Acidity

Also known as Heartburn, Acid reflux and Hyperacidity

Overview

Acidity is one of the most common ailments that almost everyone experiences once in their lifetimes. In simple terms, it is a condition that causes excess acid production in the stomach. This not only causes discomfort in the stomach but also leads to other symptoms, such as a sour taste in the mouth, difficulty swallowing, and indigestion.

There are numerous causes of acidity, right from poor eating habits and excessive stress to the use of certain medications. Moreover, lifestyle factors, such as smoking and consuming foods loaded with oil, fats, and spices, can also up your risk of acidity.

If you experience acidity once in a while, it may not indicate any health issues. However, if you suffer from frequent bouts of acidity, where the symptoms occur at least two or more days per week, there might be some underlying disorder associated with it. It is advised to consult your doctor in such cases.

You can fight acidity with simple lifestyle changes and effective home remedies, such as tulsi, mint, fennel seeds, and cold milk. In most cases, over-the-counter medications to reduce/neutralize the acid are known to be of great help.

Key Facts

Usually seen in

Adults above 30 years of age

Gender affected

Both men and women

Body part(s) involved

Esophagus

Stomach

Intestine

Prevalence

Worldwide: 11.9% (2005)

India: 7.6–18.7% (2018)

Mimicking Conditions

GERD

Peptic ulcer disease

Achalasia

Gastritis

Dyspepsia

Gastroparesis

Treatment

Antacids: Aluminum Hydroxide, Magnesium Trisilicate & Calcium Carbonate

H2 receptor blockers: Famotidine & Ranitidine

Proton pump inhibitors: Omeprazole, Pantoprazole & Rabeprazole

Prokinetic drugs: Domperidone, Metoclopramide & Levosulpiride

Coating drugs: Sucralfate & Colloidal bismuth (CBS)

Specialists to consult

General physician

Gastroenterologist

Symptoms Of Acidity

The symptoms of acidity occur when some of the acid content of the stomach flows back up into the esophagus or the food pipe, which connects the mouth to the stomach. Normally, a ring of muscle called the lower esophageal sphincter (LES) acts as a valve that lets food enter the stomach but does not allow it back up into the esophagus. When this valve fails to function properly, stomach contents are regurgitated into the esophagus and the following symptoms of acidity can be experienced:

1. Heartburn

Despite the name, heartburn has nothing to do with the heart. It is a common symptom of acidity that is caused when the excess stomach acid leaks out into the esophagus, leading to a burning sensation in the chest. This feeling can last for a few minutes to several hours.

2. Regurgitation

Some people with acidity may experience regurgitation. It is a feeling in which the person may feel liquid undigested food, bile, or stomach acid moving up and down in the throat. This sensation is somewhat similar to the feeling of being pukish and usually occurs post meals, exercising, or bending right after eating.

3. Sour taste in the mouth

Another common symptom of stomach ailments, a sour taste in the mouth, is also a symptom of acidity. It happens when food, along with stomach acid and bile, rises up to the back of your throat, causing a bitter taste. This usually happens along with regurgitation.

4. Difficulty in swallowing

Difficulty in swallowing, also known as dysphagia, happens when excess acid in the stomach causes a feeling of fullness. It also causes a delay in the movement of food through the food pipe and impedes digestion.

5. Sore throat

When the stomach acid moves up to the mouth it can irritate the vocal cords or the voice box, leading to sore throat or hoarseness.

6. Indigestion

Indigestion, also known as dyspepsia, can also be a key sign of acidity and other digestive problems. It can lead to a feeling of discomfort and a burning sensation in the upper middle part of the stomach.

Heartburn is often confused as a symptom of heart attack.

Read the article to know the difference bewteen angina, heartburn, and heart attack.

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Causes Of Acidity

The stomach produces gastric acids that help in digesting food. However, due to some causes, there are times when gastric acids are produced in excess, leading to acidity. Factors affecting the function of the lower esophageal sphincter (LES) are also responsible for acid reflux.

Some of the common causes of acidity include:

1. Food and dietary factors

Eating foods containing excessive amounts of chillies, pepper, vinegar, and paprika

Deep fried and oily foods

Excessive intake of caffeine in the form of tea, coffee, and chocolate

High intake of table salt

Diet low in fiber

Overeating or eating at irregular intervals

Unhealthy habits, like lying down just after eating

Eating just before strenuous physical exercise

2. Lifestyle factors

Frequent smoking

Excessive intake of alcohol, soda, or carbonated drinks

Lack of sleep

Lack of physical activity

3. Ailments and medications

Excessive stress, anxiety, or depression

Stomach diseases, like peptic ulcer, gastroesophageal reflux disease, and stomach cancer

Medications, like painkillers, antibiotics, chemotherapy medications, and antidepressants

Risk Factors Of Acidity

The following conditions are related to increased risk of acidity:

Medical conditions, such as asthma, diabetes, celiac disease, and connective tissue disorders, like scleroderma

Hiatal hernia

Delayed stomach emptying

Overweight/Obesity

Pregnancy

Women who are nearing menopause

Women on hormone replacement therapy

Do not wear tight waist belts for long as they may cause heartburn.

Wearing a tight-fitting waist belt, especially for a long time can cause heartburn. This is because wearing a tight waist belt can cause a change in anterior pelvic tilt (where your pelvis is rotated forward and the spine is curved). This mostly occurs when sitting or standing and causes an increased abdominal pressure by narrowing the waist circumference and a decreased space within the abdominal cavity. Read about other lifestyle factors that can put you at risk of acidity.

Click Here

Diagnosis Of Acidity

If you experience any symptoms of acidity, such as burning pain or discomfort (also called heartburn), regurgitation or bloating or burping (with a sour taste in the mouth), then it is wise to consult a doctor. Your doctor might do some physical examination followed by a few questions related to your daily routine to know the cause of it.

If your symptoms are mild, your doctor might not recommend any tests. However, if your symptoms fail to show any improvement post-treatment or if you experience symptoms such as internal bleeding or difficulty in swallowing, then your doctor might recommend further investigation.

The tests include:

1. Upper GI endoscopy: In this, a small flexible tube (known as endoscope) is inserted down the throat to examine the lining of the esophagus, stomach, and small intestine.

2. pH monitoring: This test helps measure stomach acid by checking how much stomach acid enters through the food pipe and how long it stays in the stomach.

3. Barium swallow test (esophagram): In this, you need to drink a liquid barium mixture and get an X-ray of the chest and upper abdomen done to help identify any physical abnormalities in the stomach or esophagus.

4. Esophageal manometry: It is a test that helps check the function of the lower esophageal sphincter (LES) and the muscles of the esophagus. It will tell your doctor if the food you eat can move through the esophagus normally or not.

5. Electrocardiogram (ECG): In some cases ECG is also recommended if you report severe chest pain or discomfort to check your heart condition. Additionally, other tests, such as biopsy, can also be recommended based on your condition and the symptoms.

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

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Celebs affected

Illeana D’Cruz

Popular Bollywood actress, Ileana D’Cruz, informed all her fans through Instagram that the reason why she was not able to share her workout posts was due to a really bad case of acid reflux.

Singer Ashlee Simpson

The famous singer is known to keep her acidity in check with dietary changes and not eating post 9 pm.

Former US President Bill Clinton

The 42nd US president adopted a vegan diet after he was diagnosed with acidity. He also avoids foods that increase the risk of acidity and GERD.

Former US President George W. Bush

George W. Bush, the 43rd president of the United States, avoids triggers of acidity such as coffee and peppermint to fight acid reflux.

Prevention Of Acidity

There are few simple tips and tricks that can help you to prevent and manage acidity. These include:

1. Eat small, frequent meals

One of the simple tips to lower your risk of acid reflux is to eat small yet frequent meals. This is because overeating puts extra pressure on the lower esophageal sphincter (LES), a valve-like muscle which prevents the acid content in the stomach from entering the esophagus.

2. Eat a low-carb diet

A study has reported that a low-carb diet can improve heartburn symptoms, especially in obese individuals. It may be because excess carbohydrates can make you gassy and bloated, which in turn can lead to heartburn.

3. Chew your food properly

When you eat slowly and chew your food properly, it provides sufficient time for the digestive juices to break down the food and digest it. This, in turn, can help you beat indigestion, acidity, and heartburn.

4. Avoid eating late at night

Unhealthy eating habits are one of the leading causes of digestion-related problems. Eating late at night because of work pressure or snacking heavily in the evening can, in turn, make you more prone to heartburn. Therefore, avoid this habit of late-night snacking or eating close to bedtime.

5. Limit consumption of spicy and deep-fried foods

Regular intake of highly spicy food can stimulate excessive gastric acid production. Similarly, deep-fried foods are slow to digest and trigger more acid production. Hence, these kinds of food should always be consumed in moderation.

Do you know what foods to eat and what to avoid in acidity? Are you aware of the common home remedies for acidity? Do you have an idea about what lifestyle changes can be made to improve acidity? Watch this video to know the answers from our expert doctors.

6. Limit caffeine and carbonated beverages intake

One of the key ways to prevent heartburn is to avoid foods that trigger acid reflux. Caffeine-containing food and drinks, like tea or coffee, are highly acidic in nature and stimulate excessive gastric acid production. Likewise, carbonated beverages increase acidity because carbonation bubbles expand in the stomach and put pressure on the LES to open in the wrong direction and cause regurgitation of gastric acid.

7. Limit your alcohol intake

It goes without saying that drinking alcohol is bad for your health, especially, if you suffer from heartburn. Alcohol increases your risk of acid reflux and also worsens the condition. It irritates the lining of the stomach and impairs the ability of the LES to clear up acid. Hence, avoid alcohol to ease the symptoms of heartburn.

8. Quit smoking

Nicotine in cigarettes can relax the LES and trigger acidity. Hence, for the prevention of acidity and many other health benefits, it is always advisable to quit smoking.

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9. Avoid strenuous physical activity right after eating

Strenuous physical activities like exercising or bending right after meals can hinder the process of digestion and can lead to a build-up of acid in the oesophagus. This can lead to acidity and worsen the condition if you already suffer from it. So give your stomach some time to empty its contents before you start exercising.

10. Do not sleep immediately after meals

It is important to maintain a gap of at least three hours between eating meals and hitting the sack. Lying down immediately after eating can increase the pressure on the LES which can make you vulnerable to acid reflux. Maintaining a gap can help the stomach to digest the food and prevent heartburn.

11. Raise the head of the bed

Elevating the head of the bed by about 15-20 cm can reduce symptoms of acidity and improve quality of sleep. This can be achieved by using a foam wedge to support the upper body. Stacking of pillows usually does not provide the uniform support one needs.

12. Try to lose weight

If you are overweight and suffer from acid reflux, then losing weight should be a priority. This is because excess fat, especially in the abdominal region, puts pressure on the stomach and the LES. This pushes the stomach acid upwards, which leads to acid reflux.

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13. Check your medicines

Certain medicines can cause acid buildup or inflame the oesophagus, which can lead to heartburn or worsen the condition. Hence, talk to your doctor about the medicines you are recommended to be doubly sure of its side-effects such as heartburn.

Avoid sleeping on your right side as it can worsen acidity

Sleeping on the left side can not only help you sleep better but also prevent heartburn. According to a study published in the American Journal of Gastroenterology, sleeping on the right side can worsen the symptoms of acid reflux. This is because when you lay on the right side, the chances of acid leaking through the LES is high, increasing the risk of heartburn. Heal your gut and heal yourself.

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Specialist To Visit

The symptoms of acidity are often easy to deal with by using over-the-counter medications and making lifestyle changes. However, if you experience severe chest pain or chest discomfort or heartburn that seems different or worse than usual, then consult a doctor. Also, if you experience these symptoms more than twice a week or on a regular basis, do not think twice before visiting your doctor’s clinic to know the exact cause and get it treated.

Specialists that can help manage acidity include:

General physician

Gastroenterologist

Consult India's best doctors online. Click here to book an appointment.

Consult Now!

Treatment Of Acidity

The medications used to treat heartburn work either by blocking the production or aiding in the neutralization of the stomach acid. Based on their action mechanism, these drugs are classified into three main categories, namely:

1. Antacids

Antacids, also known as stomach acid neutralizers, neutralize the stomach acid to provide quick relief from acidity. These are available in the form of tablets as well as syrups.

Examples include:

Aluminum hydroxide

Magnesium hydroxide

Magnesium trisilicate

Magnesium carbonate

Calcium carbonate

The side effects of antacids are based on their ingredients. For example, antacids containing aluminum hydroxide might cause constipation as a side effect, whereas those containing magnesium hydroxide can lead to diarrhea. The long-term effects include gas (belching), swelling of the feet and hands, constipation, and diarrhea.

2. H2-receptor blockers

These medications block specific receptors on the stomach cells that release gastric acids, thereby helping fight acidity. They are also known to aid in the treatment of damaged tissues in the stomach caused by peptic ulcers, gastritis, or stomach inflammation.

Some of the common side effects of drugs belonging to H2-receptor blockers class include abdominal pain and diarrhea. These drugs should not be taken by pregnant women as they can cause abortion and teratogenic (fetal defects) side effects.

Examples include:

Famotidine

Ranitidine

Nizatidine

3. Proton pump inhibitors (PPIs)

PPIs block and reduce the production of stomach acid to relieve acidity. They are available both as over-the-counter and prescription drugs. These drugs are usually prescribed to people who do not show any improvement post diet and lifestyle changes or experience gastric symptoms regularly.

Side effects of these medications are rare but may include headache, diarrhea, and upset stomach. The long-term health effects of these medicines are not yet known, so talk to your doctor if you are taking PPIs for a long time or in high doses.

Examples include:

Omeprazole

Pantoprazole

Rabeprazole

Esomeprazole

Lansoprazole

4. Coating drugs

Coating drugs, also known as ulcer protective drugs, protect the esophagus and stomach by forming a protective layer over the surface. These drugs are mostly recommended for short-term action and considered to be safe.

They are mostly recommended for use in people suffering from stomach ulcers and peptic ulcer disease.

Examples include:

Sucralfate

Carbenoxolone

Colloidal bismuth (CBS)

5. Prokinetic drugs

This class of drugs are prescription drugs and are known to act by promoting normal contraction of the esophagus and helping in the emptying of the stomach.

These are commonly recommended for people with GERD and mostly in combination with medications that lower acid production in the body, such as PPIs and H2-receptor blockers.

Some common side effects of these drugs include diarrhea, drowsiness, and agitation.

Examples of drugs belonging to this class are:

Domperidone

Metoclopramide

Mosapride

Levosulpiride

Home-care For Acidity

Diet plays a key role in managing and treating acidity. Here are some dos and don’ts you need to follow to keep your acid reflux under control and fight acidity.

Dos:

Eat foods rich in fiber, as fiber aids in the process of digestion.

Have small, frequent meals throughout the day to avoid excessive acid secretion.

Water is the best natural remedy for acidity. You must aim to consume close to 7-8 glasses (2-3 liters) of water every day.

Include foods such as oatmeal, ginger, salad, banana, melon, and fennel seeds in your daily diet.

Herbs, such as cardamom and mint, serve an immediate relief from acidity and associated pain.

Don’ts :

Avoid excessive intake of oily and spicy foods.

Avoid excessive intake of caffeinated drinks, such as tea and coffee.

Say no to alcohol and carbonated beverages.

Do not overeat. It puts a direct load on the digestion process and causes the body to secrete acid in excess.

Complications Of Acidity

Acid reflux or acidity usually does not cause any serious or long-term health problems when it occurs on an occasional basis. But if it happens frequently and is left unattended, it can lead to various stomach problems, such as:

1. Gastroesophageal reflux disease (GERD): It is a condition in which the lower esophageal sphincter (LES), which is a ring of muscle between the esophagus (food pipe) and stomach, is affected. Acidity or heartburn is one of the most common symptoms of GERD.

2. Erosive esophagitis: As the name suggests, this condition is the inflammation in the esophagus, which may lead to ulcers as well as bleeding.

3. Ulcers: Acidity, if left untreated or unattended, can lead to stomach ulcers. This in turn can increase the risk of peptic ulcer disease.

4. Barrett’s esophagus: It is a condition in which the tissue that is similar to the lining of the intestine replaces the esophageal lining. In some cases, this condition can also increase the risk of esophageal cancer.

5. Esophageal stricture: In this condition, the esophagus becomes narrow, which leads to problems with swallowing.

Alternative Therapies Of Acidity

Home remedies for acidity

Here are a few quick fixes to control and get relief from acidity.

1. Holy basil (Tulsi) leaves

Tulsi leaves have antiulcer properties that help in lowering the acid level in the stomach. They also stimulate the stomach to produce more mucus, thus neutralizing excess gastric acid in the stomach. Chew 4-5 leaves and swallow their juice to fight the burning sensation in the stomach and chest.

2. Cinnamon (Dalchini)

Cinnamon contains phytochemicals that help in the process of digestion, thus relieving acidity. Add a pinch of cinnamon powder to a teaspoonful of honey or water and consume it after meals to eliminate acidity.

3. Cumin seeds (Jeera)

Jeera seeds contain compounds which act as natural carminative and digestive agents and aid in relieving acidity caused due to indigestion and flatulence. Moreover, these seeds also help relieve the symptoms of acidity, such as stomach pain and discomfort.

Add 1/4-1/2 teaspoon of cumin seeds to a cup of water, and let it boil till the water becomes slightly dark in color. Strain, cool, and sip this tea at regular intervals throughout the day if you experience frequent bouts of acidity.

4. Cold milk (Doodh)

Milk contains high amounts of calcium, a mineral which plays a key role in preventing acid buildup in the body, and hence, causes immediate relief. It also absorbs the excess acid produced in the stomach, thus nullifying its effect on the intestinal lining.

It is advised to drink cold (and not warm) milk to get rid of acidity. Remember to drink it plain, and avoid adding anything such as honey, sugar, and turmeric.

5. Buttermilk (Chaach)

Buttermilk neutralizes the excess acid in the stomach. It also contains lactic acid, which improves digestion and helps you fight acid reflux and gas trouble at home.

Drink a glass of buttermilk everyday after meals if you are prone to frequent acid attacks. You can also add a pinch of black pepper and coriander to it.

6. Carom seeds (Ajwain)

Ajwain contains a compound, thymol, that helps in secreting gastric juices, which in turn ease indigestion and gas.

Add a teaspoon of ajwain seeds or 3-4 fresh ajwain leaves to 2-3 glasses of water and boil. Strain it and drink this water regularly post meals/breakfast for quick relief.

Yoga for acidity

Some of the simple yoga asanas that can help relieve acidity include:

Pawanmuktasana

Vajrasana

Virabhadrasana

Shashankasana

Trikonasana

Did you know?

Elevating the head of the bed can improve the clearing of stomach acid and reduce symptoms of acidity. This will ensure a good night's sleep.

Explore Our Sleep Aids

Living With Acidity

If you experience acidity once in a while, it can be managed with a few lifestyle changes and diet modifications. However, if you suffer from chronic acidity, then in addition to diet and lifestyle changes, you may also need to take medications to manage and prevent any long-term complications.

Also, if you are taking over-the-counter medications, then it is wise to talk to your doctor to know about the severity of your condition and the right treatment approach to fight and prevent the acidity from worsening.

Additionally, here are a few changes that can help you manage and prevent acidity:

Avoid foods that can trigger and worsen symptoms of hyperacidity, such as coffee, chocolate, carbonated drinks, deep-fried food, fat-rich dairy, meats, citrus fruits, and alcohol.

Avoid eating right before bed and going to bed with a full stomach.

Say no to eating large meals. Eat small and frequent meals.

Drink more water and shed some weight (if you are overweight/obese).

Keep a diary to record and know about your triggers, and work on them to prevent another episode of acidity.

Try home remedies or over-the-counter antacid medications if you experience the symptoms of acidity.

Remember, chronic acidity can also indicate an underlying health problem, such as gastroesophageal reflux disease (GERD). Therefore, consult your doctor if your symptoms fail to subside with medications and at-home treatment.

Heartburn vs acid reflux vs GERD

Although used interchangeably, these three terms have different meanings.

Acid reflux, also known as acidity, is a digestive disorder characterized by excess acid levels in the stomach.

Heartburn is a symptom of acidity or acid reflux that is caused when the excess stomach acid leaks out into the esophagus, leading to a burning sensation in the chest. This feeling can last for a few minutes to several hours.

Gastroesophageal reflux disease (GERD) is a chronic form of acidity in which the stomach acid causes inflammation of the esophagus and/or intestinal lining. You may require medications to neutralize or stop the production of the acid in the stomach to treat this condition.

Heartburn in pregnancy

Heartburn is one of the most common gastrointestinal symptoms in pregnant women, with an incidence of 17% to 45%. The cause of heartburn during pregnancy is multifactorial.

It is attributed to the increase in the levels of the hormone progesterone or its metabolites, which cause the relaxation of smooth muscles and a decrease in lower esophageal sphincter pressure.

Also, during pregnancy, food and gastric acid tend to pass from the stomach into the esophagus, leading to inflammation and a burning sensation in the esophagus. The pressure of the growing uterus on gastric contents as the pregnancy progresses may also worsen the heartburn.

Most cases of heartburn can be improved with lifestyle modifications, such as consumption of smaller meals, not eating late at night, avoiding known triggers, and cessation of smoking/alcohol during pregnancy. If not relieved, your doctor may recommend medications that are safe for use during pregnancy.

Frequently Asked Questions

Can we eat bananas in acidity?

What acidity does to your body?

Does drinking water reduce acidity?

What causes acid reflux at night?

Does coffee help in acidity?

Is cold milk good for acidity?

Is curd bad for acid reflux?

What food kills acidity?

Is hot water good for acidity?

Is lemon good for acidity?

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Anxiety

Syn: Also known as Anxiety Disorder, Panic Disorder, Phobias, Obsessive Compulsive Disorder (OCD), Generalised Anxiety Disorder (GAD)

Overview

Anxiety disorders are the most common types of mental health conditions. According to a survey in 2017, 44.9 million Indians were estimated to be suffering from anxiety disorders. Anxiety disorder is twice as likely to affect females than males.

It is normal to feel a little anxious and stressed about challenging situations that arise in life. However, when the feeling of anxiety interfere with a person’s day-to-day life, such a condition is suspected to be an anxiety disorder.

People who suffer from anxiety disorders, phobias, or who have a history of panic attacks often try to avoid situations or things that precipitate their anxiety. They are unable to lead a normal life and live in fear of challenging situations. If episodes of anxiety become too frequent and severe, and start affecting a person’s quality of life and everyday behavior, it is essential to visit a doctor to seek care for anxiety. Medications, psychotherapy, and lifestyle modifications can help alleviate the symptoms of anxiety.

Key Facts

Usually seen in

Children above 11 years of age

Adults above 20 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Brain

Prevalence

India: 44.9 million (2017)

Mimicking Conditions

Hyperthyroidism

Cardiac arrhythmias

Addison’s disease

Necessary health tests/imaging

Complete Blood Count

Thyroid Profile Total

Adreno Corticotrophic Hormone Plasma

Alcohol Screen Blood

Drugs of Abuse (Qualitative) Panel

Electrocardiography (ECG)

Treatment

Selective serotonin reuptake inhibitors (SSRIs): Fluoxetine & Sertraline

Serotonin-norepinephrine reuptake inhibitors (SNRIs): Venlafaxine & Duloxetine

Tricyclic antidepressants (TCAs): Moclobemide

Azaperone

Sedatives and tranquilizers: Diazepam & Lorazepam

Beta-blockers: Propranolol

See All

Symptoms of Anxiety

The following symptoms suggest an anxiety disorder:

Constantly feeling restless, nervous or tense, inability to concentrate.

The fear of losing control.

Having frightening thoughts and mental images.

Trouble falling asleep.

Feeling weak or tired all the time.

Physical symptoms such as excessive sweating, hyperventilation or raid breathing, feeling faint or dizzy & increased muscle tension.

Extreme, irrational fear of specific things or situations.

A tendency to avoid being in situations that cause anxiety.

Types Of Anxiety

There are several types of anxiety disorders such as:

1. Generalized anxiety disorder (GAD)

People who experience prolonged bouts of worry, anxiousness, and irrational fear that interferes with their day-to-day activities, social life, personal health, and work for more than 6 months are considered to have a generalized anxiety disorder.

2. Phobias

Intense and irrational fear of a very specific thing or situation is termed as ‘Phobia’. People who have phobias exhibit an unreasonable response to fear or anxiety to a condition that may otherwise not be considered very harmful.

These are phobias of things or situations encountered in everyday life, such as:

Phobia of heights (Acrophobia)

Phobia of insects (Entomophobia)

Phobia of seeing blood (Hemophobia)

Phobia of needles (Trypanophobia)

Phobia of darkness (Nyctophobia)

Phobia of water (Aquaphobia)

Phobia of confined space (Claustrophobia)

Phobia of interactions with others in society (Social phobia)

3. Panic disorder

Panic attacks are sudden, recurrent bouts of extreme fear and anxiousness. The attack may be accompanied by physical symptoms as well, such as excessive sweating, a pounding, and fast heartbeat, trembling, shortness of breath, etc.

4. Post traumatic stress disorder (PTSD)

It is a disorder that develops in some people after experiencing a shocking, scary and dangerous event. The person may reexperience intrusive thoughts about the incident in the form of flashbacks, bad dreams, and frightening thoughts which can trigger anxiety.

5. Bulimia nervosa

It is a serious life-threatening eating disorder. People with bulimia secretly binge with a loss of control over the eating. This is followed by the excessive concern of living in fear of gaining weight triggering anxiety attacks.

6. Obsessive compulsive disorder (OCD)

It is a common, chronic, and long-lasting disorder in which people have recurring, unwanted thoughts, ideas, or sensations (obsessions) that make them feel driven to do something repetitively (compulsions).

Causes Of Anxiety

Our brain produces certain chemicals which are known as neurotransmitters, which help us to deal with anxiety. The neurotransmitters such as norepinephrine, serotonin, dopamine, and gamma-aminobutyric acid are related to our mood and emotions. Any imbalance of these neurotransmitters can lead to symptoms of anxiety and other anxiety-related disorders.

The causes of anxiety disorder are not very clear. Some people experience severe anxiety in certain situations, while others take those similar conditions with ease. More focused studies are required to fully understand the reason. However, it is thought to be due to a complex interaction of genetics, environmental factors, and lifestyle choices.

People who suffer from chronic health conditions, such as cancer, diabetes, heart illness, chronic pain, thyroid issues, may also have anxiety. It may also manifest as a withdrawal symptom of alcohol intoxication, drug abuse, or a side effect of certain prescription medications.

Should you control anxiety on your own?

If you have an anxiety disorder, it is important to get professional help. Trying to control it on your own with tips like snapping a rubber band on your wrist to control anxious thoughts fails to show results. Do not block or ignore anxious thoughts as it can lead to severe anxiety symptoms like fear, panic, or worry which can sometimes turn out dangerous.

Consult Now

Risk Factors Of Anxiety

Although anxiety can happen to anyone at any given point in their life, anxiety disorders are found to be associated more with certain factors. These factors can be considered as a trigger for developing an anxiety disorder:

Relation to a close relative in the family with an anxiety disorder.

A chronic or serious health condition.

Abused as a child.

Unexpected trauma, such as the untimely death of a loved one or partner.

Alcohol and drug abuse.

Suffer from other mental health conditions, like depression, bipolar disorder, schizophrenia, etc.

Diagnosis Of Anxiety

The diagnosis of an anxiety disorder comes after a thorough evaluation of the patient’s complaints and symptoms, family history, and history of onset of symptoms and how the symptoms affect the patient's daily life. A thorough psychological evaluation may help establish the diagnosis.

There are no lab tests that can diagnose an anxiety disorder. Sometimes, a physician may order a few lab tests to check for the cause of symptoms and rule out other health conditions that may be causing the symptoms. These include:

Complete Blood Count to look for signs of an infection or inflammation in the body

Thyroid Profile Total to rule out any potential cause of thyroid disorders

Adreno Corticotrophic Hormone (ACH) Plasma to check for the level of the ADH hormone in blood

Alcohol Screen Blood to rule out symptoms caused due to alcohol abuse

Drugs of Abuse (Qualitative) Panel to check if there’s any underlying side effects of medicines

Electrocardiography (ECG) to look for any complications related to the heart

When anxious we worry so much that everything seems to be going out of control and our mind jumps from one issue to another, leaving us more depleted than before. Here are 5 effective self-help tips to cope with anxiety.

Click To Read

Prevention Of Anxiety

Feeling anxious during stressful situations is a normal human response. However, the intensity of the response can act as a window to look for the symptoms of anxiety. Anxiety cannot be prevented as such, but making certain lifestyle changes can help with bouts of extreme anxiety or panic attacks.

Meditating regularly can help focus your mind and channel positive energy.

Listening to motivational speeches helps increase your self-confidence and boosts positivity.

Watching videos that encourage positivity.

Reading books on topics like understanding anxiety.

Taking a healthy, balanced diet and cutting down on processed and sugary foods.

Exercises are mood enhancers. Regular light exercises help prevent negative thoughts and feelings.

Specialist To Visit

When episodes of anxiety become too frequent and severe and start affecting a person’s life and everyday behavior, it is essential to visit a doctor to seek care for anxiety. The specialists who can help diagnose and treat anxiety are:

Psychiatrist

Psychologist

Consult India's best doctors online. Click here to book an appointment.

Consult Now

Celebs affected

Anushka Sharma

Bollywood actress Anushka Sharma has been quite vocal about her battle with anxiety. In 2017, she posted on twitter that she was undergoing treatment for anxiety.

Shraddha Kapoor

In 2019, Bollywood actress Shraddha Kapoor openly talked about how she faced anxiety for 6 years following the release of her film Aashiqui 2.

Oprah Winfrey

Famous American TV personality Oprah Winfrey has admitted to having a nervous breakdown because of a severe episode of anxiety.

Treatment Of Anxiety

Mild or infrequent episodes of anxiety do not require any treatment. It is a normal human tendency to feel anxious in challenging and stressful situations. However, when the episodes of anxiety or panic attack become too frequent and hamper a person’s ability to lead a normal life, treatment is considered necessary to help relieve the symptoms. The following medications are used to treat anxiety:

1. Antidepressants and anxiolytics

These medications work by regulating neurotransmitter levels and thus help improve mood.

Selective serotonin reuptake inhibitors (SSRIs) are considered the first line of treatment for anxiety disorder. Examples include fluoxetine, sertraline, and combination drugs like clonazepam + escitalopram.

Serotonin-norepinephrine reuptake inhibitors (SNRIs) are also effective in treating generalized anxiety. Examples are venlafaxine and duloxetine.

Tricyclic antidepressants (TCAs) are a class of antidepressants that work by increasing levels of the hormone noradrenaline. Examples of these drugs include phenelzine and moclobemide.

Azaperone is a class of drugs that has anxiolytic action (reduce anxiety) and works as serotonin receptor agonist. Examples of these drugs include buspirone, and gepirone.

2. Sedatives and tranquilizers

They effectively promote relaxation and reduce other symptoms. They are particularly useful in managing episodes of panic attacks or phobias. Benzodiazepines like diazepam and lorazepam are used for short-term management of anxiety as they are fast-acting, whereas buspirone, a mild tranquilizer, is used in the treatment of generalized anxiety disorder.

3. Beta-blockers

These medicines help control the physical manifestations of anxiety or phobias, such as fast heartbeat, palpitation, sweating, trembling, and dizziness. Examples of these types of drugs include propranolol.

A few changes to your diet can help you manage anxiety that can sometimes make a regular day tough to deal with. Here are some healthy foods that will help you fight anxiety better.

Read To Know

Home-care For Anxiety

Making certain lifestyle changes can help ease the symptoms of anxiety and also help reduce future episodes.

Reduce consumption of caffeinated beverages like cola and coffee as these are known to worsen the symptoms.

Learn and practice relaxation techniques and meditation.

Consume a healthy, balanced diet and avoid processed, sugary, and fried foods.

Quit smoking and reduce the consumption of alcohol

Stay active; light-intensity exercises daily help improve mood and alleviate feelings of anxiety.

Establish a sleep schedule for sound sleep.

Keep a journal to log in all your thoughts. Expressing thoughts and feelings helps deal with them.

Join a support group.

During a panic attack, focus on breathing techniques, breathe slowly and with counts, as it will help you relax and shift focus from the source of panic.

Living with Anxiety

Living with a chronic anxiety disorder is often very challenging as it interferes with a person's day-to-day life and affects work and social interactions. People who suffer from anxiety disorders, phobias, and have a history of panic attacks often try to avoid situations or things that precipitate their anxiety. They are unable to lead a normal life and live in fear of challenging situations. Anxiety in children often hampers their performance at school and the anxiety can continue in adulthood, affecting career and social interactions.

Grounding technique for anxiety attacks

If you are having a panic attack, you can use a 5-4-3-2-1 technique to deal with anxiety. As per this technique, whenever you are feeling anxious, you should start concentrating on your breathing and try to take slow and deep regular breaths. Once your breathing is normalized, follow the 5-4-3-2-1 steps:

Identify 5 things you see around you

Identify 4 things you can touch around you

Identify 3 things you can hear

Identify 2 things you can smell

Identify 1 thing you can taste

This will help distract your mind away from the anxious thoughts and help you cope with the anxiety attack.

Some age-old practices like meditation, tai chi (a form of exercise), and breathing exercises can help reduce stress and anxiety.

Read More

Complications Of Anxiety

Anxiety disorder, if left untreated, can worsen gradually and lead to various complications. These may include:

Chronic depression

Substance abuse - smoking, alcoholism, and drug dependence

Insomnia

Chronic fatigue and pain

Lack of productivity

Suicidal thoughts

Suicide

Alternative Therapies For Anxiety

Apart from medications, alternative therapies and lifestyle interventions can control anxiety to a great extent. These may include:

1. Psychotherapy

This involves sessions with a psychologist who helps a patient understand and deal with feelings of anxiety, modify behavior, and improve responses to particular situations.

2. Cognitive behavior therapy (CBT)

This is a structured, goal-oriented form of therapy that helps individuals modify their altered thinking patterns and beliefs, causing anxiety. It focuses on building behavioral skills that help patients adapt and react more efficiently to stress-inducing things or situations.

3. Counseling

Speaking to a counselor may help a person express his/her feelings and overcome negative thoughts and impulses. Often, coming to terms with anxiety involves self-realization of bottled-up feelings and learning to accept them.

4. Exercise and yoga

There is plenty of evidence that suggests light exercises and yoga can help improve a person’s mood and induce feelings of happiness, positivity, and exhilaration. Regular activities, such as walking, cycling, swimming, pilates, tai-chi, yoga, etc., can help a patient struggling with anxiety tremendously.

Practicing yoga is one way to handle anxiety and depression. Here are some yoga postures to help you fight depression and anxiety.

Check Out Now

5. Massage

Light massage helps rejuvenate the body, promotes relaxation, and improves overall mood. Going for regular light massages may help alleviate feelings of anxiousness.

6. Meditation and relaxation

Specific exercises focused on promoting relaxation in the body, such as breathing exercises, are particularly helpful in fighting anxiety. Meditating daily helps increase focus and concentration, it also helps increase a person’s mental strength. This boosts the person’s confidence in battling negative thoughts as well as helps improve behavioral responses.

7. Ayurveda

Panchakarma therapy and herbs like Ashvagandha, Jatamansi, Bhramhi, and Mandookaparni are Ayurvedic treatment options for people suffering from anxiety disorders.

Combating stress is easy now with these common herbs.

Check Here

Frequently Asked Questions

How do I know if I have an anxiety disorder?

What is a quick way to deal with a panic attack?

How to prevent episodes of anxiety?

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Appendicitis

Overview

Appendix is a small, closed-ended, narrow pouch that projects from the large intestine. Inflammation of the appendix is referred to as appendicitis and worldwide is the most common reason for emergency abdominal surgery.

The condition usually presents as severe stomach pain that starts around the belly button and later moves to the lower right abdomen. Appendix can rupture in some cases, which should be treated as a medical emergency.

Appendicitis seems to develop by obstruction at the opening of the appendix. The major risk factors that can contribute to appendicitis are constipation, infections, some bowel conditions, and having a strong family history.

Appendicitis is mostly treated by surgical removal of the appendix and is increasingly done as a laparoscopic procedure. Antibiotics are prescribed to manage wound infections.

Symptoms Of Appendicitis

The most important symptom of appendicitis is:

Sudden pain that starts around the belly button and frequently moves to the lower right abdomen.

Initially, the pain is diffused and not confined to one spot. Most individuals indicate the location of the pain with a circular motion of their hand around the central part of their abdomen.

With time, the pain may get localized to the right lower abdomen, and the patient may be able to pinpoint the exact location of the pain.

Other symptoms of the condition include:

Loss of appetite

Nausea

Vomiting

Constipation

Diarrhea

Bloating

Indigestion

Swelling in the abdomen

Abdominal pain that becomes worse as you cough, sneeze, walk, or perform other actions

Low-grade fever with chills

Inability to pass gas

Painful and frequent urination

Difficulty rising from lying position

Anxiety

Headache

Dizziness

Anorexia (an eating disorder where the individual do not eat to avoid weight gain)

Suffering from severe stomach ache?

There could be several reasons for this. Do not simply swallow a tablet on your own. Here's a simple guide to when you should see a doctor for stomach pain.

Know More

Causes Of Appendicitis

The cause of appendicitis is usually blockage of the opening of the appendix. The potential causes of blockage include:

Appendicoliths (hardened rock-like mucus or stools)

Lymphatic tissue growth

Infections

Benign or malignant tumors

As the blockage occurs, bacteria that are normally found within the appendix begin to multiply and invade the wall of the appendix. The body's immune response to this bacterial invasion results in inflammation of the appendix.

Types of Appendicitis

Appendicitis can be classified based on its onset into the following types:

Acute appendicitis

It begins with normal abdominal pain and then pain migrates to the lower right abdomen. The pain intensifies very fast within a few days to hours. It requires immediate medical attention or surgery, as it can develop more fatal complications if left untreated.

Chronic appendicitis

When inflammation of the appendix lasts for a longer duration, it is termed chronic appendicitis. The symptoms are milder than disappear and reappear constantly. Sometimes, this makes it challenging for doctors to diagnose it early.

Risk Factors Of Appendicitis

Appendicitis can affect anyone. But some people may be more likely to develop this condition than others which includes the following factors:

Age: The majority of appendicitis cases occur during 20s and 30s.

Gender: Males are more prone to develop appendicitis than females.

Family history: People with a family history of appendicitis are more likely to develop it.

Constipation: Prolonged constipation can block the appendix which can lead to appendicitis.

Suffering from constipation? Listen to our expert talk about the treatment of constipation with the help of Ayurvedic medicines.

Other conditions: Chronic bowel diseases such as Crohn’s disease or ulcerative colitis can increase the chances of getting appendicitis.

Air pollution: Research demonstrates a link between air pollution and increased risk of appendicitis. It might be possible because air pollution can increase the susceptibility to bacterial and viral infections and can increase intestinal inflammation.

Did you know?

Air purifiers, indoor plants, and wearing masks are not the only things that help you combat air pollution. Learn about certain food items that will help to fight air pollution and protect your family.

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Diagnosis Of Appendicitis

The symptoms of appendicitis are very similar to many other conditions. So, it is essential to distinguish between these diseases through specific clinical tests along with physical examination. They include:

Medical history

A detailed medical history is taken to rule out the possibility of other health conditions. A history of abdominal pain for the last 12-24 hours without fever or diarrhea that migrates to the lower right side of the stomach along with tenderness. You might be asked about the starting of your symptoms, along with ongoing medicines for any other disease.

Physical examination

To diagnose appendicitis, your doctor will perform a physical test. You might be asked to pinpoint the area of the abdomen where you feel the pain. The doctor will apply gentle pressure on the painful area to check the abdominal rigidity and a tendency for you to stiffen your abdominal muscles in response to pressure over the inflamed appendix.

Note: The physical examination may be unrevealing in the very early stages of appendicitis and the signs and symptoms might be subtle.

Imaging tests

These tests show whether the abdominal pain is caused by any obstruction inside the appendix, an enlarged or burst appendix, inflammation, an abscess, or something else. They include:

Abdominal ultrasound: Abdominal ultrasonography uses sound waves to produce an image of internal organs, without the use of X-rays or radiation. It is a widely used primary measure to evaluate patients with acute abdominal pain.

Abdominal Computerized tomography (CT): CT scans use X-rays to produce internal images. An abdominal CT scan has greater than 95% accuracy for the diagnosis of appendicitis.

Abdominal Magnetic resonance imaging (MRI): MRI Scan uses strong magnetic and radio waves to create detailed and clear 3D images of the body's internal organs. However, performing an abdominal MRI is expensive and also demands a high level of expertise to interpret the results.

Note: In order to reduce radiation exposure, it is recommended for pregnant women and children to undergo an ultrasound or MRI instead of a CT scan.

Abdominal x-rays: Abdominal X-rays do not have a role in diagnosis of acute appendicitis, but in some cases appendicoliths may be visible on it.

Barium enema test: This can assist in identifying appendicitis in patients with atypical symptoms. It can detect signs of inflammation in the appendix, as well as other abnormalities in the colon or pelvis.

Laboratory tests

Complete blood count (CBC): Your doctor will recommend a CBC to check for a high white blood cell count, which could be a sign of infection.

C-reactive protein test: This test is recommended to check any other causes of abdominal inflammation such as autoimmune disorders.

Urine and stool test: Urinalysis and stool test is done for diagnosis of any infection, inflammation, kidney stone that is causing pain.

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Other tests

Diagnostic laparoscopy: It is a medical procedure used by doctors to visually examine the abdomen and pelvis when other imaging techniques are not able to identify the cause of pain or growth in these areas.

Prevention Of Appendicitis

One of the major risk factors for appendicitis is constipation. Though appendicitis cannot be prevented there are certain dietary modifications that can prevent constipation.

Foods to eat

Fresh fruits like apple, orange, lime, strawberries, papaya, banana, muskmelon, guava, pineapple, mango, blueberries, avocado, apricots, & peaches.

Legumes like green gram, lentils, sprouts, yellow lentils, green lentils, & chickpeas.

Vegetables like carrot, ladyfinger, bottle gourd, snake gourd, beetroot, cucumber, potatoes, capsicum, cauliflower, squashes, green leafy vegetables, kale, spinach, cabbage & beetroot.

Whole wheat flour

Brown rice

Foods to avoid

Processed, packaged, fried, and junk foods

All purpose flour (maida)

Red meat

Cakes, pastries, and other sugary items

Carbonated drinks & canned packed juices.

Note: Remember to get adequate water intake, regular exercise, and keep an arm's distance from alcohol consumption and smoking.

Check out our wide range of products to manage constipation.

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Specialist To Visit

The doctors who can assess the severity of the patient and formulate a treatment plan include:

General physician

Gastrointestinal (GI) specialist

General surgeon

Your general physician will examine your symptoms and abdomen. If they confirm a diagnosis, they may refer you to a specialist who can perform surgery to remove the appendix and prevent future problems. This specialist may be a gastrointestinal specialist or a general surgeon, both of whom have the expertise to perform appendectomy (Appendix removal).

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Treatment Of Appendicitis

The most effective and common treatment for appendicitis is surgical removal of the appendix. The exact function of the appendix is unknown and the best and safest option to treat an inflamed appendix is its removal. However, studies also show that certain cases can be managed through non-surgical options. Management of appendicitis include:

Surgical management

Treatment of appendicitis generally involves surgery to remove the inflamed appendix, which is known as appendectomy Surgery to remove your appendix can be performed in the following ways:

Open appendectomy: It is a surgical procedure in which a single 5-10 centimeters long incision in the lower-right abdominal area removes an appendix. This type of appendectomy is suggested if the appendix has ruptured and the infection has spread.

Laparoscopic appendectomy: The surgeon makes up to three tiny incisions in the belly to insert a laparoscope, which is a camera and light attached to a thin tube that allows the surgeon to observe the abdomen internally. After identifying the appendix, it is stitched up and removed. Laparoscopic procedures are preferred due to fewer complications and a quicker recovery period.

Here are a few tips to follow post-surgery. Post-operative care includes:

Keep the incision site clean with water and gentle soap

Change the dressing as and when suggested by the doctor

Limit your physical activity and do not lifting any heavy objects

Drink plenty of water and fluids and adding more fiber to ease constipation

Do not strain the abdominal muscles by climbing stairs or doing exercise that involves stomach

Ask your doctor about when is safe to return to your regular job, and about the follow up visits

Keeping a check on your symptoms. Contact your doctor immediately if you experience severe pain, fever, and pus formation near your incision or severe vomiting.

Medications

1. Most treatment strategies include an initial course of intravenous antibiotics for 1-3 days, followed by oral antibiotics for 7 days.The most common antibiotics used are:

Cefotaxime

Ampicillin

Sulbactam

2. Some analgesics (painkillers) such as acetaminophen may be given to manage severe pain.

Trying to get all your medications on time, but unable to find them. Well, don’t worry. Order your medicines with Tata 1mg for guaranteed delivery.

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Home-care For Appendicitis

Acute appendicitis is a sudden medical issue that requires urgent treatment and surgery.. However, the following natural and herbal remedies may help alleviate the symptoms associated with appendicitis:

Ginseng tea: Ginseng possesses anti-oxidant and anti-inflammatory properties. It can help relieve pain associated with appendicitis.

Mint essence: May be able to lessen the discomfort associated with appendicitis. Every three to four hours, add 2 to 3 drops of mint essence to water and consume.

Basil (Tulsi): If the appendicitis patient has a fever, basil leaves can be used to make a decoction because they have antipyretic properties

Fenugreek (Methi): High fiber content of fenugreek may aid in reducing constipation, which makes it potentially useful in managing appendicitis.

Yogurt (Dahi): Probiotics like yogurt may prove effective in preventing bacterial growth in the appendix. Therefore consuming 2 tablespoons of yogurt once a day is beneficial as it treats inflammation and pain to a huge extent.

Ginger (Adrak): It is famous for its therapeutic benefits. Its anti-inflammatory and detoxifying properties have the potential to provide major health benefits. Mix 1 teaspoon (tsp) of ginger juice, half a tsp of turmeric, and 1 tsp of honey. Drink this mixture twice a day. This may help you to reduce swelling, nausea, and other symptoms of appendicitis.

Complications Of Appendicitis

The serious problem with appendicitis is the risk of a bursting appendix and causing life-threatening infections. This may happen if the appendix is not treated and removed quickly and can cause complications, including:

Peritonitis: After the appendix bursts, the thin layer of tissue inside the abdomen becomes swollen and infected with bacteria. This can cause severe, continuous pain in the whole abdomen, known as peritonitis.

Abscess: An abscess is a painful collection of pus around the ruptured appendix that is usually caused by a bacterial infection. It is managed with antibiotics to clear the infection and surgical drainage of pus.

Sepsis: Pus and infection caused by a ruptured abscess might travel through the bloodstream to other body parts. It is a rare but severe condition that can lead to tissue damage, organ failure, and death.

Thrombophlebitis: It is an uncommon and serious illness involving the inflammation of the wall of a vein associated with a blood clot.

Appendicular mucocele: This refers to a swollen appendix filled with mucus, which is usually caused by the growth of cells, inflammation, or blockage.

Recurrent appendicitis: It is seen when the appendix is only partially removed resulting in recurrent inflammation of the remaining appendix.

Complications post-surgery

After the removal of the appendix, certain complications can arise, which include:

Healing with scar formation

Intestinal adhesion and obstructions

Frequently Asked Questions

Is appendicitis treatable without surgery?

What is the best pain relief medicine for the appendix?

What is the recovery time for appendicitis?

Which fruits are good for the appendix?

Do you gain weight after appendix surgery?

Key Facts

Usually seen in

Second and third decades of life

Gender affected

Both men and women but more common in men

Body part(s) involved

Appendix

Abdomen

Prevalence

Global: 6.7 to 8.6% (2023)

India

Mimicking Conditions

Gastroenteritis

Crohn’s ileitis

Ulcerative colitis

Urinary tract infection

Kidney infection

Kidney stones

Irritable bowel syndrome (IBS)

Pelvic inflammatory disease (PID)

Endometriosis

Ectopic pregnancy

Necessary health tests/imaging

Imaging tests: Abdominal ultrasound, Magnetic resonance imaging (MRI), and Computerized tomography (CT).

Laboratory tests: Complete blood count (CBC), C-reactive protein test, Urinalysis, Stool test, and Diagnostic laparoscopy.

Treatment

Surgical management: Open appendectomy and Laparoscopic appendectomy

Antibiotics: Cefotaxime, Ampicillin, and Sulbactam.

See All

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Arthritis

Also known as joint pain, joint stiffness

Overview

Arthritis is a common condition that affects joints and bones (especially the knees, elbows, wrists, and ankle). The symptoms of arthritis usually appear gradually or sometimes may appear suddenly. The signs and symptoms include joint pain and stiffness, swelling of the joints, decrease in range of motion of joints, or redness of the skin around the joint.

There are different causes depending on the type of arthritis. The most common types are osteoarthritis and rheumatoid arthritis. Risk factors for arthritis include family history, old age, previous joint injury, obesity, smoking etc.

The main goal of treatment is to reduce pain, prevent any additional damage to the joints and improve joint mobility. Management includes the use of medications, surgery, weight management and exercises.

Key Facts

Usually seen in

Individuals older than 65 years of age.

Gender affected

Both men and women

Body part(s) involved

Hands and Wrists

Elbow joint

Shoulders joint

Hip joint

Knee joint

Ankles and feet

Prevalence

Worldwide: 350 million (2021)

India: 180 million (2017)

Mimicking Conditions

Lupus

Lyme Disease

Gout

Vasculitis

Osteoarthritis

Fibromyalgia

Necessary health tests/imaging

Physical examination

Laboratory tests

MRI

CT

Arthroscopy

Treatment

NSAIDs (nonsteroidal anti-inflammatory drugs): Ibuprofen, Aspirin & Naproxen

Steroids: Prednisolone, Betamethasone & Dexamethasone

DMARDs (disease-modifying anti-rheumatic drugs): Methotrexate, Leflunomide & Hydroxychloroquine

Surgery: Synovectomy & Join replacement therapy

Physiotherapy

See All

Causes Of Arthritis

There are different causes depending on the type of arthritis. The most common types are:

1. Osteoarthritis

Osteoarthritis is the most common form of arthritis, affecting millions of people worldwide. The most common symptoms are joint pain and stiffness and results in the breakdown of joint cartilage and underlying bone.

2. Rheumatoid arthritis

Rheumatoid arthritis, or RA, is an autoimmune and inflammatory disease. It typically results in warm, swollen, and painful joints.

3. Gout

Gout is a type of arthritis that causes pain and swelling in your joints. It is characterized by recurrent attacks of a red, tender, hot, and swollen joint. Gout is due to persistently elevated levels of uric acid in the blood.

4. Juvenile idiopathic arthritis

Juvenile idiopathic arthritis, formerly known as juvenile rheumatoid arthritis, is the most common type of arthritis in children under the age of 16. This type of arthritis can cause serious complications, such as growth problems, joint damage and eye inflammation.

5. Ankylosing spondylitis

Ankylosing spondylitis is a type of chronic arthritis that causes inflammation in certain parts of the spine.This causes pain and stiffness in the lower back and hips, especially in the morning and after periods of inactivity.

6. Psoriatic arthritis

Psoriatic arthritis is a chronic, autoimmune form of arthritis that causes joint inflammation and occurs with the skin condition psoriasis. Psoriasis causes red, scaly rashes and thick, pitted fingernails.

7. Reactive arthritis

Reactive arthritis is pain or swelling in a joint that is caused by an infection in your body. It causes extremely painful, swollen joints and the person feels very tired.

8. Septic arthritis

Septic arthritis is also known as infectious arthritis, and is usually caused by bacteria. It can also be caused by a virus or fungus. This type of arthritis typically causes extreme discomfort and difficulty in the affected joint. The joint could be swollen, red and warm, and you might have a fever.

Symptoms Of Arthritis

While it is difficult to know for sure if your joint pain is due to arthritis or not, based on the symptoms, there are certain signs that usually indicate you should consult a doctor. The four key signs include:

Pain: Pain from arthritis can be constant or it may come and go. It may occur when at rest or while moving. Pain may be in one part of the body or in many different parts.

Swelling: Some types of arthritis cause the skin over the affected joint to become red and swollen, feeling warm to the touch. Swelling that lasts for three days or longer or occurs more than three times a month should prompt a visit to the doctor.

Stiffness: This is a classic arthritis symptom, especially when waking up in the morning or after sitting at a desk or riding in a car for a long time. Morning stiffness that lasts longer than an hour is a good reason to suspect arthritis.

Difficulty in mobility: If you find it hard or painful to get up from your favorite chair, or after sitting in a single position for a long time, then it could be a warning sign of arthritis.

Risk Factors For Arthritis

Risk factors associated with Arthritis include:

Being overweight/obese exerts more stress on joints, particularly weight-bearing joints like the hips and knees

Trauma or injuries to joints

Habits of repetitive knee bending and squatting

Smoking puts you at more risk of developing rheumatoid arthritis

Bacterial and viral infections can infect joints and cause the development of some types of arthritis

Gender - Women are more likely than men to develop rheumatoid arthritis, while most of the people who have gout, another type of arthritis, are men.

Genetic and hereditary factor

Are you at risk of arthritis? Read to know more about this

Check Out Here!

Diagnosis Of Arthritis

The doctor diagnoses arthritis on the basis of:

Physical examination: Based on the symptoms, your doctor will do a thorough examination of the joints for pain and swelling of the affected areas.

Laboratory tests: Fluids commonly analyzed include blood, urine, and joint fluid.

Imaging tests: Imaging scans such as X-ray, MRI, and CT scans are commonly used to assess the extent of damage to joints.

Arthroscopy: This procedure involves inserting a small, flexible tube called an arthroscope through an incision near the joint. The arthroscope transmits images from inside the joint to a video screen.

You can now book your test at the comfort of your home.

Book Now!

Celebs affected

Megan Park

She has been living with Rheumatoid Arthritis for 10 years. Symptoms like extreme joint swelling, the inability to do certain things that everyone else could.

Aida Turturro

Most people think of arthritis as a disease for the elderly. The truth is, Rheumatoid arthritis can strike at any age. For Aida Turturro, her diagnosis came when she was just 12.

Lucille Ball

Lucille Ball was the star of the famous 50’s show I Love Lucy. She was only seventeen when she was diagnosed with arthritis and was one of the first and most famous celebrity supporters of the National Arthritis Foundation.

Prevention Of Arthritis

Some of the common ways to prevent arthritis include:

Strengthen joints with easy exercises.

Warm-up before any physical activity.

Consume calcium every day.

Maintain a healthy weight.

Add exercise in your life to increase strength and muscle tone.

Do some moderate activity at least 5 times a week.

Annoying Arthritis pain?

Studies suggest that certain foods help in alleviating the pain and inflammation associated with arthritis. Add the following foods into your diet to combat arthritis pain.

Read More!

Specialist To Visit

If you experience any symptoms of arthritis:

Do consult your doctor at the earliest for proper diagnosis of the condition

Before visiting the doctor, keep track of your symptoms (for a few weeks) such as

Which part of the joint/body is swollen and stiff,

When and for how long the symptoms appear

Which helped to ease the symptoms.

Also, make a note of other symptoms such as fatigue or rash.

If you have a fever along with these symptoms, seek immediate medical care.

Sometimes arthritis is difficult to be diagnosed by a general physician and might need to see a specialist. In such cases, your doctor might advise you to consult:

Orthopedician

Rheumatologist

Consult our professional doctors and seek help. Click here to book an appointment.

Consult Now!

Treatment Of Arthritis

1. Medications

NSAIDs (nonsteroidal anti-inflammatory drugs) are used to treat pain and inflammation and decrease joint damage.Some examples of drugs are: ibuprofen, aspirin, and naproxen.

Steroids are given to manage symptoms of arthritis, mainly pain and inflammation. These drugs also help in improving the range of motion by managing the symptoms.Steroids like prednisolone, betamethasone, and dexamethasone are used in inflammation.

DMARDs (disease-modifying anti-rheumatic drugs) are used to reduce pain, swelling, and inflammation, especially in people suffering from rheumatoid arthritis. Commonly used conventional DMARDs include methotrexate, leflunomide, hydroxychloroquine, and sulfasalazine.

2. Surgery

Synovectomy, i.e., removal of the damaged joint lining, is also recommended in case of severe inflammation of the synovial fluid that causes arthritis.

Joint replacement therapy is a surgical procedure in which parts of an arthritic or damaged joint are removed and replaced with a metal, plastic, or ceramic device called a prosthesis.

3. Physiotherapy

Physiotherapy is recommended to keep joints supple and flexible. Exercise can help in strengthening the muscles around the affected joint and prevent further damage. Options include stretching exercises, exercises that provide a range of motion, low-impact aerobic exercises such as walking, cycling.

Home Care For Arthritis

Using hot-water bags

Hot water bags or electric heating bags can be used to give temporary relief from joint pain and swelling on a daily basis.

Losing weight

Being overweight can increase complications of arthritis and contribute to arthritis pain. Make gradual and permanent lifestyle changes like eating healthy, portion control, avoiding deep-fried foods, and following an exercise regimen.

Exercising

It might sound contradictory to suggest exercise with arthritis pain when even getting up can be painful. Research has shown that exercise helps to warm up the fluid present in our joints and prevents it from thickening.

There are 3 types of exercises that are essential for healthy joints as well as for people with arthritis. These include flexibility exercises, aerobic exercises, and strengthening exercises. Each one plays a role in maintaining and improving your ability to move and function.

1. Flexibility exercises

These exercises are aimed at improving the range of motion. This means that they improve the ability to move your joints through the full motion that your joints were designed to achieve.

Flexibility exercises include gentle stretching and movements that take joints through their full span.

Doing these exercises regularly, ideally, every day, can help maintain and even improve the flexibility in your joints.

2. Aerobic exercises

These exercises strengthen your heart and make your lungs more efficient. They improve your stamina, reduce fatigue, and help in keeping your weight in check.

Brisk walking: This is one of the best bone-strengthening aerobic activities. While it is recommended to take a 30-minute brisk-walking session at least 5 days a week, you can start with three 10 minutes walking sessions anytime throughout the day.

Swimming: If you don’t know how to swim yet, get enrolled in a local swimming club and befriend water as swimming strengthens the hips, knees, shoulders, and chest while having minimum impact on the joints. A 30-minute swimming session, 5 days a week is very beneficial.

Cycling: Cycling takes the hips and knees through their range of motion. It strengthens the thigh and calf muscles thereby providing support to essential joints of the hips and legs. A 30-minute ride 5 or more days every week is recommended.

3. Strength Training Exercises

Strengthening exercises help maintain and improve your muscle strength. Strong muscles can support and protect joints thereby preventing as well as improving arthritis.

1. Chair sit

Sit on a chair that does not revolve or have wheels fitted.

Slowly rise up using the legs and the hip.

Use the elbow rests for support if required.

Stand up straight and again sit back down.

Perform 20 reps anytime throughout the day.

This movement strengthens the hips, knees, and feet.

2. Leg raises

Lie down on your back and keep your hands on your sides, palms down.

Slowly raise the right leg using the abdominal muscles while keeping both legs straight.

Repeat on both sides 10 times each.

This exercise strengthens the core muscles that support the spine.

3. Knee rolls

Lie down on your back, hands on the side and bend your legs at the knees so that the feet touch the ground.

Inhale and slowly lower both knees towards the ground on the right side.

Hold for 5 seconds and come back to the starting position.

Repeat 20 times on both sides.

This exercise relieves stiffness of the hips and the abdominal muscles.

Massaging

Experts suggest that regular massage can help reduce pain caused due to arthritis. You can consult a massage therapist for learning massages that you can administer yourself or see a masseuse regularly. Massage with extra virgin olive oil is especially beneficial for relieving joint pain.

Other Daily tips

Here are some essential tips on how to care for your joints on a daily basis:

1. When using a chair

Avoid using your wrists or knuckles when getting up from your chair. Instead, use your forearms to push or get up from a chair. This helps in distributing the weight more evenly and prevents any undue stress on joints.

When getting out of the chair, one way is to lean forward with your hands around your knees and push up/stand up by using your leg muscles.

Another way of getting up from the chair is to distribute the weight between your forearms and the legs. This avoids straining the knuckles or the shoulders.

2. When carrying a bag

Avoid carrying too much weight. You may strain your shoulders and fingers if you carry your bag by holding the strap.

Carry your bag on your shoulder if it is not too heavy.

3. When reading a book

Avoid resting your face on your elbows and knuckles when reading a book.

Avoid resting your face on your wrists when reading a book.

Avoid holding the book too tightly. It can strain your wrist. You can use a book rest. It avoids any strain on your elbows, knuckles, wrists, and neck.

4. When opening a jar

Avoid holding the lid with your fingers and thumb to open the jar. It can strain your thumb.

Instead, use both hands to increase your grip on the jar. Use the palm of the hand to increase the grip and always screw open towards the thumb.

Both hands can be used to hold the lid after opening the jar on a non-slip mat or damp cloth.

5. When holding a cup

Avoid holding the cup with just one hand.

Use both hands to hold a lightweight cup or a mug.

Use cups with larger handles.

6. When carrying the dishes

Avoid carrying dishes in one hand. It causes strain on the thumb and wrist. Use both hands instead.

Also avoid carrying dishes on a tray as it causes strain on your neck, shoulders, and elbows.

It is best to use a trolley to carry dishes.

7. When lifting heavy objects

Avoid bending forward to lift an object.

Instead, bend your knees, rest the weight equally on both feet, hold the heavy object close to your body, and then lift.

Tips to keep in mind

For those suffering from arthritis or joint pain of any kind, high impact exercises are best avoided

Wear proper clothing and footwear when you go out for exercise.

Rest is as important as the exercise itself, not getting enough may cause injury.

An expert’s supervision is recommended while working out with heavy equipment.

Patients with heart conditions and other chronic health conditions should always consult a doctor before taking up an exercise regimen.

Complications Of Arthritis

Arthritis can lead to several severe health complications that may affect other parts and organs of your body. Arthritis is a complex disorder, it’s sometimes hard to treat effectively. Some of the complications you may encounter with arthritis include:

Trouble sleeping: Stiff and painful joints, makes it hard for you to sleep.

Mobility issues: Arthritis can hamper the mobility of the person, moving out of bed and working causes a lot of pain.

Weight gain: Arthritis affects your ability to get around. Being less active can lead to weight gain.

Anxiety and depression: it can lead to a toll on your mental health.When you’re unable to walk around properly and remain in pain all the time. This can lead to both anxiety and depression.

Alternative Therapies Of Arthritis

Home Remedies

1. Turmeric (Haldi): Turmeric contains curcumin that has anti-inflammatory properties and can help reduce arthritis pain especially rheumatoid arthritis.It also acts as an antioxidant.

Tip: You can mix ½ teaspoon of turmeric powder to warm milk and drink it.

2. Ginger (Adrak): Ginger has anti-inflammatory properties that help relieve pain. You can take ginger either in powder form or in raw form.

Tip: Prepare a mixture of raw, crushed ginger, black pepper powder, and honey and take one

teaspoon of it daily.

3. Epsom salt (Sendha namak): Epsom salt consists of magnesium sulfate which has been used to relieve pain since historical times.

Tip: You can either soak yourself in bath water mixed with Epsom salt or take it orally by mixing Epsom salt with equal amounts of lemon juice in warm water and taking 2 teaspoons of it daily.

4. Cinnamon (Dalchini): Cinnamon has anti-inflammatory properties which can help relieve arthritis pain.

Tip: You can add more cinnamon to food or try having crushed cinnamon powder mixed with honey and warm water.

5. Magnesium rich foods: Magnesium is an essential nutrient that is needed by the body to maintain healthy muscles, bones, heart and for relieving stress and pain. It is important for arthritis patients to get enough magnesium from food. Some examples of magnesium-rich foods are dark green, leafy vegetables like spinach, legumes/beans, and nuts.

Tip: You can consider taking magnesium supplements and rubbing magnesium oil on the joints.

Living With Arthritis

Arthritis can be a constant source of agony for the patient. Being in chronic pain can affect the quality of life. Efforts to make some lifestyle changes can decrease the risk of getting arthritis or making arthritis worse. Losing weight, quitting smoking, avoiding underuse or overuse of joints etc can help in managing the disease. The aim of arthritis treatment is to reduce pain, minimize joint damage and enhance or support function. Along with treatment, being physically active can also reduce aches and pains, improve function and overall health of arthritis patients. It can also help in reducing the risk of developing or managing other diseases like heart disease and diabetes. Staying active and changing the activity levels accordingly with the severity of symptoms can go a long way in helping the patients.

Frequently Asked Questions

How can I avoid getting arthritis?

Can arthritis happen suddenly?

Does arthritis hurt all the time?

Does exercise help arthritis?

Can arthritis make you tired?

Does sitting make arthritis worse?

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Ascites

Also known as Portal hypertension-ascites

Overview

Ascites is a medical condition that results in the accumulation of fluids within the spaces of your abdomen. Primarily, the condition is caused by cirrhosis of the liver that is foremost a result of drinking excessive amounts of alcohol. Ascites can also be caused by different types of cancer, specifically, it is seen in advanced stages of cancer and recurrent cancer. The condition can also be seen in different heart disorders, infections, low protein levels, and dialysis.

Ascites can be painful in severe cases and may prevent a person from being able to move around comfortably. The condition can cause fluid to move into the chest and surround the lungs which can cause difficulty in breathing.

The most common symptoms of ascites include swelling in the abdomen, weight gain, bloating, sense of heaviness, feeling of fullness, vomiting, shortness of breath, nausea, and indigestion. Treatment of ascites requires a change in lifestyle, modification of diet, and taking diuretics to flush out the excessive fluid. In severe cases, doctors would remove excessive fluid through a needle.

Key Facts

Usually seen in

Adults and children

Gender affected

Both men and women

Body part(s) involved

Liver

Abdomen

Lungs

Mimicking Conditions

Bladder distention

Hydronephrosis

Pancreatic pseudocysts

Large uterine or ovarian tumours

Necessary health tests/imaging

Ultrasound

CT scan

MRI scan

Laparoscopy

Blood tests

Treatment

Lifestyle modifications

Diet changes

Diuretics

Transjugular intrahepatic portosystemic shunt

Specialists to consult

General physician

Gastroenterologist

Hepatologist

Symptoms Of Ascites

Ascites can cause several symptoms that can affect your health. It is possible to experience more than one symptom at the same time.

Swelling of the abdomen

Weight gain

Shortness of breath

Nausea

Indigestion

Sense of heaviness

Bloating

Sense of fullness

Vomiting

Digestive issues

Constipation

Back pain

Difficulty in sitting

Fatigue

Swelling in the lower legs

Did you know?

Edema is the medical term used for swelling caused by fluids in the body's tissues. It usually occurs in the feet, ankles, and legs, but it can involve your entire body. Learn more about the causes and symptoms of edema.

Tap To Read!

Causes Of Ascites

The abdominal organs are covered by a sheet of tissue called the peritoneum. The peritoneum covers the liver, stomach, kidneys, and bowels. This peritoneal covering has two layers, one outer and one inner layer. Accumulation of fluid between these two layers is called ascites.

Fluids can get accumulated between these layers when there is a build-up of pressure in the veins present in the liver, and they stop working the way they should. The increased pressure prevents the flow of blood into the liver, and over time kidneys are unable to remove the excessive amount of salt from the body. This causes fluid build-up resulting in ascites.

The build-up of pressure is primarily caused by liver cirrhosis, heart failure, kidney failure, cancer or an infection.

Liver cirrhosis

Cirrhosis accounts for 84% cases of ascites. Liver cirrhosis is a late-stage liver disease in which the healthy liver tissue is replaced with scarred tissue resulting in permanent damage to the liver. The scar tissue prevents the liver from functioning normally and causes inflammation and cell death of the liver. Cirrhosis can be caused by various diseases such as hepatitis, fat accumulation in the liver, and iron buildup in the body. The leading cause of liver cirrhosis is an excessive amount of alcohol intake.

Liver cirrhosis results in an increase in the blood pressure of the portal vein that carries blood from the digestive organs towards the liver. When the pressure rises, there is a decline in the functioning of the kidneys that causes fluids to build up in the abdomen. This results in cirrhotic ascites.

Cirrhosis of the liver is a result of long-term liver damage which causes liver scarring. Read more about it.

Click Here!

Cancer

Recurrent cancer or late-stage cancer can result in ascites. Primarily cancer can spread to the lining of the peritoneal covering of the organ and cause it to leak. These are called malignant ascites. Secondly, cancer can spread to the liver itself and cause the build-up of pressure within the liver. This prevents the functioning of the kidney and results in ascites. Cancers such as colon cancer, ovarian cancer, pancreatic cancer, and liver cancer are more likely to cause ascites. In peritoneal cancer, the tumor cells present in the lining of the abdomen produce a proteinaceous fluid that causes ascites.

Heart failure or kidney failure

Ascites can occur when there is increased pressure of the hepatic veins and the veins that drain the lining of the organ. This is usually caused by long-standing venous hypertension. A heart failure or kidney failure can result in the decline of the blood volume of the arteries, vessels that carry blood throughout the body. This can further cause changes in the different body systems and cause the blood vessels of the kidneys to constrict, resulting in sodium and water retention leading to ascites.

Budd–Chiari syndrome

Budd–Chiari syndrome is caused by occlusion of the hepatic veins that drain the liver. It presents with the classical triad of abdominal pain, ascites, and liver enlargement.

Pancreatic ascites

Chronic pancreatitis is the most significant risk factor for the development of pancreatic ascites. It occurs when pancreatic secretions collect in the peritoneum as a result of a pancreatic duct injury. It most often follows necrotizing pancreatitis with major pancreatic duct injury or via fistula formation which communicates with the peritoneum.

Other rare causes:

Meigs syndrome (It is the triad of benign ovarian tumors with ascites and pleural effusion)

Vasculitis (swelling and redness of the blood vessels)

Hypothyroidism (decreased production of thyroid hormones)

Mastocytosis (a condition in which mast cells are formed in excess)

Risk Factors Of Ascites

Usually, a patient experiences ascites along with other medical conditions or as a consequence of another disease. You are more likely to have ascites in case of the following conditions:

Non-alcoholic fatty liver disease

Alcohol use disorder

Hepatitis B

Hepatitis C

Autoimmune hepatitis

Congestive heart failure

Kidney failure

Infections

Cancer of the organs present in the abdomen

Genetic liver conditions such as Wilson’s disease

Did you know?

Heart failure doesn't mean the heart is no longer working. But, heart failure is a condition in which the heart fails to pump blood to the body as efficiently as it should. Understand heart failure in depth.

Click Here!

Diagnosis Of Ascites

Diagnosing ascites can take multiple tests that may require you to go through some particular tests. Your doctor will carry out a physical examination where they'll check the swelling in the abdomen and carry out an examination. You can also be asked to take blood tests that will measure the protein levels in your blood. Other imaging and testing methods can include:

Ultrasound

Abdominal ultrasound is an examination modality that uses sound waves that helps in creating an image of the organs present in the abdomen. For an ultrasound, the patient may be asked to fast for the next eight to 12 hours before the ultrasound. This is done to prevent undigested food from blocking the sound waves and preventing a clear picture. You can also be asked to consume a fat-free meal the evening before your test in case of a liver or pancreas ultrasound. A doctor or health provider uses a handheld probe and moves it over the abdomen to take the ultrasound. This in turn creates a digital image on the screen that can be viewed by the doctor. This imaging modality is painless and images are captured in real-time. It will show the structure and movement of blood through the blood vessels of the abdomen. Abdominal ultrasonography can detect as little as 100 ml of ascitic fluid.

CT scan

A CT scan is also known as computed tomography. It is a specialized form of X-ray and shows the cross-sectional view of a specific body part. The CT scan circles around the body and sends images to the computer where they can be viewed by a medical professional. An abdominal CT scan can help the doctor view the organ and blood vessels present in the abdominal cavity. CT scan provides multiple images of the body and allows medical professionals to make an accurate diagnosis. Your doctor may ask you to fast for two to four hours before the CT scan and stop certain medications. You can also be asked to drink a glass of water or oral contrast that can help in getting a better view of the stomach and bowel.

MRI scan

Magnetic resonance imaging or MRI is a testing modality that uses magnets and radio waves to create images of the inside of the body. This non-invasive technique uses magnets and radio waves to create cross-sectional images of the abdomen that allows healthcare professionals to view any abnormality present inside the tissues and organs of the abdomen. An MRI uses no radiation and is considered to be a safer alternative to a CT scan. You will be asked to lie on your back and given a blanket and pillow while a technician will communicate with you via a microphone. The MRI machine makes loud noises that can be disturbing. The scan requires the patient to be completely still as the machine is sensitive towards movements.

Laparoscopy

It is a surgical diagnostic procedure that allows the examination of the organs presents inside the abdomen. This is a low-risk and minimally invasive procedure that is carried out via a small incision. It uses an instrument called a laparoscope that has a high-intensity light and a high-resolution camera at the front. The doctor will insert the instrument through a small incision in the abdomen and move the rod along with the camera that will further send images to the video monitor. Your doctor will be able to view the inside of the body in real-time and also collect tissue samples if needed. It is usually performed when non-invasive methods such as CT scan and MRI scan are unable to help with the diagnosis.

Fluid sample (diagnostic paracentesis)

Your doctor may take a sample of fluid present inside your abdomen through a needle. The fluid will be sent back to the laboratory, where it will be checked for the signs of disease such as infection or cancer. This test can help in pointing towards the cause of ascites. You will be given local anesthesia before this procedure.

The fluid is then reviewed for its gross appearance, protein level, albumin, and cell counts (red and white). Additional tests will be performed if indicated such as microbiological culture, Gram stain (to check for bacteria), and cytopathology (examination of cells and fluids of the body).

The serum ascites albumin gradient (SAAG) is probably a better discriminant than older measures (transudate versus exudate) for the causes of ascites. A high gradient (> 1.1 g/dL) indicates the ascites are due to portal hypertension. A low gradient (< 1.1 g/dL) indicates ascites of non-portal hypertensive as a cause.

Classification

Ascites exist in three grades:

Grade 1: Mild, only visible on ultrasound and CT

Grade 2: Detectable with flank bulging and shifting dullness

Grade 3: Directly visible, confirmed with the fluid wave/thrill test

Prevention Of Ascites

It is not always possible to prevent ascites. However, you can reduce your risk of developing ascites by reducing the risk factors of some causes. This can be done by:

Living a healthy lifestyle and eating a balanced diet that is low in added fats and salts.

Managing body weight and getting regular exercise are also great ways of preventing your chances of having ascites.

Limiting alcohol consumption alcohol abuse is a leading cause of ascites.

Avoiding undercooked fish or meat to reduce the chances of getting an infection in case you have cirrhosis.

Talking to your doctor and following their advice for managing your condition.

If you are at a higher risk of developing ascites due to pre-existing conditions, make sure to consult your doctor before taking new medications.

Is your booz giving you health blues?

Excessive alcohol consumption over a period of time can cause severe damage to your health. Read how alcohol can be a real problem.

Click To Read!

Specialist To Visit

You should visit a doctor if you are experiencing symptoms such as a distended, swollen abdomen, sudden weight gain, difficulty in breathing when lying down, reduced appetite, abdominal pain, bloating, nausea, vomiting, heartburn, fluid retention that is causing swelling in your feet or ankles, and shortness of breath. These symptoms might indicate the possibility of ascites. You can consult the following doctors for diagnosis:

General physician

Hepatologist

Gastroenterologist

A hepatologist is a medical doctor who diagnoses, treats, and manages problems associated with your liver, gallbladder, bile ducts, and pancreas.

A gastroenterologist is a doctor who treats digestive disorders.

If you are noticing any of the symptoms, seek advice from our world-class medical professionals.

Consult Now!

Treatment Of Ascites

There are different treatment modalities for ascites which include:

1. Lifestyle changes

Some common lifestyle changes that can help in the treatment of ascites include avoiding alcohol and limiting salt intake in your diet. You should not have more than 1500 mg/day of sodium or as directed by the doctor. You will also be asked to limit the intake of some types of fluids.

2. Water pills

These are also known as diuretic pills are used to flush out the extra fluid from the body. The most commonly used diuretic pills are furosemide and spironolactone, which help the kidney remove excess sodium and water. These pills are most effective for ascites and reduce the pressure around the liver.

Use of spironolactone may be limited by hyponatremia, hyperkalemia and painful gynecomastia (tenderness in the breasts). If gynecomastia is distressing, amiloride may be substituted for spironolactone. Furosemide is usually combined with spironolactone in a ratio of 40:100; maximal daily doses of spironolactone and furosemide are 400 mg and 160 mg, respectively.

Your doctor may ask you to monitor your blood chemistry while on the medications and reduce your salt and alcohol intake.

3. Pharmacologic therapy

It is used for refractory ascites and includes the addition of midodrine or clonidine, alpha-adrenergic agonists, to diuretic therapy. These agents constrict the vessels counteracting splanchnic dilation of the vessels.

4. Therapeutic paracentesis

This procedure is carried out by medical professionals. They use a long and thin needle to remove the accumulated excessive fluid from around the abdomen. The needle will be inserted through the skin and into the abdominal cavity. After the procedure, you will be asked to maintain a low salt and fluid diet to prevent the fluid from getting recollected. This procedure is usually recommended in patients with severe or recurrent ascites that do not show improvement with diuretics.

Patients undergoing large-volume paracentesis should receive i/v albumin infusions of 6-8 g/L of ascitic fluid removed.

5. Ultrafiltration

If the person exhibits a resistance or poor response to diuretic therapy, ultrafiltration or aquapheresis may be needed to achieve adequate control of fluid retention and congestion. The use of such mechanical methods of fluid removal can be beneficial in people with diuretic resistance and may restore responsiveness to conventional doses of diuretics

6. Transjugular intrahepatic portosystemic shunt (TIPS)

Severe cases of ascites may require a permanent tube called a stent (wire mesh) which will be inserted inside the body. This will be inflated inside the body and will form a channel or shunt that will bypass the liver. This will help in rerouting the blood flow from around the liver and hence decrease the need for regular drainage. This may be recommended when the diuretics fail to show any improvement in the patient's symptoms.

7. Liver transplantation

In the case of severe liver disease where the ascites don't improve, the patient may require a liver transplant. Ascites from liver or kidney failure may require surgery. In case the underlying cause of the ascites is a bacterial or viral infection, your doctor will treat you with other therapies to treat the cause and relieve the symptoms.

Ascites that are refractory to medical therapy are considered an indication for liver transplantation. In the United States, the MELD score is used to prioritise people for transplantation. The MELD Score has been validated as a predictor of survival in patients with cirrhosis, alcoholic hepatitis, and acute liver failure.

Home-care For Ascites

Ascites can be a real problem if not managed correctly. Individuals diagnosed with it should make lifestyle modifications for their betterment. These include:

Make sure you take the prescribed medications on time to manage your medical condition.

Label your drugs and set the alarm to make sure you have the medicines every day at the same time.

Follow all the instructions given to you by your doctor. Follow the diet given to you by your doctor.

Stick to the right treatment plan, as decided by your doctor, and incorporating the necessary lifestyle changes can help you take care of your condition and recover faster.

Eat a balanced diet and cut back on alcohol or foods that worsen your risk of developing ascites.

Note: The food you eat plays a vital role in your general well-being and good health. Read about tips to reap the benefits of a healthy diet.

Click Here!

Your physician may recommend you to a dietician who can make a customized plan for you depending on your medical condition and suggest ways to make your diet more compatible with your disease.

Complications of Ascites

Ascites can lead to several complications, including:

Abdominal problems

The fluid buildup may lead to pain discomfort and cause difficulty in breathing. These symptoms can interfere with a patient's ability to carry out day-to-day tasks such as walking and eating

Infection

The accumulated fluid can become infected and cause a condition called spontaneous bacterial peritonitis. This may result in fever and stomach pain that would require immediate medical attention. You may be prescribed long-term antibiotics or IV antibiotics to prevent the recurrence of the infection.

Accumulation of fluid in the lungs

Abdominal fluid can fill the lungs, especially on the right side which can cause symptoms such as chest discomfort, shortness of breath, cough, and hypoxemia (lack of oxygen in the blood). This will require thoracentesis, a procedure to drain the fluid from around the lungs.

Ascites-related hernia

Ascites cause an increase in abdominal pressure which can lead to a hernia, a condition in which an internal organ pushes through a weak spot in the muscle or tissue. This can especially occur in the case of an umbilical or inguinal hernia.

Kidney failure

Worsening of liver cirrhosis may lead to kidney failure. The treatment options for the same will be discussed by your doctor depending on your clinical condition.

Severe form of ascites can lead to hepatorenal syndrome (HRS) in which the impairment in the kidney function can lead to advanced liver disease. Individuals with hepatorenal syndrome do not have any identifiable cause of kidney dysfunction and the kidneys themselves are not structurally damaged.

Alternative Therapies for Ascites

If you have ascites, these therapies can help you control the condition. They are:

Exercising

Leading a healthy lifestyle and doing light exercises daily such as walking can help in managing your medical condition. Talk to your doctor about what kind of exercises would suit your condition.

Diet changes

Choose a diet that is low on salts and follow protein guidelines given by your doctor. The guidelines of what you are supposed to eat will depend on the severity of the condition and the treatment regimen that you are on. It is important to follow the advice of your doctor since your diet influences your health.

Yoga

Opting for simple exercises such as yoga can help you avoid stress and anxiety that can further help your health.

Did You Know?

Yoga is derived from Sanskrit and means ‘to unite’, symbolising the union of body and mind. Understand how yoga can help you.

Tap To Read!

Living with Ascites

Being diagnosed with ascites can be scary and can cause difficulty in carrying out day to day tasks. However, modern science has opened the doors to several possibilities that can allow you to live a healthy life and prevent fluid from accumulating again. Along with your medical treatments, it is important to incorporate lifestyle changes that will help you cope with your disease. Here are a few tips that you can follow:

Diet modifications

Your doctor may recommend you to a dietician who will help you plan a sodium-restricted diet. You should also check food labels and avoid consuming any food that has a high content of sodium. Instead of consuming products high in sodium, you can use salt substitutes and incorporate fresh ingredients that have no added salts. However, avoid using any salt substitutes with potassium in case you are taking medications for ascites since they can increase potassium levels.

Stop alcohol intake

If you have ascites, drinking a large amount of alcohol can be extremely detrimental to the health of your liver. Your liver will have to work harder to remove toxins from your body since alcohol doesn't metabolize out of your system. Drinks such as wine and beer contain large amounts of phosphorus that can lead to heart diseases and even death if your liver is unable to filter out excessive potassium. Talk to your doctor about what kind of drink you can intake without putting your health at risk and the frequency of drinking. Most people would be advised to eliminate alcohol from their diet completely.

For most adults, moderate alcohol use is probably not harmful. However, alcoholism, or alcohol dependence, causes long-term problems. Read more about alcohol addiction.

Click Here!

Lifestyle modifications

You will be advised to maintain a healthy weight and perhaps record your weight every day to keep a track of fluid retention in the body. Exercising daily will help you improve your health. Ask your doctor about the kind of exercises you can do.

Frequently Asked Questions

Is ascites a life-threatening condition?

Can ascites come back?

How can one control ascites?

What is spontaneous bacterial peritonitis (SBP)?

What is secondary bacterial peritonitis?

What is the difference between belly fat and ascites?

When will symptoms of ascites present themselves?

What is the prevalence of ascites with liver cirrhosis?

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Asthma

Also known as Obstructive airway disease, Bronchial asthma and Reactive airway disease

Overview

Asthma is a long term condition in which air passages in the lungs become narrow due to inflammation and contraction of the muscles around the small airways. This causes symptoms such as cough, wheezing, shortness of breath and chest tightness. These symptoms are intermittent and are often worse at night or during exercise.

Some of the common triggers that can make asthma symptoms worse include viral infections (colds), dust, smoke, fumes, changes in the weather, grass and tree pollen, animal fur and feathers, dust mites (dermatophagoides), strong soaps, and perfume. These triggers vary from person to person.

Asthma is diagnosed mainly with lung function tests but other blood tests and allergy testing also helps in making proper diagnosis. The treatment of asthma is vast but beta-2 agonists and corticosteroids remain the mainstay of asthma treatment.

Lifestyle and prevention measures such as avoiding triggers, avoiding foods that increase the risk of an asthma attack, and staying away from stress could be of great help when it comes to controlling asthma attacks. In severe cases, it can lead to a condition known as status asthmaticus that might require hospitalization.

Key Facts

Usually seen in

Children below 15 years of age

Gender affected

Both men and women

Body part(s) involved

Lungs

Airways

Prevalence

Worldwide: 235 million(2016)

India: 1-2% (2016)

Mimicking Conditions

Vocal cord dysfunction

Tracheal or bronchial obstruction due to foreign body or tumor

Heart failure

Gastroesophageal reflux disease (GERD)

Chronic sinusitis

Chronic obstructive pulmonary disease

Anaphylactic reaction

Necessary health tests/imaging

Blood tests: CBC, Immunoglobulin E (IgE) & Absolute eosinophil count (AEC)

Pulmonary function test

Chest X-ray

Allergy panel/asthma/rhinitis screening test

Treatment

Corticosteroids: Beclomethasone, Fluticasone & Prednisolone

Leukotriene receptor antagonists: Montelukast & Zafirlukast

Short-acting beta agonists (SABA): Salbutamol & Terbutaline

Long-acting beta agonists (LABA): Salmeterol & Formoterol

Methylxanthines: Theophylline

Anticholinergic drugs: Ipratropium & Tiotropium

See All

Symptoms Of Asthma

You may suspect asthma, if you or your child are noticing symptoms such as coughing and wheezing (whistling sounds) while breathing. These are common asthma symptoms. The symptoms of asthma can be characterized by:

Breathlessness (shortness of breath) when exposed to triggering factors

Cyanosis (blue discolouration of face and extremities)

Wheezing or whistling sound during breathing

Chest tightness, which feels like a tightened band around the chest

Intense coughing or the urge to cough that may be triggered by an allergen or other environmental factors

Fatigue during and after an asthma attack

These symptoms usually occur during attacks, mostly at night time. This is why some of you may feel tired during the day. During an asthma attack, breathing difficulties can get worse and develop into more serious shortness of breath, if not treated.

Most doctors identify asthma as intermittent (comes and goes) or persistent (lasting). Persistent asthma can be mild, moderate, or severe. The severity of the condition is based on the frequency of attacks.

Know more about the causes, symptoms, treatment and prevention of asthma in Hindi.

Causes Of Asthma

The exact cause of asthma is still not known. It is also believed to be a multifactorial pathology that is affected by both genetics and environmental factors. Ideally, when your immune system comes in contact with an allergen, it triggers an immune response to fight against the allergen. But in people with asthma, this immune response is very strong which leads to inflammation. This in turn, causes the airways to swell and become narrowed causing it difficult to breathe.

During an asthma attack, three things can happen:

Bronchospasm: The muscles around the airways constrict (tighten). When they tighten, it makes the airways narrow. Air cannot flow freely through constricted airways.

Inflammation: The airway linings become swollen. Swollen airways don’t let as much air in or out of the lungs.

Mucus production: During the attack, your body creates more mucus. This thick mucus clogs airways.

Asthma in children

According to the Global Initiative for Asthma (GINA) guidelines, around 300 million individuals worldwide including both adults and children are afflicted with asthma. As per the World Health Organization (WHO), India has around 15-20 million asthmatics. It is estimated that the prevalence of asthma in kids aged 5-11 years is between 10-15%.

Most kids with asthma may not show any signs or symptoms of the condition for a long time or until they have an asthma attack. Moreover, in most cases, the symptoms of asthma in children can be confused with other respiratory illnesses. Hence, the diagnosis of asthma in kids is quite difficult and is based merely on the symptoms.

There is no known way to identify the cause of asthma in kids. However, certain studies have identified a few factors that can increase the risk of asthma in children.

Click Here To Know!

Asthma in pregnancy

Uncontrolled asthma means that the mother is not getting enough oxygen. This naturally has adverse consequences for the mother, continuation of pregnancy and on the fetus in the mother. Well-controlled asthma leads to a normal pregnancy, normal delivery and a normal child.

Some of the common concerns a pregnant woman might have regarding asthma are:

Will asthma adversely affect my pregnancy or my baby?

Will pregnancy adversely affect my asthma?

Can asthma medicines be taken safely during pregnancy?

Will my child also have asthma?

Well-managed and well-controlled asthma does not create problems during pregnancy and delivery; neither for the mother and nor for the baby.

Here are all your concerns about asthma and pregnancy answered by an expert.

Tap Here For Answers!

Note: Intrinsic asthma is a type of asthma that is seen in a minority of asthmatic patients (around 10%), with negative skin tests to common allergens and normal serum concentrations of immunoglobin E (IgE). It is usually seen in adults, commonly have nasal polyps & may be sensitive to aspirin.

Risk Factors For Asthma

Some of the common triggers/risk factors for asthma include:

Genetics: Evidence suggests that presence of asthma and its severity can be influenced by the genome or genetic make up of a person.

Air pollution: Exposure to outdoor pollutants like nitrogen dioxide and diesel particulates, is associated with increased asthma symptoms.

Diet: Diets low in antioxidants such as Vitamin A, Vitamin C, Vitamin D, magnesium, & selenium and may also predispose to the development of asthma.

Viral infections: Respiratory tract infections that may be caused by a virus during childhood can be a cause for asthma in adulthood.

Allergens: Environmental allergens such as pollen dust or mites can trigger an asthma attack.

Medications: Certain medicines such as aspirin & beta-blockers are also a cause of asthma attacks in certain individuals.

Exercise: Exercise may aggravate asthma and make breathing difficult.

Chronic sinusitis: Post-nasal drip caused by sinusitis can trigger coughing and itchy throat which can aggravate asthma symptoms.

Insects or plants: Some people may be allergic to certain plants or insects that may act as a trigger for asthma.

Obesity: Being overweight puts you at a higher risk of asthma and its symptoms such as shortness of breath and wheezing.

Stress: Emotional factors such as stress can trigger not only anxiety but also asthma symptoms like breathlessness.

Smoke: Smoke or chemical irritants such as fumes can also lead to asthma symptoms like wheezing and shortness of breath.

Here’s more on the ill-effects of smoking and why quitting smoking is good for asthma patients.

Click To Know!

Did you know?

Exercise can cause asthma flare-ups. Also known as exercise-induced asthma, it is a condition that leads to breathing problems in asthmatics during or after exercise, especially with vigorous and prolonged exercise. It is clinically known as exercise-induced bronchoconstriction (narrowing of the airways) as it is not a cause but a trigger of asthma in people who already have the condition.

Click To Know More!

Diagnosis Of Asthma

Asthma is usually suspected if the patient has a history of recurrent dry coughing, particularly at night and early morning, along with other symptoms such as chest tightness, shortness of breath, and wheezing sound. Following are the diagnostic tests for asthma:

1. Physical examination

During a physical examination, your doctor might look at your eyes, ears, nose or throat for swelling or drainage which may indicate allergic reaction. Also, checking your chest and lungs for wheezing or whistling sounds which may indicate inflammation and contraction of airways.

2. Blood tests: Your doctor may recommend certain blood tests to check the level of inflammation, antibodies and eosinophils (a type of immune cells). These include complete blood count (CBC), immunoglobulin E (IgE) and absolute eosinophil count (AEC).

3. Pulmonary function test: Pulmonary or lung function tests are done to find if there are any airway obstructions. In case there is clinical suspicion but the lung function test comes out to be normal, then other tests such as post-exercise test or allergen challenge test can help in determining bronchial hyperresponsiveness in adults.

4. Chest X-ray: In severe cases, hyperinflation of lungs may be seen which can be detected with the help of chest x-ray.

5. Allergy panel/asthma/rhinitis screening test: If you are showing symptoms of asthma and an allergic trigger is suspected, then allergy diagnosis is generally recommended. The diagnosis of an allergy consists of medical history, skin prick test, and specific IgE (immunoglobuline group E) test.

Celebs affected

Amitabh Bachchan

Bollywood superstar Amitabh Bachchan has been open about being asthmatic. He even carries an inhaler in his pocket all the time to avoid any trouble.

Priyanka Chopra

Bollywood Actress Priyanka Chopra Jonas has been suffering from asthma since the age of 5. The actress has claimed that she has been battling with this disease for many years of her life. However, that hasn't become a barrier in her way of success.

David Beckham

The England midfielder David Beckham, who is considered as one of the fittest footballers in the world, has been suffering from mild asthma for many years.

Prevention Of Asthma

The best possible way to prevent asthma is to eliminate or reduce exposure to triggers that could lead to asthma attacks. Some of the common triggers of asthma and their prevention include:

Staying away from allergens such as animal dander, dust mites, mold, etc.

If possible, wear a mask whenever you come in contact with smoke and other irritating fumes.

Patients suffering from asthma should avoid exposure to viruses and other respiratory infections.

It is important to wash your hands carefully. Don’t forget to get your flu and/or pneumonia vaccine every year and reduce the risks of an asthma attack.

Maintain an asthma diary and note specific triggers so you can inform your doctor about these and reduce flare-ups in the future.

Click here to know about some common triggers of asthma.

Read To Know!

Specific tips based on the triggers

1. Exercise-induced asthma

Avoid exercising in cold, dry air.

Workout indoors or avoid exercising during early morning hours.

If a person is very much into workouts then warm up before working out, this helps the airways to adjust and hence eases breathing.

Before working out, it is beneficial to use an asthma inhaler or bronchodilator, these asthma medications can help to prevent the airways from contracting, and help control exercise-induced asthma.

2. Drug-induced asthma

Stay away from foods or medications that trigger asthma attacks like aspirin or beta-blockers.

Oral contraceptives may produce asthma exacerbation with long term use and high doses of postmenopausal hormone replacement therapy also increase the risk of asthma.

3. Pregnancy-induced asthma

Avoid smoking and places where people smoke, because cigarette smoke can increase the risk of having an asthma attack.

Avoid triggers that can induce asthma attacks whenever possible, depending on the type of allergy, triggers might include animal fur, pollen, cold air or dust mites.

4. Stress-induced asthma

Emotional stress can also trigger asthma attacks, therefore you can practice meditation and other relaxation techniques to keep stress at bay.

Getting enough rest, eating a healthful diet, and exercising regularly are often effective ways to reduce stress levels. People may find relief from asthma symptoms by making few lifestyle changes to help manage their stress levels.

Specialist To Visit

If you have asthma or your symptoms are similar to asthma and are looking for a doctor then these specialists can help:

Pulmonologist

Allergist or immunologist

Pediatrician

Physician

You should seek immediate medical attention if:

You start feeling dizzy or weak after or during an asthma attack

You are unable to complete sentences in one breath

You note bluish discoloration of face and extremities (cyanosis)

You are unable to carry out a routine activity like cleaning or other daily chores

Your cough doesn't improve with medication

You are hearing a wheezing sound while inhaling and exhaling and you are breathing differently from your usual breathing

Your wheezing does not get better even after taking the medicine as most fast relief asthma medicines work within 15 - 20 minutes

Tip: Do not use excess of quick-relief medicine

Use of quick-relief medicine containing only bronchodilator frequently can improve your symptoms for a while but in the long run can worsen your condition. This is because, bronchodilators cause the airways to swell more and more which in turn can lead to severe asthma attacks. So, if you are taking relievers with bronchodilators only, talk to your doctor to change the medicines.

Click To Consult Now!

Treatment Of Asthma

The common treatment approach for people with asthma involves use of preventive medicines (also known as controllers) and quick-relief medicines (also known as relievers)

A. Controllers

These medicines help reduce the swelling of the airways and prevent mucus formation. They are mostly used to prevent asthma attacks and protect the lungs. These medicine classes are:

1. Corticosteroids

These are the best and most commonly prescribed drugs for asthma. They act by inhibiting the activity of the inflammatory compounds such as prostaglandins, leukotrienes, and histamines which are responsible for inflammation. They are broadly classified into:

a) Inhaled corticosteroids (ICSs): ICSs are amongst the most effective anti-inflammatory medications available to treat asthma. Low-dose monotherapy of inhaled corticosteroids is usually given as first-line maintenance therapy for most children and adults dealing with asthma. Regular use of ICS have been shown to reduce symptoms and flare ups of asthma along with improvement in lung function. Example of drugs that belong to this category are:

Beclomethasone

Budesonide

Fluticasone

b) Oral corticosteroids: These are generally given for the acute treatment of moderate to severe asthma. Prolonged use of oral steroids are generally avoided as it has been associated with potentially serious side effects. Examples include:

Prednisone

Prednisolone

2. Leukotriene receptor antagonists

These medicines are effective for the treatment of asthma, are well tolerated and are safe to use. As the name suggests, they work by blocking the action of an inflammation-causing chemical messenger called leukotriene. These medicines thereby reduce the inflammation in the airways, preventing asthma and relieving symptoms of allergies. Common examples of these medicines include:

Montelukast

Zafirlukast

3. Biological therapies

Biological therapies such as the anti-IgE monoclonal antibody, example omalizumab, can reduce the frequency of asthma attacks. This drug is given subcutaneously once every 2–4 weeks. This medicine is specific to patients with difficult to control asthma with an elevated serum IgE level. It is also given to people whose asthma symptoms do not improve even with ICS therapy in combination with a second controller medication.

B. Relievers (bronchodilators)

These are the preferred medications for the treatment and maintenance of acute symptoms of asthma and are generally prescribed to all patients with asthma. They work by dilating the bronchioles, thereby providing only temporary relief. These medicines are used to relieve the symptoms of asthma when they occur but not reverse the inflammation that has already occured. Drugs that belong to the class of bronchodilators are:

1. Short-acting beta agonists (SABA)

These medicines are used for the treatment of asthma symptoms and its exacerbations. As the name suggests, these are known to provide quick relief. For example, salbutamol which is the common drug, has an action onset of under 5 minutes & lasts for 3 to 6 hours. Some of the common examples include:

Salbutamol

Terbutaline

Levalbuterol

2. Long- acting beta agonists (LABA)

This class of medicines contain low doses of controllers and relievers with a long lasting effect. These not only help you to relieve the symptoms but also protect you from asthma attacks. These medicines are often used in conjugation with other drugs such as corticosteroids. They have an action onset of more than 5 minutes but the effect lasts for at least 12 hours. Common example include:

Salmeterol

Formoterol

Indacaterol

Olodaterol

Vilanterol

3. Methylxanthines

These are a new class of medicines used for the treatment of asthma. It is known to aid in the treatment of asthma by reducing airways inflammation and airway obstruction which is seen in asthmatics. Theophylline is one of the most commonly prescribed methylxanthines.

4. Anticholinergic drugs

This class of medicines work by blocking the action of acetylcholine, a neurotransmitter which plays a key role in controlling the constriction of smooth muscles and inflammation. These are further classified into:

Short acting muscarinic antagonists (SAMA): Ipratropium is the common medicine that belongs to this class. It is used to treat and prevent the symptoms of asthma and COPD along with improving the breathing.

Long acting muscarinic antagonists (LAMA): Tiotropium is the common medicine which is mainly used for the treatment of chronic obstructive pulmonary disease (COPD) and asthma.

C. Other therapies

Bronchial thermoplasty is a bronchoscopic treatment using thermal energy to ablate airway smooth muscle in accessible bronchi. It may reduce exacerbations in patients not responding to maximal inhaler therapy.

Did you know?

Asthma medications can be taken in the form of dry powder inhaler (DPI), which means taking asthma medication in the form of dry powder, using a small, hand-held device. The DPI is an effective tool that delivers the medication directly into the lungs. DPI users are required to take a strong and steady breath through the device. To know more, check out the video.

Click To Watch!

Home-care For Asthma

To care for your condition, you can follow these simple steps at home and manage your asthma better:

1. Stay away from allergens

You must know what could trigger asthma such as plants, dust or certain food items and keep them away from your home.

2. Stay hydrated

Drinking plenty of water throughout the day keeps the mucus thinner, helps in better breath control and digestion, thereby keeping asthma in control.

3. Keep the air filters clean

It is important to keep the air around you clean and for that you need to keep the air filters cleaned or changed to avoid triggers for asthma.

4. Avoid strong fragrances

Not only dust, but strong fragrances such as cleaning sprays, perfumes & air fresheners can also trigger asthma. Therefore, it is best to avoid these sprays.

5. Keep yourself active

It is commonly believed that exercise can trigger asthma attacks. However, if you are taking your medication regularly and indulge only in moderate exercise then you can easily stay active and fit.

6. Avoid exposure to dust

Keep your surroundings clean to avoid build up of dust. Always wear a mask while cleaning or vacuuming.

7. Keep inhaler handy at all times

It is important to always keep an inhaler with you at easily accessible places in times of emergency.

Here are 10 mistakes to avoid if you are using inhalers.

Click To Read!

Complications Of Asthma

If asthma is left undiagnosed or untreated, it can cause an increased risk of lung scarring. Scarring is the permanent damage to your lungs and airways, where you find it hard to breathe unless provided with external aid. This is an irreversible stage of asthma, which means it cannot be corrected with medications. Some of the permanent changes that are possible include:

Increased production of mucus

Thickening of airways

Irreversible narrowing of airways over time

Pulmonary hypertension

It is a state where there may be a risk of complete respiratory failure with severe attacks of asthma. During a severe attack of asthma, the airways can get shut, and even the emergency medications fail to work.

Alternative Therapies For Asthma

1. Home remedies for asthma

Garlic: Garlic is known to have several health benefits, including anti-inflammatory properties, Due to the anti-inflammatory nature of garlic it may be helpful in relieving the symptoms of asthma.

Ginger: Ginger has anti-inflammatory properties, which may be helpful in treating severe asthma. You can take oral ginger supplements, which can help improve asthma symptoms.

Honey: Honey is often used as a remedy for colds. It helps in soothing sore throat and reduces coughing. You can take honey with herbal tea or warm water to provide relief for your symptoms.

Omega-3 fatty acids: Foods rich in omega-3 fatty acids such as fish and flax seeds can help in decreasing airway inflammation and improving lung function in people suffering from severe asthma.

Caffeine: Caffeine is known to be a bronchodilator, which reduces fatigue of respiratory muscle. Therefore, it is effective for people suffering from asthma. It is also known to elevate the function of airways for a few hours after consumption.

2. Breathing techniques

Breathing exercises may be helpful in reducing your asthma symptoms by breathing slowly and gently. Breathing techniques focus on breathing out of your nose rather than breathing out from your mouth. Breathing out of your mouth tends to dry out your airways and make them more sensitive to allergens, thereby triggering an asthma attack.

3. Yoga

Yoga comprises both stretching and breathing exercises that help in maintaining your overall fitness. Yoga is also a great stress buster, which can help in decreasing the daily stress, which may be a trigger for your asthma.

4. Mindfulness

Mindfulness refers to a type of meditation that focuses on being in the present and can be practiced almost anywhere. All you need to do is sit in a quiet place, close your eyes, and focus your attention on either your breath, thoughts, feelings, or sensations occuring in your body.

As it is a great stress-relieving exercise, it can be quite helpful in relieving stress-related asthma symptoms.

Living With Asthma

Who said asthmatics have to live their life under restrictions? If your asthma is under control, you can lead a normal, active life just like others. Do not let asthma control your life with these simple tips and tricks.

1. Stay informed and aware of your condition

It is quite common to feel anxious about your condition, if you are not aware of the condition. It is therefore advised you must be aware and well informed about the condition. This may include reading books about the condition. If researching online, then make sure you follow legitimate sources and not everything that turns up on search engines. It is also a good idea to speak to your doctor and get all your queries answered by a medical professional who knows about your condition in depth.

2. Always take your medication on time

Taking your medications on time can play an important role in the management of asthma symptoms. Remember preventive medicines for asthma help to reduce the swelling over time. You do not become addicted to it nor do the medicine become less effective with time. Your doctor will ask you to take these medicines regularly, if you:

Have frequent asthma attacks

Wake up in middle of the night due to asthma

Use quick relief medicine more often (like twice in a week) to stop asthma attacks

Note: If you are pregnant, talk to your doctor because most of the medicines are safe during pregnancy. Moreover, keeping your asthma in control can protect your child.

3. Never miss your doctor’s appointment

It is important to schedule appointments at regular intervals, even if you feel good or have no breathing issues. This is because these check-ups will help the doctor keep track of the asthma symptoms and make changes to the treatment plan accordingly. It also helps you to prevent complications as your doctor keeps a track of your condition on a regular basis.

You can even ask for an asthma action plan from your doctor which will help you to know when your asthma is getting worse and how to respond to it. Talk to your doctor, if your asthma is not yet controlled with use of medicines. Also, inform your doctor, if you have to take controllers before, during or after exercise.

4. Make some special changes for the patient

You can make some minor changes in your bedroom to prevent asthma attacks. For example:

Do not allow rugs or carpets in your room as these could get dusty or moldy.

Say no to soaps, shampoos, incense, or lotion that smell like perfumes, if your asthma is triggered by strong smells. No smoking or strong smells in the bedroom as well.

Do not let animals in your bedroom. If possible, keep them out of your house and ask someone to clean the area or their litter.

Use dust-proof covers with zippers for pillows, mattresses, and quilt. Avoid pillows or mattresses made from straw as these can trigger an allergic reaction.

Wash bed sheets, pillow covers, and blankets in hot water and sun dry them.

Always keep your windows open, especially when you are cooking, cleaning or if there is any strong smell.

Do the chores like painting, vacuuming, cleaning, or dusting when the person is not around. The same rule applies when using sprays or disinfectants.

Have your inhaler near the bedside to avoid panic during late night symptoms. Also, always keep your inhaler with you while traveling.

5. Maintain an asthma journal

Maintain an asthma diary, where you note down the time, severity and triggers of your asthma attacks. Different people have different triggers so noting them down can help you to know your trigger and avoid attacks. This could even help in deciding the treatment and dealing with the condition in a better way.

6. Get vaccinated

As people with asthma are at a high risk of developing complications from respiratory infections such as influenza and pneumonia, it is important to get vaccinated. Ask your doctor about the recommended one.

Everyone loves to travel and see new places! Asthmatics are no different. But traveling and visiting new places poses certain risks and problems. But with proper care and attention to detail, asthmatics can safely travel and enjoy without asthma playing spoilsport!

Here are some quick and effective tips for asthmatics to travel safely.

Click To Know!

Frequently Asked Questions

How do I know if I have asthma?

What can help my asthma attack if I do not have an inhaler?

Which foods to eat for asthma?

Which foods to avoid for asthma?

Can asthma get worse with age?

Can asthma be cured?

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Autism

Also known as Autistic Disorder, Asperger Disorder, Childhood disintegrative disorder, and Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS)

Overview

Autism, now known as autism spectrum disorder (ASD), refers to a broad range of conditions characterized by challenges with social skills, repetitive behaviors, speech and nonverbal communication.

Autism is a developmental disability caused by differences in the brain due to genetic conditions. Other causes are not yet known, however there are multiple risk factors that can play a role in the development of autism. The most common risk factors are nutritional deficiencies during pregnancies, age of the parents, infections, exposure to toxic chemicals and certain drugs.

Individuals with autism have difficulty in communication and adapting to social situations. They find it hard to understand what others are thinking or feeling, they get very anxious about social situations and find it hard to make friends or prefer to be on their own.

The treatment and management depends on the severity of symptoms. Though, there might be no cure for autism the goal of treatment is to maximize an individual’s ability to function by training them on social, communication, functional and behavioral skills.

Key Facts

Usually seen in

Children between 12-18 months of age.

Gender affected

Both men and women, but more common in men.

Body part(s) involved

Brain

Prevalence

World: About 1 in 100 children has autism (2022)

India: About 1 in 84 children has autism (2021)

Mimicking Conditions

Heavy metal poisoning (mercury and lead)

Aminoacidurias

Hypothyroidism

Brain tumor

Organophosphate exposure

Seizure disorder (atypical)

HIV infection

Childhood schizophrenia

Other rare conditions (glycogen storage disorders)

Subacute sclerosing panencephalitis

Tuberous sclerosis

Creutz-Jacob disease/new variant CJD

Necessary health tests/imaging

Assessment for dysmorphic features

Wood’s lamp examination of the skin

Full neurologic examination with a head circumference

Genetic testing

Treatment

Therapies: Deep brain stimulation (DBS), Behavioral and psychological therapy, Occupational therapy and Communication therapy.

Medications: Antipsychotics and Antidepressants.

See All

Types Of Autism

In 2013, the American Psychiatric Association merged four distinct autism diagnoses into one umbrella diagnosis of autism spectrum disorder (ASD). They included:

Autistic disorder

It is also known as “classic” autism. Individuals with autistic disorder usually have significant language delays, social and communication challenges, and unusual behaviors and interests. Generally, people with autistic disorder may also have an intellectual disability.

Asperger syndrome

This syndrome is categorized by milder symptoms of autistic disorder and the individuals might have social challenges and unusual behaviors and interests. But, they typically do not have problems with language or intellectual disability.

Pervasive developmental disorder – Not otherwise specified (PDD-NOS)

This is sometimes called “atypical autism”, and individuals who meet some of the criteria for autistic disorder or Asperger syndrome, but not all, may be diagnosed under this. These people usually have fewer and milder symptoms than those with an autistic disorder which might cause only social and communication challenges.

Childhood disintegrative disorder

Also known as Heller's syndrome and disintegrative psychosis is a rare condition characterized by developmental delays in language, social function, and motor skills after 3 years of age.

Click Now!

Symptoms Of Autism

Signs of autism usually appear by age 2 or 3. Some associated development delays can appear even earlier, and often, they can be diagnosed as early as 18 months. These include:

Symptoms in children

Usually, a child with autism will present with several indicators that include:

Behavioral symptoms

Inexplicable tantrums

Unusual interests or attachments

Uncommon movements such as flapping hands or spinning

Extreme difficulty coping with any kind of change

Sensory symptoms

Being scared of certain sounds

Does not look directly at an object or person

Fascinated with moving objects

High tolerance towards temperature and pain

Communicational symptoms

Not responding to their name by 12 months

Not giving any reactions by 12 months

Know the 5 early symptoms of autism in children.

Read This!

Symptoms in adults

People with autism have difficulty with social communication and interaction, restricted interests, and repetitive behaviors. The symptoms include:

Behavioral or interactive symptoms

Avoiding eye contact

Infrequently sharing interest, emotion, or enjoyment of objects or activities

Not responding or being slow to respond to one’s name or to other verbal bids for attention

Difficulty in keeping up with the conversations

Often talking at length about a favorite subject without noticing that others are not interested or without giving others a chance to respond

Displaying varied facial expressions, movements, and gestures

Having an unusual tone of voice that may sound sing-song or flat and robot-like

Difficulty in understanding another person’s point of view

Unable to predict or understand other people’s actions

Difficulties adjusting behaviors to social situations

Difficulties sharing in imaginative play or in making friends

Restrictive or repetitive symptoms

Repeating certain behaviors or having unusual behaviors

Having a lasting intense interest in specific topics, such as numbers, details, or facts

Overly focused interest in moving objects or parts of objects

Becoming upset by slight changes in a routine

Being more sensitive towards light, sound, clothing, or temperature

Experiencing sleep problems and irritability

Note: People with autism also may have many strengths like being able to learn things in detail, having strong visual and auditory learners, and excelling in math, science, music, or arts.

Read about 7 things about autism that you may not know about.

Click Here!

Causes Of Autism

Autism is a complex disorder and there’s no exact cause for it, however, it can develop from a combination of genetic and nongenetic, or environmental influences. These influences appear to increase the risk that a child will develop autism.

Risk Factors For Autism

The fact that symptoms and severity vary from person to person and the complexity of this disorder, both genetics and environment may play a major role.

Genetic risk factors

Genetic mutation: Most individuals with autism have rare gene mutations (changes) and these mutations occur in only a single gene.

Heritability: The recurrence risk of pervasive developmental disorder in siblings of children with autism is 2% to 8%.

Environmental risk factors

Paternal age: Studies suggest that advanced paternal age was associated with an increased risk of autism that in turn is associated with gene mutations. These mutations occur with advancing age.

Environmental chemicals: Several environmental agents were identified as strong contributors to learning and developmental disabilities in humans. These include:

Arsenic

Lead

Manganese

Mercury

Pesticides

Polybrominated diphenyl ethers (PBDEs)

Polychlorinated biphenyls (PCBs)

Polycyclic aromatic hydrocarbons (PAHs)

Solvents

Drugs: Exposure to pharmacological agents particularly during pregnancy represents a highly relevant environmental concern relative to the risk of autism. These include:

Valproic acid (VPA)

Thalidomide

Misoprostol

Beta 2 adrenergic agonist drugs

Antipyretics

Dietary factors: Diet-influenced factors are part of the potential environmental risk factors for autism that have been largely overlooked until recently. These include deficiencies of the following:

Vitamin D: Some studies have found that mothers of autistic children versus those with non-autistic children have reduced serum vitamin D levels.

Folic acid: Folate availability has also been suggested as a possible factor in the risk of autism because of its role in affecting neurodevelopment.

Infections: The idea that maternal and/or early infant infections could influence neurodevelopment and contribute to adverse outcomes.

Assisted reproductive technologies (ART): Children conceived using ART were more likely to be diagnosed with autism than those conceived naturally.

Pregnancy-related factors: Studies demonstrate that certain prenatal factors that aid in the development of autism include:

Maternal asthma

Allergic conditions

Maternal toxemia or bleeding

Prenatal stressors

Beginning of prenatal care

Urbanization of birthplace

Pregnancy and birth complications like extreme prematurity, low birth weight, multiple pregnancies

Pregnancies spaced with less than a one-year gap

Understand week-by-week symptoms related to pregnancy.

Click Here!

Diagnosis Of Autism

Evaluation of autism begins with a screening of the general pediatric population to identify children at-risk or demonstrating signs suggestive of autism, after which a thorough diagnostic evaluation needs to be done.

A parent interview, collection of any outside informant observations, and direct clinician observation of the child’s current cognitive, language, and adaptive functioning by a clinician experienced with autism should be components of this comprehensive assessment. Further, diagnostic evaluation include:

Complete physical examination

Individuals with autism often have a number of unusual physical characteristics, which can be evaluated by the following:

Assessment for dysmorphic features: Dysmorphology is the study of the atypical development of physical features which include birth defects like presence or absence of ear pit.

Full neurologic examination with head circumference: Individuals with autism often show a high level of anxiety and are frequently affected by comorbidities that influence their quality of life. Also, studies demonstrate children with autism often exhibit an atypical trajectory of head circumference (HC) growth, which may be an indicator of vulnerability to autism.

Wood’s lamp examination of the skin: This test is often used to make a diagnosis of specific skin and hair disorders.

Genetic testing

Currently, no clear biomarkers or diagnostic measures exist for autism, and the diagnosis is made based on the fulfillment of descriptive criteria. Given a relatively high yield in patients with autism, clinical genetic testing is recommended. It can provide information regarding medical interventions or work that might be necessary and help with family planning.

Note: Children with autism should also be screened for other illnesses or learning disorders, the comprehensive evaluation may include blood tests and hearing tests. Get tests in the comfort of your home.

Book Now!

Celebs affected

Daryl Hannah

Daryl Hannah is an American actress & environmental activist who is known for her roles in films such as Splash, Blade Runner, and Steel Magnolias. She was diagnosed with autism as a child. Though she was extremely shy around other people and very fearful of the spotlight as an adult, her special interests in watching movies supported her career as an actress.

Prevention Of Autism

There's no way to prevent autism, however, certain measures taken during pregnancy along with early detection and screening can reduce the impact to a greater level. These include:

Get genetic testing done

Genes represent the baseline susceptibility, which results in physiological changes that overcome the individual’s resilience and adaptation. Manipulation of these factors can render some kind of prevention.

Find out more about genetic testing and whether the disease runs in your family.

Read This Now!

Beware of congenital hypothyroidism

Maternal hypothyroidism during pregnancy also increases the risk of autism. Testing for congenital hypothyroidism during pregnancy can be a game changer.

Avoid smoking during pregnancy

Studies suggest that maternal smoking during pregnancy is correlated with risks for pregnancy and birth complications as well as long-term effects like asthma and behavioral problems or autism.

Want to quit smoking?

Try our exclusive smoking cessation range to get rid of this deadly habit.

Shop Now!

Protect yourself from air pollution

Air and chemical pollution are also a matter of general public health that have an effect on the development of autism in children whose mothers are exposed to it.

Avoid high thermal-intensity ultrasound

Studies suggest that the use of modern high thermal-intensity ultrasound in the first trimester of pregnancy increased the risk of autism. Since the toxic window covers the first trimester, avoidance or reasoned use of ultrasound during this period may decrease the overall risk for autism.

Eat healthy

Nutritional deficiencies are a known risk factor for the development of autism. Make sure to get enough Vitamin D and folic acid during pregnancy.

Add multivitamins to your regime

Multivitamin with folic acid during pregnancy is associated with a reduced risk of autism in children. Taking these supplements during pregnancy can be very beneficial to the mother and the child as well.

Explore our widest range of multivitamin supplements to meet all your needs.

Fill Your Cart Now!

Specialist To Visit

Diagnosing and managing autism requires a comprehensive approach that consists of the following:

Pediatric neurologist

Developmental-behavioral pediatrician

Child psychiatrist

Child psychologist

A pediatric neurologist diagnoses and treats children with diseases and conditions that affect the nervous system. A developmental-behavioral pediatrician focuses on the strengths and weaknesses of the child. A child psychiatrist is a doctor primarily concerned with the treatment of behavioral disorders and emotional problems that affect children and a child psychologist is a mental health professional who uses psychological evaluations and various forms of therapy to help children.

Don’t hesitate to seek advice from our trusted team of doctors.

Consult Now!

Treatment Of Autism

The treatment of autism mainly consists of various educational and behavioral treatments. There are two kinds of interventions that have been used for treating autism, i.e. focused intervention practices and comprehensive treatments. These include:

Deep brain stimulation (DBS)

DBS has been used to send electrical impulses to specific parts of the brain [and provides a therapeutic benefit. Certain studies have demonstrated the efficacy of DBS for psychiatric disorders including refractory obsessive-compulsive disorder, depression, Tourette syndrome, and others in the past few years and have shown some good results in individuals with autism.

Medications

Antidepressants were the most commonly used agents followed by stimulants and antipsychotics. Antipsychotics were effective in treating repetitive behaviors in children with autism. Alternative options include opiate antagonists, immunotherapy, hormonal agents, megavitamins, and other dietary supplements.

Behavioral and psychological therapies

Individuals with autism may be referred to specialists who provide behavioral, psychological, educational, or skill-building interventions. These programs may help people with autism in managing their behavior as these are highly structured and intensive therapies that also involve caregivers, siblings, and other family members.

Other interventions

While there is no "cure" for autism, there are several effective interventions that can improve a child's functioning. Those include:

Training for social skills: This training is done in groups and the children with autism are taught to navigate through social situations.

Therapy to improve communication: These therapies are focused to improve the child's speech patterns and understanding of language.

Training for parents: In this, the parents are shown effective ways of responding to problematic behavior and encouraging appropriate behavior in their child.

Occupational therapy: This type of therapy addresses adaptive skills and helps individuals with activities of daily living, as well as problems with handwriting.

Special education services: This includes special day classes for very young children to address language, social, and life skills.

Treating other conditions

Children with autism experience many other symptoms like insomnia, anxiety, depression, and intellectual disability that need to be addressed. The impact of these conditions can be reduced with the proper services, psychotherapy, and medical treatment.

Read about how cognitive therapy can benefit individuals with anxiety, which is a common trait of people with autism.

Tap now

Home care For Autism

Managing individuals with autism can be tricky as every individual is different with an array of symptoms. The most important part is patience and care. Also, there are certain natural remedies consisting of dietary and sensory tips that have been known to yield good results in managing individuals with autism. These include:

Avoid gluten

Studies suggest a beneficial effect of the gluten-free diet (GFD) in managing behavioral and intellectual problems associated with autism. A gluten-free diet can also help in improving gut health, especially if the individuals have symptoms of digestive disorder.

Try deep-pressure techniques

It involves applying deep pressure, with the help of an inflatable ball, a cushion, or a pillow, which can help the individual calm down and go into a relaxed state as people with autism can have trouble keeping still or being calm.

Say hello to probiotics

Probiotics are healthy bacteria that can have a very positive impact on autism. In a preliminary study, probiotics have shown promising results in alleviating some of the symptoms of autism and mood disorders by directly restoring the gut microbiota.

Buy pre and probiotic products online to keep your gut healthy and happy.

Browse Now!

Add omega-3 fatty acids to the diet

Foods rich in omega-3 fatty acids help in the development of brain functions, and can have a positive effect on the development which is good for individuals with autism. These include

Fatty fish

Fish oil

Cod liver oil

Flax seeds (Alsi)

Chia seeds (Sabze ke beej)

Note: Add omega 3 supplements if you do not meet the dietary requirements. You can up your healthcare game by choosing omega-3 supplements from our extensive range.

Explore Now!

Give importance to sleep

Autism can cause an imbalance of the sleep hormone called melatonin hormone leading to irritability and underdevelopment of the brain functions. Including melatonin in the diet can help in steadying the sleep pattern. Good food sources of melatonin include:

Corn (Bhutta)

Asparagus (Shatavar)

Barley (Jau)

Use weighted blankets

It can improve the quality of sleep as weighted blankets provide a calming effect on the body. Individuals with autism can benefit the most from it because it increases the release of serotonin, a hormone responsible for mood, sleep, and digestion.

Allow time with electronic tablets

Tablets help the overall education of the individual as it goes at their speed and allows them to learn without pressure. Also, it can improve the motor skills of kids with autism.

Add supplements

Supplements like vitamin D, vitamin C, and magnesium, can be very helpful as the deficiencies of these can cause impairment in brain function, changes in behavioral patterns, and poor concentration.

Include turmeric in your food

Turmeric (Haldi) is the most versatile herb with antimicrobial, anti-inflammatory, and antioxidant effects on the body. It can significantly improve gut health which can improve or lessen certain symptoms of autism.

Apply essential oils

Children with autism can benefit from essential oils as it has various positive effects, including boosting the mood, promoting mental clarity and reducing stress. These oils include:

Sandalwood

Lavender

Cedarwood

Chamomile

Peppermint

Essential oils are not just good for relaxation. Read about incredible benefits of essential oils that you are yet not aware of.

Click Now!

Complications Of Autism

A range of disorders generally accompany autism. These complications include:

Gastrointestinal (GI) problems: Children with autism tend to have more medical gastrointestinal (GI) symptoms such as abdominal pain, constipation and diarrhea when compared to others.

Epilepsy: It commonly develops with the risk of seizures that increases throughout childhood with the highest seizure number occurring during adolescence.

Malnutrition: Studies showed that limited food preferences were the most common atypical eating behavior in autism groups that can lead to decreased nutrition.

Is your child a picky eater?

Learn how to provide complete nutrition with healthy eating habits.

Alternative Therapies For Autism

Complementary and alternative interventions for autism involve special diets and supplements. Along with this, there are certain therapies and treatments that can help manage the symptoms of individuals with autism. These include:

Homeopathy

Autism treatment in homeopathy can vary and there is no recipe book of homeopathic remedies to give to a child. However, homeopathic intervention in children with autism holds promise, and integration of homeopathy with conventional measures can enhance the outcome.

Ayurveda

Treatment of autism with Ayurveda generally focuses on maintaining balance and treating the “dosha” which includes a daily Ayurvedic massage. Many children have difficulties with a change in routine and a daily Ayurvedic massage can be soothing for the child.

Check out our Ayurveda page.

Click Here!

Traditional Chinese medicine (TCM)

Traditional Chinese Medicine, along with acupressure and acupuncture, is another approach to treating autism symptoms. Studies show that the use of interventional modalities in TCM has a positive impact on its efficacy.

Chelation therapy

This therapy is designed to flush heavy metals from the body and it involves the administration of a chelating substance that binds to heavy metals, such as lead and mercury, which then is excreted in the urine. There is no evidence that metals cause autism or proof that this option works.

Living With Autism

Autism is a complex disorder that needs utmost accessibility, inclusivity, and support and the care for people with autism needs to be accompanied by actions at community and societal levels. Living with individuals who have autism can be quite a task, here are a few tips for caregivers that can help in handling them:

Minimize any changes in the daily routine

Any changes in the daily routine can lead to erratic behavior as many people with autism get upset by minor changes. So, try to stick to a schedule and the way things are done. Also in case of illness, having a team of healthcare specialists come to your home, can minimize the disruption to the daily routine and make it easier to provide the necessary treatment.

Teach the patients relaxation techniques

Behavior problems are a common issue in people with autism and calming techniques, such as deep pressure massage or wearing weighted clothing, may soothe agitation. Relaxation teaching involves teaching how to tighten and relax their muscles, including those in the hands, arms, and legs in combination with deep breathing, and can help alleviate stress and agitation.

Learn 5 relaxation techniques to manage your stress and anxiety.

Read This!

Manage social anxiety

For individuals with autism social anxiety can act as a trigger. It can be hard to know if a person with autism is experiencing anxiety. Always stay alert to signs that your loved one with autism is not behaving in a way that is normal for him or her.

Maintain personal space and boundaries

If you’re caring for a child with autism, and your child is sick, bringing in a doctor who might not understand the personal boundaries can be a trigger and can also lead to the unintentional spread of germs. The best way to prevent this from happening is to rely on in-home treatment instead.

Supervise gastrointestinal disorders

Another common ailment in children with autism is a gastrointestinal disorder which can include chronic diarrhea and constipation. Make sure to give in-home careers so it can eliminate the risk of an accident or uncomfortable situation.

Be vigilant in case of emergency

Seizure disorders and epilepsy are frequently reported medical comorbidities in individuals with autism. In-home treatment is a top choice for someone experiencing a mild seizure, but if the symptoms include involuntary stiffening or jerking of muscles, confusion, loss of consciousness, call an ambulance or visit your doctor immediately.

Tips for Parents

Having a child with autism affects the whole family and it can be stressful, time-consuming and expensive. Paying attention to the physical and emotional health of the whole family is important. Here are some other tips that can help:

Learn everything about autism

Make a consistent schedule and routine

Connect with other parents of children who have autism

Seek professional help for specific concerns

Take time off for yourself and other members of the family

Understand your child's triggers and try to avoid them

Always use positive reinforcement to manage any tantrums.

Note: Children with autism often experience changing routines as a major challenge and one such major change in everyone’s life in the past couple of years was the COVID-19 pandemic. Get all your queries answered on COVID-19.

Read The FAQs On Autism!

Frequently Asked Questions

What are the early signs of autism?

What difficulty do children with autism face in a regular classroom setting?

Can vaccines cause autism?

What are mitochondrial diseases and how is it related to autism?

What is the outlook for people with autism?

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Acne

Also known as acne vulgaris, pimples

Overview

Acne is a common condition that most of us have dealt with at some point in our lives. Acne, or acne vulgaris, is a skin condition in which the pores and hair follicles of the skin get clogged with sebum, an oily, wax-textured substance secreted from the skin glands. Though the face is the most commonly affected area, acne can occur anywhere on the body, like the chest, shoulders, and upper back.

Acne is mainly of two types, comedogenic and non-comedogenic. Comedogenic acne is mainly non-inflammatory and can be seen in the form of whiteheads and blackheads. On the other hand, non-comedogenic acne is inflammatory and may be red, pus-filled, and painful.

The treatment of acne comprises topical, systemic, and lifestyle remedies. Topical remedies include prescribed ointments or cleansers. Systemic therapy consists of antibiotics or hormonal preparations to keep acne at bay. Lifestyle changes for acne majorly include a clean diet, better hydration, and regular exercise. Timely treatment of acne can greatly help prevent acne scars in the future.

Key Facts

Usually seen in

Children between 13 to 18 years of age

Adults between 25 to 40 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Skin

Prevalence

Worldwide: 9.4% (2015)

Mimicking Conditions

Acne keloidalis nuchae

Acneiform eruptions

Folliculitis

Perioral dermatitis

Rosacea

Sebaceous hyperplasia

Syringoma

Tuberous sclerosis

Hidradenitis suppurativa

Necessary health tests/imaging

Luteinising Hormone

Follicle Stimulating Hormone

Dehydroepiandrosterone(DHEA)

Treatment

Retinoids: Retinoic acid, Tretinoin & Adapalene

Antimicrobials: Azelaic acid

Topical antibiotics: Clindamycin & Azithromycin

Anti-acne agents: Salicylic acid

Systemic antibiotics: Doxycycline & Minocycline

Oral Isotretinoin

See All

Symptoms Of Acne

Acne, also known as acne vulgaris, is a recurrent skin condition. In this, the pores and hair follicles of the skin get clogged with sebum. Acne can be seen in the form of pimples, blackheads or comedones, or nodes of the skin. Following are the symptoms of acne:

Reddened and painful skin around the acne spots

Skin that may become darker or scarred over time

Fever and joint pain may occur in rare but severe cases of acne

Some symptoms based on the type of acne are:

1. Comedogenic acne (Non-inflammatory acne)

Closed comedones (whiteheads): These are small round lesions that contain whitish material (sebum and dead skin cells).

Open comedones (blackheads): These small round lesions appear as bumpy dark spots.

2. Non-comedogenic acne (Inflammatory acne)

This acne appears as a red and painful area on the skin.

They are small, reddish bumps that may or may not be filled with pus developed from comedones.

Furthermore, this inflammatory acne can be presented in various forms. The most common ones include:

Papules: These are small painful bumps like eruptions on the skin.

Pustules: These pimples have pus collected in them and are red in color.

Nodules: These are large, painful, solid pimples that are deep in the skin.

Cysts: These deep, painful, pus-filled pimples can cause scars.

In some cases, a person may also suffer from a severe form of acne known as nodulocystic acne. In this, knots are formed on the skin that are hardened masses, larger than 5 mm, and usually present in the area of the back and neck.

Causes Of Acne

The common causes of acne are:

1. Hormonal conditions

Androgens are hormones that increase in boys and girls during puberty and cause the sebaceous glands to enlarge and make more sebum. Hormone changes during midlife, particularly in women, like PCOS and pregnancy, can also lead to acne breakouts. The menstrual cycle is one of the prime causes of hormonal acne seen in women.

2. Genetic factors

The genes may be somewhat responsible for the development, course, and severity of acne. Although acne is not the result of a single gene but a series of different genes.

3. Environmental factors

Environmental factors, such as sunlight, can worsen acne, along with skin aging. Also, climatic conditions, such as humid weather, can aggravate acne problems in certain individuals due to the overstimulation of sebaceous glands.

4. Lifestyle factors

Certain food products, such as dairy, products made from dairy, and sugary foods, can cause acne. Also, stress and increased weight are two major causes of acne in many individuals.

5. Health conditions

Certain metabolic diseases, such as diabetes, may cause acne in some individuals. Also, the use of some medications, such as lithium, corticosteroids, or testosterone-containing tablets and creams can result in acne.

6. Chemicals/products

The application of perfumed products, such as cosmetics, hair products, and soaps, can result in acne in some individuals. Irritation of the affected skin area by either scratching, pulling, pressing, or wearing tight garments, such as headbands or scarves around the face and neck, can also cause acne.

Want to know about the causes of acne in detail? Check out this video

Risk Factors For Acne

Almost everyone is at risk of developing acne at some point in their lives. Below mentioned are some of the common risk factors for acne:

Age: People of all ages can get acne, but it's most common in teenagers.

Hormonal changes: The changes in hormones, which are common during puberty or pregnancy, can increase the risk of acne.

Family history: Genetics plays a role in acne. If both of your parents or any of your immediate family members had acne, you're likely to develop it too.

Greasy or oily substances: You may develop acne when your skin comes into contact with oil or oily lotions and creams.

Food: Studies indicate that consuming certain foods, including carbohydrate-rich foods, such as bread, bagels, and chips, may worsen acne.

Friction or pressure on your skin: This can be caused by items such as telephones, cellphones, helmets, tight collars, and backpacks.

Stress: It doesn't cause acne, but if you have acne already, stress may worsen it.

Diagnosis Of Acne

If you are suffering from acne, your dermatologist will diagnose you by looking at them. They may notice the type of acne and where the breakouts appear on the face or other parts of the body. This helps them create an effective treatment plan for you.

Women of childbearing age, who are suffering from acne, should go for tests that are done after a history of dysmenorrhea or hirsutism is taken, such as:

Testosterone total test

LH test

FSH test

DHEA test

Celebs affected

Kendall Jenner

In Jan 2019, American top model and socialite Kendall Jenner shared on her Instagram profile that suffering from acne was a debilitating problem for her, and she has been battling this condition since her teen years.

Prevention Of Acne

Acne may seem like a non-serious issue but can affect an individual's confidence and lead to self-consciousness, anxiety, depression, and lower self-esteem. If you suffer from acne frequently, here are some of the preventive tips to avoid acne breakouts:

Wash your face after sweating: If you sweat after going out or wearing a hat or helmet, it can worsen your acne. Hence, it is advised to wash your skin as soon as possible after sweating.

Stay away from irritating scrubs: It is advised to use your fingertips to apply a gentle, non-abrasive cleanser, rather than using a mesh sponge or an abrasive cloth that can irritate the skin.

Be kind to your skin: It is advised to use gentle products, which are alcohol-free. Products like astringents, scrubs, and exfoliants may irritate your skin and therefore, should not be used if you suffer from acne.

Use lukewarm water to clean your face: It is advised to rinse your face with lukewarm water after face wash. Avoid too cold or hot water if you have acne.

Shampoo regularly: If you have oily hair, it could be the reason for acne on your forehead; therefore, it is advised to shampoo daily to get rid of the excess oil.

Let your skin heal the natural way: Do not pop, pick, or squeeze your acne. This would not only worsen your acne problem but your skin will also take longer to heal. This also increases the risk of scarring.

Stop touching your face: Your hands carry germs, which transfer to your face when you touch it, and can cause flare-ups.

Be careful of sun and tanning: Sun is not your best friend, especially when it comes to skin conditions. Tanning damages your skin and certain acne medications make the skin quite sensitive to ultraviolet (UV) light.

Diet & Acne

Certain foods are known to promote inflammation in the body, thereby resulting in acne outbreaks. In addition to that, diet can also affect hormone levels, making your acne worse. Following food items can cause acne breakouts:

Foods that are high in fat content, for example, milk and meat

Foods and beverages with a high sugar content lead to high insulin levels, altering other hormones that can cause acne

Fast foods and snacks

In some patients, chocolate consumption was related to past or current acne. Therefore, it is advised to eat healthily and stay away from foods that could trigger your acne. Consult your dermatologist or a nutritionist to know what foods to avoid in order to achieve better and clear skin.

While the exact cause of acne is not known, the appearance and recurrence can be lowered by making simple lifestyle changes. One of these changes includes adding foods to your diet that help in fighting acne.

Click to know about some foods that help in reducing the appearance of acne and blemishes.

Click To Know

Specialists To Consult

Acne that is recurrent, pus-filled, and painful should only be treated under expert medical supervision, as they may have the tendency to leave deep scars. Visit a skin specialist who can best evaluate your condition and rule out the correct treatment for your acne. If you are suffering from acne, it is best to consult:

General physician

Skin & hair specialist

Acne can be a painful and recurring condition that can deeply impact your confidence. To get the best treatment for it today, book a consultation now.

Tap Here

Treatment Of Acne

Acne can be treated successfully by either topical or oral anti-acne preparations. Some dermatologists also suggest a combination of both therapies. Listed below are some commonly used therapies to guide you about the treatment process:

1. Topical therapy

Retinoids, such as retinoic acid, tretinoin, and adapalene, are used either alone or with other topical antibiotics.

Antimicrobials, such as azelaic acid, are helpful in treating normal acne and post-inflammatory pigmentation of acne as well.

Topical antibiotics, like clindamycin, azithromycin, and lotion, are effective in treating acne.

Anti-acne agents, like salicylic acid, are used as topical gel for seborrheic and comedonal acne. These are also useful in treating pigmentation caused after the healing of acne. Topical benzoyl peroxide is taken in combination with adapalene available in the gel base. Topical dapsone is useful in papular and comedogenic acne. Dapsone (aczone) 5% gel is recommended twice daily for inflammatory acne, especially in women. Side effects include redness and dryness.

2. Systemic therapy

Antibiotics, like doxycycline, help in controlling inflammation and affect the secretion of free fatty acids. Minocycline is taken in the form of capsules once a day. Sometimes other antibiotics, such as amoxicillin, erythromycin, and sulfamethoxazole, are also used for acne. Ciprofloxacin is used in case of pseudomonas caused acne.

Oral isotretinoin (a derivative of vitamin A), like amnesteem or claravis, is used to control sebum production and reduce inflammation. It may be prescribed to people whose moderate or severe acne hasn't responded to other treatments.

Low-dose estrogen may also be prescribed along with cyproterone acetate for treating severe recurrent acne.

Spironolactone is prescribed to males dealing with acne issues. It is helpful in reducing the production of androgens and blocking the actions of testosterone.

Combined oral contraceptives are approved by the FDA for acne therapy in women who also wish to use them for contraception. They are products that combine progestin and estrogen. The benefit of this treatment may not be visible for a few months; therefore, using other acne medications with these for the first few weeks may be helpful.

3. Other treatments

Dermabrasion: In this procedure, the top layer of the skin is removed with the help of a rapidly rotating brush or another device. This helps remove surface scars. It may also reduce the intensity of deeper acne scars.

Chemical peel: In this procedure, a chemical solution is applied to the scar tissue to remove the top layer of the skin. This helps in minimizing the appearance of deeper scars.

Skin needling: In this procedure, a needle-studded device is rolled over the skin to stimulate collagen formation.

Acne is a painful side effect of oily skin. Here are a few things you could try to improve your skincare game, especially if you have oily skin.

Click Here

Complications Of Acne

Acne, when ignored for a long, can become severe and ultimately lead to scar formation. Some common complications include:

1. Scars: Pitted skin (acne scars) and thick scars (keloids) can remain for a long time after the acne has healed. Scars left by acne can affect both teenagers and adults. Scars are a result of acne breakouts, penetrating deep into the skin layers. The longer someone has inflammatory acne, the higher it is likely to develop acne scars. Therefore, it is best to seek timely treatment for this condition and prevent the formation of acne scars.

2. Skin changes: After acne has cleared, the affected skin may be darker (hyperpigmented) or lighter (hypopigmented) than before.

3. Emotional well-being: Acne can affect more than just skin. It can have a significant impact on one’s emotional well-being. According to studies, acne can lead to low self-esteem, poor self-image, anxiety, depression, decreased quality of life, and feeling alone. Moreover, severe and chronic acne can also take a toll on confidence.

Alternative Therapies For Acne

Ayurveda

Ayurvedic science believes that acne results from the ventilation of Vata, Pitta, and Kapha doshas in the body. Here is a list of some herbs that can help heal acne faster.

Turmeric (Haldi): Turmeric has anti-inflammatory, antibacterial, and antifungal effects, which can help relieve acne problems. Apply a thin paste of turmeric over the affected area after consulting a doctor.

Honey (Sahed) and Lemon (Nimbu): Honey and lemon have antibacterial properties that could help in healing the acne. However, be careful before applying lemon directly to the face as it may irritate the skin.

Neem leaves: Neem offers anti-inflammatory, antibacterial, antifungal, and antiviral activities. It works well against both gram-negative and gram-positive bacteria and hinders the growth of acne-causing bacteria, such as Staphylococcus epidermidis and Propionibacterium acnes (P. acnes). Ground fresh or dried neem leaves into a soft paste by adding water and apply it on the face. Wash it off after 10-15 minutes with warm water.

Pimples can be caused due to various reasons. Read to know the home remedies to get rid of them.

Click Here

Homeopathy

Unlike conventional treatment, homeopathy treatment for acne claims to treat this condition from its root without causing any side effects. Some of the homeopathic medications that are helpful in treating acne are:

Pulsatilla– This is helpful in treating acne associated with the onset of puberty in teenage girls. It can also help treat acne in pregnant women or those facing acne due to menstruation.

Silicea– It is helpful in treating cystic acne, which appears like boils. Along with this, slow-healing acne and acne which leave pitting scars can be treated with this homeopathic medicine.

Sulfur– Sulfur is helpful in treating blackheads and whiteheads, which are not deep and are present over a large area.

Acne scars not only mar the appearance and reduce confidence, but they are also not very easy to get rid of. Click to read about some effective natural remedies to help remove acne scars.

Acne scars not only mar the appearance and reduce confidence, but they are also not very easy to get rid of. Read about some effective natural remedies to help remove acne scars.

Tap Here

Do only teenagers get acne?

No. While acne may predominantly show up during the teenage years, it can be a part of adulthood as well. Acne can also be a result of PCOS, menopause, pregnancy, stress, certain medications, and other hormonal problems. This is because hormonal changes can lead to excess oil production, which can increase the risk of acne in adults. Want to know about the myths related to acne?

Click To Know

Home-care For Acne

Medications, therapies, and treatments can give long-lasting results; however, it is important to take care of your skin at home too. Below mentioned are some tips to follow at home if you have acne:

Be gentle with your skin: Use a mild cleanser in the morning and evening. Avoid scrubbing your skin as it can worsen your acne.

Avoid certain products: Products such as facial scrubs, astringents, and masks tend to irritate the skin, especially sensitive skin, which can worsen acne. Excessive washing and scrubbing can also irritate the skin.

Refrain from touching your skin too often: People who squeeze, pinch, or pick their pimples can get scars or dark spots on their skin.

Shave carefully: Men and women both can use this tip while shaving facial hair. Men should soften their beards with some soap and water before applying the shaving cream, and the same applies to women too. Facial hairs are delicate and pre-softening is required before shaving. Shave lightly and only when you have to.

Avoid over-exposure to the sun: Many acne medications can make the skin prone to sunburn. Consult a doctor to know more about the reaction of the cream to sun rays.

Choose your makeup carefully: Use oil-free makeup. Look for the word “non-comedogenic” on the label. A ‘non-comedogenic’ label means that the product will not clog up the pores.

Use medications wisely: If the doctor has recommended any treatment plan for acne, it is important to give the treatment some time to show effective results. If acne treatment works, some improvements might be noticed within 4 to 6 weeks. It might take more than 3 months for the skin to clear up.

Avoid using different products all at once: Do not use a new acne product every week as this can irritate the skin and cause fresh breakouts, making it difficult to treat the condition.

Watch this video to know about natural ways to deal with acne or pimples.

Living With Acne

Even though almost everyone suffers from acne, a curable skin condition, in their life, it can still take a toll on one’s emotional well-being. It makes people conscious of their physical appearance, which in turn makes them feel embarrassed and less-attractive all the time. This thought process may become a severe issue in teenagers, and may make them miss out on being active in class, taking up sports, and getting a job.

Instead of feeling anxious or suppressing your feelings, talk about them with your friends or close ones. You can even consult a doctor about its treatment and how to deal with the feelings. Make sure to complete your treatment course and follow the doctor’s advice without fail to fix your acne.

Acne is a completely curable condition, but still has a severe impact on one’s mental well-being. Consult India's best doctor's online with a single click.

Consult NOW

Frequently Asked Questions

Why am I getting acne in my 30s?

Which is the best exercise for clearing acne?

Does drinking water help you get rid of acne?

Which foods can trigger acne breakouts?

How can I clear my acne fast?

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Addison's disease

Also known as Chronic adrenocortical insufficiency, Primary adrenal insufficiency, Primary failure adrenocortical insufficiency

Overview

Addison's disease is a rare disorder characterized by inadequate production of the steroid hormones cortisol and aldosterone by the adrenal gland. Adrenal glands are located on top of your kidneys and produce many hormones for the normal functioning of the body.

Symptoms generally come on slowly and may include abdominal pain, muscle weakness, and weight loss. Darkening of the skin in certain areas may also be seen.

Addison's disease mostly affects middle-aged females. Risk factors include certain medications, sepsis, and bleeding into both adrenal glands.

Treatment involves replacing the absent hormones. The prescribed medications are usually taken lifelong, and regular follow-up treatment and monitoring for other health problems are also required.

Key Facts

Usually seen in

Adults between 30- 50 years of age.

Gender affected

Both men and women, but more common in women.

Body part(s) involved

Adrenal glands

Skin

Prevalence

World: 4 to 11 per 1,00,000 of the population (2022)

India: 1 in 1,00,000 people (2021)

Mimicking Conditions

Adrenal crisis

Adrenal hemorrhage

Congenital adrenal hyperplasia

Eosinophilia

Histoplasmosis

Hyperkalemia

Sarcoidosis

Tuberculosis

Necessary health tests/imaging

1. Laboratory tests: Serum cortisol, ACTH stimulation test, Serum renin, and aldosterone levels, Serum electrolytes, Random blood glucose test. Serum calcium, and TSH.

2. Imaging tests: Abdominal computed tomography (CT), Magnetic resonance imaging (MRI), and Chest radiograph.

3. Additional tests: PPD test, Plasma's very long-chain fatty acid profile, and Electrocardiography (ECG).

Treatment

Hormone replacement therapy

Glucocorticoid replacement: Hydrocortisone, Prednisone, and Dexamethasone.

Mineralocorticoid replacement: Fludrocortisone.

Androgen replacement: Dehydroepiandrosterone (DHEA).

See All

Symptoms Of Addison's Disease

Addison’s disease is a hormonal disorder with an array of symptoms. These include:

Tiredness and fatigue

Loss of appetite

Craving for salt

Nausea, vomiting

Abdominal pain

Dizziness

Pain in the muscles

Diarrhea

Loss of consciousness

Constipation

Increased pigmentation

Loss of weight

Hypotension (low BP)

Anemia

Vitiligo (a disease that causes loss of skin color in patches)

Note: Sometimes the symptoms of Addison's disease appear suddenly. This is known as the Addisonian crisis. It is a life-threatening situation that results in low blood pressure, low blood levels of sugar, and high blood levels of potassium.

Causes Of Addison's Disease

Addison's disease is caused by damage to the adrenal glands that sit just above the kidneys resulting in adrenal insufficiency. Causes of adrenal insufficiency based on the type includes:

Primary adrenal insufficiency

It occurs when the adrenal glands are damaged and don’t make enough of the hormones cortisol and aldosterone. The major causes of primary adrenal insufficiency include:

Autoimmune disorders: These are conditions in which your immune system attacks your adrenal glands. These include:

Autoimmune polyendocrinopathy (an inherited condition affecting major organs)

Candidiasis

Ectodermal dysplasia ( a genetic disorder affecting the development of the teeth, hair, nails, and sweat glands)

Autoimmune thyroiditis

Type 1 diabetes

Pernicious anemia

Vitiligo or alopecia

Infections: These can cause an adrenal crisis due to decreased cortisol leading to severe complications. Infections that can cause primary adrenal insufficiency include:

Sepsis

Tuberculosis

HIV

Cytomegalovirus infections

Fungal infections

Syphilis

Adrenal hemorrhage: Bilateral adrenal hemorrhages can be due to DIC (Disseminated Intravascular Coagulation, a serious disorder in which the proteins that control blood clotting become overactive), trauma, meningococcemia (infection in the bloodstream).

Note: An Adrenal crisis due to meningococcemia is known as the Waterhouse-Friderichsen syndrome and is more common in children and patients without a spleen.

Infiltration: This can be due to cancer and abnormal growths (tumors) that can cause primary adrenal insufficiency.

Drugs: Certain drugs can cause adrenal insufficiency by blocking cortisol synthesis. They include:

Blood thinners

Glucocorticoids

Antifungal agents

Secondary adrenal insufficiency

This starts when the pituitary gland doesn’t make enough of the hormone ACTH (adrenocorticotropin) resulting in decreased cortisol levels. Causes of secondary adrenal insufficiency include:

Tumors

Medications like corticosteroids

Family history

Trauma or injury to the brain

Understand how hormonal imbalance can throw you off balance and ways to manage it. Watch this video now

Risk Factors For Addison's Disease

Adrenal insufficiency causes Addison’s disease. There are certain factors that can increase your chances of developing this insufficiency. They include:

1. Type I diabetes

The risk of developing Addison’s disease is higher in those suffering from type 1 diabetes.

Type 1 diabetes also known as juvenile diabetes is a chronic condition in which the pancreas produces little or no insulin.

Note: Type I Diabetes is called Juvenile diabetes because it affects the younger population. It is an autoimmune condition causing the destruction of the cells of the pancreas.

Know more about Type 1 diabetes

Tap Here

2. Hypoparathyroidism

It is a condition in which the parathyroid glands don't produce enough parathyroid hormone. Though a rare disorder, affected individuals have been associated with Addison's disease.

3. Hypopituitarism

Your pituitary gland is a small, pea-sized gland located at the base of your brain. It produces and releases several hormones that help carry out important bodily functions. Hypopituitarism leads to a deficiency of one or more of the pituitary hormones and can lead to adrenal insufficiencies.

4. Pernicious anemia

Pernicious anemia is caused by Vitamin B12 deficiency and is associated with primary adrenal insufficiency.

5. Testicular dysfunction

It is a condition in which the testicles cannot produce enough sperm or male hormones, such as testosterone. This can be caused by autoimmunity, which in turn increases the chances of getting Addison’s disease.

6. Grave’s disease

It is an immune system disorder that results in the overproduction of thyroid hormones (hyperthyroidism). Grave’s disease and Addison's disease are linked with a strong auto-immune basis.

Note: Individuals with Graves' disease and Addison's simultaneously are at risk of incipient adrenal crisis.

7. Chronic thyroiditis

It is a condition that causes swelling of the thyroid gland. It often results in reduced thyroid function, thus increasing the risk for the development of Addison’s disease.

8. Dermatitis herpetiformis

Commonly known as celiac disease, this is a chronic condition with intense itching, and blisters all over the skin. Individuals with this disorder are at a higher risk of developing Addison’s disease and other autoimmune conditions.

9. Vitiligo

Sporadic vitiligo is associated with autoimmune thyroid disease, pernicious anemia, Addison's disease, and lupus.

Wondering what exactly is vitiligo?

Read about these 4 facts about vitiligo that can help you understand this condition better.

Click Here

10. Myasthenia gravis

It is an autoimmune disorder in which antibodies destroy the communication between nerves and muscles, resulting in weakness of the skeletal muscles. This condition is rarely associated with Addison’s disease.

11. Medications

Certain drugs like Ketoconazole and Etomidate can cause adrenal insufficiency by blocking cortisol synthesis.

12. Other risk factors

Sarcoidosis: It is characterized by the growth of tiny collections of inflammatory cells, (known as granulomas) in the body.

Lymphoma: Cancer of the lymphatic system that includes lymph nodes, spleen, thymus gland, and bone marrow.

Congenital adrenal hyperplasia: A group of genetic disorders affecting the adrenal gland.

Adrenoleukodystrophy: It is a type of genetic condition that damages the membrane protecting the nerve cells in the brain.

Diagnosis Of Addison's Disease

Diagnosing Addison’s disease can be very crucial in deciding the treatment. The diagnosis must include detailed history along with a physical examination to evaluate the signs and symptoms.

Apart from this, the diagnosis is established by the following:

1. Laboratory tests

These consist of blood tests to check for any imbalance in the hormonal levels. Tests include:

Serum cortisol: A low cortisol level (< 3 mcg/dL) confirms the diagnosis of adrenal insufficiency.

ACTH stimulation test: This test measures how well the adrenal glands respond to adrenocorticotropic hormone (ACTH). The ACTH level is markedly elevated in primary adrenal insufficiency.

Serum renin and aldosterone levels: This test is done to determine whether a mineralocorticoid deficiency is present.

Anti–21-hydroxylase antibodies: These serve as the markers of autoimmune destruction of the adrenal gland.

Other tests:

Serum electrolytes

Random blood glucose test

Serum calcium

TSH (Thyroid stimulating hormone ) test

Complete blood count (CBC)

Imaging tests

These tests are done to have a better look at the adrenal gland. These include:

Abdominal computed tomography (CT): It is done in a suspected case of adrenal hemorrhage.

Magnetic resonance imaging (MRI): MRI of the hypothalamic-pituitary region should be obtained if ACTH is inappropriately low in the presence of cortisol deficiency.

Chest radiograph: This test may be useful to diagnose tuberculosis associated with Addison’s disease

Additional tests

PPD test: This is a skin test that should be performed to evaluate for tuberculosis.

Plasma's very long-chain fatty acid profile: This test is done in cases where damage to the nerves is suspected.

Electrocardiography (ECG): ECG is done to check for hyperkalemia (increased potassium levels) caused by aldosterone hormone deficiency in Addison’s disease.

Histology: It is useful to investigate infiltrative causes of adrenal insufficiency.

Get your tests done in the comfort of your home.

Book Your Test Now

Prevention Of Addison's Disease

There is no way to prevent Addison’s disease, but the condition can be well-managed to prevent the Addisonian crisis. Certain useful tips include:

Talk to your doctor if are always tired or are losing weight without even trying

Understand what is an adrenal shortage

Know what to do when you're sick or in case of an emergency

Get enough sleep

Finding it difficult to fall asleep easily?

Buy sleep aid products that can help you get quality sleep.

Browse Now

Have optimum salt intake in your diet

Try to have a healthy lifestyle

Exercise regularly

Too lazy to sweat?

Try these tips and tricks that can help you get that daily dose of exercise.

Read Now

Eat a well-balanced nutritious diet

Know more about healthy eating habits and how to get complete nutrition from your diet. Watch Now

Avoid red meat, foods with preservatives, aerated drinks, and sugar

Drink alcohol in moderation

Quit smoking.

Want to quit smoking?

Try our widest range of smoking cessation products to help you achieve this goal.

Explore Now

Specialist To Visit

Doctors that can help diagnose and curate an appropriate treatment plan for the management of Addison’s disease include:

General physician

Endocrinologist

An endocrinologist is a doctor who treats conditions of the endocrine glands.

When to see a doctor?

Seek emergency treatment if you notice the following:

Extreme weakness

Intense pain

Unstable or changes in the heart rate or blood pressure

Temperature higher than 101 F

Persistent hypotension (low BP)

Noticing any of the above symptoms?

Well, do not delay and get the right diagnosis and treatment from our team of qualified doctors.

Book Your Appointment Now

Treatment Of Addison's Disease

Timely treatment of Addison’s disease is very crucial, as negligence can lead to an Addisonian crisis that can be life-threatening. The treatment mainly consists of hormone replacement therapy that corrects the levels of steroid hormones. It includes:

1. Hormone replacement therapy

Glucocorticoid replacement: The medications commonly used are:

Hydrocortisone

Prednisone

Dexamethasone

During this regime, clinical symptoms and plasma ACTH are monitored as required.

Mineralocorticoid replacement: Fludrocortisone is the most commonly used drug during this regime. During this treatment, it is important to monitor blood pressure as well as pulse, edema, and serum potassium levels

Androgen replacement: Dehydroepiandrosterone (DHEA) is usually the drug of choice. This therapy is given only in women for psychological well-being, if needed, after optimal glucocorticoid and mineralocorticoid replacement

Ordering medicines has never been easier!

Get your medications online from India’s largest online pharmacy.

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2. Management of adrenal crisis

This is a life-threatening condition that needs immediate treatment. The management consists of the following:

Intravenous (IV) infusion of isotonic saline or 5% dextrose as early as possible

Analysis of serum electrolytes, glucose, and routine measurement of plasma cortisol and ACTH.

IV Hydrocortisone and due correction of any ongoing electrolyte abnormalities

3. Treatment during pregnancy

Pregnant patients with primary adrenal insufficiency should be monitored for clinical symptoms and signs of glucocorticoid over- and under-replacement (normal weight

gain, fatigue, low or high BP, increased blood sugar) with at least one review per trimester. The drugs used are:

Hydrocortisone

Prednisolone

Dexamethasone

4. Treatment during childhood

In children with primary adrenal insufficiency, treatment with hydrocortisone in three or four divided doses is recommended. Fludrocortisone is recommended in children with primary adrenal insufficiency along with aldosterone (a hormone that helps regulate your blood pressure) deficiency.

Home care For Addison's Disease

Addison’s disease requires lifelong hormone replacement therapy. Along with medications there are certain home care tips that can help manage your condition better. These include:

1. Eating a supportive diet

Some people with Addison’s disease may have low aldosterone levels leading to low sodium and high amounts of potassium. Eating a diet that can balance out this can be very beneficial.

Foods to eat

Grain products

Eggs

Cheese

Milk

Yogurt

Broccoli

Tofu

Fortified cereal

Chicken

Tuna

Canned beans

Foods to avoid

Coffee

Green tea

Black tea

Excessive alcohol

Too many bananas and oranges

Salt substitutes

2. Adding that extra salt

Individuals with Addison’s disease tend to crave salt due to low aldosterone levels, The best choice of sodium-rich foods is foods like eggs, cheese, salted nuts and seeds, and poultry.

3. Managing stress

Stress can hamper the treatment of Addison’s disease by decreasing glucocorticosteroid secretions. Make time to relax, every day and practice slow, deep breathing to manage your stress levels.

Are you looking for ways to de-stress yourself?

Learn about effective techniques to manage stress.

Tap Here

4. Giving importance to supplements

People who take medicines to replace cortisol may also need plenty of calcium and vitamin D. Taking supplements like adaptogens and certain vitamins can be very useful. Consult your doctor or dietitian before starting these supplements.

Check out our extensive range of vitamins and supplements to meet all your needs.

Fill Your Carts Now

Complications Of Addison's Disease

The major complication of Addison’s disease is acute adrenal insufficiency or Addisonian crisis. This generally occurs when your body is stressed mainly due to an illness, fever, surgery, or dehydration. If an Addisonian crisis is not treated, it can lead to the following complications:

Shock

Seizures

Severe abdominal pain

Extreme weakness

Low blood pressure

Kidney failure

Coma

Did you know?

COVID-19 infection can cause adrenal hemorrhage leading to primary and secondary adrenal insufficiencies.

Read More About Covid-19 Here

Alternative Therapies For Addison's Disease

Certain alternative therapies have shown good results in managing Addison's disease along with conventional treatment. These include:

Naturotherapy

This is a method to treat illnesses or conditions using natural foods, massages, and other techniques instead of artificial medications. The most commonly used herb is Ashwagandha, which helps to restore optimal health by maintaining energy levels and immunity function.

Salt substitution therapy

Salt substitutes replace part of the sodium chloride in regular salt with potassium chloride. This therapy can maintain the expected level of sodium chloride and other elements found to be deficient in these individuals.

Regenerative therapy

This therapy is beneficial for Addison’s disease as it uses the application of stem cells. Stem cells are cells from which all other cells with specialized functions are generated. They have the potential to repair and restore function in damaged body tissues or organs.

Living With Addison's Disease

Diagnosis of Addison’s disease may come as a shock and the fact that it requires lifelong treatment can be overwhelming. But, this condition can be well managed and individuals with this disorder can live their life to the fullest. However, there are certain things to remember if you have Addioson’s disease. These include:

1. Understand your condition

Knowing everything about your illness can be very beneficial, especially in managing an emergency situation.

Also, managing stress and learning to inject your medications can help you be independent.

2. Have a medical alert bracelet/necklace

It is an emergency medical information card on your phone or inside your wallet, and prefilled syringes containing 4 mg of dexamethasone in 1 mL saline. An emergency card and medical alert identification helps emergency care providers know what kind of care you might need.

3. Keep extra medicines handy

Missing out on even a single dose can be dangerous, so always keep your medications stocked up. Also, have a small supply at work and with you when you travel.

4. Get yearly checkups

See your doctor at least once a year. Your doctor may recommend yearly screening for autoimmune diseases, and monitoring your hormone levels. If you have problems with your medication, your provider might need to change the doses or time.

Stay alert!

Learn more about step-by-step guidelines to prepare for any medical emergencies.

Enlighten Yourself Now

Frequently Asked Questions

How does Addison's disease affect daily routine?

What is the outlook for Addison’s disease?

Is there a cure for Addison’s disease?

Are Addison's disease and Cushing's syndrome different?

Is Addison's disease fatal?

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Airplane ear

Overview

Have you experienced ear discomfort while flying, especially while the airplane is ascending or descending? Well, this can be airplane ear which is characterized by discomfort, pain, and fullness in the ear. It is caused by sudden pressure changes during air travel.

Airplane ear can affect anybody on the flight but it is more commonly seen in individuals suffering from conditions such as common cold, sinusitis, allergic rhinitis, and middle ear infections. Infants and toddlers are more susceptible to this condition while traveling in air routes.

Airplane ear can be easily prevented by simple techniques such as yawning, chewing, swallowing during the flight. Infants and toddlers can be breastfed, suck a pacifier or drink fluids through a sipper or a straw to ease the symptoms of airplane ear.

This condition is usually self-limiting, responds well to preventive measures, and resolves after air travel.

Key Facts

Usually seen in

Children under 3 years of age

Gender affected

Both men and women

Body part(s) involved

Ear

Mimicking Conditions

Inner ear decompression sickness (IEDCS)

Necessary health tests/imaging

Otoscopy

Audiometry

Treatment

Self-care activities: Yawning, Chewing, and Swallowing

Medications

Antihistamines: Fexofenadine, Cetirizine, and Loratadine

Decongestants: Oxymetazoline, Phenylephrine, and Pseudoephedrine

Surgery

Specialists to consult

General physician

ENT specialist

Symptoms Of Airplane Ear

The typical symptoms of airplane ear include:

Discomfort in the ear/s

Pain in the ear/s

Fullness in the ear/s

Mild to moderate hearing loss

In severe cases, an individual may experience:

Severe pain in the ear/s

Moderate to severe hearing loss

Tinnitus (ringing sound in the ear)

Vertigo

Hemotympanum (presence of blood in the middle air cavity)

Causes Of Airplane Ear

To understand the cause of airplane ear, it is important to know the normal structure of the ear and how the ear works at ground level

Structure of the ear

The structure of the ear is divided into three parts:

Outer ear: The part of the ear that is seen from the outside is the outer ear. The external auditory canal connects it to the middle ear. There is a separation between the middle ear and outer ear with a structure called the eardrum.

Middle ear: A tube-like structure called the eustachian tube connects the middle ear to the back of the nose. It plays a very important role in maintaining air pressure on either side of the eardrum.

Inner ear: The inner ear has several compartments that perform specific functions for the purpose of hearing and maintaining balance.

How does the ear work when we are at ground level?

At normal level, the pressure of the air is the same in the middle ear cavity and external ear canal. This equalization of pressure helps in normal functioning of the ear.

What happens to the ears when we are in the flight?

During take-offs and landings, the air pressure inside the middle ear reduces rapidly compared to the external cabin air pressure

Due to this pressure difference, eardrum is pulled inside

The eustachian tube is not able to react fast enough and gets flattened.

This stretching of the eardrum and eustachian tube lead to the symptoms of ear barotrauma.

Other conditions that can cause ear barotrauma include:

Scuba diving without proper gear

Exposure to loud explosions, like in and around a war zone

Hyperbaric oxygen chambers

Riding in an elevator in a tall building

Driving in the mountains

Why doesn't everyone on the flight experience the same degree of an airplane ear?

Not everyone suffers from the same intensity of symptoms of airplane ear while flying. This is due to the differences in opening and closing of the eustachian tube. In most of cases, the eustachian tube opens periodically during swallowing, yawning and chewing and tries to maintain equal pressure between the outside and inside of the ear.

However, people with a narrow eustachian tube or any blockages associated with cold, throat infections etc are more prone to develop airplane ear or ear barotrauma.

Did you know?

Many conditions including a toothache can also cause pain in the ear. This is because the nerves present in your face and neck are closely related and hence, any nerve injury or damage in the neck or face can impact the ears as well. Here are some of the other common causes of ear pain.

Tap To Know

Risk Factors For Airplane Ear

Everybody on the flight has an effect of the pressure change happening there. But in some individuals the ear pain is worse than others. The following risk factors that block the eustachian tube or hamper its function are associated with airplane ear:

Age

Infants and toddlers are more susceptible to airplane air due to small eustachian tubes.

Medical conditions

Some medical conditions make it hard for the ears to adapt to the rapid pressure changes, making one more prone to airplane air. These include:

Common cold

Sinusitis

Allergic rhinitis (hay fever)

Otitis media (middle ear infection)

Certain hormonal changes (for instance, during pregnancy)

Sleeping or napping during air travel

The activities such as swallowing and yawning helps to equalize the pressure of ears. Since these activities are reduced during sleeping, the chances of airplane air increases if individuals take a nap on flight.

Diagnosis Of Airplane Ear

The diagnosis of airplane ear is confirmed based on air travel history and symptoms experienced by the patient. In case of uncertainty about the symptoms, confirmation is done through:

Otoscopy

This involves examination of the inner ear through an instrument called an otoscope. The signs that are looked at with an otoscope involves:

Bulging in the eardrum

Tear in the eardrum

Blood/fluid in the eardrum

Audiometry

This test is performed when a person complains of loss of hearing.

Specialist To Visit

Most of the symptoms of airplane ear are reduced after landing.

When to see a doctor?

A doctor consultation is required if you are experiencing:

Dizziness and a feeling of falling right after flying

Severe ear pain

Bleeding from ear

Drainage of fluid from ears

Difficulty in hearing

The specialty of doctors that may help in diagnosing and treating airplane ears include:

General physician

ENT specialists: These are the doctors that have a specialization in managing the conditions of eyes, nose and throat.

Get the right diagnosis and treatment from our team of qualified doctors.

Consult Now

Prevention Of Airplane Ear

Airplane ear is a preventable condition. The prevention strategies can be divided into three categories:

A. Primary prevention

It involves measures that can be taken before or during any discomfort in the ears.

1. Practice self-care measures: The activities such as yawning, chewing, and swallowing especially during take off and landing should be performed during flying. These activities help in keeping the eustachian tubes open and thus prevent airplane ear.

Sucking lozenges and chewing gum while the plane begins to ascend and descend is also helpful.

2. Stay awake: Individuals should avoid sleeping or napping during ascent and descent of flights so that they can practice activities such as yawning, chewing, and swallowing. Individuals can also request the attendees of the flight to wake them up when the plane is about to land.

3. Use of air pressure regulating earplugs: There are specialized ear plugs that are often sold at airports, pharmacies, or a hearing clinic. They are helpful in equalizing pressure against the eardrum and thus help in preventing airplane ear.

4. Take medications: Individuals suffering from cold can prevent airplane air by taking decongestants an hour before the take off of the flight.

Note: It is important to take consent from your healthcare provider before taking a decongestant in case of high blood pressure, a heart ailment, a heart rhythm disorder or pregnancy.

5. Use over-the-counter (OTC) nasal sprays: Nasal congestion increases the chances of airplane ear. So, it is recommended to use a nasal spray about 30 minutes before take-off.

6. Blow a special autoinflation balloon: These special balloons have to be blown up through the nose, by blocking off one nostril at a time and blowing through the other. These can be bought from pharmacies, and help people manage pain during flying or unblock ears afterwards.

7. Reschedule air travel plans: If possible, try to reschedule the travel plans by air if you are suffering from common cold, sinusitis, nasal congestion, recent ear surgery or infection, particularly if you have experienced considerable airplane ear symptoms during prior air travel.

B. Secondary prevention

It involves strategies to prevent severe ear pain in case of ear discomfort.

1. Valsalva manoeuvre: It is an activity that is performed by passengers feeling ear discomfort during the flight. The technique helps in equalizing pressure in the middle ear and thus help in preventing airplane ear. It involves the following steps:

Take a breath.

Push that breath out against the closed mouth and nose

Hold for 15 to 20 seconds.

Open the nose and mouth

Breathe out.

2. Ear packing

In case of bleeding, immediate ear packing should be done to prevent further damage.

C. Tertiary prevention

It involves long-term preventive techniques. A tube is placed surgically in the eardrums to help in the fluid drainage and equalize the pressure between the outer and middle ear. It is used for frequent fliers who are prone to severe airplane ear.

Special tips to prevent airplane ear in infants and toddlers

Infants and toddlers are more prone to airplane ears due to small eustachian tube.

As a parent or guardian with whom kids are flying, the following measures may help minimize symptoms of airplane ear:

Breastfeeding

Feeding with a bottle

Sucking a pacifier

Drinking fluids through a sipper or a straw

Children more than 4 years of age can try the following:

Chewing gum

Drinking fluids through a straw

Blowing bubbles through a straw

Note: Decongestants are usually not recommended for children under 6 years of age. Always consult the child’s pediatrician before giving them to the child.

Did you know?

Listening to music in a confined space increases the risk of hearing damage. Find out more such causes that can impact hearing and ways to prevent them.

Click To Know

Treatment Of Airplane Ear

Preventive instructions should also be given by airplane authority about this phenomenon. This will help in spreading awareness and combating the condition. Airplane ear is managed by simple techniques.

Yawning or swallowing is recommended as it opens the eustachian tube and reduces the pressure difference. This helps in easing the symptoms.

In case of prolonged cold or allergies medications such as antihistamines (egs. cetirizine, fexofenadine,loratadine) and decongestants (egs.oxymetazoline, phenylephrine, and pseudoephedrine) can be taken.

In case of severe pain, pain relief medications such as paracetamol can be taken.

A minor surgery known as myringotomy is performed in rare cases. In this, a surgical cut is made in the eardrum to drain accumulated fluids and allow equalization of pressure.

Complications Of Airplane Ear

The symptoms of airplane ear are mostly self-limiting responds well to preventive measures and usually does not pose any complications. In very rare instances, when eardrum is put under so much pressure that it bursts, it can lead to:

Acute ear infections

Hearing loss

Chronic tinnitus (ringing in ears)

Vertigo

Perforation in the eardrum

Frequently Asked Questions

How many days can an airplane ear last?

Which seat is ear friendly in flight?

What are the ways to reduce ear pain from air travel after returning home?

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Allergic conditions

Also known as Hypersensitivity

Overview

Allergies are caused when the body’s immune system responds abnormally to an external trigger known as ‘allergen’. These allergens are present in our environment but do not usually incite an immune response in other people. While in some people, the body’s immune system generates antibodies against these foreign bodies or allergens. This causes inflammation and leads to various symptoms that can range from being mild to quite severe.

The symptoms of allergy vary such as mild sneezing, runny nose, swelling of face, swelling of the tongue, skin rash, itching, and difficulty in breathing, etc. Anaphylaxis is a severe reaction to any type of allergy which can be life-threatening, if not promptly treated.

Allergies are widely prevalent across the world. These can be caused due to different types of allergens such as dust, molds, mites, foods like nuts, fish, and medicines like penicillin. Clinical treatment for allergies is suggested with antihistamine medicines, steroids, and OTC preparations to provide relief from symptoms.

Key Facts

Usually seen in

Children below 15 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Immune system

Skin

Lungs

Eyes

Mimicking Conditions

Eczema

Psoriasis

Gastritis

Pneumonia

Necessary health tests/imaging

Total IgE

Allergy - drugs

Allergy - inhalants

Allergy - food (vegetarian)

Treatment

Antihistamines: Levocetirizine & Chlorpheniramine Maleate

Nasal Decongestants: Xylometazoline & Oxymetazoline

Corticosteroids: Prednisolone, Hydrocortisone & Betamethasone

Bronchodilators: Salbutamol

Immunotherapy

Specialists to consult

Immunologist

Allergist

Dermatologist

Respiratory specialist

ENT specialist

Intensive care specialist.

See All

Causes Of Allergy

Allergies are caused when the body’s immune system responds abnormally to an external trigger known as ‘allergen’, which does not usually incite an immune response in most other human beings. When the allergen comes in contact with the human body, the immune system activates a response system by producing IgE antibodies. Usually, this immune response is not harmful, but an extreme reaction of the immune system may lead to the formation of a chemical called histamine that causes the various symptoms of allergy.

There are innumerable substances that can cause allergies. The most commonly observed allergens are:

Dust

Mold

Mites

Pollen

Animal fur

Insect bites

Latex

Foods like peanuts, shellfish, and milk

Certain medications like penicillin, and NSAIDs

Seasonal changes

Symptoms Of Allergy

There are many different types of allergies, each of them present with different symptoms, such as

1. Skin allergy: Also known as ‘atopic dermatitis’ or eczema, it can cause symptoms like:

Redness, itchiness, and pain in the parts of the skin exposed to the allergen.

It may also cause the skin to become flaky and peel off.

2. Allergic conjunctivitis: When an allergen enters the eye and irritates the conjunctival lining, it may cause the following symptoms:

Redness in the eyes

Puffy eyes

Excessive watering of the eyes

Itching or burning sensation of the eyes

Changes in vision

3. Food allergy: Consuming foods that cause allergy can cause symptoms such as:

Tingling in the mouth

Puffing of the face

Swelling of the lips

Swelling of the tongue

Difficulty breathing

Itching all over the body

In severe cases, it can cause anaphylaxis

4. Insect allergy: An insect sting can cause allergic symptoms like:

Pain, swelling, and redness at the site

Itching all over the body

Difficulty breathing

Chest tightness and wheezing

In severe cases, it can also cause anaphylaxis

5. Respiratory allergy: Allergic rhinitis and asthma are types of respiratory allergies. Symptoms of respiratory allergies are:

Shortness of breath

Coughing

Wheezing

Chest tightness

Runny nose

6. Medicinal allergy: Certain medications can trigger an allergic reaction and cause symptoms like:

Swelling of the face and body

Difficulty breathing

Cough

Chest tightness

Skin rash

Skin itching

Anaphylaxis, in severe cases

7. Anaphylaxis: This is a severe reaction to any type of allergy, which can be life-threatening. The symptoms of anaphylaxis are:

Anaphylactic shock

Severe drop in blood pressure

Loss of consciousness

Extreme difficulty while breathing

Weak and thready pulse

Nausea

Skin rash

Did you know?

If your kid is scratching the skin very often or if there is a rash on the skin that fails to go away on its own, then it could indicate a skin allergy. Here are some of the common causes of skin allergies in children.

Click To Read!

Risk Factors For Allergy

Allergies are widely prevalent across the world and the number of people suffering from allergies is increasing every year. It is estimated that about:

200-250 million people suffer from food allergies

400 million people suffer from allergic rhinitis

300 million people have asthma (allergic reaction due certain allergens like pollen or dust) One-tenth of the population suffers from medicine allergies worldwide

The risk factors for allergy include:

A family history, as allergies are hereditary. The risk of developing an allergy increases if your parents or someone in the family has allergies.

Occupational exposure to common allergens, such as dust, can also trigger allergies due to repeated exposure to the triggers.

Did you know?

Although rare, vaccines, specifically individual components of the vaccine, are known to cause allergic reactions. The vaccine components include active immunizing antigens, conjugating agents, preservatives, stabilizers, antimicrobial agents, adjuvants and culture media used in the preparation of the vaccine. These allergic reactions are often mild and subside within some time. But in some cases, these can lead to serious health complications like anaphylaxis and therefore require attention.

Click To Know More!

Diagnosis Of Allergy

To evaluate whether a person is allergic to any particular trigger, the doctor may take a detailed history of the onset of symptoms with particular emphasis on the exposure to allergens and how often the symptoms occur. Along with this, the doctor may perform a detailed physical examination to evaluate the symptoms and their probable cause.

A skin prick test can check for the development of an allergic reaction to the exposure of common allergens via the skin prick. The development of a skin rash or bumps at the test site suggests an allergic reaction.

Laboratory tests to check for the levels of Total IgE are also used to evaluate the possibility of allergies. Other specific tests that may be performed to test for specific allergies include:

Allergy - Medicines

Allergy - Inhalants

Allergy - Food

Prevention Of Allergy

Allergies by themselves cannot be prevented as they are mostly hereditary. But the harmful effects that occur due to allergy, otherwise known as an allergic reaction, can be prevented. The single most effective way to prevent an allergic reaction is to avoid exposure to the causative allergen.

It is important first to understand and recognize the trigger that causes the allergic reaction. Once the agent is identified, all steps must be taken to avoid exposure to the allergen, wherever possible. For example:

Dust allergy: Using face masks or tying a wet cloth over the nose and mouth while cleaning or dusting an area with excessive dust.

Food allergy: Avoiding foods that may cause allergies, even in minute quantities.

Medicine allergy: Always inform your doctor if you have had an allergic reaction to any medicine in the past so that the doctor can modify the treatment accordingly.

Mold allergy: Molds usually grow in dark enclosed places, devoid of sunlight. To prevent exposure to molds, all areas at home must be adequately ventilated and receive plenty of natural sunlight.

Those who face respiratory problems on and off can benefit by using some natural herbs on a regular basis or as advised. Here are a few natural herbs that will help you fight symptoms of common respiratory allergies.

Here's More To Read!

Celebs affected

Halle Berry

American actress Halle Berry, more famously known as ‘The Bond Girl’, is allergic to shellfish.

Kim Kardashian

American reality TV star Kim Kardashian is allergic to cat fur.

Specialist To Visit

If you get recurrent symptoms such as sneezing, skin rash, or chest tightness in response to being exposed to any particular environmental trigger, you may be suffering from allergies and must seek medical care. You may seek help from an immunologist or allergist. Based on your allergy symptoms, you can also consult:

General physician

Dermatologist

Respiratory specialist

ENT specialist

Also, at times, allergic reactions are severe and cause anaphylaxis. At such times, it is essential that the patient seeks prompt medical care at the hospital’s emergency department. The patient may need to be treated by an intensive care specialist.

Consult India’s best doctors online. Click here to book an appointment now.

Book Now!

Treatment Of Allergy

The treatment for an allergic reaction aims to provide symptom relief and long-term management for desensitization of the immune system.

1] Symptomatic relief

1. Antihistamines: These are used to provide relief from allergic reaction symptoms such as itching, swelling, and rashes. They work by blocking the action of histamine, the chemical responsible for allergy symptoms. They may be given orally or applied topically on the skin in a lotion or cream form to provide relief from skin rash and itching.

Antihistamine eye drops are used to provide relief from eye allergies. Antihistamines can also be administered through the nose to provide rapid relief from nasal congestion, sneezing, runny nose, and other respiratory symptoms. Medicines that belong to this class include:

Levocetirizine

Chlorpheniramine Maleate

Loratadine

2. Nasal decongestants: These can also provide symptom relief by reducing nasal congestion and make breathing easier. These include:

Xylometazoline

Oxymetazoline

3. Corticosteroids: These are available for oral consumption or in an injectable form. They are used to provide rapid relief from mild to severe allergy symptoms such as inflammation and rash. Steroids may also be prescribed as eye drops to help with eye symptoms and skin rashes. Examples of this class of medicine include:

Prednisolone

Hydrocortisone

Betamethasone

Dexamethasone

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4. Bronchodilators: These are used to provide relief from acute asthma symptoms. Other medicines for inhalation are prescribed as daily maintenance therapy for asthma. Salbutamol is one of the most commonly prescribed medicines in this category.

2] Immunotherapy

For severe allergies or allergies that do not respond to standard medication, immunotherapy may be tried. This involves a series of allergen exposures via injections or tablets over a period of a few years. With time, this helps desensitize the body’s immune system to the allergen and prevents serious allergic reactions.

3] Treatment for anaphylaxis

Anaphylaxis is the most severe form of an allergic reaction that requires immediate medical care. When a patient starts getting an anaphylactic attack, they must be given an injection of adrenaline as soon as possible, and it may need to be repeated at intervals. Symptoms of anaphylactic attack may include dizziness, difficulty in breathing, skin rashes, nausea or vomiting, and fast heart rate. The patient must receive prompt supportive care at the hospital.

Allergies can affect people of all ages, sex, and race. Want to know how to tackle allergies in a risk free way?

Click Here!

Home-care For Allergy

Preventing exposure to allergens is the best way to avoid getting allergic reactions, and this can be achieved by adopting simple lifestyle modifications such as:

Staying away from dusty and moldy areas

Covering the nose and mouth with a mask or wet cloth in dusty environments or performing activities like cleaning

Ensuring that all rooms of the house get ample natural air and light to prevent the growth of molds

Avoiding garden and field visits, if you have pollen allergy or insect allergy

Staying away from pet animals, if you are allergic to pet fur or dander (flakes of animal skin)

Avoiding foods that cause allergies like nuts, milk, certain types of fish and mushrooms

Avoiding contact with foreign bodies such as metals or detergents that trigger skin allergies

How to care for troublesome symptoms

If you have an allergic reaction that causes troublesome symptoms, you can care for yourself by doing the following things:

Do not panic.

Immediately withdraw contact from the allergen.

If you have mild symptoms like a runny nose, sneezing, or a mild rash, take OTC preparations to relieve the congestion. You can also use emollient cream to relieve skin rash.

Using a saline nasal rinse can help relieve symptoms such as nasal congestion

A cold compress (ice pack) or shower can help reduce the symptoms of skin rash or burning sensation.

You must always carry an emergency epinephrine shot with you, which can be used in emergency cases of anaphylaxis.

Did you know?

Temperature, time of day, humidity, and rain can affect levels of the pollen count. If you have allergies, the best time to go outside is right after heavy rains. Pollen counts run lowest on chilly, soggy days. Stay prepared with anti-allergic medicines.

Stock Up Now!

Complications Of Allergy

If allergy is left ignored or unnoticed, it can lead to various complications such as:

Anaphylaxis: At times, the allergic reaction may be severe and may cause an episode of anaphylaxis, which can be fatal if not treated in time.

Asthma: People with allergic disorders are more prone to develop asthma, an obstructive airway disease characterized by wheezing, cough, and breathlessness. Allergens may also cause worsening of symptoms of asthma.

Recurrent infections: Allergies make a person more prone to recurrent bacterial infections, such as sinusitis, pharyngitis, etc.

Respiratory allergies, especially asthma and nasal allergy (also called allergic rhinitis) are increasing worldwide, particularly in children. Here’s more information on respiratory allergies and asthma.

Read To Know!

Alternative Therapies For Allergy

Ayurveda: According to Ayurveda, allergies occur when there is an imbalance of the three doshas - vata, pitta, and kapha doshas. The Ayurvedic approach believes in avoiding exposure to common allergens and maintaining a balance of the three doshas.

Ayurveda suggests detoxification procedures, such as ‘Nasya Chikitsa’, to help with symptoms of respiratory allergies. Herbal preparations, such as tulsi, ginger, ashwagandha, and triphala may help ease symptoms of a mild allergic reaction.

Homeopathy: Homeopathic medicines are seen to improve the over-sensitized immune system and thus act as an immunomodulator or immunoregulator. Homeopathy not only treats the disease permanently by correcting the immune response and that too without side-effects like dizziness and drowsiness.

Some of the common homeopathic medications recommended for allergic rhinitis are:

Arsenic Album

Allium Cepa

Natrum Mur

Sabadilla

Arundo

Yoga: Breathing exercises such as pranayam may be beneficial, providing relief from respiratory symptoms of an allergy, such as nasal congestion, runny nose, and breathlessness.

Living With Allergy

A person with allergies may find it difficult to lead a completely symptom-free life. Even the slightest exposure to the allergens can trigger a severe allergic reaction and even anaphylaxis. With treatments, the intensity of the allergic reactions can be reduced to some extent.

A person with allergies may find it difficult to perform some day-to-day activities like cleaning, dusting, etc. There may be certain dietary restrictions also. The person may require alternative medicines in case a person takes certain medicines which may cause allergic complications.

People with severe allergies are recommended to carry an emergency epinephrine shot at all times with them. This can be life-saving in the case of a severe episode of anaphylaxis.

Frequently Asked Questions

Is there any first aid for a severe allergic reaction?

How can I identify if I have allergies?

What foods to avoid if I have allergies?

Do I need to carry epinephrine shots with me all the time if I have allergies?

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Alzheimer's disease

Also known as AD, Brain damage, Mental decay and mental deterioration

Overview

Alzheimer's disease (AD) is a slowly progressive disorder of the brain that fades away memory. It is characterized by disturbances in thinking skills, reasoning, language, and perception and, eventually, the ability to carry out simple daily tasks.

The exact cause of Alzheimer's disease is not known. However, accumulation of amyloid proteins and tangled bundles of fibers called neurofibrillary, or tau tangles, in the brain are suspected to play a role.

Alzheimer’s disease is not a normal part of aging and is not something that inevitably happens in later life. However, the likelihood of having Alzheimer's disease increases substantially with advancing age. A combination of age-related brain changes, genetic, environmental, and lifestyle factors are thought to increase the risk of this condition.

Though AD is not entirely preventable, ensuring an extensive social network, and frequent participation in social, physical, and intellectually stimulating activities like reading, playing games, participating in adult education courses, and other recreational activities can delay its onset.

Current Alzheimer's medications can help temporarily with memory symptoms and other cognitive changes. Caregivers play an extremely pivotal role in helping the patient with their daily needs and activities as well as protecting them from any danger.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Brain

Prevalence

Worldwide: 55 million (2020)

India: 4.1 million (2019)

Mimicking Conditions

Depression

Delirium

Mild cognitive impairments

Stress

Senility

Nutritional deficiency

Necessary health tests/imaging

Thyroid profile total

Vitamin B12

Vitamin D (25-OH)

Complete blood count (CBC)

Erythrocyte sedimentation rate

CT scan (Head)

MRI brain

CT angiography brain

Treatment

Acetylcholinesterase inhibitors

N-methyl-D-aspartate (NMDA) receptors

Anti-anxiety medications

Antidepressants

Other drugs

See All

Symptoms Of Alzheimer’s disease

The first symptoms of Alzheimer’s vary from person to person. Memory problems are typically one of the first signs related to this disease. The decline in non-memory aspects of cognition, such as word-finding and impaired reasoning or judgment, may also signal the very early stages of Alzheimer’s.

Alzheimer’s disease progresses through several stages, explained as follows:

1. Early symptoms

In the early stages, the main symptom of Alzheimer's disease is memory lapses. This is characterized by a cognitive decline that requires compensatory strategies to maintain independence and perform daily living activities.

The early Alzheimer’s symptoms may include

Trouble thinking of the right word

Misplaced items

Poor judgment or it harder to make decisions

Forgetting about recent conversations or events

Hesitant to try new things

Asking about the same things repeatedly

Mood changes, such as increased anxiety or agitation

2. Middle-age symptoms

In mild Alzheimer’s disease, a person may seem healthy but can be characterized by symptoms that mildly impair daily living activities, so the patient needs supervision over complex tasks. This stage requires more intensive supervision and care become necessary. It is characterized by symptoms like increased memory loss, confusion, and moderately impaired daily life activities.

Other symptoms may also develop, such as

Obsessive, repetitive, or impulsive behavior

Disturbed sleep

Increased confusion, and disorientation

Problems with speech or language (aphasia)

Seeing or hearing things that are not seen by other people (hallucinations)

Changes in mood, such as frequent mood swings

Difficulty performing spatial tasks, such as judging distances

3. Later symptoms

People with severe Alzheimer’s cannot communicate and depend entirely on others for their care. They have to rely on caregivers to handle even their most basic needs, including eating, washing, and going to the bathroom.

Several other symptoms may also develop as Alzheimer's disease progresses, such as

Gradual loss of speech

Weight loss

Difficulty changing position or moving around

Unintentional passing of urine (urinary incontinence)

Significant problems with short- and long-term memory

Types Of Alzheimer’s Disease

There are two types of Alzheimer's, namely early-onset and late-onset:

1. Late-onset Alzheimer's disease: Most people with Alzheimer's have late-onset Alzheimer's disease, in which the symptoms appear in the late 60s. The specific gene that increases its risk is the Apolipoprotein E (APOE) gene on chromosome 19. The E4 allele of this gene seems to be a strong risk factor for developing this disease. However, inheriting this gene does not always lead to the development of Alzheimer's.

2. Early-Onset Alzheimer's disease: This occurs between the 30s to mid-60s and represents less than 10 percent of all people with Alzheimer's. Genetic risk variants for the early onset of this disease include mutations in the genes coding for amyloid precursor protein (APP), presenilin 1, and presenilin 2.

Causes Of Alzheimer’s Disease

Alzheimer’s is a progressive brain disease characterized by changes in the brain that result in the loss of nerve cells and their connections. However, the complete understanding of the causes of this disease is not yet known. Various hypotheses have been proposed for the development of Alzheimer’s disease, with moderate or strong evidence. These are:

1. Cholinergic hypothesis: The cholinergic hypothesis of Alzheimer’s disease states that the deficits in acetylcholine (ACh,a chemical messenger, that plays a vital function in transmission of signals in the nervous system) and choline acetyltransferase (enzyme responsible for the synthesis of the acetylcholine) lead to memory and cognitive decline.

2. Amyloid hypothesis: According to this hypothesis, Alzheimer's disease may be caused due to deposition of oligomeric or fibrillar amyloid beta (Aβ) peptide in brain tissue.

3. Tau hypothesis: Tau is a protein that helps stabilize the internal framework of nerve cells (neurons) in the brain. This internal framework has a tube-like shape through which nutrients and other important substances travel to reach different parts of the neuron. In Alzheimer’s disease, an abnormal, insoluble form of tau builds up and causes this internal framework to disintegrate.

Did you know?

Alzheimer's disease is named after Dr. Alois Alzheimer. In 1906, Dr. Alzheimer noticed changes in the brain tissue of a woman who had died of an unusual mental illness. Her symptoms included memory loss, language problems, and unpredictable behavior. After she died, he examined her brain and found many abnormal clumps (now called amyloid plaques) and tangled bundles of fibers (now called neurofibrillary, or tau, tangles). These plaques and tangles in the brain are still considered some of the classic features of Alzheimer’s disease.

Risk Factors Of Alzheimer’s Disease

Alzhiemer’s disease is thought to be a combination of age-related brain changes, genetic, environmental, and lifestyle factors. These factors are discussed as below:

1. Advanced age: Patients over 65 years of age are at an increased risk for dementia compared to younger people. Older age does not cause Alzheimer’s, but it is the most important known cause of the disease.

2. Family history: A family history of Alzheimer’s disease increases the patient’s chances of developing the disease by up to seven times.

3. Genes: The Apolipoprotein E (ApoE) gene is implicated in Alzheimer’s disease. The E4 allele of this gene seems to be a strong risk factor for developing this condition. The higher the number of apoE4 alleles, the higher the risk of AD and the lower the age of onset.

The early-onset familial AD is usually caused by mutations in the genes coding for amyloid precursor protein (APP), presenilin 1, and presenilin 2.

4. Gender: Women are at a higher risk of developing this disease. They make up approximately 2/3rd of all Alzheimer’s patients.

5. Overweight and obesity: People with higher BMI or obesity (in particular abdominal obesity) are at an increased risk of dementia after the age of 25 years.

6. Alcohol: Middle-aged alcoholics, especially apoE4 allele carriers are found to have a 3-fold higher risk of dementia and AD later in their lives.

7. High blood pressure (hypertension): Elevated blood pressure in middle age, especially if uncontrolled, is associated with a higher risk of AD development.

8. Cardiovascular and cerebrovascular diseases: A significant increase in the risk of dementia and AD is associated with stroke, clinically silent cerebral infarction, and cardiovascular diseases like peripheral artery disease.

9. Hypercholesterolemia: People with high total serum cholesterol levels in the middle ages were found to be at risk of developing AD and other dementias in their later life..

10. Hormone imbalances: Imbalanced hormones can create havoc within the body in many systemic ways and increase the risk of Alzheimer’s. For example, changes in estrogen levels, in particular, seem to affect cognition, as estrogen both protects and helps the brain to grow.

11. Down syndrome: Many people with Down syndrome develop Alzheimer’s disease as they age. They are born with an extra copy of chromosome 21, which carries a gene that produces a specific protein called amyloid precursor protein (APP). Excess of APP protein leads to a buildup of protein clumps called beta-amyloid plaques in the brain. The presence of beta-amyloid plaques is one of the hallmarks of Alzheimer's disease.

12. Head injury: A head injury can usually be directly linked to increasing the chances of developing Alzheimer’s or other forms of dementia later on in life.

13. Hearing loss: People with hearing loss are more likely to have Alzheimer’s. It has been researched that the particular part of the brain in charge of hearing and processing auditory information may simply start to work differently when the hearing part of that equation goes away, causing a change to how the brain is structured, which could be related to the effects of Alzheimer disease.

14. Chronic stress: Chronic stress and depression contribute to the buildup of amyloid-beta proteins in the brain, which play a potential role in the pathogenesis of Alzheimer’s.

15. Sleep issues: Sleep issues and poor sleep schedule may create mild cognitive impairment and trigger the beginnings of Alzheimer’s.

16. Sedentary lifestyle: A sedentary lifestyle with a lack of mind and body stimulation increases the risk of this disease.

17. Social network and social engagement: The risk of dementia and AD is 2-fold higher in elderly persons with increased social isolation and less frequent, unsatisfactory contact with relatives and friends.

Diagnosis Of Alzheimer’s Disease

An early and accurate diagnosis is crucial for several reasons. It can tell people whether their symptoms are due to Alzheimer’s disease or another cause, such as stroke, tumor, Parkinson’s disease, sleep disturbances, side effects of medications, or other conditions that may be treatable and possibly reversible.

Doctors can usually diagnose the disease with the help of the following:

1. Past medical history and current health status: The doctor usually asks the person experiencing symptoms as well as a family member or friend questions about overall health, history of Alzheimer’s disease in the family, diet, past medical problems, and ability to carry out daily activities. The history should include information from the person related to the patient.

2. Changes in the behavior and personality of the patient: A psychiatric evaluation is crucial to distinguish Alzheimer’s from other conditions that can mimic it, such as depression, delirium, and mild cognitive impairment.

3. Cognitive tests involving memory: Diagnosis of Alzheimer's disease is based on tests to assess memory and thinking skills. Most cognitive assessments involve a series of pen and paper tests and questions, each of which carries a score. The tests assess some different mental abilities, including attention span and concentration, abilities related to vision, communication skills, and short-term memory. Therefore, these tests can help doctors work out what's happening, but an individual themselves should never use them to diagnose this disease.

4. Medical tests: Blood, urine, and other standard medical tests can help identify other possible causes of the problem. Certain tests, like thyroid profile total, vitamin B12, vitamin D (25-OH), complete blood count (CBC), and erythrocyte sedimentation rate can be helpful in checking for infectious conditions, autoimmune conditions, or nutritional deficiencies as these are other potential causes of Alzheimer's disease. Depending on the test results, the doctor may recommend more detailed tests to confirm the findings.

5. Imaging studies: Neuroimaging is a promising and widely expanding area of research for detecting Alzheimer’s disease. There are multiple brain imaging procedures that can be used to identify abnormalities in the brain, including CT, MRI, and PET scans. These tests are considered to be preliminary tests for the detection of disease.

Computed tomography (CT) scan: CT scan of the brain can give more detailed information about its tissue and structures than standard X-rays of the head.

Magnetic resonance imagining (MRI) scan: A strong magnetic field and radio waves are used to produce detailed images of your brain to identify the brain parts which are not working correctly and can help determine the cause.

Positron emission tomography (PET) scan: A PET scan can detect changes in metabolism, blood flow, cellular communication processes, and any other brain activities. The most commonly used PET scan is a fluorodeoxyglucose (FDG) PET scan. It can identify brain regions with reduced glucose metabolism. The pattern of metabolism change can help in diagnosis of various degenerative brain diseases. PET scans have recently been developed to detect clusters of amyloid proteins (plaques) or tau (neurofibrillary tangles) associated with AD. However, these types of PET scans are typically used for research purposes.

Celebs affected

Ronald Reagen

Ronald Reagan, 40th president of the United States from 1981 to 1989, had Alzheimer’s disease.

Prevention Of Alzheimer’s Disease

The exact cause of Alzheimer's disease is still unknown. Although there's no certain way to prevent the condition, a healthy lifestyle can help reduce its risk.

Reduce the risk of cardiovascular disease: By reducing the risk of cardiovascular disease, a person reduces the risk of Alzheimer’s disease, stroke, and heart attack by following a few steps:

Quit smoking

Eat a healthy and balanced diet by including fruits and vegetables every day

Include regular moderate exercise in the schedule

Appropriate treatment to manage hypertension, obesity, increased glucose levels, and diabetes mellitus.

Stay mentally and socially active: Evidence suggests that the rate of dementia is lower in people who remain mentally and socially active throughout their lives.

Maintain an active and socially integrated lifestyle by ensuring an extensive social network, and frequent participation in social, physical, and intellectually stimulating activities like:

Learn foreign languages

Play musical instruments

Join book clubs

Engage in gardening or crafts

Even though the Alzheimer’s disease mostly affects people in their old age, it is not a part of the natural aging process. Read about a few lifestyle changes to lower the risk of Alzheimer’s disease.

Click Here!

Specialist To Visit

A general practitioner can carry out some simple checks to find out the cause of dementia and can then refer you to a specialist for assessment, such as

Psychiatrist (usually an old age psychiatrist)

Elderly care physician (sometimes called a geriatrician)

Neurologists (Expert in treating conditions affecting the brain and nervous system)

These specialists will assess your memory and other areas of mental ability and, if necessary, arrange more tests to rule out other conditions. Although there's no simple and reliable test for diagnosing Alzheimer's disease, the staff at the memory clinic will listen to the concerns of both the patient and the family about the issues faced mentally and physically.

If you are facing such issues or have some elderly facing them. Connect with our professionals now.

Consult Now!

Treatment Of Alzheimer’s Disease

Currently, there is no cure for Alzheimer's disease though symptomatic relief can be provided. Current treatments are discussed as follows:

1. Medications to improve symptoms: Medicines may be prescribed for Alzheimer's disease to help temporarily improve some symptoms. These may include:

Cholinesterase(AChE) inhibitors: Alzheimer’s disease can be caused by low levels of a chemical called acetylcholine in the brain. Acetylcholine performs the function of sending messages between nerve cells. Cholinesterase inhibitors (CI) aim to increase the availability of acetylcholine in neurotransmission in order to treat memory disturbances. Various medications to treat Alzheimer's are donepezil, rivastigmine, and galantamine.

N–methyl–D–aspartate (NMDA) receptor blocker: Memory loss in Alzheimer’s disease is due to excessive production of glutamate (chemical messenger) in the brain which is mediated by NMDA receptors. These medications work by preventing the action of NMDA receptors and regulates the production of glutamate involved in the transmission of nerve signals e.g. of this type of drug is memantine which is used for moderate or severe Alzheimer's disease. It is suitable for those who cannot take or are unable to tolerate AChE inhibitors. This drug is also prescribed in case of severe Alzheimer's disease who already have been taking an AChE inhibitor. Medicines to treat challenging behavior: In the later stages of dementia, a significant number of people will develop what's known as behavioral and psychological symptoms of dementia (BPSD). These symptoms include anxiety, depression, wandering, and aggression.

A consultant psychiatrist can prescribe anti-anxiety drugs to manage anxiety and agitation. Antidepressant drugs can be prescribed to treat restlessness, aggression and depression. Anticonvulsants are sometimes used to manage aggression. Antipsychotics can also be used to treat paranoia and hallucinations.

Disease-modifying treatments: While symptomatic treatments have proven to be helpful, it is the finding of a cure that is most vital. Since the amyloid hypothesis indicates that Aß generation and deposition to be the basis of Alzheimer’s disease, interest centers on amyloid therapies. These therapies aim to decrease production of Aß, increase clearance of Aß, and the prevention of Aß aggregation into amyloid plaques. Eg. Aducanumab is a newly approved agent identified as an amyloid beta-directed monoclonal antibody.

2. Psychosocial interventions: These interventions are used as an adjunct to medicinal treatment:

Cognitive stimulation therapies: These involve taking part in group activities and exercises designed to improve memory and problem solving skills.

Cognitive rehabilitation: Cognitive rehabilitation works by helping one to use the working parts of their brain to help the parts that are not. A patient practices on a computer program for memory training.

Recollections and past stories: Life story work involves a compilation of photos, notes, and keepsakes from childhood to the present day. These approaches sometimes help in improving mood and well-being.

Home Care For Alzheimer’s Disease

It is important to ensure safety and quality of life for patients suffering from Alzheimer's disease. Caring for a relative or loved one who is suffering from this disease can be challenging. Here are a few points that can help:

1. Always keep the atmosphere at home pleasant, positive, and caring. Never make the patient feel that they are a burden.

2. Encourage the person to maintain a diary or calendar to note down important things or days which will help them remember.

3. Ensure that the patient has access to important data, such as identity documents, home address, important telephone numbers, etc., at all times. This can help in situations where the patient loses their way home or is unable to remember their identity or whereabouts.

4. People with dementia are often at an increased risk of falls due to concurrent motor issues. Hence, take care and ensure that their surroundings are well-lit, spacious, and free of obstacles. A few things you or your caregiver can do to make your living space safer include the following:

Install a sturdy handrail on staircases.

Remove unnecessary furniture to move freely.

Install carpet on stairs or mark the edges of each step with bright colored tape.

All the electrical cords should be tucked out of the way.

Sharp objects should not be kept open.

Living With Alzheimer’s Disease

Receiving a diagnosis of Alzheimer's can be a life-altering and challenging situation for patients and their caregivers. Coming to terms with the diagnosis can invoke feelings of anxiety, depression, anger, rage, guilt, etc. However, it is important to remember that even with a diagnosis it is possible to live a happy life. Some of the points that need to be remembered are:

Take care of oneself

These steps can help to protect health, foster feelings of control, and self-worth, and find meaningful ways to engage with others.

Care for physical health by exercising and eating a healthy diet

Care for mental health by taking part in mentally stimulating activities such as playing games,reading books and engaging in calming activities like yoga

Care for emotional health by experiencing a range of emotions without labeling any of them good or bad. Join a support group so that you can connect with people in the same situation and maintain close relationships with them.

Stay active and engaged

Patients should try to keep up with the activities that they enjoy and spend time with family and friends. If someone is not able to do some things safely anymore, try taking on new activities and do them at times of the day when they feel best.

Minimize stress from life

Stress can be an inevitable part of life with Alzheimer’s. Taking steps to prevent or manage it from escalating can improve every day. To stay calm it is always better to engage in relaxing activities, like listening to music, gardening, or keeping a journal.

Add a few routines that can make life easier

Alzheimer’s related memory loss can be full of frustrations and hazards. A few strategies can be helpful:

Always keep keys, cellphones, and other essentials in the same place at home.

Arrange for automatic payment of bills.

Schedule regular appointments on the same day at the same time.

Use a calendar or whiteboard at home for your daily schedule, and make a list of tasks as you complete them.

Care for caregivers

Alzheimer’s can be uniquely challenging for caregivers, as the person they’re caring for becomes more and more dependent and is unable to express their wants and needs. For the family members and caregivers, witnessing this situation and coping with a loved one can take an enormous toll on their mental health as well. Here are a few tips:

Keep the mood positive. Convey feelings of affection with facial expressions, and touch.

If the person becomes agitated or upset, acknowledge those feelings, change the topic, or suggest a distraction like going for a walk.

Keep a sense of humor, and find activities for the person you care about, on which you both can laugh.

Complications Of Alzheimer’s Disease

Alzheimer's is a progressive condition that can worsen with time. The treatments currently available are known to slow the progression of the disease but cannot entirely stop it. Alzheimer's can cause the following complications as it worsens gradually:

Safety issues: Patients with Alzheimer's disease are at an increased risk of injuries even while performing activities like walking, cooking, cleaning, etc.

Personal hygiene: In the later stages, Alzheimer's patients struggle with basic human hygiene, such as brushing, bathing, grooming, and using the bathroom.

Nutritional challenges: With advanced Alzheimer's, a person may forget to eat and may lose interest in eating. This can lead to a variety of malnutrition-related problems.

Aspiration or choking: Trouble swallowing food can lead to aspiration or choking and cause pneumonia in the lungs.

Death: Severe forms of Alzheimer's result in death, often due to infections like pneumonia and conditions like dehydration and malnutrition.

Alternative Therapies For Alzheimer’s Disease

1. Exercise and yoga: Performing light exercises can help enhance mood, manage anxiety, and maintain physical activity status in patients with Alzheimer's. These light exercises can include home-based aerobic routines, dancing, lifting light weights, and yoga, such as Pranayama.

2. Physiotherapy and occupational therapy: Certain modifications suggested by physiotherapists or occupational therapists may need to be implemented in a patient’s home or work environment to make it safer and prevent injuries due to falls.

3. Massage therapy and aromatherapy: Massage therapy and aromatherapy induce relaxation and may be helpful for patients with Alzheimer’s.

4. Ayurveda: Alzheimer's is known as “Smruthi Nasha” in Ayurveda. Panchkarma and medicinal herbs, like Shankhpushpi, Guduchi (Giloy), Brahmi, Ashwagandha, Shatavari, etc., may be useful in treating Alzheimer's disease.

Frequently Asked Questions

What is the difference between Alzheimer's disease and dementia?

Are there any foods that can improve memory?

Is there a cure for Alzheimer's disease?

How does Alzheimer's disease change the brain?

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Amenorrhea

Also known as Absence of normal menstrual flow, Failure to menstruate and No vaginal bleeding

Overview

Amenorrhea is defined as the absence of menstruation during the reproductive years of a woman's life. It can be categorized into primary and secondary. Primary amenorrhoea is when a woman never had menstrual periods, and in secondary amenorrhoea, there is the absence of menstrual periods in a woman who was previously menstruating.

The causes of primary amenorrhea are defects in the ovaries, problems with the reproductive organs, and issues with the pituitary gland, and the central nervous system. Secondary amenorrhea can result from natural causes like pregnancy, and breastfeeding or other causes like low body weight, mental stress, excessive exercise, hormonal imbalance, and birth control pills.

A variety of tests are necessary for the diagnosis of amenorrhoea including pregnancy, thyroid function test, ovary function test, male hormone test, and prolactin test. Treatment mainly depends on the cause of amenorrhea. If the cause of amenorrhea is a hormonal imbalance then hormone replacement therapy can be administered. If amenorrhea is due to malnutrition, a proper diet plan can cure the patient successfully. In some cases, surgery is required that can treat anatomical causes of amenorrhea.

Key Facts

Usually seen in

Individuals above 16 years of age

Gender affected

Women

Body part(s) involved

Reproductive organs

Prevalence

Worldwide: 1.5–3% (2004)

Mimicking Conditions

Abdominal distention

Pseudocyesis

Necessary health tests/imaging

Lab tests: Beta human chorionic gonadotropin (hCG), Ovary function test, Follicle stimulating hormone (FSH) & Luteinizing hormone (LH)

Imaging test: Ultrasound & Magnetic resonance imagining (MRI)

Hysteroscopy

Karyotyping

Treatment

Estrogen

Dopamine agonist: Bromocriptine (Parlodel) & Cabergoline

Birth control pills: Medroxyprogesterone

Estrogen replacement therapy (ERT)

See All

Symptoms Of Amenorrhoea

The main symptom of amenorrhoea is the lack of periods for at least three months. Depending upon the cause the other symptoms of amenorrhoea can be:

Hair loss

Headache

Visual disturbances

Tiredness

Lack of breast development

Discharge from breast

Excess facial hair

Sleep disturbance

Vaginal dryness

Pelvic pain

Acne

Deepening of the voice

Causes Of Amenorrhoea

Amenorrhea is often a sign of another health problem rather than a disease itself, and it can happen for many reasons. This can occur as a natural part of life such as during pregnancy, breastfeeding, and menopause. However, the absence of menstruation can also indicate a problem within the ovaries, uterus, hypothalamus, and pituitary gland, or an abnormality of the genital tract. Amenorrhea has also been linked to infertility, some medications, and lifestyle factors.

There can be two types of amenorrhoea namely primary and secondary.

Primary amenorrhea (failure of menses by the age of 16)

It can be due to the following reasons:

1. Genetic abnormalities: Sometimes, it causes the ovaries to stop functioning. A genetic syndrome that is linked to the missing of an X chromosome, is called Turner’s syndrome. This syndrome is characterized by ovarian insufficiency due to defects in the development of genitals, hence it can delay or disrupt menstruation.

Another genetic cause of primary amenorrhoea is Mayer–Rokitansky–Küster–Hauser (MRKH) syndrome. In MRKH syndrome, the mullerian ducts (an embryonic structure that develops into the female reproductive tract) develop abnormally which results in the absence of a uterus and cervix. Even though patients with MRKH have functioning ovaries and secondary sexual characteristics, they may experience primary amenorrhea due to absence of any functioning uterus.

2. Problems with hypothalamus or pituitary gland: Hormonal issues because of problems with the hypothalamus or the pituitary gland can cause amenorrhoea or delay in onset of menstruation.

3. Imperforate hymen: This is a disorder in which a hymen has no opening and completely obstructs the vagina.

4. Transverse vaginal septum: This is a birth defect that results in a wall of tissue running horizontally across the vagina, blocking all or part of it.

5. Constitutional delay of puberty: Constitutional delay of puberty is a transient state associated with prolonged childhood phase and delayed pubertal growth spurt. It is not attributed to any disease but is considered just a modification of the timeline of puberty. Although it is more common in boys, girls with delayed puberty present with onset of secondary sexual characteristics after the age of 14, as well as menarche (beginning of menstrual periods) after the age of 16. This may be due to genetics or family history. This diagnosis is made when other causes have been ruled out.

Secondary amenorrhea (not having periods for at least 6 months after menstruating normally)

This can result from various causes like:

1. Natural causes: Pregnancy is the most common natural cause of secondary amenorrhea and other physiologic causes include breastfeeding and menopause.

Breastfeeding or lactational amenorrhea is due to the presence of elevated prolactin and low levels of luteinizing hormone (LH) in the blood. LH plays an important role in sexual development and functioning, which suppress ovarian hormone secretion. The duration of lactational amenorrhoea depends on how often a woman breastfeeds.

2. Health conditions: Several health conditions can also lead to seconday amenorrhea such as:

Pituitary tumors: The pituitary gland in the brain regulates the production of hormones that affect many body functions. The tumors of the pituitary gland are usually noncancerous but can interfere with the normal hormonal regulation of menstruation.

Thyroid issues: The thyroid is a small butterfly-shaped gland at the base of the neck. The thyroid produces two hormones that control metabolism and plays a vital role in puberty and menstruation. Both upregulation and downregulation of the thyroid gland can cause menstrual irregularities, including amenorrhea.

Polycystic ovary syndrome (PCOS): PCOS is a hormonal disorder common among women of reproductive age. PCOS may cause menstrual cycle changes, increased facial and body hair, cysts in the ovaries, and infertility. Most women with PCOS either have amenorrhea or experience irregular periods, called oligomenorrhea.

Hypothalamic amenorrhoea: This condition occurs when the hypothalamus, a gland in the brain that regulates body processes, slows or stops releasing gonadotropin-releasing hormone (GnRH). GnRH is the primary hormone for the starting of the menstrual cycle.

Low body weight: Women who perform extraneous exercise regularly or lose a significant amount of weight are at risk of developing Functional Hypothalamic Amenorrhoea (FHA). In such cases, women do not consume enough calories to maintain their normal menstrual cycles.

Hyperandrogenaemia: In this case, the body makes high levels of male sex hormones, which can affect the female reproductive system. This can be caused by tumors of the ovary or adrenal gland, or certain conditions present at birth.

Premature menopause: Menopause usually begins around age of 50 years. But, for some women, the ovarian supply of eggs diminishes before the age of 40 leading to early cessation of menstruation.

3. Medications and therapies: These include:

Birth control pills: Some birth control pills may cause missed periods or the complete absence of menstruation. A few injectable contraceptives and hormonal intrauterine devices (IUDs) can cause amenorrhea. After stopping the pills and injectables it takes a few months to restart a regular menstrual cycle.

Recreational drugs: The use of opiates (such as heroin) on a regular basis has also been known to cause amenorrhoea in longer term users.

Antipsychotic drugs: The drugs which are commonly used to treat schizophrenia, have been known to cause amenorrhoea as well. Research suggests that antipsychotic medications result in hormonal imbalance which can cause amenorrhea.

Radiation and chemotherapy: Certain cancer treatments like bone marrow, blood, lymph nodes, and breast can destroy estrogen-producing cells and eggs in the ovaries, leading to amenorrhea.

4. Poor nutrition: Nutritional deficiencies may affect the functioning of the hypothalamus and pituitary gland, which can lead to amenorrhea.

5. Stress: Stress can affect hormone levels in the body, and can lead to hypothalamic amenorrhoea.

Risk Factors For Amenorrhoea

There are various factors that can put one at the risk of developing amenorrhea. Some of the risk factors are:

1. Eating disorders

These disorders are psychological conditions that cause the development of unhealthy eating habits. They might start with an obsession with food, body weight, or body shape. Anorexia nervosa is likely the most well-known eating disorder. People with anorexia generally view themselves as overweight, even if they’re dangerously underweight.

Another eating disorder is bulimia nervosa, people with bulimia frequently eat unusually large amounts of food in a specific period. Both these disorders affect women more than men during adolescence and early adulthood. When an eating disorder is present, the most common cause of missing a period is hypothalamic amenorrhea (HA).

2. Excessive exercise

Excessive exercise may cause the hormone to be released less frequently or it may cause the amount of the hormone released at each pulse to decrease. The prevalence of amenorrhoea is more likely when excessive exercise is combined with low-calorie intake or a low body fat percentage.

3. Family history

If there is a family history of delayed menstruation or irregular menstruation, there can be a chance of genetic predisposition to amenorrhea.

4. Structural abnormalities

Girls who have congenital abnormalities such as poorly developed genital and pelvic organs can be at the risk of developing amenorrhea.

5. Tumor and its treatments

Sometimes, after receiving chemotherapy and radiotherapy ovarian failure can occur which leads to the absence of menstruation.

Diagnosis Of Amenorrhoea

1. Physical examination and medical history

During the history and physical examination, clinicians first ask about the age of the person and the start of the menses at puberty (menarche). This will help the physician in diagnosing whether it is primary or secondary amenorrhoea. If the patient was not menstruating at all, then it must be primary amenorrhea. All other cases will be secondary amenorrhea.

The medical findings would include a history of night sweats, sleep disturbance, and hot flashes for premature ovarian failure, a history of chemotherapy, and radiation therapy for neoplasm should be obtained because these can also cause ovarian failure in young women.

The doctor would also check the presence of any chronic illness to determine the exact reason as these diseases affect the hypothalamic-pituitary axis, which plays a vital role in controlling the female menstrual cycle.

The physical examination should include the following parameters:

Checking body mass index (BMI) to rule out disorders of eating like anorexia nervosa and malnutrition.

Measuring the height, weight, and fat index of the patient to look for the presence of any chronic illness.

Examining the breasts, pubic hair, and the clitoral index is also an important part during the physical examination to rule out genetic syndrome. For example, a normal chest examination can rule out Turner's syndrome.

2. Lab tests

A variety of blood tests may be necessary, including:

Beta human chorionic gonadotropin (Beta-hCG): This test is an accurate test for checking the pregnancy. The hCG hormone is produced by the embryo and it is present in the blood after a first missed period. This test is done to confirm or rule out pregnancy which is the most common cause of amenorrhoea.

Ovary function test: It measures the amount of follicle-stimulating hormone (FSH) and luteinizing hormone (LH). The FSH blood test is used to help diagnose problems with sexual development, menstruation, and fertility. The LH blood test measures the amount of luteinizing hormone, which plays role in sexual development and regulation of the menstrual cycle. Measuring the amount of FSH in the blood can determine if the ovaries are working properly.

Thyroid function tests: A thyroid profile test shows high levels of thyroid-stimulating hormone (TSH) but normal levels of the other hormones generally indicate that amenorrhea has been caused by hypothyroidism. The thyroid produces hormones that control metabolism and play a role in puberty and menstruation.

Prolactin test: The level of prolactin is increased in the case of amenorrhoea. This hormone plays a central role in a variety of reproductive functions. Pathological hyperprolactinemia most commonly presents as an ovulatory disorder and is often associated with secondary amenorrhea or oligomenorrhea.

Progesterone challenge test: This test is also called the progestin challenge test, which is performed to differentiate between the anovulation, anatomic, and estradiol deficiency as causes of amenorrhea. If bleeding takes place after withdrawing progesterone within 2 to 7 days, the cause must be the anovulation, but if no bleeding takes place after progesterone withdrawal, the causes are other than anovulation or premature ovarian failure.

If you are looking to book a test just sitting back at home, you are just a click away.

Book Now!

3. Imaging tests

Depending on the sign and symptoms, various tests can be recommended.

Ultrasound: This test, also called sonography, is an imaging method that uses high-frequency sound waves to produce images of structures within your body. If a person never had menstruation, the doctor may suggest an ultrasound test to check for any abnormalities in the reproductive organs.

Note: If a uterus is not present on ultrasound, karyotype analysis is obtained to assess for MRKH.

Magnetic resonance imaging (MRI): MRI uses a strong magnetic field and radio waves to create detailed images of the organs and tissues within the body. A doctor may recommend an MRI to check for a pituitary tumor, a large non-functioning pituitary tumor that causes amenorrhea by compressing the normal pituitary gland. Therefore, the pituitary hormone directly affects the menstrual cycle.

4. Hysteroscopy

If another test does not reveal a specific cause, hysteroscopy is performed. It is an exam of the inside of the cervix and uterus using a thin, lighted, flexible tube called a hysteroscope. This test is done to diagnose problems related to the uterus like abnormal vaginal bleeding, polyps, and fibroids.

5. Karyotyping

In a few cases, where there is a family history or a genetic syndrome is running in the family. A karyotype (chromosomal analysis) is not indicated as an initial test for amenorrhea as it is not a screening test. Chromosomal abnormalities like turner syndrome contribute as one of the etiological factors in patients with primary amenorrhea; girls who did not attain menarche by the age of 11-15 years.

Prevention Of Amenorrhoea

A woman can prevent amenorrhea by following programs:

Maintaining a healthy weight

Exercising regularly

Eating a well-balanced diet

Managing stress

Getting regular and adequate sleep.

Being aware of your menstrual cycle (so you’ll know if you miss a period)

Specialist To Visit

Sometimes, it is difficult to diagnose the cause of amenorrhoea, a general practitioner may be concerned with the cause of the issue. People who miss three periods in a row but are not pregnant or likely to have some issue with the reproductive organ or some hormonal imbalance should see:

Gynecologist

Endocrinologist

Gynecologist is a doctor who specializes in female reproductive health. They diagnose and treat issues related to the female reproductive tract. This includes the uterus, fallopian tubes, ovaries, and breasts. Endocrinologists specialize in endocrine glands and the hormones they produce.

If someone is facing such issues, contact and seek medical help immediately.

Consult Now!

Treatment Of Amenorrhoea

Treatment is mainly dependent on the cause of amenorrhea and the health status of a person:

Medication

If amenorrhoea is due to estrogen deficiency, estrogen can be administered.

Dopamine agonist: Bromocriptine and cabergoline are effective for treating hyperprolactinemia (increased levels of prolactin). It restores the normal endocrine function and ovulation

In women with the polycystic ovarian syndrome (PCOS), metformin can be given to induce ovulation

Birth control pills or other types of hormonal medication, including oral contraceptives may be prescribed to restore the menstrual cycle and to provide estrogen replacement to women with amenorrhea. Before administering oral contraceptives, withdrawal bleeding is induced with an injection of progesterone, or oral administration of 5-10 mg of medroxyprogesterone can be recommended for 10 days.

Estrogen replacement therapy (ERT) helps in balancing hormonal levels and restarting the menstrual cycle in women with primary ovarian insufficiency (POI). Hormone replacement therapy works by replacing estrogen hormone that is no longer being made by the body.

Treatment of hypo or hyperthyroidism: Replacement therapy with levothyroxine to correct hypothyroidism and antithyroid drugs like methimazole to correct the underlying hyperthyroidism.

Surgical treatment

In the case of pituitary tumor, medications may be recommended to shrink the tumor. If medication does not work, surgery may be necessary to remove the tumor. Most of the time, pituitary tumors are removed through the nose and sinuses, but sometimes radiation therapy may be used to shrink the tumor.

Women with intrauterine adhesions require dissolution of the scar tissue. Removal of the scar tissue during a procedure called a hysteroscopic resection can help restore the menstrual cycle.

Home-care For Amenorrhoea

Home remedies

Some of the herbs mimic estrogen-like effects and are sometimes used to treat amenorrhoea symptoms. Apart from these traditional treatments, there are several home remedies for amenorrhea that may bring some symptomatic relief such as:

1. Fenugreek (Methi): It is considered to be a solution for many problems related to the menstrual cycle and reproduction. Fenugreek intake has shown many positive results in milk production, amenorrhea, and relief from menstrual cramps.

2. Saffron (Kesar): It is an antioxidant that can act as a toxin-flushing and stress-reducing agent. The therapeutic effects of saffron are attributed to its relaxant effect on smooth muscles and stimulating menstruation.

3. Chamomile (Babunah ke phul): It is used as a relaxant and an antispasmodic that can be taken as a supplement or drunk as a tea. The absence of menstruation caused by stress and anxiety can be treated with chamomile.

4. Turmeric (Haldi): It has its ancient medicinal properties that help to heal internal injuries and is also used as a uterine stimulant that is used to regulate menstrual flow.

5. Lemon (nimbu) balm: It is another herb that has been used in the treatment of amenorrhea and other menstrual problems. It promotes the menstrual cycle and eases menstrual cramps.

6. Blue cohosh: Blue and black cohosh are phytoestrogenic herbs, which are commonly used to treat menopause symptoms in middle-aged women. A phytochemical called opsonin, which is present in this herb, provides stimulation for blood flow in the pelvic region to effectively treat amenorrhea and other gynecological diseases.

Food can also help you to manage PCOS

Polycystic ovary syndrome (PCOS) is a common endocrine disorder affecting women of reproductive age. It is characterized by high levels of androgens (male hormones), hirsutism (abnormal hair growth), and an abnormal menstrual cycle due to hyperinsulinemia (high levels of insulin in the blood). PCOS is the most common cause of amenorrhea in women with evidence of androgen excess. Here are a few examples of foods that help to curb PCOS symptoms.

Read More!

Complications Of Amenorrhea

The causes of amenorrhea can cause other problems as well. These include:

Infertility: One of the problems caused by amenorrhea is not getting pregnant. Primary amenorrhea or secondary amenorrhea for several months may be a sign of a disease or chronic condition that can lead to infertility. Amenorrhea caused by hormonal imbalance can also lead to miscarriage or other problems with pregnancy.

Psychological stress: Not having regular menstrual flow when your peers are having theirs can be stressful, especially for women who are trying to conceive and are planning a family.

Osteoporosis: Estrogen also plays a role in bone health. If amenorrhea is caused by low estrogen or problems with estrogen production, a woman may be at risk for loss of weak or brittle bones.

Pelvic pain: If any structural problem is causing amenorrhea, it may also cause pain in the pelvic area.

Alternative Therapies For Amenorrhoea

1. Yoga and exercise

Doing yoga and exercises three times a week can help improve blood circulation and help the body to feel fresh and prevent from feeling fatigued all the time. Yoga and exercise are useful in reducing stress or pressure on the body and have also proven to relieve stress, manage anxiety, and pain management.

2. Acupuncture

Acupuncture is a traditional chinese medicine technique that involves sticking finely pointed needles in areas of the body known as acupuncture points. Acupuncture may improve hormonal imbalances that go along with amenorrhea. It is also believed that the needles stimulate specific nerves and muscles, which in turn release natural pain-relieving hormones in the body.

3. Massage

Massage helps in increasing circulation and relieving pain from pelvic congestion. But, massage is only used for treating physical symptoms like pain rather than treating the cause of the problem.

4. Nutritional approach

Eating a healthy diet and limiting processed foods, and eating foods with heart-healthy fats (unsaturated fats) rather than saturated fats. Eating a more wholesome diet containing grains, vegetables, and omega-3 fatty acids. A diet that is very low in fat can raise your risk of amenorrhea.

Supplemental calcium, Vitamin D3, magnesium, and Vitamin K should be taken as women having irregular periods are at an increased risk of weak and brittle bones (osteoporosis). These vitamins and minerals may help to keep bones strong.

Vitamin B6 (pyridoxine) is important for normal brain development and for keeping the nervous system and immune system healthy. Vitamin B6 may reduce high prolactin levels. Prolactin is a hormone released by the pituitary gland, and women with amenorrhea often have increased levels of prolactin.

5. Chiropractic care

Chiropractic is a healthcare profession that cares for a patient's neuromusculoskeletal system, the bones, nerves, muscles, tendons, and ligaments. This is a natural, safe, and effective way to relieve menstrual cycle symptoms as well as increase fertility. This form of alternative therapy aims to ease any pain you have and improve the way your body functions.

6. Hot water bath

It helps in relieving the pain due to the absence of the menstrual cycle, the hot water bath has muscle relaxant properties, the heat from the water can improve the blood circulation in the body and also ease tension from the muscles.

Living With Amenorrhoea

Self management can help in taking care of yourself.

Know about your condition: Sometimes, amenorrhoea can affect the mental health of a person and it can lead to anxiety and depression. Talking to your near and dear ones can eliminate cases of emotional drainage and thus an effective treatment plan.

Exercising daily: It increases the blood circulation of the body and frees the mind from tension and stress.

Take your medicine on time: Self helps give a sense of satisfaction to the person that he/she is aware of the condition.

Talk with a doctor openly in case of any questions related to the issues faced: The person having amenorrhoea should ask as many questions that come to his mind.

Lower the stress levels: Practicing meditation and yoga helps in eliminating stress and keeps the person happy.

Take adequate sleep: Sleep activates and calms the body and mind. This makes the person feel less fatigued.

Did you know?

Amenorrhoea or irregular menstrual cycle can lead to osteoporosis (brittle and weakening of bones). Get to know more about a few ways to strengthen your bones.

Tap To Read!

Frequently Asked Questions

What increases my risk of amenorrhea?

Who should be evaluated for amenorrhoea?

How common is amenorrhoea?

Can I still get pregnant if I have amenorrhoea?

How does amenorrhea affect bone health?

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Anal fissure

Also known as Fissure-in-ano

Overview

An anal fissure is a cut, crack, tear or open sore in the lining of the anus (the opening through which stools pass out of the body) that extends upwards into the anal canal.

Symptoms include bleeding, burning sensation, and pain during and after passing stools. The various causes of an anal fissure include constipation, long-term diarrhea, pregnancy, childbirth, or sometimes an underlying medical condition.

An anal fissure can be prevented by changing eating and lifestyle habits. Eat a high-fiber diet, including legumes, vegetables, fruits, and whole grains. Keep yourself well hydrated, restrict the consumption of alcohol and caffeine, stay active and exercise, and avoid holding on to the urge to pass stools.

Treatment depends on the severity; in most cases, anal fissures will improve on their own. To provide symptomatic relief, your doctor may recommend topical creams and medications. Surgery may be considered in whom non-surgical treatments have proven to be ineffective.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Anus

Prevalence

India: 18% (2021)

Mimicking Conditions

Piles

Crohn's Disease

Perianal abscesses

Anal fistulas

Solitary rectal ulcer syndrome (SRUS)

Ulcerative Colitis

Microscopic Colitis

Necessary health tests/imaging

Rectal examination

Colonoscopy or sigmoidoscopy.

Treatment

Topical anesthetic ointments

Nitroglycerin

Calcium Channel blockers: Nifedipine, Diltiazem

Botox injections

Surgery

See All

Symptoms Of Anal fissure

You may be suffering from anal fissure if you have the following signs and symptoms:

Pain, sometimes severe, during or after bowel movements that can last up to several hours

Blood stains on the stool or toilet paper after a bowel movement

A visible crack or tear in the skin around the anus

A small lump on the skin near the anal fissure

Burning and itching sensation around the anus

Discomfort when urinating or painful urination

Foul-smelling discharge

Causes Of Anal Fissures

An anal fissure is a tear, open sore, or cut in the anus that develops in the lining of the large intestine around the anus and is mainly caused by injury to the area. This can happen when you pass a hard, dry, large stool. Along with this, several risk factors may lead to anal fissures or increase the likelihood of the disease.

Are you confused between anal fissures and piles?

Though they both can cause similar symptoms, they are different conditions. Anal fissures are tiny cracks or tears present in the anus area while piles are mainly the swollen blood vessels. Just like anal fissures, people suffering from piles have to maintain an intake of a fiber-loaded diet to prevent painful, hard stools.

Read to know more about other common problems of the anal area which can be real trouble.

Tap Here

Types Of Anal fissures

There are two types of anal fissures classified based on their causes. They include:

Primary fissure: Primary fissure is non-threatening, looks like a tiny fresh tear, and gets healed within six weeks. This is usually caused by constipation, long-term diarrhea, or anal intercourse.

Secondary fissure: This kind of fissure is also known as chronic anal fissure, which has a more profound tear or cut and may have internal or external tissue growth-like lesions. A secondary fissure lasts more than eight weeks and may return if not treated properly. These fissures are often seen in patients with prior surgeries in the anus, patients with inflammatory bowel disease, or colon cancer.

Risk factors Of Anal fissure

Constipation

It is a condition in which large, hard, and dry stools are difficult or painful to pass. Constipation is more likely to cause lesions in the anal region during a bowel movement.

Here is an informative video about various causes of constipation and their effective management.

Chronic diarrhea

Diarrhea can also cause fissures by drying the skin until it cracks open. As the anal skin is very sensitive, prolonged diarrhea can cause an anal fissure, leading to severe pain.

Read more about what to eat and what to avoid if you have diarrhea.

Click Here

Pregnancy and childbirth

Pregnant women tend to develop anal fissures toward the end of their pregnancy. The lining of the tissues in the anal area may also tear during childbirth.

Pregnant women suffer from constipation.

Here are a few tips which can help you manage constipation during pregnancy.

Click To Read

Muscle spasms

The spasm of anal muscles can lead to the tearing of the inner lining of the anus during bowel movements. This can lead to the development of a chronic anal fissure.

Anal intercourse

Any trauma to the anal tissue can lead to an anal fissure. There is a high risk of developing anal fissures during rough anal intercourse, or putting things into your anus can overstretch the skin and cause a fissure.

HIV

HIV-associated anal lesions are the most disabling of anal diseases in HIV+ patients. Clinically anal fissure results in pain with defecation, but HIV-associated anal lesions are more likely to result in disabling pain unrelated to bowel movements.

Tuberculosis

Anal tuberculosis can cause non-healing and recurrent ulcer-like fissures in the anal region.

Other conditions

Some conditions that may cause anal fissures to include:

Crohn's disease ( a type of inflammatory bowel disease that causes swelling of the digestive tract)

Ulcerative colitis (an inflammatory bowel disease (IBD) that causes swelling and ulcers in the digestive tract)

Other inflammatory bowel diseases in the anal area.

STDs (sexually transmitted diseases) like syphilis, gonorrhea, chlamydia, chancroid

Minor trauma in the anal region caused by mountain biking, insertion of a rectal thermometer, enema tip, or ultrasound probe.

Weight loss surgery can induce explosive diarrhea.

Diagnosis Of Anal fissures

Minor anal fissures may not cause many problems and heal on their own. However, chronic cases may need attention. Diagnosing the cause can help with the treatment plan as well. Diagnosis consists of the following:

1. Medical history

The doctor will take a detailed medical history of the patient’s symptoms, eating habits, toilet habits, and medicines taken for past or current health conditions.

2. Physical examination

This involves a visual inspection of the anal region by gently separating the buttocks. If separating the buttocks does not reveal a fissure, a more vigorous rectal examination might be required. It is done after the application of a topical anesthetic to the anus and anal canal. A cotton-tipped swab may be gently inserted into the anus to localize the source of pain.

3. Colonoscopy or sigmoidoscopy

If rectal bleeding is present, an endoscopic evaluation is necessary to exclude the possibility of a more serious disease of the anus and rectum such as colon cancer or solitary rectal ulcer syndrome (which causes rectal bleeding and straining during bowel movements). A tiny, flexible tubular device is inserted into the anus to inspect the entire colon.

We should never ignore the early signs of any disease. And the best way to identify it is an annual preventive health checkup. What are you waiting for?

Book Lab Test Here

Prevention Of Anal fissure

The following preventive measures and tips can help prevent anal fissures:

Eat a diet rich in fiber

Fiber improves stool consistency and adds bulk to bowel movements. Intake of foods rich in fiber, such as fruits, vegetables, legumes, nuts, and whole grains, greatly reduces the risk of getting constipation and thereby anal fissures. A minimum of 18 grams of fiber is recommended for adults daily.

Here is your guide to a fiber-rich diet that improves your bowel movements.

Read about superfoods that relieve constipation.

Click Here

Stay hydrated

Keep yourself hydrated. Drink a minimum of 8 glasses of water, as it will help to make you pass stools easily and less prone to anal fissures. Limit your intake of alcoholic and caffeinated drinks because they can dehydrate your body.

Not just water, these healthy drinks can also up your hydration game.

Read To Know More

Do not hold on to the urge to pass stools

Holding stools for too long can strain your anal muscles and make your stool hard and dry to pass, predisposing it to constipation and anal fissures.

Be mindful while taking laxatives

Do not take laxatives without the recommendation of your doctor. Ensure that you use them only for a short period of time and to treat occasional constipation.

Here is a comprehensive guide to laxatives. Learn about various types of laxatives and tips to use them.

Click Here To Read

Stay active

Keep yourself physically active and exercise regularly, as it will help to boost your metabolic rate and fight constipation. Aim for 10,000 steps every day.

No time to hit the gym? Stay in shape even by ditching the gym.

Click Here To Know More

Specialist To Visit

Doctors/specialists who can help in the diagnosis and treatment of anal fissures are:

General Physician

Gastroenterologists

Proctologists

Pediatrician(in case of children)

A gastroenterologist is a medical practitioner who diagnoses and treats disorders of the gastrointestinal tract and related organs. A proctologist is a doctor who specializes in treating conditions of the colon, rectum, and anus.

When to see a doctor?

In most cases, an anal fissure can clear up on its own. However, consult a doctor if you have

Chronic constipation

Severe pain while passing stools

Blood, along with stool

If you are facing any of the symptoms mentioned above, don't ignore them. Please book your appointment and speak with our experts now.

Click Here

Treatment Of Anal fissure

Treatment for anal fissures mainly includes medicines and dietary changes to soften the stools or stimulate its movement through the colon.

Medications

Topical anesthetic ointments: Patients with anal fissures get relief by applying topical anesthetics such as lidocaine hydrochloride creams to the affected area. You can either use over-the-counter topical agents or those prescribed by the doctor.

Nitroglycerin: Application of nitroglycerin ointment to affected areas or fissures increases blood flow to the damaged tissues. This, in turn, can speed up healing and relieve anal sphincter muscle spasms.

Calcium channel blockers (CCBs): CCBs like nifedipine or diltiazem, reduce blood pressure and relieve the anal sphincter muscle spasm. These can be taken orally or used topically on the affected area.

Botox injections

In case medications are not effective, botox injections can be used to treat secondary anal fissures. They work by paralyzing the anal sphincter muscles and relieving muscle spasms.

Surgery

If an anal fissure does not respond to medicines, your doctor may recommend surgery. This procedure is known as lateral internal sphincterotomy (LIS), which involves making a small incision in the anal sphincter muscle to reduce spasms and promote healing.

Home care For Anal Fissures

The home remedies mentioned below help relieve constipation, allowing the fissures to heal and prevent them from worsening. Along with drinking enough water and being physically active, try these for better results:

Keep constipation at bay

Constipation is the main culprit for anal fissures. It can both cause and delay the healing of anal fissures. Hence it is imperative to manage constipation.

Struggling to deal with constipation? Learn about practical ways to manage constipation.

Click Here

Try a sitz bath

A sitz bath or hip bath is nothing but a warm water bath that can promote the healing of an anal fissure. You can take a sitz bath with warm water for at least 20 minutes twice daily. The bath should only cover the hips and can be taken with the help of a kit or in the bathtub.

Keep the anal area lubricated

You can try the following to keep the anal area moisturized and lubricated to aid in the easy passing of stools. It is always wise to take consent from your doctor before trying these out.

1. Petroleum jelly: Applying petroleum jelly around the anal region can help to lubricate and soothe the skin. Once it is lubricated properly, there are fewer chances of straining and bleeding while passing stools.

2. Aloe vera: It is a plant with healing and pain-relieving properties. Research has found that applying natural aloe vera gel to the affected area can effectively manage chronic anal fissures.

3. Coconut (Nariyal): Coconut oil has excellent healing properties and also works as a natural lubricating agent. Applying coconut oil around the anal region twice a day helps in dealing with anal fissures.

4. Olive oil (Jaitoon ka tel): Olive oil is a rich source of monounsaturated fats. It helps in lubrication, allowing hard, dry stools to pass without discomfort. It also has anti-inflammatory properties, which ease the pain caused by anal fissures.

In a study, it has been found that patients with anal fissures reported reduced pain, bleeding, and itching after applying a natural mixture of olive oil, honey, and beeswax.

5. Castor oil (Arandi ka tel): Not only is castor oil an excellent natural laxative when consumed with milk, but you can also apply it to the anal fissure region to alleviate pain and easy defecation.

Looking for body oils? Try our extensive range.

Shop Now

Complications Of Anal fissure

Complications of anal fissure can include:

Failure to heal: An anal fissure gets fixed within six weeks, but in a few cases, some fail to heal within eight weeks, which are considered chronic ones. Surgery is the best way to treat chronic anal fissures.

Relapse: Once you've experienced an anal fissure, you are at high risk of having it again or another one.

Anal fistula: An untreated or unhealed anal fissure can cause infection, leading to an anal fistula. An anal fistula is an infected tunnel between the skin and the anus, causing severe pain, swelling, and discharge of blood or pus from the anus.

Alternative Therapies Of Anal fissure

Anal fissures can be very painful and discomforting and interfere with a person's daily work. Alternative therapies can be used as an adjunct to conventional treatment.

Yoga

You can try yoga poses as they help you manage your symptoms, like easing bowel movements and keeping constipation in check. Some of the most beneficial ones include:

Viparita Karani (legs-up-the-Wall Pose)

Trikonasana (standing pose)

Dhanurasana (bow pose)

Matsyasana (fish pose)

Anjaneyasana (crescent pose)

Pavanamuktasana (wind-relieving pose)

Balasana (child's pose)

Did You Know?

As per ancient yogic texts, there are 84 Lakh yoga asanas present. However, only some of them are known and practiced. Read more about its benefits.

Click Here

Living With Anal fissure

Anal fissures are very common. At the same time, most are self-healing and can be managed by home care. However, in some cases, medications or surgical approaches are required. Here are a few points that could help you deal with anal fissures in your daily life.

Regular warm sitz baths will help you decrease anal fissure pain and discomfort. Keep your bathtub clean after every use. Always use clean and dry towels. This will block any risk of infection.

Avoid using scented soap and shower gels, as they can cause irritation and make your fissures worse. Instead, use non-perfumed soaps formulated for sensitive skin.

Sitting too long on the toilet seat can increase the pressure on your lower rectum, especially on the veins in the anus region. Straining during a bowel movement increases the risk of repeated tears and interferes with healing.

Always gently clean the anus region after defecation to prevent irritation or infection.

Avoid consuming refined or processed food items. It will only exacerbate your symptoms.

Always keep yourself hydrated and include fiber-rich food in your meals.

Certain medicines, like iron supplements, antacids, etc., can cause constipation, predisposing to anal fissures. Your doctor may change your medication with another one that doesn’t cause constipation. Always inform your doctor about the changes you may experience while taking a specific pill.

Frequently Asked Questions

What does fissure pain feel like?

How do I know if I have piles or fissures?

How do you permanently heal a fissure?

How do I know my fissure is healing?

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Anaphylaxis

Also known as Severe allergic reaction, Hypersensitivity reaction, Anaphylactic shock and Allergic shock

Overview

Anaphylaxis is a severe, life-threatening allergic reaction that can affect multiple systems of the body at the same time. Common triggers of this reaction include certain foods, insect stings, some medications, or latex. However, anaphylaxis is rare. The majority of people, even those with allergies, might never suffer from an episode of anaphylaxis.

The symptoms of anaphylaxis include tongue swelling, vomiting, difficulty in breathing, mental confusion and even shock. These symptoms occur due to over reaction of the immune system.

People with allergies, asthma and a family history of anaphylaxis are at a higher risk of anaphylaxis. If someone is at a higher risk or has a known serious allergy, avoidance is the best form of treatment.

Anaphylaxis requires immediate medical treatment because if it is not treated timely or properly, it can be fatal. If someone has a history of a serious allergic reaction, it is important to always carry an adrenaline(epinephrine) kit.

Accurate diagnosis and successful management of allergies is essential to prevent any anaphylactic reactions in the future. An allergist or immunologist, has specialized training and experience to diagnose the problem and develop a prevention plan.

Key Facts

Usually seen in

Infants between 0-2 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Skin

Respiratory system

Gastrointestinal system

Cardio-vascular system

Central nervous system

Prevalence

Worldwide: 0.3–5.1% (2020)

India: 0.14% (2020)

Mimicking Conditions

Acute asthma

Peri-menopause

Syncope (faint)

Carcinoid syndrome

Anxiety/panic attack

Autonomic epilepsy

Acute generalized urticaria

Medullary carcinoma of the thyroid

Aspiration of a foreign body

Non Organic Disease

Myocardial infarction

Pulmonary embolism

Vocal cord dysfunction

Seizure

Cerebrovascular event

Hyperventilation

Psychosomatic episode

Scombroidosis shock

Pollen-food allergy syndrome

Hypovolemic shock

Sulfites distributed

Food poisoning

Sepsis

Excess endogenous histamine

Non Allergic angioedema

Basophilic leukemia

Hereditary angioedema types I, II, & III

ACE inhibitor-associated angioedema

Systemic capillary leak syndrome

Red man syndrome (vancomycin)

Pheochromocytoma (paradoxical response)

Necessary health tests/imaging

Laboratory tests: Skin prick testing, Serum-specific IgE, and Serum enzyme tryptase

Treatment

Alpha-adrenergic receptor: Adrenaline

Antihistamine: Diphenhydramine or Cetirizine

Vasopressors: Norepinephrine, vasopressin

Beta antagonists

Glucocorticosteroids

See All

Symptoms Of Anaphylaxis

As anaphylaxis is a generalized systemic reaction, a wide variety of clinical signs and symptoms involving the skin, gastrointestinal and respiratory tracts, and cardiovascular system can be observed. The most common clinical manifestations include:

Cutaneous (skin) symptoms:

Red, hot, and itchy rashes

Pale and cold skin

Urticaria (skin rashes)

Respiratory symptoms:

Wheezing

Stridor (high pitched sound on respiration)

Difficulty in breathing

Gasping

Bronchospasm (tightness of muscles lining the lungs)

Cardiovascular symptoms:

Tachycardia (increased heart rate)

Hypotension (low blood pressure)

Bradycardia (decreased heart rate)

GI symptoms:

Nausea

Vomiting

Abdominal pain

Diarrhea

Neurological symptoms:

Lightheadedness

Confusion

Loss of consciousness

Conjunctival (eye) symptoms

Erythema (redness)

Pruritus (itching)

Excessive tearing

Other symptoms

Sense of impending doom

Tingling

Anxiety

Metallic taste in the mouth

Laryngeal edema (swelling in the throat)

Uterine cramps and bleeding

Read more about allergic conditions.

Click Here!

Causes Of Anaphylaxis

Anaphylaxis is generally caused by triggers and it’s very important to know what triggered the reaction. The most common triggers include:

1. Food

Food allergies are quite common and in severe cases, they can precipitate an anaphylactic reaction. Common food items that can cause anaphylaxis include

Peanuts

Walnuts

Pecans

Fish

Shellfish

Cow’s milk

Eggs

Red meat

Prawns

Shrimps

Lobster

Want to know which food you are allergic to? There is a test for it that measures the levels of allergen-specific antibodies.

Know More!

2. Medications

When your immune system mistakenly identifies a medication as a harmful substance, it will develop an antibody specific to that drug leading to an allergic reaction. Medications that can cause anaphylaxis include:

Antibiotics

Penicillin

Cephalosporin

Other Antibiotics

NSAIDS

Diclofenac

Disprin

Paracetamol

Drugs used in anesthesia

Eugenol

Muscle relaxants

β-adrenergic blocker

ACE inhibitor

3. Latex

Latex allergy may cause itchy skin and hives or even anaphylaxis, a potentially life-threatening condition that can cause throat swelling and severe difficulty breathing. It is generally used in the following:

Disposable gloves

Intravenous tubes

Syringes

Adhesive tapes

Catheters

Health care workers, children with spina bifida and genitourinary abnormalities, and people who work with natural latex are at higher risk for latex-induced anaphylaxis. Shop latex-free products.

Visit Now!

4. Insect stings

Episodes of anaphylaxis can also occur following insect stings or bites. Insects that are most likely to trigger anaphylaxis are:

Bees

Wasps

Hornets

Yellowjackets

Fire ants

5. Vaccines

Some patients can also develop anaphylaxis following immunization. The majority of cases of vaccine-associated anaphylaxis include vaccination from:

Measles, mumps, and rubella (MMR) vaccine

Japanese encephalitis vaccine

Diphtheria, tetanus, and pertussis (DPT)

Hepatitis A and B vaccine

Did you know?

Very rarely, an anaphylactic reaction can occur post-COVID 19 vaccination as well. Get all your queries answered on COVID 19 vaccination.

Read Now!

Risk Factors For Anaphylaxis

Anaphylaxis is a life-threatening type I hypersensitivity reaction, triggered by exposure to a wide range of antigens that involve multiple organ systems. Risk factors for anaphylaxis include:

1. Cardiovascular diseases

Preexisting cardiovascular disease is a risk factor for fatal anaphylactic reactions or lasting morbidity due to myocardial infarction (heart attack) or stroke induced by anaphylaxis.

2. Asthma

Poor asthma control remains a risk factor for severe anaphylaxis, especially in children.

Want to know the basics of asthma? The second Tuesday of May is observed as World Asthma Day with the aim to raise awareness about the condition and its management.

Know more about all the things you need to understand about asthma.

Read Now!

3. Mastocytosis

It is a rare condition caused by an excess number of mast cells (a type of immune cells) gathering in the body's tissues. Adult patients and children with extensive skin disease with mastocytosis have an increased risk to develop severe anaphylaxis.

4. Age

It has been observed that the first anaphylactic episode mostly occurs in the age group 0–2 years. Also, older age has been consistently associated with a higher rate of fatal drug anaphylaxis.

Read about the common causes of skin allergy in kids.

Tap Here!

5. Previous anaphylactic reaction

The risk of serious reaction increases if you've had anaphylaxis once and future reactions might be more severe than the first reaction.

6. Gender

Adult women suffer more frequently from anaphylaxis induced by food, drugs, and radiocontrast agents along with idiopathic anaphylaxis compared to adult men.

7. Alcohol

Allergy to alcohol can cause symptoms ranging from mild, such as an itchy mouth or eyes, to severe, including vomiting or anaphylaxis.

8. Exercise

Exercise-induced anaphylaxis is a rare but potentially life-threatening clinical syndrome in which association with exercise is crucial. The range of physical activities can be as mild as walking.

Diagnosis Of Anaphylaxis

To diagnose your risk of anaphylaxis or to determine whether previous symptoms were anaphylaxis-related, your allergist/immunologist will conduct a thorough investigation of all potential causes that include:

Medical history

Your allergist will ask for specific details regarding all past allergic reactions. Clinical history along with allergy testing is used in the identification of allergen triggers.

Laboratory tests

Medically supervised allergen challenges may also be undertaken to confirm a diagnosis or determine if a patient has outgrown an allergy. Tests to identify sensitization to an allergen include:

1. Skin prick test (puncture or scratch test): This test inspects for immediate allergic reaction to different allergens at the same time. It is usually performed on the forearm in adults and on the upper back in children.

2. Serum-specific IgE: This test was formerly known as RAST(Radioallergosorbent testing). It measures how much IgE your body makes in response to a single allergen and is preferred when skin prick test (the favored allergy test) is not suitable or not available.

3. Serum enzyme tryptase: Tryptase is released from mast cells during anaphylaxis. The level can be raised for three hours after the reaction. Levels greater than 11.5 ng/mL are considered elevated.

4. SC5b-9 (soluble membrane attack complex (sMAC) or terminal complement complex (TCC)): This test measures the complement system activation which can be elevated shortly after a severe allergic reaction.

Note: Testing for allergen-specific IgE food mixes is not recommended as it does not indicate which foods from the mix the patient is allergic to and may result in unnecessary avoidance of foods.

Read more about the tests to determine an allergic reaction.

Click Here!

Get all your labs at the safety and comfort of your homes.

Book Now!

Celebs affected

Bethenny Frankel

Bethenny Frankel is an American businesswoman, television personality, entrepreneur, philanthropist, and author. Bethenny opened up about a scary incident in 2018 that happened due to her "rare fish allergy." She always carries an Epinephrine injection to manage emergencies.

Kerry Marisa Washington

Kerry Marisa Washington is an American actress, producer, and director. She gained wide public recognition for starring as Olivia Pope in the ABC drama series Scandal. She carries Epinephrine injection with her almost everywhere because she has a lot of food allergies.

Prevention Of Anaphylaxis

If you have a serious allergy or have experienced anaphylaxis in the past, it's important to try to prevent any future episodes. It can be done by keeping the following things in mind:

Identify the triggers

Finding out what you are allergic to, can help you avoid these future episodes of anaphylaxis.

Avoid those triggers

If a trigger has been identified, you'll need to take steps to avoid it in the future whenever possible. Here are some of the most common triggers and ways to avoid them:

1. Food

Check the food labels for ingredients

Let the staff at a restaurant know what you're allergic to so it's not included in your meal

Remember what types of food may contain small traces of potential allergens

2. Insect stings

Move away from wasps, hornets or bees slowly without panicking

Use an insect repellent if you spend time outdoors, especially in the summer

Be careful drinking out of cans when there are insects around

Do not walk around outside with bare feet

3. Medicines

If you're allergic to certain types of medicines, talk to your doctor to prescribe alternatives that can be safely used.

Always carry adrenaline auto-injectors

You may be prescribed an adrenaline auto-injector if there's an ongoing risk you could develop anaphylaxis. Things to keep in mind while using an auto-injector are:

Always carry two in-date auto-injectors at all times

Make sure you and any caregivers know when and how to use your auto-injector

Check the expiry date regularly and replace it before it expires

Do not delay injecting yourself if you think you may be experiencing anaphylaxis

Try allergy shots (immunotherapy)

For many people, allergy shots can help lower the risk of anaphylaxis and decrease the severity of reactions.

Specialist To Visit

You should contact the emergency department of your nearest hospital if you suffer from an anaphylactic attack. Doctors that can help you with this are:

General physician

Allergist

Immunologist

An allergist is a medical practitioner specializing in the diagnosis and treatment of allergies. An immunologist is a doctor who diagnoses, treats, and works to prevent immune system disorders.

Seek advice from our professionals.

Consult Here!

Treatment Of Anaphylaxis

The treatment of anaphylaxis depends upon the ability of the patient to describe the situation but if the patient is unconscious or not properly conscious, understanding the symptoms becomes important. Anaphylaxis treatment includes:

Medications

The medications used to treat an anaphylactic reaction include:

Adrenaline (Epinephrine): This is the first line of treatment recommended for patients with anaphylaxis. This drug can be life-saving as it plays an important role in delaying the progression of life-threatening reactions.

Antihistamines: Antihistamines reduce inflammation in air passages and also improve breathing. H1 antihistamines such as diphenhydramine or cetirizine can also relieve itching and hives.

Beta antagonist: They are used for airways protection and to relieve respiratory tract symptoms.

Glucocorticoids: Steroids (glucocorticoids) are often recommended in anaphylaxis. They reduce the severity of the acute reaction and the risk of recurrence.

For hospital-based patients

Patients who have been moved to a hospital set up and stabilized, the following agents are used:

Activated charcoal: The solution is commonly used to treat poison victims, and also to treat people with peanut allergies. Drinking activated charcoal immediately after accidental exposure to peanuts can block further absorption of allergy-causing proteins in the body and reduce the severity of the allergic reaction.

Vasopressors: Norepinephrine, vasopressin and other pressors are helpful in patients suffering from anaphylaxis with refractory hypotension (persistent hypotension in resuscitated patients)

Glucagon: It is an anti-hypoglycemic used to manage and treat anaphylaxis refractory to epinephrine, and aid in passing food boluses.

Intravenous fluids: These are administered to maintain adequate blood circulation.

In case of emergency

If you are with someone who is having an allergic reaction with signs of anaphylaxis, here are things you need to do:

Call the local medical emergency number immediately.

See If the person is carrying an epinephrine auto-injector (EpiPen, Auvi-Q, others) to treat an allergic attack.

Help the person inject the medication by pressing the autoinjector against the person's thigh.

Make the person lie face up and be still.

Loosen their tight clothing and cover the person with a blanket.

Turn the person to the side to prevent choking if there's vomiting or bleeding from the mouth.

Position the patient in the Trendelenburg position i.e lying flat on the back with legs elevated in order to allow blood flow to the heart.

If there are no signs of breathing, coughing or movement, begin CPR (start uninterrupted chest presses about 100 every minute).

Correct first aid can help save a life! Know about step-by-step instructions for emergency management.

Know This!

Complications Of Anaphylaxis

Anaphylactic shock is an extremely serious condition that can block your airways and prevent you from breathing. It can also stop your heart. This is due to the decrease in blood pressure that prevents the heart from receiving enough oxygen. The complications of anaphylaxis include:

Cerebral hypoxia: It refers to a condition in which there is a decrease of oxygen supply to the brain even though there is adequate blood flow.

Acute renal failure: It is associated with anaphylactic shock caused by diclofenac sodium.

Fetal death: There is no evidence that anaphylaxis occurs in the fetus but maternal anaphylaxis can lead to a significant risk of fetal/neonatal neurological damage or even death.

Septic shock: It is caused by malfunction of the vascular system due to severe allergic reactions such as anaphylaxis that results in blood poisoning by bacteria.

Acute respiratory distress syndrome: It is a condition in which fluid collects in the air sacs of the lungs, depriving organs of oxygen.

Abnormal coagulation profile: Anaphylaxis is a complex allergic reaction where multiple biological systems are involved and it can lead to disruption of coagulation systems in severe cases.

Pulmonary edema: Histamines are the substances released by the body during an allergic reaction, that cause the blood vessels to expand, which in turn causes a dangerous drop in blood pressure. Fluid can leak into the lungs, causing swelling (pulmonary edema).

Arrhythmia: Anaphylaxis can also cause heart rhythm disturbances.

Abnormal liver function: The relationship between acute liver injury with idiopathic anaphylaxis is rare, but there are cases involving repeated episodes of anaphylactic shock accompanied by acute liver injury.

Did you know?

Food allergy in children may be linked to anxiety. Know more.

Read This!

Alternative Therapies For Anaphylaxis

Homeopathy

Homeopathy works by correcting the immune responses of individuals rather than suppressing or modifying the immune system. Some individuals use homeopathic remedies for allergic reactions or allergic diseases, but there is no research showing effectiveness of homeopathy in preventing or treating anaphylaxis. Anaphylaxis requires emergency medical treatment.

Acupuncture

Acupuncture has been used to support the immune system and to relieve symptoms of seasonal allergies. However, acupuncture should not be used to treat anaphylaxis, which requires immediate medical attention.

Traditional chinese medicine (TMC)

TCM has been used in China and other Asian countries for thousands of years, either as monotherapy or in combination with standard Western medical treatment. Studies suggest that an herb-based formula (FAHF-2) may be an effective approach to food allergy treatment that is not specific to any one food allergen and can be potentially used to treat multiple food allergies.

Read about how to tackle allergies in a risk free way.

Click Here!

Living With Anaphylaxis

A number of general strategies and tips may help you or your child avoid anaphylaxis, or improve health outcomes when a reaction happens. Some of them include:

Anaphylaxis education

Awareness of people about anaphylaxis, their family, and caregivers tend to decrease distress and apprehension and instills trust in their capacity to cope, not just by anaphylactic episodes but even by identification and timely treatment.

Keep a close watch on the food ingredients

If you have a severe food allergy, scan food labels carefully for any troublesome ingredients, which may be harmful.You should also feel free to ask detailed questions about ingredients and food preparation when you’re eating out.

Introduce new foods to children slowly

If you or your child have had a severe allergic reaction to a food, it’s more likely that another new food will also cause problems. This might require sensitization, which means that the first few times your child tries out a new food item, give it in small amounts with bites that are spaced out.

Always wear a medical ID tag

Having a necklace or bracelet that indicates your anaphylaxis risk can help bystanders and first responders identify what’s happening to you in case of any reaction or emergency.

Keep all potential treatments handy

These include an epinephrine auto-injector for nearly everyone, and also possibly a chewable antihistamine and a stiff card to scrape out a bee’s stinger.

Never share your epinephrine

You shouldn’t use your auto-injector on anyone else unless you know for sure that they are having an anaphylactic reaction. Doing so not only may put you at risk for not having this treatment available for you, but it may cause medical problems in someone who isn’t experiencing anaphylaxis.

Read more about adrenaline injection.

Click Here!

Frequently Asked Questions

What does anaphylaxis feel like?

Can pollen cause anaphylaxis?

When do you start to notice the symptoms of anaphylaxis?

What do you mean by biphasic anaphylaxis?

What is venom immunotherapy?

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Anorexia Nervosa

Also known as Anorexia and Food aversion

Overview

Anorexia nervosa, often simply referred to as anorexia, is a behavioral and life-threatening psychological eating disorder. It is characterized by self-starvation, weight loss, distorted perception of weight, and unrealistic or exaggerated fear of body image. In simple terms, it is a condition where people obsess about their weight and diet.

Anorexic people often initially begin dieting to manage their weight. But over time, the restrictions in their calorie intake and diet become a psychological obsession, leading them to the point of starvation and extreme weight loss. The exact causes of anorexia nervosa are not understood. However, several factors are believed to contribute to anorexia. These include environmental stress, external compulsion, prenatal and perinatal complications, physiological factors, neurochemical changes, hormonal changes, and genetic or hereditary factors.

Anorexia nervosa, if left untreated, may cause dangerous health conditions including fatigue, low blood pressure, water-electrolyte imbalance, and may even have fatal consequences, among others. Medical intervention and psychological consultation are therefore crucial for early diagnosis and effective treatment of the condition.

Key Facts

Usually seen in

Individuals between 10 to 20 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Stomach

Intestine

Brain

Kidney

Heart

Prevalence

Worldwide: <2% (2021)

India: 0.5-2% (2020)

Mimicking Conditions

Celiac disease

Achalasia

Body dysmorphic disorder

Bulimia nervosa

Illness anxiety disorder

Necessary health tests/imaging

Physical examination

Mental health assessment

Blood vital test

MRI of brain

Treatment

Psychotherpay: Family-based therapy (FBT), Cognitive behavior therapy (CBT) & Dialectical behavior therapy (DBT)

Medications: Cyproheptadine, Megestrol, & Olanzapine

Diet therapy

See All

Symptoms Of Anorexia Nervosa

Anorexia nervosa symptoms differ from person to person. The most prominent and visible symptoms are excessive weight loss and physiological changes.

Some of the common signs and symptoms of anorexia nervosa include:

1. Physical symptoms

Restricting the necessary calorie intake over time can have a devastating effect on your mind and body. If the adverse effects of starvation are left untreated and unnoticed over time, it can cause a permanent loss in the functioning of vital organs.

Some of the most common physical signs and symptoms of anorexia include:

Extreme tiredness/fatigue

Dry skin

Insomnia or sleep disorder

Thinning of hair

Low blood pressure

Discoloration of skin or pale skin

Severe loss of muscle and weight

Osteoporosis or loss of bone density

Discoloration and brittleness of nails

Constipation

Emaciation or extreme thinness

Lanugo or growth of soft hair all over the body

Irregular heartbeats

Infertility

2. Emotional and behavioral symptoms

Constant hunger can trigger unpleasant emotions such as anger and depression. Some of the warning signs of emotional and behavioral anorexia symptoms include:

Low self-esteem

Irritability

Aversion to food

Anxiety

Depression

Difficulty concentrating

Suicidal thoughts

Lack of interest or emotional flat-lining

Mood swings

Obsessive thoughts and social anxiety

Exercising extensively

Avoidance of social gathering

Denial of hunger

Withdrawal from regular activities

Feeling stressed

3. Cognitive symptoms

Not many people know that anorexia nervosa can also lead to cognitive symptoms such as:

An obsession with counting calories and monitoring fat contents of food.

Preoccupation with food, recipes, or cooking; may cook elaborate dinners for others, but not eat the food themselves or consume a very small portion.

Admiration of thinner people.

Thoughts of being fat or not thin enough.

An altered mental representation of one's body.

Difficulty in abstract thinking and problem solving.

Rigid and inflexible thinking.

Poor self-esteem.

Hypercriticism and clinical perfectionism.

4. Perceptual symptoms

This condition can also affect how you perceive your body and can lead to self-criticism with respect to your weight and body. It causes:

Perception of self as overweight, in contradiction to an underweight reality (namely "body image disturbance" )

Intolerance to cold and frequent complaints of being cold; body temperature may lower (hypothermia) in an effort to conserve energy due to malnutrition.

Altered body schema (i.e. an implicit representation of the body evoked by acting)

Here are signs that you or anyone you know may be suffering from an eating disorder.

Find Out Here!

Causes Of Anorexia Nervosa

The specific reasons that cause anorexia nervosa are still unclear. But it is believed to be caused by multifactorial biological, environmental, and psychological factors. Some of the causing factors that increase a person’s risk of developing anorexia nervosa are as follows:

1. Psychological factors

Anorexia nervosa, an overwhelming phobia of being a normal weight, is often believed to be associated with personality and behavioral traits. In most cases, anorexic people tend to seek perfection in their looks and body image. This can cause them to restrict their diet to the point of starvation to achieve unrealistic goals.

Some other psychological factors that can contribute to the development of anorexia are as follows:

Excessive fear and uncertainty

Medical history of depression and anxiety

Painful or traumatic childhood experience

Reduced ability to regulate and adapt behavior as per different situations

The feeling of inadequacy and loneliness

Stressful life events such as accidents, loss of a loved one

2. Environmental factors

The current culture emphasizes being unrealistically thin as a beauty standard. This external pressure and competitiveness on achieving unhealthy body goals can increase the obsession to restricting vital food intake.

3. Social media effects

Social media pressure and high social risk environments such as sports, modeling, and acting can contribute to the development of anorexia nervosa. Persistent exposure to media that present body ideals may constitute a risk factor for body dissatisfaction and anorexia nervosa. The cultural ideal for body shape for men versus women continues to favor slender women and athletic, V-shaped muscular men. A 2002 review found that, of the magazines most popular among people aged 18 to 24 years, those read by men, unlike those read by women, were more likely to feature ads and articles on shape than on diet. Body dissatisfaction and internalization of body ideals are risk factors for anorexia nervosa that threaten the health of both male and female populations.

Websites that stress the importance of attainment of body ideals extol and promote anorexia nervosa through the use of religious metaphors, lifestyle descriptions, "thinspiration" or "fitspiration" (inspirational photo galleries and quotes that aim to serve as motivators for attainment of body ideals). Pro-anorexia websites reinforce internalization of body ideals and the importance of their attainment.

The media portray a false view of what people truly look like. In magazines and movies and even on billboards most of the actors/models are digitally altered in multiple ways. People then strive to look like these "perfect" role models when in reality they are not near perfection themselves

4. Biological factors

The correlation between biological factors and anorexia is not clearly understood. However, a family history of anorexia, drug abuse, and co-existing health illness increases the risk of developing anoxia. Abnormalities in the structure or function of the hypothalamus, a part of the brain, can alter eating behaviors.

5. Genetic factors

Genetic or inherited predisposition, although the mechanism to extract responsible genes associated with anorexia is not well understood, research is being conducted to increase the understanding of the role of genes in anorexia. Anorexia nervosa is highly heritable. Twin studies have shown a heritability rate of between 28 and 58%. First-degree relatives of those with anorexia have roughly 12 times the risk of developing anorexia.

A 2019 study found a genetic relationship with mental disorders, such as schizophrenia, obsessive–compulsive disorder, anxiety disorder and depression; and metabolic functioning with a negative correlation with fat mass, type 2 diabetes and leptin.

One gene that has been linked to anorexia might be of particular interest. This gene codes for a protein called the estrogen related receptor alpha (ERRalpha). In some tissues, this gene alters the ability of estrogen and estrogen receptors to interact with DNA and change the function of cells.Since estrogen has potent effects upon appetite and feeding, any genetic abnormality in the estrogen signaling pathway could contribute to the symptoms of anorexia and explain why anorexia typically appears in young women just after the onset of puberty

Risk Factors For Anorexia Nervosa

Several factors can increase your risk of anorexia nervosa, from psychological factors, such as relationship break and life transition to type 1 diabetes. Anorexia nervosa can occur in both men and women but more in women, as they are more likely to develop negative body perceptions.

Anorexia nervosa is a complex psychological disorder. Like many other eating disorders, several risk factors such as biological, sociocultural issues, psychological triggers can increase the risk of developing it.

Some of the most common risk factors associated with anorexia nervosa are listed below:

Having a family history of an eating disorder.

Diabulimia, an eating disorder in a person with diabetes, wherein the diabetic individual purposefully restricts insulin therapy to lose weight.

Extreme dieting and starvation can change the thinking pattern of vulnerable individuals and make them perpetuate their restrictive eating behaviors.

Loneliness and boredom can bring psychological stress and increase the risk of developing anorexia nervosa.

Age is also a factor. Although anorexia can occur in any age group, it commonly occurs during adolescence and puberty.

Journaling your inner feelings can strengthen mental health

According to The American Psychiatric Association, regular journaling can improve brain activity and help strengthen mental health crucial in anorexia treatment. Some of the things that you can cover in the journal are the pros and cons of bad eating habits, a list of triggers causing you to skip or limit food intake, and how to overcome your external or environmental pressures of getting unrealistic fitness goals. Writing your thoughts on your eating disorder may help you recognize your distorted thoughts and resolve them quickly. Here are more tips to help someone with mental illness.

Read To Know!

Diagnosis Of Anorexia Nervosa

If you are experiencing any symptoms of anorexia nervosa, such as weight loss, increased obsession with body image, extreme dietary restriction, psychological stress, or increased fear of gaining weight, it is wise to consult a psychiatrist or nutritionist. Early diagnosis and prompt treatment for anorexia reduce the risks associated with its own.

Based on the severity and duration of your condition, your doctor might do some physical exams and a medical history analysis to rule out other mimicking health conditions. If the signs and symptoms are unclear, your physician may recommend one or a few tests to diagnose your condition.

1. Physical examination

Physical examination for anorexia nervosa may include:

Evaluation of your physical appearances, such as dry skin, sunken eyes, and growth of smooth hair over the body

Calculation of your body mass index (less than 17.5 in adults, or less than 85% of expected weight in children)

Checking your vitals such as cardiac heart rate, blood pressure, the temperature of your body, and other signs of malnutrition in your body

Examination of your abdomen for stretch marks and liver palpation

2. Psychological evaluation

Psychological evaluation for anorexia may include:

Behavioral pattern change analyses such as substance abuse, self-harming, or suicidal attempts.

Analysis of your family or medical history of other psychological disorders.

Evaluation of your attitudes toward eating, appearance, and exercise.

DSM-5 guidelines

Anorexia nervosa is classified under the Feeding and Eating Disorders in the latest revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM 5). There is no specific BMI cut-off that defines low weight required for the diagnosis of anorexia nervosa.

The diagnostic criteria for anorexia nervosa (all of which needing to be met for diagnosis) are:

Restriction of energy intake relative to requirements leading to a low body weight. (Criterion A)

Intense fear of gaining weight or persistent behaviors that interfere with gaining weight. (Criterion B)

Disturbance in the way a person's weight or body shape is experienced or a lack of recognition about the risks of low body weight. (Criterion C)

Relative to the previous version of the DSM (DSM-IV-TR), the 2013 revision (DSM5) reflects changes in the criteria for anorexia nervosa. Most notably, the amenorrhea (absent period) criterion was removed. Amenorrhea was removed for several reasons: it does not apply to males, it is not applicable for females before or after the age of menstruation or taking birth control pills, and some women who meet the other criteria for AN still report some menstrual activity

Levels of severity

Body mass index (BMI) is used by the DSM-5 as an indicator of the level of severity of anorexia nervosa. The DSM-5 states these as follows:

Mild: BMI of greater than 17

Moderate: BMI of 16–16.99

Severe: BMI of 15–15.99

Extreme: BMI of less than 15

3. Laboratory tests

Although there is no specific confirmatory test for anorexia, assessment of your blood work may provide clues to determine any underlying health illness.

Some of the common lab test used to diagnose anorexia are as follow:

Blood sugar test: Diabetic patients, particularly type 1 diabetes mellitus patients, have an increased risk of developing anorexia.

Electrolyte level test: It is done to determine the severity and effect of anorexia on your health condition.

Complete blood count (CBC): This test may help your physician to determine the underlying cause of your anorexic condition.

Comprehensive metabolic profile (CMP): This test measures 14 different parameters in the blood. The result of this test provides a picture of overall body chemical balance and metabolism.

Urine routine analysis: Medical evaluation of your urine sample can be used to determine a wide range of underlying disorders causing anorexia. This test also gives clues to your hydration and fluid intake levels.

Electro-cardiogram studies: They are done to access your cardiac patterns and other related ailments.

Liver function test: A series of tests used to assess liver function some of the tests are also used in the assessment of malnutrition, protein deficiency

Luteinizing hormone (LH) response to gonadotropin-releasing hormone (GnRH): Tests the pituitary glands' response to GnRh, a hormone produced in the hypothalamus. Hypogonadism is often seen in anorexia nervosa cases.

Celebs affected

Lady Gaga

In 2012, Lady Gaga announced on her website Little Monsters that she has battled anorexia since she was 15 years old. She also posted her pictures depicting the cycles of weight gain and loss.

Taylor Swift

American singer-songwriter Taylor Swift shared her struggles dealing with anorexia during a documentary show.

Molly Simms

A popular American fashion model and actress, Molly Simms published a book called “Hungry,” where she shared her obsession to become size zero and pressures in the modeling industry.

Christina Ricci

Christina Ricci, a popular American actress, opened up on her early career struggles with eating disorder-anorexia and external compulsion to fit in Hollywood standards.

Prevention Of Anorexia Nervosa

Although there are no specific proven methods to prevent anorexia, some of the following measures and tricks can help you prevent and manage the symptoms caused by anorexia nervosa. These include:

1. Early detection of anorexia

Anorexia has a multifactorial etiology, and it shares similar symptoms with other related psychological disorders. This makes the identification of the root cause of anorexia disease difficult. However, if the symptoms are recognized early, interventions can reduce the risk of complication and death.

2. Follow healthy eating habits

The malnutrition that accompanies anorexia may have seriously damaging effects on the body. One of the simple tips to overcome the risk of developing internal organ damage is to consume nutrient-rich food in small yet frequent meals. This is because eating a large amount of food is often easy at the early stages of anorexia. You can consult a dietitian or nutritionist to get an optimal diet plan to meet your body’s nutritional requirements.

3. Don’t consume alcohol

Drunkorexia is a term that denotes the behavior of replacing food consumption with excessive alcohol. A study published on Alcohol Health and Research World has reported the association of alcohol and effects on triggering eating disorder anorexia nervosa. According to various other related studies, the combination of alcohol and anorexia can cause serious, even potentially, deathly health complications. So, avoiding alcohol can reduce the risk of developing alcohol-related injuries.

4. Stop judging yourself

Anorexic people often seek to achieve perfection in everything they do. Though perfectionism is often seen as a positive trait, in most cases, it may cause unwanted pressure, stress, and other mental health issues. Working on accepting the present state of your body, weight, and physical appearance can effectively prevent the development of your negative self-perception.

5. Don’t encourage body shaming

When you allow someone to make harsh criticism of your body, it can hurt your self-esteem. Body shaming has become a prevalent issue on social media platforms. As with any other form of harassment, body shaming can severely affect a person’s mental health. Body shaming is unavoidable in the digital world, so try not to let negative comments affect you and practice self-love affirmations.

6. Be aware of anorexia and other related eating disorders

Anorexia nervosa has the highest death rate of all other mental illnesses. Becoming aware of the possible risk factors and triggers associated with anorexia can help you eliminate unwanted dissatisfaction with your self-image.

7. Seek professional help to understand your condition better

If you are experiencing any signs of anorexia or suspect having anorexia, fix an appointment with a doctor to understand your condition better. Early detection of the underlying root cause of anorexia allows for quicker action and recovery.

Do you know what foods to eat and what to avoid for anorexia? Are you aware of the common home remedies for anorexia? Do you have an idea about what lifestyle changes can be made to improve eating disorders?

Specialist To Visit

The signs of anorexia are not always visible from the outside. In most cases, people with anorexia often don’t realize their symptoms and deny having a problem. In such cases, the symptoms of anorexia can rapidly get worse or lead to serious health complications.

Early diagnosis of anorexia can increase the chance of complete recovery. So, if you are concerned about your mental health or experiencing any warning signs and symptoms of anorexia nervosa, it is always better to seek immediate medical assistance and eliminate the progression and associated risks.

Specialists that can help manage anorexia include:

Primary care physician

Nutritionist

Psychiatrist

Gastroenterologist

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

Click Here!

Treatment Of Anorexia Nervosa

The treatment of anorexia aims at restoring the body to normal weight and psychological and mental well-being. There are several therapies available to treat anorexia nervosa. However, the choice of treatment is determined based on the individual's age, complications, and health factors. In most cases, a combination of therapies is recommended to treat emotional issues such as low self-esteem, anxiety, and other related mental health problems.

Some of the common strategies to treat anorexia nervosa are as follows:

1. Psychotherapy

Psychotherapy can help anorexic people cope up with their mental health problems associated with anorexia. It helps the patient understand the issue in a better way and how to cope with it. Various forms of psychotherapy used to treat anorexia include:

Family-based therapy (FBT): Also called the Maudsley method, it engages parents/family in the process of restoring their child to a healthy weight at home. The family as a whole is encouraged to engage more with the patient in ensuring a proper diet to gain a healthy weight.

Cognitive behavior therapy (CBT): This therapy aims to improve mental health, and the primary focus is on addressing the distorted views on your body image.

Dialectical behavior therapy (DBT): This therapy aims at recognizing the triggers and methods to manage the factors causing anorexia nervosa. DBT also helps patients in managing their mental health balance.

Acceptance and commitment therapy: This therapy aims at developing self-motivation rather than changing your thoughts and feelings.

Interpersonal therapy (IPT): This therapy helps patients to recognize and solve problems in their relationships. Improving relationships and mental health has been found to reduce eating disorder symptoms.

Nutrition counseling: A counseling with a nutritionist can help you understand the importance of diet and restoring normal eating patterns.

2. Medications

There are no specific medications approved to treat anorexia because none has been found to work very well. However, antidepressants or other psychiatric medications can help treat other mental health disorders associated with anorexia. Some of the antidepressant drugs commonly prescribed by a psychiatrist to treat anorexia include:

Cyproheptadine: Cyproheptadine is an antihistamine medication that blocks the chemical messengers responsible for itching, congestion, inflammation, and other allergic reactions. It also stimulates the appetite because of constant stimulation of growth hormone secretion and increased energy intake.

Marinol: Marinol is a cannabinoid. Using this medicine regularly may improve your appetite and overall quality of life.

Megestrol: Megestrol is a manufactured version of the human hormone progesterone. The use of megestrol can increase appetite.

Olanzapine: Olanzapine is an atypical antipsychotic. It works by affecting the levels of chemical messengers (dopamine and serotonin) to improve mood, thoughts, and behavior.

3. Diet

Diet is the most essential factor to work on in people with anorexia nervosa, and must be tailored to each person's needs. Food variety is important when establishing meal plans as well as foods that are higher in energy density. People must consume adequate calories, starting slowly, and increasing at a measured pace. Evidence of a role for zinc supplementation during refeeding is unclear.

Did you know?

To maintain a healthy body weight and ensure your body receives all the required nutrients, it is advisable to eat healthy and clean. Avoid junk food and eat at irregular times. Increase the intake of fibers, including fruits and vegetables, in your diet to keep the gut healthy.

Home-care For Anorexia Nervosa

Recovery from anorexia nervosa can be challenging. However, with some nutritional and dietary changes, it is possible to reverse the effects caused by anorexia.

Here are some do’s and don’ts you can follow at home to manage your anorexia:

Do’s

The use of micro nutritional supplements, including whole grains, citrus fruits, leafy greens, and more, is recommended for individuals with severe anorexia.

Refeeding for significantly underweight individuals. It is a process where a person is given food after starvation or malnourishment. However, refeeding should be gradual and progressive.

Take fresh juices to replenish your mineral and vitamin deficiency.

Stay hydrated. Try to consume at least 2-3 liters of water every day.

Include fiber-rich foods such as beans, lentils, broccoli, berries, and avocados.

Include herbs such as cardamom, asafoetida, trikatu, quality-rich, and ginger in your diet.

Don’ts

Avoid aerated drinks and alcohol.

Avoid intake of caffeinated drinks such as coffee and tea.

Say no to refined food items like pasta, noodles, polished rice, and sugar.

Avoid eating food items at unhygienic places.

Do not overeat ready-made food items like canned or preserved food.

Avoid eating high sodium and salt content food such as pickled meat, highly salted breakfast cereals, buns, cakes, packed soups, and sauces.

Complications Of Anorexia Nervosa

The medical complications associated with anorexia are as follows:

Increased risk of cardiovascular problems, such as cardiac value complications, mitral valve prolapse, mitral valve prolapse, arrhythmia (abnormal heart rhythms), or heart failure

Kidney problems, including issues with digestion

Osteoporosis, in which the bones gradually decrease in density due to the development of pores

Electrolyte imbalance such as decreased levels of sodium, potassium, and chloride in the body

Eye problems such as lagophthalmos, a condition wherein the eyelids do not cover the eye during sleep. This condition can irritate and cause mild discomfort to the cornea in the eye.

Metabolic and endocrine complications such as thyroid abnormalities and infertility

Amenorrhea, as the name suggests, is a condition that refers to the absence of menstruation

Gastrointestinal problems such as nausea, bloating, constipation, or slowed gastric emptying

Hematological disorders such as anemia (low RBC in the blood) or leucopenia (low WBC in the blood)

A neurological complication of anorexia includes brain atrophy changes, resulting in mild mood disturbance to permanent memory loss

Other psychological complications of anorexia nervosa include:

Obsessive-compulsive disorder (OCD), a condition characterized by repetitive or excessive thoughts

Anxiety

Personality disorder

Drug or substance abuse

Alternate Treatment For Anorexia Nervosa

Ayurvedic Remedies For Anorexia

Here are a few herbal and natural methods that may help with anorexia nervosa:

1. Ginger (Adrak)

Ginger is loaded with benefits of antioxidant, antibacterial, antiviral, and anti-inflammatory properties. Add a pinch of lime juice and rock salt to the ginger juice. This stimulates your taste buds and also neutralizes excess gastric secretion.

2. Tamarind (imli) and salt

A mixture of tamarind and saltwater juice can be used to stimulate the taste receptors in the tongue. This, in turn, can trick your mind and grow your appetite.

3. Black cardamom (Badi elaichi)

Black cardamom is rich in antioxidant and antispasmodic properties, so it can also be used to relieve the stress associated with eating disorder-anorexia.

4. Trikatu

Trikatu comprises three powerful herbs, namely black pepper (kali mirch), ginger (adhrakh), and long pepper (pippali). A combination of herbs helps in secreting gastric juices, which in turn ease indigestion and gas. You can take trikatu powder with water or with a tablespoon of honey.

Did you know?

Making connections with people who share similar symptoms can help you feel relieved from unnecessary stress. Participating in groups can grant you opportunities to understand the condition better and also helps in getting practical feedback about the treatment options. So, consider joining a support group as a part of your recovery plan. If this doesn’t help, then hold back from taking expert help.

Consult Here!

Living With Anorexia Nervosa

Living with anorexia nervosa can make you feel dissatisfied with your body, leading to limiting calories intake, exercising excessively, or overusing medication to achieve unrealistic fitness goals. If untreated, the persistent fear of weight gain can cause serious physiological problems such as depression, suicidal thoughts, anxiety, and social aggression. Fortunately, early diagnosis and prompt treatment for anorexia reduce its risks and complications in most cases.

Here are a few tips that can help you manage anorexia:

Understand and recognize your triggers

Check your vitals regularly

Practice meditation or yoga

Keep yourself engaged

Stay hydrated

Seek professional help if need

Participate in support groups

Frequently Asked Questions

What is the difference between anorexia nervosa and bulimia nervosa?

What triggers anorexia?

Who is more prone to anorexia?

Can anorexia just go away without any treatment?

Does anorexia shrink your brain?

Why are women more prone to anorexia than men?

How many eating disorders are there?

What are the different types of anorexia nervosa?

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Keratitis

Overview

Keratitis is the inflammation of the cornea which is the clear outer layer of the eye that focuses light. The severity of keratitis may range from mild to severe and can be associated with inflammation of other regions of the eye as well. It may also involve one eye (unilateral) or both eyes (bilateral).

Keratitis is caused by either infectious agents or non-infectious causes. Infectious diseases are mainly caused by microbes like bacteria, fungi, viruses, and parasites. The noninfectious keratitis is majorly caused by local factors irritating the eye, or other systemic diseases affecting the eye.

Some of the common symptoms of keratitis are eye irritation and pain, eye discharge, sensitivity to light, blurred vision or partial blindness, and red eyes.

Keratitis is typically easy to treat and resolves quickly. However, if the infection spreads beyond the surface of your cornea, it may leave scars that impair your eyesight or possibly cause loss of vision. Thus, appropriate and timely management is very important.

Key Facts

Usually seen in

Adults between 21 to 50 years of age

Gender affected

Both men and women

Mimicking Conditions

Atopic keratoconjunctivitis

Bacterial endophthalmitis

Band keratopathy

Blepharitis

Corneal ulcer

Entropion

Epidemic keratoconjunctivitis

Fungal keratitis

Herpes simplex virus keratitis

Herpes zoster

Interstitial keratitis

Neurotrophic keratitis

Nasolacrimal duct obstruction

Ocular rosacea

Pseudophakic bullous keratopathy

Scleritis

Viral conjunctivitis

Necessary health tests/imaging

Eye examination

Slit-lamp exam

Penlight exam

Treatment

Bacterial keratitis: Cefazolin, Gentamicin & Amikacin

Protozoal keratitis: Topical biguanides & Levofloxacin

Viral keratitis: Acyclovir & Topical steroid

Fungal keratitis: Amphotericin B, Fluconazole & Ketoconazole

Specialists to consult

General practitioner

Ophthalmologist

Symptoms Of Keratitis

The first symptom of keratitis is usually redness and pain in the eye. Normally only one eye is affected, but in some cases, the condition can affect both the eyes. The symptoms often associated with keratitis are:

Eye pain

Eye redness

Watery discharge

Excessive tearing

Difficulty in opening the eyelid because of pain or irritation

Blurred vision

Reduced vision

Sensitivity to light or photophobia

Feeling of a foreign body like sand in eye

Did you know?

Eye pain is a common complaint that causes discomfort in and around the eyes. Here are a few common causes of eye pain that you should know about.

Read Here!

Causes of Keratitis

Keratitis is classified as either infectious or noninfectious. The various causes of these types are discussed below:

Infectious keratitis

Infectious keratitis is a major cause of visual impairment and blindness globally, often affecting marginalized populations. The causative agents that cause infectious keratitis are as follows:

1. Bacteria: Bacterial keratitis is usually seen with improper use of contact lenses. It is mostly caused by bacterias like:

Pseudomonas

Staphylococcus

Streptococcus

Moraxella

Nocardia

Atypical mycobacteria

2. Virus: Viral keratitis is usually associated with the following viruses:

Adenovirus which is one of the causes of upper respiratory tract infections

Herpes simplex virus (HSV) is the same virus that causes cold sores

Herpes zoster virus (HZV) which is associated with chickenpox and shingles

Zika virus which is transmitted by Aedes aegyptus mosquitoes, the same type that causes dengue

SARS-CoV-2 virus, which causes COVID-19, is also associated with keratitis

3. Parasite: Acanthamoeba keratitis is a rare but serious infection of the eye that can cause permanent vision loss or blindness. This infection is caused by a single-celled living organism called Acanthamoeba. History of exposure to soil or contaminated water is often associated with Acanthamoeba keratitis in the developing countries. However, in the developed world, contact lenses have been found to mostly cause this condition.

4. Fungus: Fungal keratitis is a potentially blinding infection of the cornea, which is the clear dome covering the colored part of the eye. This infection mainly occurs due to eye trauma, and use of contact lenses. However, it is also possible to be exposed to these fungi outdoors or during agricultural work. It is caused by the fungi:

Aspergillus

Fusarium

Candida (yeast)

Cladosporium

Alternaria

Curvularia

Microsporidia.

5. Oomycete: Oomycete, which is morphologically very similar to fungi, causes pythium keratitis.

6. Helminth: Onchocercal keratitis or river blindness (sclerosing keratitis) is a parasitic corneal infection caused by motile worms. Worms do not usually cause blindness by itself, however, as they die naturally or after treatment, they cause inflammation and corneal opacification. Repeated episodes result in complete opacification of the cornea and result in blindness. It is rarely seen in developed countries but very common in the third world countries like the developing countries of Africa, Asia, Latin America, and Australia.

Noninfectious keratitis

The following causes or conditions may lead to noninfectious keratitis:

1. Local causes: The following can cause irritation in the sulcus subtarsalis (a groove in the inner surface of the eyelid near the eyelid margin) and lead to keratitis:

Foreign body

Trichiasis which is anatomic misalignment of eyelashes

Entropion which is a condition in which the eyelid folds inwards

Distichiasis is a rare condition of having two rows of eyelashes

Giant papillae in which the inside of the eyelid which is usually very smooth gets red, swollen, and irritated. It is usually seen in people who wear soft contact lenses.

2. Collagen vascular diseases: Diseases such as rheumatoid arthritis, granulomatosis with polyangiitis, polyarteritis nodosa, relapsing polychondritis, systemic lupus erythematosus can cause peripheral ulcerative keratitis.

3. Damage to the ophthalmic division of the trigeminal nerve: Surgeries involving the cornea like cataract surgery, orbital surgery, laser eye surgery to correct vision, corneal transplants and surgery or tumor involving the trigeminal nerve can potentially damage the ophthalmic division of the trigeminal nerve and result in Neurotrophic keratitis.

4. Xerophthalmia: Vitamin A deficiency causes abnormal dryness of the conjunctiva and cornea of the eye with subsequent necrosis resulting in keratitis.

Risk Factors Of Keratitis

Factors that may increase your risk of keratitis include:

1. Contact lenses

Wearing contact lenses increases the risk of both infectious and noninfectious keratitis especially in the following cases:

Wearing lenses while sleeping

Using extended-wear contact lenses

Not disinfecting lenses properly

Not cleaning the case or container of lenses

Using visibly contaminated lens solution to clean lenses

Not discarding or replacing the used lens solution while storing contact lenses

Adding fresh solution to existing used solution in the case instead of using only fresh solution while storing contact lenses

Storing or rinsing lenses with water

Swimming or bathing while wearing lenses

Sharing non-corrective lenses which are used for cosmetic reasons

2. Eye injury

Eye injuries such as a scratch, tear or injury in the past, you may be more vulnerable to developing keratitis.

3. Weakened immune system

Compromised immune system due to some disease or medications can increase the susceptibility to keratitis.

4. Corticosteroids

Overuse or long term use of corticosteroid eye drops to treat any eye disorder can increase the risk of developing infectious keratitis or worsen existing keratitis.

5. Exposure to intense light

Exposure to natural sunlight in the form of reflection of sunlight from snow, water, ice or sand or by staring at the sun without special eye protection can increase the risk of keratitis. Photokeratitis can also be triggered by manmade sources of ultraviolet (UV) light like tanning beds and tanning lamps.

Diagnosis of Keratitis

In case of any suspected symptoms of keratitis, a doctor should be consulted immediately so that proper treatment is given before any further complications arise.

The doctor will examine the eyes and discuss the symptoms that are being experienced.

Diagnosing keratitis typically involves the following:

1. Eye exam

If your eye is sealed shut from an infection, the doctor will help you open it to conduct a full examination of eyes and check for visual acuity.

2. Slit-lamp exam

The slit lamp exam is a standard diagnostic procedure, which is also known as biomicroscopy. It is usually a part of a comprehensive eye exam. It provides a bright source of light and magnification to detect the character and extent of keratitis as well as the effect it may have on other structures of the eye.

3. Penlight exam

A penlight is used for checking the pupil for any unusual changes. The doctor may apply a stain to the surface of the eye to identify the extent of surface irregularities, and ulcers of the cornea.

4. Laboratory tests

Doctors can take a sample of tears or a small scraping from the cornea for laboratory analysis to determine the cause of keratitis. This test is also helpful in treatment planning for keratitis.

Prevention Of Keratitis

While keratitis can happen to anyone, there are a few steps that help to prevent its occurrence.

1. Do's & Don'ts while using contact lenses

Follow the advice of your eye doctor about how to wear, replace, store, and clean contact lenses.

Wash, rinse, and dry your hands thoroughly before handling your contacts.

Replace your contact lens case every three to six months.

Use only sterile lens solutions that are made specifically for contact lens care.

Discard the used solution in the contact lens case each time you disinfect your lenses.

Gently rub the lenses during cleaning. Avoid rough handling or scratching of lenses.

Avoid sleeping in contact lenses.

Contact lenses should not be worn while bathing or swimming.

Do not share coloured or cosmetic contact lenses.

Visit your eye doctor for regular checkups.

2. Tips to protect your eyes

Keratitis can also affect people who do not wear contact lenses. Eyes can be protected from damage by:

Wearing sunglasses when exposed to intense sunlight.

Wearing protective eyewear while doing agricultural work.

Being aware of allergens and avoiding them, if possible.

Consuming a diet rich in Vitamin A.

3. Prevent viral keratitis

Some forms of viral keratitis can't be completely prevented. But the following steps can help to reduce the risk of viral keratitis:

Avoid touching your eyes, your eyelids and the skin around your eyes with dirty hands.

Wash your hands frequently with antiseptic soap solution to prevent viral outbreaks.

Only use eye drops that are prescribed by the doctor.

Specialist To Visit

The diagnosis of keratitis is done by an ophthalmologist who is a physician who specializes in diseases and surgery of the eye. The ophthalmologist will record comprehensive history and perform physical examination of eyes. If needed, some lab tests or cultures can also be advised.

If you are facing any eye-related problems, consult our medical professionals.

Consult Now!

Treatment Of Keratitis

Infectious keratitis

Infectious keratitis is one of the major causes of avoidable blindness. Therefore, appropriate and timely management could reduce the incidence of corneal damage and loss of vision.

1. Bacterial keratitis: Antibiotic therapy should be promptly started as bacterial keratitis is an eye emergency due to its rapid progression and potential complications.

Combination therapy of antibiotics such as cefazolin and tobramycin or gentamicin can be given. The dose is dependent on the severity of the infection.

For keratitis caused by methicillin-resistant Staphylococcus aureus (MRSA), drugs like topical vancomycin and topical linezolid can also be given.

Aminoglycoside antibiotics can be used along with fortified drops of gentamicin and tobramycin.

Cephalosporin drugs are also used with fortified drops of cefazolin.

Antibiotics like amikacin are useful for treating infections due to gram-negative organisms resistant to tobramycin and gentamicin.

2. Protozoal keratitis: Early diagnosis is essential for effective treatment of Acanthamoeba. The infection can be difficult to treat due to the resilient nature of the cyst form of Acanthamoeba.

The treatment usually includes a topical cationic antiseptic agent such as biguanides and pentamidine. Polyhexamethylene biguanide (PHMB) and chlorhexidine are the commonly used biguanides.

In some cases, addition of levofloxacin to the antiprotozoal treatment might augment treatment of resistant cases.

3. Viral keratitis:Topical antiviral acyclovir is the mainstay of treatment for viral keratitis. Howover, steroids can also be recommended in some cases.

For herpes simplex virus infections, a topical steroid is usually prescribed.

Herpes zoster keratitis is usually treated with oral acyclovir. It is also given to prevent recurrence of infection.

4. Fungal keratitis: Depending upon the type of the fungus, the following treatment options are recommended:

Amphotericin B is active against Aspergillus and Candida species, and commonly administered as a topical solution.

Natamycin is the first line treatment in fungal keratitis. It is considered to be the most effective medication against Fusarium and Aspergillus species.

Fluconazole is available in oral, topical, and intravenous preparations. This drug is found efficacious in patients who do not respond to natamycin or miconazole in the treatment of Candida keratitis.

Ketoconazole is available in oral and topical form. It is known to have good in-vitro activity against Aspergillus, Candida, and Curvularia species.

Very rarely, some cases of infectious keratitis are resistant to medication and lead to permanent eye damage. For this, your doctor may recommend having a corneal transplant.

Non-infectious keratitis

Treatment of noninfectious keratitis varies depending on the severity.

1. Local causes

Patients with keratitis related to trichiatic lashes, entropion, or distichiasis need early correction. The treatment for these include electrolysis of eyelash hair root follicle, lid everting procedures, or lid splitting procedures, respectively.

Keratitis associated with giant papillae is managed with topical steroids along with topical cyclosporine and lubricants.

2. Systemic causes

Rheumatoid arthritis (RA): The treatment involves topical and oral steroids and methotrexate.

Granulomatosis with polyangiitis(GPA): Cyclophosphamide is the drug of choice along with topical and oral steroids.

Living With Keratitis

With proper diagnosis and appropriate treatment including follow-up care, keratitis can usually be managed without causing permanent visual disturbances. A continuous evaluation of the eyes by a general practitioner is advised, if you have eye-related signs or symptoms that worry you. Depending on the type and severity of your symptoms, your doctor may refer you to an eye specialist (ophthalmologist).

In case a person is using contact lenses, and eyes become red and inflamed, promptly remove your contact lenses. Avoid touching eyes and rubbing eyes as it can often lead to infection. Always lubricate eyes with eye drops as it helps ease the symptoms of keratitis.

Be sure to follow your healthcare provider's advice about wearing, cleaning, and storing your contact lenses.

Always wash hands before handling contact lenses, and remove them before sleeping or swimming.

In case of a viral infection, make sure to wash your hands thoroughly with an antiseptic before touching your eyes.

Contact your eye doctor immediately if you experience redness, eye pain, or blurry vision.

Alternative Therapies Of Keratitis

Homeopathic treatment for keratitis

Homeopathic medicines play a supportive role in keratitis and can be used along with conventional treatment for effective relief from symptoms like pain, burning, and discharge. Here are a few homeopathic medicines for keratitis:

Belladonna: This is a natural medicine which is prepared from the plant called deadly nightshade. Belladonna is the most frequently used remedy in eye troubles like eye redness and congestion.

Apis mellifica: It is a natural remedy for treating pain in the eyes due to keratitis. The key features for using Apis mellifica include pain which may be stinging, tearing, lancinating, or shooting in nature.

Euphrasia: This is a homeopathic medicine for keratitis prepared from the plant Euphrasia Officinalis, also known as eye-bright. Euphrasia is useful in the case of keratitis where there is excessive secretion of tears and intense photophobia.

Pulsatilla: A homeopathic cure for eye discharges in keratitis prepared from the fresh plant Pulsatilla nigricans. It is used in case of eye discharge, burning and itchy eyes, and sticky eyelids in the morning.

Complications Of Keratitis

Early treatment can make you recover quickly from keratitis. However, delayed treatment may lead to serious complications including:

1. Corneal scars

Trauma, infections, or degenerative conditions can cause corneal scars which can lead to loss or reduction in vision.

2. Long-term inflammation

Keratitis is an inflammatory disorder of the cornea. Depending on the layer of cornea affected, the symptoms and complications are different. Inflammation in the stroma (middle layer of the cornea), can lead to permanent scarring. In some cases, the scars fade enough for the vision to return to normal. However, inflammation in the endothelium, or the innermost layer of the cornea, may cause long-term vision impairment depending on the extent of damage.

3. Corneal ulcers

Chronic corneal inflammation and scarring can lead to recurrent viral infections in your cornea. This often leads to open sores on the cornea (corneal ulcers) and can predispose to temporary or permanent reduction of vision.

4. Recurring infections

When keratitis is not treated for a longer period of time it leads to recurring infections. Keratitis may or may not be associated with an infection.

5. Glaucoma

Rarely keratitis can lead to glaucoma, a condition when the eye’s optic nerve is damaged with or without raised intraocular pressure. This can lead to gradual vision loss.

6. Loss of vision

Most cases of keratitis can be treated without loss of vision. However, some cases of severe infection can lead to serious complications that may permanently damage vision.

Frequently Asked Questions

What is the difference between conjunctivitis and keratitis?

What causes keratitis without an infection?

Can water cause keratitis?

How can keratitis be prevented?

How can I control viral keratitis?

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Kidney cancer

Also known as Renal cancer and Hypernephroma

Overview

Kidney cancer occurs when healthy cells in one or both kidneys grow out of control and form a lump (called a tumor).The kidneys are two bean-shaped organs, located behind the abdominal organs, with one kidney on each side of the spine. They filter the blood and remove waste material and excess water by making urine that is expelled as waste.

During the early stages, most people don’t have any signs or symptoms of cancer. Kidney cancer is usually detected by chance during an abdominal imaging test. As the tumor grows, a person may have symptoms like blood in the urine, pain in the lower back, a lump or swelling in the kidney area or abdomen, and losing weight for no reason.

The major risk factor for kidney cancer is smoking. Other factors include high blood pressure, diabetes, obesity, kidney stones, long term dialysis, certain genetic conditions, and being exposed to certain chemicals.

Treatment of kidney cancer includes one of or a combination of chemotherapy, radiation therapy, embolization, biological therapy, and surgery. After treatment, follow-up care is essential to monitor recovery and to check for any possible recurrence of kidney cancer.

Key Facts

Usually seen in

Adults between 45 to 60 years of age

Gender affected

Both men and women but more common in men (2:1)

Body part(s) involved

Kidney

Surrounding organs

Prevalence

Worldwide: 430,000 (2020)

India: 27000 (2021)

Mimicking Conditions

Kidney stones

Gastrointestinal disease

Gall bladder disease

Liver disease

Necessary health tests/imaging

Blood tests

Urine tests

Complete blood count (CBC)

Blood chemistry tests

Imaging tests

Magnetic resonance imaging

Positron emission tomography (PET) scan

Biopsy

Computed tomography (CT) scan

Angiography

Bone scan

Cystoscopy

Chest x-ray

Treatment

Surgery

Targeted therapy: Everolimus, Bevacizumab & Nivolumab

Ablation therapy: Cryotherapy & Radiofrequency ablation

Radiotherapy

Embolisation

See All

Symptoms Of Kidney Cancer

A person with kidney cancer may or may not have one or more of the symptoms in the early stages. With time, signs and symptoms may develop which include:

Loss of appetite

Blood in urine (hematuria)

Lower back pain

A general feeling of poor health

A mass (lump) on the side or lower back

Fever that keeps coming and going

Feeling tired all the time

These signs and symptoms can be caused by kidney cancer (or another type of cancer), but more often caused by benign conditions. For example, blood in the urine is most often caused by a bladder or urinary tract infection or a kidney stone. Still, if you have any of these symptoms, medical advice is required so that the cause can be found and treated early, if needed.

Causes Of Kidney Cancer

Some of the common causes of kidney cancer include:

Mutation in genes

Cancer is caused by changes in the DNA. DNA is the chemical in our cells that makes up our genes. Some genes that help control when our cells grow, divide into new cells, and stay alive are called oncogenes. Genes that help keep cell division under control or cause cells to die at the right time are called tumor suppressor genes. Cancer can be caused by DNA mutations (changes) that turn on oncogenes or turn off tumor suppressor genes, resulting in cells growing out of control.

Inherited gene mutation

Certain inherited DNA changes can run in some families and increase the risk of kidney cancer. For example, a mutation in the tumor suppressor gene VHL is the gene that causes von Hippel-Lindau (VHL) disease. When the VHL gene is mutated, it is no longer able to control abnormal growth, and kidney cancer is more likely to develop.

Acquired gene mutation

Some gene mutations occur during a person’s lifetime and are not passed on. They affect only cells that come from the original mutated cell. These DNA changes are called acquired mutations. Obesity, another risk factor for this cancer, alters the balance of some of the body’s hormones. Certain risk factors such as exposure to cancer-causing chemical like those found in tobacco smoke, probably play a role in causing these acquired mutations.

Risk Factors Of Kidney Cancer

A risk factor is anything that increases your chance of getting a disease. Having a risk factor, or even several risk factors, does not mean you will get kidney cancer, but it may increase your risk.

Smoking is the most common cause of kidney cancer. Although many risk factors can increase the chance of developing renal cell cancer (RCC), it is not yet clear how some of these risk factors cause kidney cells to become cancerous.

Non-modifiable risk factors

Age: The incidence of kidney cancer increases with age, with a peak of incidence at approximately 75 years of age.

Sex: The incidence of kidney cancer is two-fold higher in men compared with women.

Genetic risk factors: Certain rare inherited conditions like von Hippel-Lindau disease, Birt-Hogg-Dube syndrome, tuberous sclerosis complex, hereditary papillary renal cell carcinoma or familial renal cancer may have an increased risk of kidney cancer.

Family history of kidney cancer: The risk of kidney cancer increases if first line relatives or close family members have suffered from the condition.

Modifiable risk factors

Overweight/obesity: Obese people are at a higher risk of developing kidney cancer as compared to people who are considered to have a healthy weight. Research shows that high body mass index (BMI) is estimated to be responsible for 26% of kidney cancer cases worldwide.

Tobacco smoking: Smokers have a greater risk of kidney cancer than nonsmokers, with an approximate 30% increased risk in current smokers and a 15% increased risk in former smokers compared with never smokers.

Environmental and occupational exposure: Environmental exposures such as pesticides, arsenic, cadmium, and lead can increase the risk of kidney cancer. Aaristolochic acid (derived from Aristolochia plants, found in contaminated food, or used in herbal traditional remedies) and trichloroethylene (used as metal cleaner and greaser) are also associated with renal cancer.

Medical history

High blood pressure (hypertension):Hypertension has been found to be associated with a considerable kidney cancer risk. Therefore, controlling the condition through the use of hypertensive medication may be an effective therapeutic intervention in the prevention of kidney cancer.

Chronic kidney disease and kidney stones: Chronic kidney disease increases the risk of kidney cancer two to three fold.

Diabetes mellitus: Diabetes can leads to obesity and hypertension which predispose to renal cancer.

Types Of Kidney Cancer

Renal cell carcinoma (RCC)

This is the most common type of kidney cancer in adults which often stays confined to the linings of tiny tubes in the kidney called renal tubules. Sometimes, cancer can spread to other parts of the body, most often the bones, lungs, or brain.

Clear cell renal cell carcinoma (ccRCC)

This is also called conventional renal cell carcinoma and is named after how the tumor looks under the microscope. The cells in the tumor look clear like bubbles. In adults, renal clear cell carcinoma makes up 80% of the cases while 2% to 6% of childhood and young adult kidney cancer cases.

Rare type of kidney cancer

Papillary renal cell carcinoma (PRCC): The tumor is located in the kidney tubes and is found in 15% of all renal cell carcinomas.

Translocation renal cell carcinoma (TRCC): It is a slow-growing tumor located in the kidney. This accounts for 1% to 5% of all renal cell carcinomas and 20% of childhood cases.

Non cancerous kidney tumor

Benign or noncancerous kidney tumors grow in size but do not spread to other parts of the body and are not usually life-threatening.

Oncocytoma: The tumor starts in the cells of the kidney collecting ducts and tumors can grow in one or both kidneys.

Angiomyolipoma: It is a benign fatty tumor that can overgrow, destroy the surrounding tissues, and can cause internal bleeding.

Stages of kidney cancer

After someone is diagnosed with kidney cancer, doctors will try to figure out whether it has spread, and if so, how far. This process is called staging. The stages of kidney cancer range from stage I to IV. The lower the number, the less metastasis (spread) of cancer. A higher number, such as stage IV, means the cancer has metastasized to other parts of the body.

The staging system used for kidney cancer is based on the TNM system.

The size and extent of the main tumor (T). Is it confined to the same area or has grown into nearby areas?

The spread to nearby lymph nodes (N)

The spread (metastasis) to distant sites (M). It has spread to nearby organs such as the brain, bones, or lungs.

Higher numbers mean the cancer is more advanced. Once a person’s T, N, and M categories have been determined, this information is combined in a process called stage grouping to assign an overall stage.

Diagnosis Of Kidney Cancer

Kidney cancer might be diagnosed because of signs or symptoms a person is having, or it might be found because of lab tests or imaging tests a person is getting for another reason.

Medical history or physical exam

If you have any signs or symptoms that suggest you might have kidney cancer, your doctor will take a complete medical history to check for risk factors to learn about your symptoms. A physical exam can provide information about signs of kidney cancer and other health problems.

A general practitioner will ask about the medical history of a person:

Ask you about your symptoms

Examine for any lumps or swelling

Arrange for a blood test to check for signs of a kidney problem

These checks may help diagnose or rule out some possible causes of your symptoms such as a urinary tract infection (UTI).

Blood tests

Lab tests cannot show for sure if a person has kidney cancer, but they can sometimes give the first hint that there may be a kidney problem. These tests can be done to get a sense of a person’s overall health and to diagnose if cancer might have metastasized (spread) to other areas.

Urine tests: In urine tests, small amounts of blood can also be detected which is usually not seen with the naked eye. About half of all patients with renal cell cancer will have blood in their urine. If the patient has transitional cell carcinoma (in the renal pelvis, the ureter, or the bladder), sometimes a special test of the urine sample (called urine cytology) will show actual cancer cells in the urine.

Complete blood count (CBC):This test measures the number of different cells in the blood. This test result is often abnormal in people with kidney cancer. Anemia or too few red blood cells is very commonly seen in people with kidney cancer. Less often, a person may have too many red blood cells called polycythemia because the kidney cancer cells make a hormone (erythropoietin) that causes the bone marrow to make more red blood cells.

Blood chemistry tests: Kidney cancer can affect the levels of certain chemicals in the blood. Blood chemistry tests also measure kidney function, which is especially important, if certain imaging tests or if surgery is planned.

Imaging tests

These tests can confirm or rule out kidney cancer. If you have cancer, they can help show whether it has spread to other parts of your body.

The tests you might have include:

Magnetic resonance imagining (MRI) scan: A scan that uses strong magnetic fields and radiowaves to produce a detailed image of your kidneys.

Positron emission tomography (PET) scan: A detailed body scan can be helpful for investigating confirmed cases of kidney cancer to see if cancer has spread and how well it's responding to treatment.

Biopsy: A biopsy might be done to get a small sample of tissue from an area that may be cancerous when the imaging tests are not clear enough to permit surgery. A biopsy may also be done to confirm cancer if a person might not be treated with surgery. Fine needle aspiration (FNA) and needle core biopsy are 2 types of kidney biopsies that may be done. In cases, where the doctors think kidney cancer might have spread to other sites, they may take a biopsy of the metastatic site instead of the kidney.

Ultrasound scan: It is a scan that uses high-frequency sound waves to create an image of your kidneys. Ultrasound can be helpful in finding a kidney mass and showing if it is solid or filled with fluid. Different ultrasound patterns can also help doctors tell the difference between some types of benign and malignant kidney tumors.

Computed tomography (CT) scan: The CT scan uses x-rays to make detailed cross-sectional images of your body. It can provide precise information about the size, shape, and location of a tumor. It is also useful in checking, if cancer has spread to nearby lymph nodes or to organs and tissues outside the kidney.

Angiography: In angiography, a contrast dye is injected into the renal artery, and the dye outlines the blood vessels. Angiography can also help diagnose renal cancers since the blood vessels usually have a special appearance with this test.

Bone scan:This test is helpful to check if cancer has spread to the bones. A small amount of low-level radioactive material is injected into the blood which gets collected mainly in abnormal areas of bone.

Cystoscopy: Where a thin tube is passed up your urethra (the tube that carries urine out of your body) so that problems in the bladder can be detected.

Chest x-ray: An x-ray may be done after kidney cancer has been diagnosed to check if the cancer has spread to the lungs.

Prevention Of Kidney Cancer

In many cases, the cause of kidney cancer is not known. In some other cases (such as with inherited conditions), even when the cause is known it may not be preventable. It can include individuals with first-degree relatives such as a parent, brother, sister, or child. The risk also increases if other extended family members have also been diagnosed with kidney cancer including grandparents, aunts, uncles, nieces, nephews, grandchildren, and cousins.

But there are some ways you may be able to reduce your risk of this disease. This include:

Obesity and high blood pressure are also risk factors for renal cell cancer. Maintaining a healthy weight by exercising and choosing a diet high in fruits and vegetables may also reduce your chance of getting this disease.

Smoking is responsible for a large percentage of kidney cancer, so quitting smoking may lower the risk of cancer.

Avoiding exposure to harmful substances such as trichloroethylene at work may also reduce your risk for renal cell cancer. Avoiding the use of metallic elements such as cadmium, working with batteries, paints, or welding materials may decrease a person’s risk of kidney cancer.

Specialist To Visit

A general practitioner can evaluate the symptoms and start the treatment. He can further refer to other doctors for assessment depending upon the organ affected.

Urologist: A urologist is a physician who specializes in diseases of the urinary tract.

Genitourinary (GU) medical oncologist: They are doctors dedicated to the treatment, research, and prevention of genitourinary cancers of the prostate, bladder, and kidney.

Nephrologists: A nephrologist is a kidney specialist. They treat conditions related to the kidneys.

Oncosurgeon: They are specialized in cancer surgeries.

If you are facing any symptoms, consult our healthcare professionals.

Consult Now!

Treatment Of Kidney Cancer

The treatment for kidney cancer depends on the size of the cancer and whether it has spread (metastatic) to other parts of the body.

A complete cure may not be possible if cancer has spread, but it may be possible to slow its progression and treat the symptoms with surgery, medicines, and radiotherapy.

The main treatments are:

Surgery

The surgery for kidney cancer includes:

Partial nephrectomy -- an operation to remove the part of the kidney containing cancer.

Radical nephrectomy -- an operation to remove the entire kidney.

A partial nephrectomy is usually done if the cancer is small, whereas radical nephrectomy is required for larger cancers or if cancer has spread beyond the kidney.

The surgery on the kidney can be done in two ways:

Through a single large cut in the tummy or back, known as open surgery.

Using surgical tools inserted through smaller cuts, known as keyhole surgery. This surgery tends to have a faster recovery time.

Note: It's possible to live a normal life with only one kidney. There can be a number of reasons for having one kidney which includes:

A person may be born with only one kidney

Kidney transplantation

One kidney was removed (nephrectomy) to treat a medical condition during surgery

Donated a kidney to someone who required a transplant

Having one kidney does not affect the length of your life nor does it affect the quality of life you will have. One kidney is enough to filter blood to keep your body functioning normally.

Targeted therapies

If a person is having cancer of the advanced stage, that person may be offered targeted therapies. These are medicines, usually taken once or twice a day, that help stop cancer from growing and spreading.

The medicines included in the targeted therapies are:

Everolimus

Bevacizumab

Nivolumab

Tivozanib

Sunitinib

Pazopanib

Cabozantinib

Axitinib

Medicines such as sunitinib, pazopanib, cabozantinib, axitinib, everolimus, nivolumab, and tivozanib are recommended for routine use.

There can be possible side effects of medicines like sunitinib, pazopanib, cabozantinib, axitinib, and tivozanib which are all available as tablets. Possible side effects include:

High blood pressure

Sore mouth

Loss of appetite and weight loss

Tiredness

Infertility

Ablation therapies

These treatments destroy cancer cells by either:

Cryotherapy (freezing cancer cells)

Radiofrequency ablation (heating cancer cells)

These techniques may be recommended in circumstances to ensure your kidney keeps working, or if the tumor is small. Cryotherapy is done by inserting needles into the tumor. This can be done through a small cut, known as laparoscopic cryotherapy. Radiofrequency ablation is done by inserting a needle-like probe through your skin, so no large cuts are needed.

Radiotherapy

If you have advanced kidney cancer that has spread to other parts of the body, such as your bones or brain, radiotherapy is recommended. It is a treatment where radiation is used to target or destroy cancerous cells. It cannot usually cure kidney cancer, but it can slow down its spread and help control your symptoms. The treatment is usually done for a few minutes every day, over a few weeks.

A few side effects of radiotherapy include:

Reddening of the skin in the treatment area

Tiredness

Diarrhea

Embolisation

Embolisation is a procedure to block the blood supply to the tumor, causing it to shrink. During embolization, a small tube called a catheter is inserted into a blood vessel in your groin and then guided to the blood vessel supplying the tumor.

Home-care For Kidney Cancer

Home remedies

1. Echinacea: It is an immune-boosting plant. The root extract of this plant cleanses the kidneys from heavy metals like cadmium. The echinacea plant has anti-inflammatory effects on the body and is considered an effective herb against kidney cancer.

2. Vitamin D3: A deficiency of Vitamin D is known as one of the risk factors for developing kidney cancer. Vitamin D3 is available in dairy, salmon, sardines, fish oil, cod liver oil, eggs, and mushrooms.

3. Astragalus: It is one of the best herbs known as a kidney restorer but also one of the best anti-cancer immune-building herbs.

4. Korean Ginseng: The roots of this plant have been used for health and longevity for thousands of years in traditional chinese medicine. Ginseng reduced the risk of multiple types of cancer by up to 40%. It has been confirmed that ginseng directly inhibits the growth of kidney tumors.

Diet for kidney cancer individuals

A kidney cancer diet should include many of the same things found in any healthy diet, with some nutritional add-ons to combat the specific effects of cancer treatment. Daily nutrition should include:

1. A lot of whole grains: Whole grains may reduce cancer risk because of their high amounts of fiber, antioxidants, and minerals like Vitamin E and selenium.

2. Fruits and vegetables: Research suggests that fruits and fiber-rich vegetables may have a protective effect against kidney cancer and its recurrence.

3. High caloric intake: If a person is undergoing cancer treatment, include high-calorie foods like peanut butter, milkshakes, sauces, gravies, and meats. These foods are essential for maintaining the weight of a person as cancer treatment leads to weight loss.

Did you know?

March 12, 2020, is observed as World Kidney Day. This day aims to highlight the importance of preventive measures to delay the onset and progression of kidney disease. Here is a list of a few foods that you should include in your diet to promote kidney health and stay healthy.

Click Here!

Complications Of Kidney Cancer

The complications arising from kidney cancer are most likely regarding the patient’s mental health. Although it’s not impossible to detect it in somewhat earlier stages, this cancer is most commonly discovered in the considerably advanced ones when there is not much left to do for the person but relieve the pain. It's hard for a person to accept reality and stay in a state of grief, denial, anger, bargaining, depression, and acceptance.

There are a number of complications that may occur due to kidney cancer including:

High blood pressure

Kidneys play an important role in regulating blood pressure. Kidney cancer may result in persistent high blood pressure and at times, blood pressure that is very difficult to control.

Liver insufficiency

Kidney cancer may affect the liver by spreading cancer. The liver filters the blood, as does the kidney, the combination of liver and kidney dysfunction can result in the accumulation of toxins in the blood, leading to confusion, personality changes, and mood changes.

Pleural effusion

When kidney cancer spreads to the lungs or the lining of the lungs, it may cause the build-up of fluid between the membranes lining the lungs called the pleura. Sometimes, a large amount of fluid (several liters) accumulates, causing significant shortness of breath. A procedure called thoracentesis is recommended in some cases, which involves placing a fine needle through the skin on the chest wall and into the pleural cavity to withdraw fluid.

Kidney failure

If a surgery leaves only one functioning kidney, the ongoing medication can put stress on the existing kidney which may lead to kidney failure. If kidney failure occurs, dialysis may be needed or a kidney transplant, if it is an early-stage kidney cancer.

Alternative Therapies For Kidney Cancer

Complementary and alternative medicine (CAM) refers to a range of treatments and practices that are not typically part of the standard medical care. It also helps in comforting themselves and easing the worries of cancer treatment and related stress. Alternative therapies help in coping with the side effects of cancer treatments such as nausea, pain, and fatigue.

Mind therapies

These combine mental focus, breathing, and body movements to help relax the body and mind. These include:

Meditation: It involves focused breathing or chanting of words or phrases to calm the mind.

Yoga: It is a physical, mental, and spiritual practice that originated in ancient India. It helps in stretching and calming the body.

Tai Chi: It includes slow, gentle movements with focus on the breath and concentration.

Body-based practices

Massage: The purpose of massage is generally for the treatment of body stress or pain. The soft tissues of the body are kneaded, rubbed, tapped, and stroked.

Chiropractic therapy: It is a branch of study that focuses on nerves, bones, and other parts of the neuro-musculoskeletal system. This is a good alternative to invasive alternatives like surgery or injections for treating short-term or chronic pain.

Biofield therapies

Biofield therapies are non-invasive therapies in which the practitioner explicitly works with a client's biofield (interacting fields of energy and information that surround living systems) to stimulate healing responses in patients.

Reiki: It is a Japanese technique for stress reduction and relaxation that also promotes healing. It is believed that improving the flow of energy around the body can enable relaxation, relieve pain, speed healing, and reduce other symptoms of illness.

Therapeutic touch: This is a holistic, evidence-based practice that incorporates the intentional and compassionate use of universal energy to promote balance and well-being.

Whole medical system

These are healing systems and beliefs that have evolved over time in different cultures and parts of the world. In India, the goal is to cleanse the body and restore balance to the body, mind, and spirit. Some examples are:

Acupuncture: It is a common practice in Chinese medicine that involves stimulating certain points in the body to promote health or to lessen disease symptoms and treatment side effects.

Naturopathic treatment: It involves various methods that help the body naturally heal itself. An example would be herbal treatment.

Living With Kidney Cancer

Watching for recurrence

One goal of follow-up care is to check for a recurrence, which means that cancer has come back. Cancer recurs because small areas of cancer cells may remain undetected in the body. Over time, these cells may increase in number until they show up on test results or cause signs or symptoms.

During follow-up, a doctor will ask specific questions about your health and prescribe specific blood tests or imaging tests. Testing is done considering various factors such as type and stage of cancer first diagnosed and the types of treatment given.

Managing long-term and late side effects

Most people experience side effects while receiving treatment. However, it is often that the side effects may linger beyond the treatment period. These are called long-term side effects. Other side effects called late effects may develop months or even years later.

Long-term and late effects can include both physical and emotional changes. Cancer in itself is a serious condition and this can easily affect the mental health of the patient as well as the caregiver too. Stress, anxiety, or depression can both affect physically and mentally. In this case, supportive emotional and mental health care can be a great help for anyone struggling to cope with kidney cancer.

Keeping personal health records

Doctors design a treatment plan for the cancer treatment and the survivor should also keep track of the cancer treatment received when treatment is completed. This helps the doctor and family to deal with the emergency condition and to look back at the medical history, treatment received, medications given and duration of treatment.

Diet and nutrition

A healthy diet and good nutrition are essential for kidney cancer patients to maintain strength, protect body tissues from breaking down, prevent infection, and promote tissue regeneration, especially while undergoing therapy. Dietary and nutritional needs may change over the course of kidney cancer depending on the stage, type of treatment, response, and other factors. Avoiding excess sugar, maintaining weight, and eating a well-balanced nutritious diet are of utmost significance.

Physical activity

Exercise and physical activity can have a variety of benefits for kidney cancer patients from helping regain muscle tone following surgery to reducing and managing stress and promoting good cardiovascular health.

Frequently Asked Questions

What are the first signs of kidney cancer?

Is kidney cancer curable?

Where does kidney cancer metastasize first?

How to prevent kidney cancer?

How can kidney cancer be detected early?

What is the difference between lower back pain & kidney pain?

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Kidney failure

Also known as Renal failure

Overview

Kidney failure is a medical condition in which one or both the kidneys stop functioning. Some patients may experience a temporary case of kidney failure (acute kidney injury or AKI), which can occur suddenly; while in the rest of the patients, this condition can occur slowly and worsen over a long period of time (chronic kidney disease or CKD).

In India, around 40-60% of cases of chronic kidney diseases occur due to hypertension and diabetes. Some of the other causes include autoimmune kidney diseases, recurrent kidney infections, urinary tract obstruction, systemic disease involving the heart or liver, severe dehydration and use of certain medicines.

Patients with kidney failure show symptoms such as vomiting, upset stomach, reduced urinary output, dry or itchy skin, confusion, delusion, and metallic taste of food. Kidney failure can be a serious medical condition, however, it can be treated if a patient gets help at the right time. Appropriate medications to treat the cause and effects of kidney failure along with dialysis are the mainstay of treatment. Kidney transplant is usually the last resort for an ailing kidney. A patient with kidney failure would require regular follow-ups and constant monitoring from their physician.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Kidneys

Mimicking Conditions

Alport syndrome

Chronic glomerulonephritis

Polycystic kidney disease

Hemolytic uremic syndrome

Necessary health tests/imaging

Urinalysis

Blood tests: Creatinine, Blood Urea nitrogen and Electrolytes.

Imaging: CT scan and MRI

Kidney function test

Treatment

Diuretics

Ultrafiltration

Dialysis

Kidney transplant

Specialists to consult

General physician

Nephrologist

Urologist

Symptoms Of Kidney Failure

Patients who have early stage kidney failure may not even notice their symptoms since the signs are quite often not noticeable. The Centre For Disease Control and Prevention (CDC) reported that as much as 90 % of people with chronic kidney disease are not aware that they have the disease. The symptoms associated with renal failure tend to worsen with time.

Some of the symptoms that may be seen in renal failure are:

Swelling of legs, feet or ankles due to retention of fluids

Excessive drowsiness

Increased fatigue

Shortness of breath

Reduced urine output

Persistent nausea

Pain or pressure in the chest

Muscle spasm

Metallic taste

Irregular heartbeat

Irregular sleep pattern

Back pain

Fever

Rash

Diarrhea

Pain in the abdomen

Seizures

Coma

Early signs of kidney failure are less noticeable and include the following symptoms such as:

Swelling of limbs due to fluid retention

Shortness of breath

Reduced urine output

A change in color of urine can act as an early sign of damage to your kidneys and the subsequent progress of the condition.

Pale yellow or clear urine: This indicates that your body is well hydrated and it’s the ideal color in most cases.

Dark yellow or amber colored urine: Drinking less amount of water can cause your urine to look slightly darker in color than normal. This indicates dehydration and can be treated by drinking your fluids while cutting down on sodas, tea or coffee.

Tint of red or pink colored urine: If you find your urine to have this colour, then it's a sign of concern. The red tint could be blood and may indicate a medical condition. Eating food like beets or strawberries can also be the reason for red colored urine. In such conditions, talk to your doctor and take a urine test.

Orange colored urine: This is also a sign of dehydration. It can indicate the presence of accumulated bile in your bloodstream. Orange colored urine is usually not caused due to a kidney disease.

Foamy urine: It may indicate the presence of protein in the urine, which is a sign of a kidney disease.

Types Of Kidney Failure

Kidney failure can be of two types namely:

Acute kidney failure: Also called acute renal failure or acute kidney injury, it develops rapidly, usually in less than a few days and is potentially reversible. It generally occurs in individuals who are already hospitalised, especially the critically ill patients .

Chronic kidney failure: This type progresses slowly over at least three months and can lead to permanent kidney damage. In the early stages of chronic kidney disease, the patient may notice only a few signs or symptoms and not realise that he/she has kidney disease until the condition is advanced.

Did you know?

There are usually no signs or very subtle signs of kidney failure and by the time the problem gets diagnosed, there is usually already serious damage done to the kidneys. Learn more about signs that suggest your kidneys might be in trouble.

Click To Read!

Causes Of Kidney Failure

The three main reasons behind renal failure are as follows:

1. Conditions that slows or impairs blood flow to your kidneys

These are the conditions and diseases that can slow blood flow to the kidney and damage them as time advances. They are:

Liver failure

Blood or fluid loss

Infections

Heart disease

Heart attack

Severe allergic response

Taking medications such as naproxen sodium and ibuprofen

Severe burns

Extreme dehydration

High blood pressure medications

2. Conditions that prevents urine from leaving your kidneys

These are the conditions that lead to decreased urine flow, which are:

Prostate, cervical, colon or bladder cancer

An enlarged prostate

Nerve damage to your bladder

Kidney stones

Presence of blood clots in your urinary tract

3. Conditions and causes that directly damage your kidneys

Damage to the kidneys can result from:

Deposition of cholesterol

Presence of blood clots

Medications such as non-steroidal anti-inflammatory drugs that include ibuprofen, naproxen or antibiotics

Glomerulonephritis, a condition where the tiny filters of the kidney become inflamed

Chemotherapy

Sepsis or infection

Rhabdomyolysis (the breakdown of muscle tissue leading to the release of muscle fibre contents into the blood)

Hemolysis (breakdown or destruction of red blood cells)

Damage to nerves that regulate your bladder

Ingestion of large amounts of toxins like ethylene glycol

Iodinated contrast used during radiographic procedures

In addition, the other causes that can lead to kidney failure are:

Lupus, an autoimmune disorder that can lead to inflammation of different organs of the body

Heavy metal poisoning

Vasculitis, a condition in which the blood vessels become inflamed

Hemolytic uremic condition, a condition that causes the breakdown of red blood cells after an infection

Scleroderma, an autoimmune disorder of the skin

Uncontrolled diabetes

Dyes used in a few imaging tests

Multiple myeloma, cancer of plasma cells present in the bone

Polycystic kidney disease

Did you know?

Your kidneys are organs which can get affected without you getting any symptoms or signs of damage. Read more about everyday habits that can cause kidney diseases.

Click Here!

Risk Factors For Kidney Failure

Usually, a patient experiences kidney failure along with other medical conditions or as a consequence of another disease. You are more likely to have kidney failure if:

Have been hospitalised for a long time

Have been admitted in intensive care

Have heart failure

Have high blood pressure

Have uncontrolled diabetes

Take pain medications like NSAIDs regularly

Have chronic kidney disease or liver disease

Have coronary artery disease

Are old

Diagnosis Of Kidney Failure

There are several tests that can help your doctor in the diagnosis of acute renal failure. Some of the common tests include the following:

1. Urinalysis

Your doctor may order a urinalysis for which you'll be asked to take a urine sample. The test is ordered if your doctor suspects anything unusual such as the presence of atypical proteins or sugar in the urine. The urine sample is further sent to a lab where an urine analysis is performed. A urinary sedimentation test is carried out to detect the presence of red and white blood cells, a number of tube-shaped bacterias known as cellular casts or levels of bacteria.

Extremely heavy proteinuria (>3.5 g/d) can occasionally be seen in glomerulonephritis (swelling and redness of the tiny filters in the kidneys called glomeruli), vasculitis (inflammation of the blood vessels), or toxins.

Urine eosinophils have a limited role in differential diagnosis, they can be seen in interstitial nephritis (spaces between the kidney tubules become swollen), pyelonephritis (a type of urinary tract infection), cystitis (inflammation of urinary bladder), atheroembolic disease (when plaque from large arteries go and block small arteries like renal artery), or glomerulonephritis.

The finding of oxalate crystals in acute kidney injury should prompt an evaluation for ethylene glycol toxicity.

2. Urine volume measurements

Urine output measurement is one of the easiest tests that can help in the diagnosis of kidney failure. Low urinary output may indicate the presence of kidney diseases due to a blockage. The blockage can be caused due to an underlying pathology or injury.

3. Blood tests

You may be ordered to take blood samples through which your doctor can identify the presence and quantity of substances present in your urine. Kidneys filter substances such as blood urea nitrogen and creatinine. The varying levels of these substances can give an idea about your health and the functioning of your kidney. A rapid rise in the level of these compounds can indicate acute kidney failure. These tests include:

Creatinine: A compound made by your muscles, in particular, can help in the identification of kidney failure since a normal kidney would remove creatinine from the blood and excrete it via urine.

Blood urea nitrogen (BUN): Urea is another waste product found in your blood. It is created from protein when broken down. It is also removed from your blood via the kidneys. Blood samples can detect the level of urea nitrogen.

Electrolytes: Electrolytes like potassium and sodium help with fluid balance in your body. A high level of sodium can be an indication that your kidneys aren't functioning properly since your body is unable to excrete the right amount of sodium.

4. Glomerular filtration rate (GFR)

It is a test used to check how well the kidneys are working. Specifically, it estimates how much blood passes through the glomeruli each minute. Glomeruli are the tiny filters in the kidneys that filter waste from the blood.

The lab specialist combines your blood creatinine level with several other factors to estimate your GFR. Different formulas are used for adults and children. The formula includes some or all of the following:

Age

Blood creatinine measurement

Ethnicity

Sex

Height

Weight

The creatinine clearance test, which involves a 24-hour urine collection, can also provide an estimate of kidney function.

According to the National Kidney Foundation, normal results range from 90 to 120 mL/min/1.73 m2. Older people will have lower than normal GFR levels because GFR decreases with age.

Normal value ranges may vary slightly among different laboratories. Some labs use different measurements or test different samples. Talk to your doctor about the meaning of your specific test results.

Levels below 60 mL/min/1.73 m2 for 3 or more months are a sign of chronic kidney disease. A GFR lower than 15 mL/min/1.73 m2 is a sign of kidney failure and requires immediate medical attention.

5. Imaging

Different imaging modalities such as MRI, ultrasound, and CT scan can be recommended at different stages of a disease, depending on your symptoms and signs. These imaging tests can help your doctor identify blockages or other problems that might be affecting your kidney and urinary tract.

6. Biopsy

A kidney tissue biopsy is recommended to collect a small sample of the kidney tissue. This exam helps in the identification of scarring, infectious organisms, or the presence of any other deposits.

Celebs affected

Rajnikant

Rajnikant, the mega superstar, underwent a kidney transplant to treat his renal failure.

Selena Gomez

Selena Gomez is a famous pop star who suffers from lupus, an autoimmune disease. She underwent a kidney transplant in 2017.

Prevention Of Kidney Failure

You can reduce your risk of developing renal failure by adopting some healthy lifestyle changes. While taking over-the-counter pills such as aspirin, ibuprofen, or other non-steroidal anti-inflammatory medications, and over-the-counter pain medications such as acetaminophen, make sure to reach the prescription label and follow the recommended dosage instructions. Taking too much of these medications can increase your risk of developing renal failure.

If you are at a higher risk of developing renal failure due to pre-existing conditions, make sure to consult your doctor before taking new medications. Talk to your doctor and follow their advice for managing your condition. Exercising right and avoiding alcohol can go a long way in reducing your risk of developing renal failure.

Specialist To Visit

You should visit a doctor if you are experiencing symptoms such as trouble keeping your blood pressure levels within a normal range even after taking the directed medications, your blood sugar levels are fluctuating within a wide range, fluid retention that is causing swelling in your feet or ankles, shortness of breath, nausea, chest pain, and seizures. These symptoms might indicate the possibility of renal failure. You can consult the following doctors for diagnosis:

General physician

Nephrologist

Urologist

Consult India’s best doctors here with a single click.

Consult Now!

Treatment Of Kidney Failure

Treatment for renal failure usually requires hospitalisation. Typically people who develop renal failure are already hospitalised due to underlying pathology or pre-existing medical conditions. The duration of your stay depends on the severity of your condition and the reason behind your kidney failure. Your doctor will monitor how quickly your kidneys are recovering and decide when to discharge you accordingly. In some cases, you might be able to recover at home.

Treatment of the cause

If you have developed kidney failure due to an injury to your kidneys or illness that has damaged your kidney, identifying and treating the underlying cause will help in the management of kidney failure. Your treatment options will depend on the cause and severity of the condition.

Treatments to balance the level of fluids in your body

Your renal failure may be caused due to a lack of fluids in the blood. This would require intravenous fluids. Sometimes an excess of fluids may cause renal failure that usually leads to fluid retention causing swelling of lower extremities such as legs and ankles. In such cases, a physician recommends medications called diuretics that help the body in expelling excessive fluids. Ultrafiltration may be required for patients who are not responding to diuretics.

Elimination of nephrotoxic drugs and substances

Elimination or replacement with non-nephrotoxic alternatives can be done for medications like angiotensin converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs), and non steroidal anti-inflammatory drugs (NSAIDs) by your doctor.

Medications to control blood potassium

Potassium is a salt that helps in regulating vital functions of your body. Excessive levels of potassium can cause an irregular heartbeat that can lead to severe complications and muscle fatigue. If your kidneys are unable to filter potassium from your blood, your doctor may ask you to restrict dietary potassium and prescribe you sodium polystyrene sulfonate, glucose along with insulin, or calcium to prevent the levels of potassium from rising in your blood.

Medication to regulate calcium levels

In case your calcium levels drop, your doctor may recommend a calcium infusion to prevent complications.

Dialysis

This is a procedure that filters and purifies the toxins from your blood through a machine. Essentially, the functions of your kidneys are taken over by the machine. Depending on the kind of dialysis recommended by your doctor, you may be connected to a big machine or you may be asked to use a portable catheter bag.

There are two types of dialysis:

Hemodialysis: For hemodialysis, a catheter (tube) will be inserted into one of the veins present in your legs or neck. The machine will regularly clean your blood. People on hemodialysis are recommended to receive treatment around three to four times a week at a dialysis centre or hospital.

Peritoneal dialysis: This dialysis cleans the blood using a dialysis solution and a catheter. A tube is inserted into your belly that takes out excessive fluids, salt, and potassium. This fluid is removed from the body and can be done via an automated exchanger while you are asleep. Most children who have renal failure are recommended for peritoneal dialysis.

Kidney transplant

A kidney transplant is a procedure where a specialist operates on the patient and replaces a non-functional kidney with a functional kidney from a healthier person. Patients with end-stage renal disease are advised to go through with a kidney transplant as that is the best treatment option available for them.

Living donors are easier to find since most of them are family members of the patient. The process of finding a living donor is usually faster. There is typically a long wait to find a donor kidney that is compatible with the patient's body. The patient undergoing the surgery may have to take immunosuppressant drugs for some time after the surgery to prevent the body from rejecting the new kidney. These drugs have side effects which need constant monitoring.

Home-care For Kidney Failure

Kidney failure needs rigorous attention and monitoring. Here are a few tips to follow at home:

If you have been prescribed medications to manage your medical condition, make sure you take those medications on time.

Label your drugs and set the alarm to make sure you have the medicines every day at the same time. Follow all the instructions given to you by your doctor.

Follow the diet given to you by your doctor.

Follow the diet given by your dietician that is customised depending on your medical condition and more compatible with your kidneys.

Stick to the right treatment plan, as decided by your doctor, and incorporate the necessary lifestyle changes to recover faster.

Eat a balanced diet and cut back on alcohol or foods that damage your kidneys.

Complications Of Kidney Failure

Renal Failure can lead to several complications which include the following:

Bone and muscle weakness

Disruption of minerals like calcium and phosphorus due to renal failure can lead to complications such as the weakening of bones. If your electrolytes are out of balance you can also develop muscle weakness that can cause heart rhythm problems or even paralysis.

Uremia

Buildup of nitrogenous waste products in the body is seen in kidney failure. At higher concentrations, changes in mental status and bleeding complications might arise.

Anemia

If your kidneys aren't functioning properly, this can lead to anemia, a condition in which a person has a low red blood cell count. Although there are multiple factors that lead to anemia in kidney failure, the primary cause is thought to be the insufficient levels of erythropoietin -- a hormone secreted by the kidneys that helps in production of red blood cells.

Fluid retention

Kidneys are responsible for filtering out excess water out of your blood and removing toxins along with it. In case of renal failure, you may be at an increased risk of fluid retention that can cause swelling of the lower extremities.

Heart disease

Kidney failure can lead to heart diseases. Heart diseases most commonly cause death in people who are on dialysis. Inflammation of the lining of the heart can lead to chest pain.

Metabolic acidosis

Renal failure can lead to excessive acid in the blood that can cause nausea, drowsiness, breathlessness, and vomiting. It can also lead to kidney stones and bone diseases.

Electrolyte imbalance

The dysfunctional kidney has limited ability to regulate electrolyte imbalance. Hyponatremia (low levels of sodium in blood) and hyperkalemia (increased potassium concentration in blood) are important abnormalities seen as a result of kidney failure.

Cardiac complications

The major cardiac complications are arrhythmias (irregular heart beats), pericarditis (inflammation of the heart membrane), and pericardial effusion (fluid build up in the pericardium). In addition, volume overload and uremia may lead to direct cardiac injury and impaired cardiac function.

Malnutrition

Patients with long term kidney disease are at a high risk for malnutrition, characterised by decreased body stores of protein and energy fuels along with micronutrient deficiencies.

Calciphylaxis

It is a rare and serious condition seen almost exclusively in patients with advanced CKD. It is characterised by accumulation of calcium in small blood vessels of the skin and fatty tissues.

Secondary complications

Some people can develop secondary complications such as:

Fluid buildup in the lungs

Nerve damage

Depression

Liver failure

Gout (increased levels of uric acid)

Skin infections

Diabetic nephropathy

Diabetic kidney disease, also known as diabetic nephropathy, is one of the most common complications of diabetes. Read more about ways to prevent it.

Click Here!

Alternative Therapies For Kidney Failure

Exercising

Leading a healthy lifestyle and doing light exercises daily such as walking can help in managing your kidney condition. Talk to your doctor about what kind of exercises would suit your condition.

Diet changes

Choose a diet that is low on salts and follow protein guidelines given by your doctor. The guidelines of what you are supposed to eat will depend on the stage of renal failure that you are on. It is important to follow the advice of your doctor since your diet influences your kidney health.

Note: The role of diet and nutrition in keeping the kidneys healthy and fit cannot be underestimated. Learn more about foods to keep your kidneys healthy.

Tap To Read!

Yoga

Opting for simple exercises such as yoga can help you avoid stress and anxiety that can further help your kidney health.

Living With Kidney Failure

Being diagnosed with renal failure can be scary and can come as a shock. However, modern science has opened the doors to several possibilities that can allow you to live a healthy life and give time for your kidneys to heal. Along with your medical treatments, it is important to incorporate lifestyle changes that will help you cope with your disease. These include:

Limiting alcohol intake

If you have kidney disease, drinking a large amount of alcohol can be extremely detrimental to the health of your kidney. Your kidneys will have to work harder to remove toxins from your body since alcohol doesn't metabolise out of your system. If you are on dialysis, then you will feel the effects of alcohol until you receive your dialysis.

Drinks such as wine and beer contain large amounts of phosphorus that can lead to heart diseases and even death if your kidney is unable to filter out excessive potassium. Talk to your doctor about what kind of drink you can intake without putting your health at risk and the frequency of drinking. Most people would be advised to eliminate alcohol from their diet completely.

Dietary changes

It is important to keep a track on the intake of potassium and sodium through diet. You should aim to eat less than 2,000 milligrams every day of both these nutrients. You will also be advised to limit phosphorus intake to below 1,000 milligrams. In the early or moderate stages of renal failure, you might be advised to cut back on protein intake. These dietary recommendations will depend on the stage of the renal failure and the severity of the condition.

Maintaining good health of the kidneys,one of the most vital organs of our body, is highly crucial. Read more about habits to keep your kidneys healthy.

Click Here!

Frequently Asked Questions

What is the life expectancy of people on dialysis?

Is a living donor better than a deceased donor for a successful kidney transplant?

What is hyperkalemia?

What are the stages of kidney diseases?

What are the first signs of kidney disease?

Which medications can cause damage to the kidney?

What is diabetic nephropathy?

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Kidney stone

Also known as Nephrolith, Urinary calculus and Renal calculus

Overview

Urine contains many dissolved minerals and salts. When the content of these minerals and salts becomes high, they form stones in the kidneys. Some stones stay in the kidney and do not cause any symptoms, while others travel down the ureter (the tube between the kidney and the bladder), reach the bladder, and pass out of the body via urine.

If the stone gets stuck in the ureter, it can block the urine flow from that kidney and cause cramping pain in the lower back, groin, or abdomen. Other symptoms may include blood in the urine, nausea, vomiting, foul-smelling urine, and frequent need to urinate.

Factors including dehydration, family history of kidney stones, obesity, and diet with high levels of protein and salt predispose to the formation of kidney stones.

Adequate hydration is a key preventive measure for kidney stones, which ensures that most kidney stones pass out via urine on their own with time. Treatment includes pain control medications and, in some cases, medications to ease the passage of urine. Surgical procedures are advised in case of larger stones that do not pass out themselves.

Key Facts

Usually seen in

Adult of age group 45-60

Gender affected

Both men and women, more common in men

Body part(s) involved

Kidneys

Urinary system

Prevalence

Worldwide: 12% (2018)

India: 12% (2021)

Mimicking Conditions

Appendicitis

Lower back pain

Gastritis

Testicular conditions

Pyelonephritis

Ovarian cyst torsion

Ectopic pregnancies

Diverticulitis

Cholecystitis

Hepatitis

Biliary colic

Herpes zoster

Narcotic-seeking individuals

Renal cell carcinomas

Necessary health tests/imaging

Lab tests

Urinalysis

Blood tests: Calcium, Phosphorus, Uric acid, Serum electrolytes, Blood urea nitrogen (BUN), Creatinine

Imaging tests

Abdominal X-ray

Intravenous pyelogram (IVP)

Abdominal Computed Tomography (CT) scan

Abdominal ultrasound

Abdominal magnetic resonance imaging (MRI)

Nuclear functional renal scan

Noncontrast computed tomography

Treatment

1. Small kidney stones

Nonsteroidal anti-inflammatory drug (NSAIDs): Aspirin, Diclofenac, Ketoprofen

Anti-sickness medicine: Cinnarizine, Hyoscine, and Chlorpromazine

Alpha-blockers : Tamsulosin, Alfuzosin, Nifedipine, Doxazosin, Terazosin

Diuretics: Bumetanide, Ethacrynic acid, Furosemide, Torsemide

2. Large kidney stones

Surgery: Shock wave lithotripsy (SWL), Ureteroscopy (URS), and Percutaneous nephrolithotomy (PCNL)

Medications: Potassium citrate and Allopurinol

See All

Symptoms Of Kidney Stones

Kidney stones vary in size. While tiny stones are less likely to get stuck in the kidneys or other parts of the urinary tract, bigger stones can cause sharp, cramping pain in the back and the sides. This feeling often moves to the lower abdomen or groin.

The pain may last for a short or long time or come and go but can be quite intense.

Symptoms of kidney stones include:

Pink, red, or brown blood in your urine, also called hematuria

Pain during urination

Cloudy or bad-smelling urine

A constant need to urinate

Chills

Fever

For men, pain at the tip of the penis

Vague pain or stomach ache that doesn't go away

Nausea

Vomiting

Did you know!

World Kidney Day is commemorated on March 10 to raise awareness about the various kidney diseases and how they can affect one’s life. Know about some common habits that are harming your kidneys.

Click Here

Causes Of Kidney Stones

Kidney stones are caused when the levels of minerals like calcium, oxalate, and phosphorus rise in the urine. Other factors that cause the development of kidney stones in the body include:

Dehydration

Obesity

Diet (high in oxalate or uric acid)

Eating an excess of salt or sugar

Lack of exercise

High concentrated urine

Imbalance of pH in urine

Regular constipation

Genetic disorders

Types Of Kidney Stones

Kidney stones are made of different types of substances. They are discussed as follow:

Calcium oxalate and calcium phosphate stones (80 percent of stones)

Calcium stones are the most common type of kidney stones comprising about 80% of all urinary calculi. The main constituent of calcium stones is brushite (calcium hydrogen phosphate) or hydroxyapatite. The main portion of these stones may account for pure calcium oxalate (CaOx) (50%), calcium phosphate (CaP, termed as apatite) (5%), and a mixture of both (45%).

Struvite or magnesium ammonium phosphate stones (10 percent of stones)

Struvite stones are referred to as infection or triple phosphate stones. They are composed of magnesium ammonium phosphate and form in alkaline urine. They occur among patients with chronic urinary tract infections.

Uric acid stones (5-10 percent of stones)

Diets high in purines, especially those containing animal proteins such as meat and fish, result in excessive amounts of uric acid in the urine, low urine volume, and low urinary pH, increasing the chances of uric acid stone formation.

Cystine stones (less than 1 percent of stones)

About 1 in 7,000 people worldwide get cystine kidney stones. It is a genetic disorder that results in impaired absorption of cystine or leaking of cystine into the urine.

Drug-induced stones (less than 1 percent)

Drugs, such as guaifenesin, triamterene, atazanavir, and sulfa drugs, induce the formation of these stones. These drugs may induce calculi formation by interfering with calcium oxalate or purine metabolisms.

Risk Factors Of Kidney Stones

Age and sex

Kidney stones are most likely to occur in people between the ages of 20 and 50 years. It has been found that men are much more likely to develop these stones than women.

Family or personal history

Someone with a family history of kidney stones is more likely to develop the stones than someone without a family history.

The risk of the development of kidney stones is also three times higher in a person with a personal history of kidney stones.

Diet

Diet that is high in sodium, protein and sugar can increase the risk of certain types of kidney stones.

Inadequate amount of calcium in the diet is a major risk factor for the development of kidney stones. Low calcium diets increase urinary oxalate excretion, which may result in more stone formation and possibly a negative calcium balance.

Dehydration

This is the most common cause and may come from the loss of body fluids due to excessive exercise, working, or living in a hot place.

Obesity

Obesity may change the acid levels in the urine, leading to stone formation. High body mass index (BMI), large waist size, and weight gain have all been associated with an increased risk of both a single episode and recurrent episodes of kidney stones.

What is body mass index? Learn more about it and how to calculate it.

Tap Now

Urinary tract infections

In patients with chronic urinary tract infections, larger stones may form in the kidney. These are commonly called a struvite or infection stones.

Medical conditions

Some medical conditions have an increased risk of kidney stones. Abnormal growth of one or more parathyroid glands, which control calcium metabolism, can cause high calcium levels in the blood and urine.

Another condition called distal renal tubular acidosis, in which there is acid build-up in the body can raise the risk of calcium phosphate kidney stones.

Medications

Some medications, calcium and vitamin C supplements, may increase your risk of forming stones. These include:

Certain antibiotics, including ciprofloxacin and sulfa antibiotics

Certain diuretics, like triamterene, which are used to treat high blood pressure

Decongestants, like ephedrine or guaifenesin

Protease inhibitors, like indinavir

Anticonvulsants, like felbamate, topiramate, and zonisamide

Diagnosis Of Kidney Stones

Medical history and physical examination

A healthcare practitioner will collect information regarding a person’s history of health conditions, family history of kidney stones, and the diet that is likely to aid in developing kidney stones. The physical examination includes:

1. General examination: In classical descriptions, a patient with renal colic (pain felt when kidney stones block the urinary tract) is continuously moving and twisting, unable to find a comfortable position. This is a common finding but not universal.

2. Vital signs: Kidney stones can induce a fast heart rate and elevate blood pressure. They generally do not cause fevers unless associated with a urinary tract infection.

3. Abdominal and flank examination: The doctor will physically examine the abdominal area.

Lab tests

Urologists often recommend several diagnostic tests to confirm the presence of kidney stones. These tests include:

1. Urinalysis: Urine tests can show whether the urine contains high levels of minerals that form kidney stones or not. It also shows white blood cells and bacteria in the urine that may indicate a urinary tract infection.

2. Blood tests: These tests are done to check the functioning of kidneys and the levels of substances that could cause progressions of kidney stones, such as calcium, phosphorus, uric acid, and serum electrolytes.

Blood urea nitrogen (BUN) and creatinine test help in identifying any abnormal functioning in kidneys by determining the amount of nitrogen in the blood that comes from the waste product urea.

Imaging tests

These tests may help to diagnose any issues that caused a kidney stone to form, such as a blockage in the urinary tract or any birth defects. These tests include:

1. Abdominal X-ray: An abdominal x-ray uses low levels of radiation to create a picture of the abdomen. These x-rays can show the location of kidney stones in the urinary tract but not all stones are visible in an abdominal x-ray.

2. Intravenous pyelogram (IVP): IVP is a gold standard for kidney stone detection. This test uses an X-ray and dye to visualize the images of kidneys, bladder, and ureters.

3. Abdominal Computed Tomography (CT) scan: If the stone is blocking the urinary tract, the CT scan can be used to assess the exact size and location of a kidney stone.

4. Abdominal ultrasound: An abdominal ultrasound scan offers moderate sensitivity specificity to diagnose kidney stones, although it is lower than a CT scan.

5. Abdominal magnetic resonance imaging (MRI): This test allows doctors to examine soft tissues without bones obstructing the view. This test is a safer alternative to a CT scan.

6. Nuclear functional renal scan: A renal scan involves the use of nuclear radioactive material to examine kidneys and assess their function.

7. Noncontrast computed tomography: This type of CT scan offers high sensitivity and specificity for the detection of kidney stones.

Stone analysis

If a person passes a stone or a stone is removed by surgery, testing the stone will determine its type. This information helps the healthcare provider to decide the best way to treat or prevent future stones.

Do tomatoes really cause kidney stones? Is it a myth or reality?

No. It is a myth that tomatoes cause kidney stones. Tomatoes are one of the most commonly eaten vegetables in the world and if it was responsible, then the number of people suffering from kidney stones would be alarming. Read more about how this myth arose.

Click Here

Prevention Of Kidney Stones

Drink enough fluids

A simple and most important lifestyle change to prevent stones is to drink more water and fluids. It's best to drink mostly no-calorie or low-calorie drinks and limit sugary and alcoholic drinks.

Reduce the amount of sodium in your diet

It is advisable to restrict salt intake ( ≤ 50 mmol/day of sodium chloride). A high sodium intake boosts stone risk by reducing calcium reabsorption in the kidneys and increasing urinary calcium.

Eat the recommended amount of calcium

People having calcium stones are recommended to avoid dairy products and other foods with high calcium content unless advised otherwise.

A reduced intake of calcium can also lead to increased intestinal absorption of oxalate, which itself accounts for an increased risk of stone formation.

Hence, it is advised to eat the right recommended amount of calcium in diet or supplements.

Eat plenty of fruits and vegetables

To prevent the formation of calcium oxalate, cystine, and uric acid stones, alkalize the urine by eating a diet high in fruits and vegetables, taking supplemental citrate, or drinking alkaline mineral waters.

Eating at least five servings of fruits and vegetables rich in potassium, fiber, magnesium, antioxidants, phytate, and citrate may help prevent stone formation.

Eat less meat

Restriction of animal proteins ( ≤ 52 g/day) is also encouraged since animal proteins provide an increased acid load because of their high sulfur-containing amino acids content. Therefore, in case of acidic urine output, it is recommended to eat less meat, fish, and poultry.

Increase magnesium intake

Magnesium is an important mineral that helps in preventing calcium oxalate kidney stone formation. The reference daily intake (RDI) for magnesium is 420 mg per day. Dietary magnesium intake can be increased by taking bananas, avocados, legumes, and tofu.

Eat foods with low oxalate levels

Limit the consumption of foods high in oxalate. These food items include peanuts, spinach, beetroots, chocolate, and sweet potatoes.

It is not necessary to completely stop eating foods that contain oxalate; however, the level of oxalate intake should be decreased.

Did you know?

Healthy kidneys are required to keep electrolyte levels balanced, produce hormones that make red blood cells and help regulate blood pressure.

To know how to keep your kidneys happy, watch this video

Specialist To Visit

Doctors that can help with kidney stones include:

General physician

Nephrologist

Urologist

A nephrologist specializes in kidney diseases and their functions. A urologist specializes in urinary tract disease.

If you are facing any health issues, seek advice from our healthcare professionals.

Consult Now

Treatment Of Kidney Stones

Small kidney stones

These stones are typically excreted out from the body on their own without considerable treatment. Intake of sufficient amounts of water (4-5 liters a day) may help flush out the stone via the urine. Different medications that can be used for assistance during the removal of these stones are:

Medications

Nonsteroidal anti-inflammatory drugs (NSAIDs): These are used to relieve the pain caused by the stone movement. A few examples include:

Aspirin

Diclofenac

Ketoprofen

Anti-sickness medicine: These drugs are used in case of nausea and vomiting. They include:

Cinnarizine

Hyoscine

Chlorpromazine

Alpha-blockers : They help in relaxing the muscles of the ureter and facilitate the passage of stones from the kidney. These drugs are:

Tamsulosin

Alfuzosin

Nifedipine

Doxazosin

Terazosin

Diuretics: These drugs increase the urine flow, and may also flush out the stone of <5 mm in size. Examples of a few diuretics are:

Bumetanide

Ethacrynic acid

Furosemide

Torsemide

Large kidney stones

If the kidney stones are too big to be passed naturally, they're usually removed by surgery.

Surgery

Shock wave lithotripsy (SWL): This is the only non-invasive method for stone removal. SWL involves the usage of ultrasound (high-frequency sound waves) to pinpoint where a kidney stone is, and the ultrasound waves break the stone into smaller pieces. SWL needs more than one session to successfully treat kidney stones.

Ureteroscopy (URS): This method is used for stones in the ureter, especially for stones closest to the bladder, in the lower half of the ureter. It involves passing a long, thin telescope, called a ureteroscope, through the tube urine passes through on its way out of the body (the urethra) and into your bladder. URS is a preferred method for the treatment of small to medium-sized kidney stones located in any part of the urinary tract.

Percutaneous nephrolithotomy (PCNL): PCNL is used most often when kidney stones are too difficult to reach, too large, too numerous, or too dense to be treated by shock wave lithotripsy or ureteroscopy. PCNL is considered the first-choice treatment for renal stones >2 cm.

Medications

Certain medications are also prescribed along with surgeries for larger stones, depending on the type of stone:

Calcium stones: Thiazide diuretics (often called water pills, which help rid your body of water) are used for patients with calcium stones. Another salt used to inhibit the formation of calcium stones is potassium citrate.

Uric acid stones: This condition is also called hyperuricemia or hyperuricosuria. Allopurinol, which is frequently prescribed for gout, is also used to lower the level of uric acid in the blood and urine.

Struvite stones: Acetohydroxamic acid (AHA) is used for patients with struvite infection. AHA can dilute the urine and make it unfavorable for the formation of struvite stones.

Cystine stones: Cystine-binding thiol drugs are used only for patients in whom cystine stones are formed. These medications (d-penicillamine or tiopronin) bind to cystine in the urine and form a compound that is less likely to crystallize than cystine.

Hyperparathyroidism surgery

People with hyperparathyroidism, a condition that results in too much calcium in the blood, sometimes develop calcium stones. Removing the parathyroid gland cures hyperparathyroidism and can prevent kidney stones.

Hyperparathyroidism can cause many symptoms in the body, including unexplained weight loss. Watch this video to know more

Home-care For Kidney Stones

Here are a few home remedies that can help in managing kidney stones:

Lemon juice (Nimbu): Lemons contain citrate, which is a chemical that prevents calcium stones from forming. Citrate can also break up small stones, allowing them to pass more easily. Consumption of half cup of lemon juice per day will increase citrates in the urine.

Water consumption: Drinking water helps speed up the process of passing a stone. Drink at least 12 glasses of water if you are trying to pass a kidney stone.

Green tea: Green tea is rich in antioxidants and possesses a protective effect against the development of calcium stones in the kidneys.

Kidney beans (Rajma): High levels of fiber in kidney beans and broth from cooked kidney beans help improve overall urinary and kidney health. It also helps dissolve and flush out kidney stones.

Celery: It has antispasmodic (that suppresses muscle spasms) properties and also helps in cleansing the toxins from the body.

Dandelion: Organic dandelion roots help cleanse the kidneys and support normal kidney functioning. Taking 500 mg of dried dandelion extract or drinking dandelion tea may help ease the symptoms and prevent the formation of kidney stones.

Wheatgrass: It is a rich source of many vital nutrients. A glass of wheatgrass juice with lemon extract is a perfect way to sort out kidney stones.

Pomegranate juice (Anar): This juice acts as a natural detoxifying agent that helps get rid of kidney stones causing impurities. Try to consume fresh pomegranate juice each day without added sugar.

Raspberry: This fruit is capable of expelling stones from the urinary tract. The prophylactic effect of raspberry has been reported on calcium oxalate renal stone formation.

Fenugreek seeds (Methi dana): It has been usually seen that fenugreek seeds significantly reduce calcification in the kidneys and help prevent kidney stones.

Black cumin seed (Jeera): This herb significantly reduces the formation of calcium oxalate stones.

Radish (Mooli): Roots of radish plant are highly effective in breaking kidney stones.

Tamarind pulp (Imli): Tamarind has shown beneficial effect in inhibiting spontaneous crystallization during the formation of kidney stones.

Baking soda: It helps in maintaining an alkaline environment in the body. The stones get enhanced in an acidic environment and baking soda aids in their removal. Mix half a teaspoon of the baking soda with apple cider vinegar and consume the solution twice a day.

Read more about effective natural remedies that can help in getting rid of kidney stones.

Click Here

Alternate Treatment For Kidney Stones

Ayurveda

1. Asparagus (Shatavari): Leaves of this plant are useful in expelling stones from the urinary tract and inhibiting the formation of calcium oxalate stones.

2. Crataeva nurvala (Varuna): The part of the plant used is the roots. Its pharmacological properties include being a lubricant, diuretic, and lithotriptic.

3. Tribulus Terrestris (Gokshura): This herb is commonly used in India to treat urinary tract diseases.

4. Hogweed (Punarnava): This Indian weed is used to help expel kidney stones.

5. Hibiscus (Gudhal): Drinking a cup of tea made from this herb significantly increases the excretion of uric acid and the clearance of kidney stones by urine.

6. Indian nightshade (Kantakari): It is a widely used edible medicinal plant in India, and is also known as the yellow berried nightshade plant. This plant is used as a remedy for the treatment of various renal diseases, including kidney stones.

7. Horse gram (Kulthi): It is a nutritional and medicinal plant native to India. Its seeds are used to prepare soup which decreases the formation and recurrence of calcium oxalate stones.

8. Indian madder (Manjistha): This is a species of flowering plant in the coffee family, and is used as a natural food colorant. The roots of manjistha are beneficial in reducing the risk of kidney stones. They work by reducing the level of calcium and oxalate in kidneys and inhibiting the growth of urinary stones.

Check out our extensive range of ayurvedic products.

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Living With Kidney Stones

Smaller kidney stones may not cause much problems and can be managed with certain simple lifestyle modifications. Here are some of the tips to apply when living with kidney stones:

Always stay hydrated

Watch your diet

Maintain a healthy weight

Talk to your doctor if the symptoms are affecting your daily activities

Add magnesium supplements to your diet

Take your medications as advised

Follow up as advised by the doctor

Here are some daily food habits you should follow if you have or are prone to developing kidney stones.

Click Now

Frequently Asked Questions

Can kidney stones damage my kidneys?

What is a ureteral stone?

What happens if I keep developing stones?

Are silent kidney stones dangerous?

What are the long-term effects of having too many stones?

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Back pain

Also Known as Lumbago, Sciatica, Backache, Back trouble, and Slipped disk

Overview

Back pain is one of the most common pain complaints that almost everyone has had at some point in their lives. This pain is felt in the back of the body, stretching from the shoulders to the hips.

Back pain can be either acute or chronic. When pain strikes suddenly and lasts for a few days, it is referred to as "acute." Symptoms are typically sudden and transient. Chronic back pain lasts for more than three months and returns regularly, making daily activities difficult.

Increasing age is a significant risk factor for back pain. Factors like injuries, inactive lifestyle, poor posture, illness, strains, injuries, and fractures can contribute to back pain.

It can be prevented by lifestyle modifications, like being physically active, losing excess body weight, maintaining good posture, managing stress, and getting adequate good quality sleep.

Most cases of back pain can be managed by over the counter medications and topical ointments. However, in case of chronic back pain, it is important to seek medical treatment to avoid long-term complications.

Key Facts

Usually seen in

Adults above 35 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Back

Buttocks

Legs

Prevalence

Worldwide: 95% (2019)

India: 75% (2015)

Mimicking Conditions

Kidney stones

Endometriosis

Fibromyalgia

Lumbosacral muscle strains/sprains

Lumbar spondylosis

Disk herniation

Spondylolysis

Spondylolisthesis

Vertebral compression fracture

Spinal stenosis

Tumor

Infection

Fracture

Necessary health tests/imaging

Imaging tests: X-ray, CT Scans , MRI & Electromyography.

Blood tests: Complete blood count, Urinalysis & Erythrocyte sedimentation (ESR)

Treatment

Medications: Ibuprofen, Codeine & Hydrocodone

Topical pain creams: Topical Diclofenac & Trolamine Salicylate

Surgery

Cortisone injections

TENS (transcutaneous electric nerve stimulation) therapy

See All

Symptoms Of Back Pain

The main symptom is an ache or pain anywhere in the back. Pain may be described as a shooting, burning, or stabbing sensation. In addition, the pain may sometimes radiate down to the buttocks and legs or worsen with bending, twisting, lifting, standing, or walking. It may also occur along with other symptoms such as:

Back inflammation

Fever

Warm area on the back

Swelling on the back

Loss of control

Numbness and tingling sensation

Chills

Weakness

Increased sensitivity towards pain

Difficulty in walking without support

Bowel or bladder changes

Nerve pain

Muscle spasm

Unexplained weight loss

Pain awakening the patient from sleep

Have you ever thought that poor posture can cause tension headaches and pain in the back of your head? Try these 6 easy tips to get relief from back pain.

Read Now!

Causes Of Back Pain

The human back comprises many parts, including muscles, ligaments, tendons, discs, and bones, all of which work together to support the body and allow it to move. Disks are cartilage-like pads that support the spine fragments. Issues with any of these components can cause back pain.

1. Strain

Excessive strain or trauma can cause damage to the back. For example, improperly lifting something or lifting something too heavy. Other causes that can strain the back include:

Poor posture

Excessive exercise

Prolonged sitting and lying down

Sleeping in an uncomfortable position

Obesity

Pregnancy

Muscle or ligament strain

Spasm of a muscle

Muscle tenseness

Damages disks

Falls or fractures

Understand more about causes of obesity, that you need to be aware of.

Tap Now!

2. Structural problems

A variety of structural issues can also cause back pain. They include:

Ruptured discs: Each vertebra is cushioned by discs. If the disc ruptures, there will be increased pressure on a nerve, resulting in back pain.

Bulging discs: A bulging disc can put more pressure on a nerve, causing back pain.

Sciatica: It is a sharp and shooting pain usually caused by a bone spur or herniated disc pressing on the nerve and radiating through the buttock, down the back of the leg along the sciatica nerve.

Arthritis: It can cause pain in the lower back, joints of the hips, and other areas.

Scoliosis: It is a condition in which the spine curves to the side resulting in back pain.

Osteoporosis: Brittle and porous bones, including those of vertebrae of the spine, can cause compression fractures resulting in back pain.

To know more about osteoporosis:

Click Now!

3. Inflammation

Inflammation can cause back pain localized to the axial spine (lower back) and sacroiliac joints (situated where the lower spine and pelvis connect). It is usually chronic in nature. Conditions that can cause this include:

Ankylosing spondylitis: It is an inflammatory disease that, over time, can cause some of the bones in the spine (vertebrae) to fuse.

Sacroiliitis: It is an inflammation of one or both of the sacroiliac joints. Sacroiliitis can cause pain in the lower back or buttocks and can extend down one or both legs.

Tuberculous spondylitis: Also known as Pott disease, it is a rare disease associated with the gradual onset of progressive back pain.

4. Tumors

Patients experience intense back pain in malignancies (cancer) that have metastasized (spread) to the spine like:

Lung cancer

Stomach cancer

Breast cancer

Prostate cancer

Certain tumors in the spinal cord like:

Multiple myeloma (cancer of white blood cells)

Neuromas (tumor in the nerves)

Angiomas (tumor in the blood vessels)

Read more about 8 common signs of cancer.

Click Here!

5. Degeneration

It is usually seen in construction or heavy load workers as their age advances. Degeneration of the lumbar spine and surrounding tissues can lead to the development of the following which eventually leads to back pain:

Spondylosis deformans: It is characterized by the presence of bony spurs or osteophytes along the edges of the bones of the spine.

Lumbar intervertebral disc degeneration: It is marked by the breakdown of one or more of the discs that separate the bones of the spine.

Lumbar non-spondylolysis spondylolisthesis: It occurs when one vertebra slips out of place onto the vertebra below it.

Ankylosing spinal hyperostosis: It is a fusion of the vertebral column resulting from the formation of bone tissues in the ligaments without significant disc disease or joint involvement.

Lumbar spinal stenosis: It is a narrowing of the spinal canal in the lower part of your back.

6. Infections

Some infections can also lead to back pain. These include:

Infection of the spine and discs

Epidural abscesses (the fluid-filled cavity between the bones of the spine)

Muscular/soft tissue abscesses

7. Pregnancy

Studies have shown that the majority of women experience back pain, which affects their daily activities, quality of life, and ability to work. It is due to weight gain during pregnancy, an increase in the size of the stomach, and the consequent shifting of the body gravity center that increases the strain, especially on the lower back.

Read about the top 5 tips that every pregnant woman should know.

Click Here!

8. Other causes

In addition to diseases that arise in the structures of the back, pain can be referred to the back due to disorders involving the organs like:

Liver

Gallbladder

Pancreas

Uterus

Ovaries

Urine bladder

Are you suffering from back pain? Know the reasons!

Click Now!

Risk Factors For Back Pain

A variety of factors can put you at risk for back pain. Following are the risk factors that can increase your chances to suffer from back pain:

1. Age

Individuals ≥35 years are found to have significantly more risk as compared to those less than 35 years.

2. Gender

Women are more prone to developing back pain when compared to men.

3. Genetics

Research also shows that the genetic component plays a significant role in chronic and disabling lower back pain.

4. Lifestyle factors

The following lifestyle factors are also associated with back pain:

Lack of exercise leading to overweight/obesity

Smoking

Poor sleep quality

Awkward posture

Excessive alcohol consumption

Physical activities like lifting heavy objects

Excessive strenuous exercises

5. Comorbidities

Chronic conditions, such as asthma, headache, diabetes, and mental health problems, can increase the likelihood of developing pain, especially in the lower back area.

6. Related symptoms

Previous episodes of pain, high initial pain intensity and repeatedly occurring radiating pain can increase the risk of chronic back pain.

7. Psychological factors

Psychological factors that act as a risk factors for back pain include:

Depression

Anxiety

Catastrophizing (considering any situating is worse than it actually is)

Low self-esteem

Fear avoidance

8. Occupation

The prevalence of musculoskeletal disorders is found to be higher in the following:

Coal miners

Truck drivers

Gold smiths

Manual laborers

Farmers

Nurses

Office workers

These factors affecting the intensity and duration of back pain depend on:

Workload

Number of hours of work

Tenure of work

Weightlifting

Bending

Twisting

Sitting for long hours

9. Socioeconomic status

Low socioeconomic status with low income and education are related to chronic back pain because of lower health literacy, and lack of health care facilities.

Long working hours can be a cause of back pain! People who spend most of their day at work, especially a desk job using laptops and smartphones, tend to sit for longer periods of time which can lead to chronic back pain.

Read some tips to prevent work-related back pain.

Read Now!

Diagnosis Of Back Pain

Back pain is usually diagnosed after asking the individual about his/her symptoms and by:

1. Physical examination

The doctor examines the back to check if one can walk, sit, stand and lift your legs. The intensity of the pain is rated on a scale of one to ten. The doctor may further advise one or more of the following tests to diagnose the condition.

2. Imaging tests

X-rays: They are done to evaluate any fractured bones, or arthritis.

CT scan: It is used to detect any issues with the bones, muscles, tissue, nerves, ligaments, and blood vessels of the back.

MRI: It is used to identify any structural abnormalities.

Electromyography: This test can confirm nerve compression caused by herniated disks or narrowing of the spinal canal.

3. Blood tests

The following tests are done if an infection is suspected to be causing back pain:

Complete blood count

Urinalysis

Erythrocyte sedimentation (ESR)

Get your lab tests done with us, where the patient’s comfort and safety are the utmost priority.

Book Now!

Celebs affected

Anushka Sharma

Anushka Sharma had a back disc issue while promoting her film Sui-Dhaga. The actress took good care of herself and carried on to promote the movie.

Usain Bolt

The Olympic track star was born with a curvature in his spine. However, it did not stop him from pursuing his dreams.

Prevention Of Back Pain

It is important to keep the back muscles strong to avoid any back pain. The following lifestyle changes can help you do the same:

Exercise regularly: Physical activity, such as back strengthening exercises, can help reduce inflammation and muscle tension. Yoga also helps to improve strength, balance, flexibility, and proper posture.

Maintain a healthy weight: A healthy weight can help to prevent or control back pain.

Know about healthy weight loss tips!

Read Now!

Quit smoking: Smokers are more prone to back pain because smoking reduces nutrient-rich blood flow to the spinal discs. Hence quitting smoking is always a great option.

Want to quit smoking? Read about 7 ways to do so.

Click Here!

Avoid heavy lifting: If you can't avoid it, keep your back straight while lifting. Allow your legs to do the work. Only bend at the knees. Maintain a close grip on the weight.

Correct the postures: This can be done by following these simple tips:

While sleeping: Sleep on one side with the knees pulled up slightly towards the chest.

While standing: Stand with the heels against a wall, the calves, buttocks, shoulders, and back of the head should all touch the wall. If the posture changes when you take a step forward, it is time to correct it.

While sitting on a chair: Keep the back straight or support the low back. One can also place the legs on a stool so that the knees are slightly higher than the hips.

While using a laptop: Place the laptop on the desk while using it. Do not lean forward. Bending forward puts pressure on the vertebrae in the neck which can cause headaches and pain in the back and neck.

While typing on phone: Do not type on the phone for more than a few minutes at a time. While typing on the phone, one bends the head and curves the spine, putting strain on the neck and back.

Take a break: Every 10 minutes, take a 20-second break. Stand for at least 2 minutes and stretch. This makes the tight and stiff joints relax and increases blood flow.

Wear comfortable footwear: High heels can cause back pain by shifting the center of gravity. Hence it is advised to avoid them and wear comfortable footwear.

Eat a well-balanced diet: Make sure to get enough calcium in the diet, as it is essential for bone health. A healthy diet also aids in weight management.

Focus on the core: Strong core muscles can reduce the likelihood of back injury.

Note: Change your shoe. Muscle strains in the back, legs, and neck are caused by ill-fitting and wearing shoes.

To shop for comfortable ortho shoes and other healthcare devices, visit:

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Specialist to Visit

If you experience the signs and symptoms of back pain, make sure not to ignore them and consult your doctor. You can take over-the-counter (OTC) painkillers for relief from the pain. If the pain doesn't subside even after three days, you should consider immediate medical attention.

Specialists who can assist with back pain management include:

Orthopedists

Rheumatologists

Neurologists

Orthopedic doctors and surgeons can treat neck, spine, disc-related pain, or other common back pain complaints. Rheumatologists help you if you are diagnosed with arthritis. Neurologists can help in managing severe sciatica and other back pain problems caused by nerve involvement.

Consult India’s best doctors online!

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Treatment Of Back Pain

Back pain usually improves after a month of home treatment. Back pain is a complex ailment that affects everyone differently. Many people's discomfort lasts for months, but only a few people suffer chronic, severe pain. In such case, various types of treatment can provide relief such as:

Heat and cold treatments

These treatments are recommended to relieve aching pain by applying a hot compress or an ice pack to the sore spot. To stimulate blood flow and healing, use a cold pack for the first 24 to 48 hours after an injury, then switch to heat therapy. Packs should not be worn for longer than 20 minutes at a time.

Medications

Pain relievers sold over the counter (OTC) and various non-steroidal anti-inflammatory drugs may help provide relief.

Ibuprofen

Codeine

Hydrocodone

Order medicines at the comfort of your house and get them delivered at your doorsteps.

Click Here!

Topical pain medications/creams

Come in the form of gels, gel patches, sprays, or foams that can be applied directly to the affected area of your back. They include:

Topical diclofenac: This is a topical NSAID used to treat arthritis symptoms such as pain, swelling, inflammation, and stiffness.

Trolamine salicylate: This topical pain reliever cream is frequently prescribed for arthritis pain. It has a chemical structure that is similar to aspirin and has a mild anti-inflammatory effect.

Cortisone injections

If previous treatments don't work and the pain radiates down the leg, the doctor may inject cortisone, a powerful anti-inflammatory steroid, along with a numbing agent into the region around the spinal cord (epidural space). Although a cortisone injection can help reduce inflammation around the nerve roots, the pain alleviation is usually temporary.

Transcutaneous electric nerve stimulation (TENS)

A TENS machine is a small, battery-operated device that has leads connectd to sticky pads called electrodes. It sends electrical impulses to specific nerves, blocking pain signals.

Surgery

Surgery may be beneficial in case of unrelenting pain with radiating leg pain or developing muscle weakening as a result of nerve compression. These procedures are usually reserved for pain that hasn't responded to prior treatments and is caused by structural issues such as the constriction of the spine (spinal stenosis) or a ruptured disc.

Know more tips on how to manage back pain.

Read this!

Home-Care For Back Pain

There are numerous home remedies and traditional back pain relief treatments that can help keep your back in good shape. Always consult your doctor before taking any new medication.

1. Heat/ice therapy

In the acute phase of back pain, ice packs may relieve discomfort and help reduce inflammation. Please keep in mind not to apply ice directly to the skin. Wrap it in a thin towel or gauze. Warm compresses may also be used to relieve pain after the inflammation has subsided. Hence, it is advised to use alternate heat and cold therapy.

2. Exercise

Exercise can reduce the intensity of pain in chronic back pain. Along with this it has multiple benefits like:

Increases back flexibility

Increases back strength

Improves cardio-vascular endurance

Keeps mind calm and can help in managing pain

Walking is one of the easiest forms of exercise. Know more about the health benefits of walking for 30 minutes daily.

Read this!

3. Use oils and creams

For pain relief, menthol-containing pain relief creams give a cooling effect that temporarily relieves back pain.

4. Get enough rest

Simply not getting enough rest and sleep may result in back pain. If you sleep on one side, you should put an extra pillow between your knees for additional support.

5. Reduce stress

Muscle tension and pain can be brought on by stress. Stress-relief techniques such as meditation, deep breathing, and yoga can be tried.

6. Get proper support while working and sleeping

Poor posture can often lead to a stiff and tense back, leading to back pain. Try these tips instead:

Sit up straight while using your laptop

Use cushioned chairs

Have a comfortable desk and chair if you need them while working

Sleep on your back, with a pillow or rolled towel under your knees.

Maintain healthy body weight

Excess weight especially affects the pelvis, back, and knees. Losing weight reduces the strain on the lower back muscles.

Read about 5 weight loss tricks that can work for you.

Read To Know

Here are some quick do’s and don’ts you need to follow to keep your back healthy and happy:

Do’s

Straighten your back while sitting or standing

Lift correctly

Exercise regularly

Quit smoking

Keep moving

Maintain a healthy diet

Stay hydrated

Don’t

Do not sleep on your stomach

Do not sit for too long

Do not skip your exercise

Do not overload your back

Do not wear high heels

Don’t be a slouch

Learn home remedies that can help you with your back pain.

Click To Read!

Complications Of Back Pain

Chronic back pain can cause a variety of health issues which can be divided into the following:

Physical complications

Reduction in activity: Severe back pain is the top reason for people missing work. Chronic back pain makes it difficult to sit, stand, or bend for long periods of time.

Weight gain: Chronic pain prevents an individual from exercising regularly, which is an essential component of living a healthy lifestyle. Weight gain is inevitable when one's movement is restricted due to back pain.

Loss of bone density: Loss of bone density is caused by an increase in weight and a decrease in muscle mass. Over time, this can affect the overall posture.

Muscle tissue loss: This occurs when movement is restricted due to increased pain, which reduces activity, increases weight, and reduces muscle mass.

Insomnia/inability to sleep: Severe pain disrupts a person's sleep pattern, leading to insomnia. Not getting enough sleep can also lead to a bad mood, making it difficult to deal with day-to-day events.

Deformity: Back pain can create the form of a hump, also known as swayback, in which the back curves inward instead of outward.

Bladder and bowel problems: Chronic back pain can affect the sacral nerves (nerves in the lower back) that influence the proper excretion of urine and stool.

Psychological complications

Back pain can cause psychological complications that can be assessed by:

Decreased productivity

Increased absenteeism at work

Increased irritability and agitation

Difficulty in concentrating

Did you know?

Covid-19 is a respiratory infection that usually causes symptoms like fever, cold, cough and fatigue. However, an increasing number of people also complain of lower back pain after getting infected. It is mainly due to the inflammatory response caused by the Covid-19 virus. Read more about Covid-19.

Tap To Read!

Alternative Therapies For Back pain

1. Ayurveda

Ayurveda recommends the use of herbs like Guggul, Nirgundi, Shallaki, and Ginger to treat back pain. The nature of the disease determines the type, duration, and course of ayurvedic treatment.

2. Yoga

It is an excellent way to stretch your back. It improves the health of your muscles and joints, improves the distribution of healing nutrients through blood circulation, and increases spinal flexibility.

Some simple yoga postures that can help relieve back pain include:

Child’s pose

Bridge pose

Upward facing dog

Touching the toes

Cobra pose

Cat-Cow pose

Read more about 5 simple yoga asanas to help you with back pain.

Click Now!

3. Acupuncture

Acupuncture is the practice of inserting thin needles into your skin at specific points to relieve pain. Based on studies acupuncture is clinically effective in pain relief and functional improvement. It as an adjunct to conventional therapy provides short-term clinically relevant improvements in pain and functional measures for the treatment of chronic low back pain.

4. Massage therapy

Massage therapy can provide significant healing and pain relief for many lower back problems. Getting massage therapy regularly will help you. Massage therapy targets the muscles that are strained and causing pain.

5. Tai Chi

Research shows that the slow, focused movements of Tai chi in addition to deep breathing can ease back pain. It has other benefits that include:

Strengthens the muscles in the abdomen and pelvic

Improves balance and flexibility

Increases awareness of posture when sitting, standing, and walking

Decreases stress and anxiety

Improves mood

Enhances quality of sleep

6. Chiropractic treatment

A chiropractor is a healthcare professional dedicated to the non-surgical treatment of disorders of the nervous system and/or musculoskeletal system. The primary focus is on the spine. Generally, chiropractors maintain a unique focus on spinal manipulation and treatment of surrounding structures.

7. Meditation

This is an excellent method for improving concentration, releasing feel-good hormones (endorphins), and reducing anxiety and stress. You can control how your body perceives pain by practicing mindful meditation. Simple breathing exercises are also beneficial.

Read how meditation can benefit your life.

Click Now!

8. Cognitive behavioral therapy

This is a treatment approach that helps you recognize negative or unhelpful thought and behavior patterns. This therapy is recommended to treat psychological factors such as mood disorders like depression related to back pain.

Living With Back Pain

If you suffer from back pain regularly, you can manage it with a few lifestyle changes and posture corrections. However, if you have chronic back pain, you should consult your doctor to determine the severity of your condition and the best treatment approach to combat back pain and keep it from worsening.

In addition, here are a few changes that can help you to manage and prevent back pain-

Keep an ideal weight according to your height and have a diet rich in calcium, vitamins, and minerals.

To keep your spine straight, sleep on a medium-firm mattress.

Do not sit for an extended time in one place, and avoid bed rest for a long duration.

Always perform a warm-up exercise or whole-body stretches before engaging in physical activity, such as walking or gardening.

When lifting an object, bend your knees slightly to avoid straining your back muscles, and also, the object you are lifting should be kept closer to you. Twisting also hurts you.

Stop smoking. Blood flow is impaired during smoking, reducing oxygen and nutrient supply to the spinal tissues.

Make sure that your workstation is ergonomically correct

Try coping strategies that are passive in nature and can help you to manage pain independently.

Start pain-related behavior, which is a set of behaviors that are gradually learned and influenced by emotions and cognitions.

Did you know?

Sleeping with a pillow between your knees can help with back pain relief. Just sleeping on one side will not get your pain down. The trick is to keep the pillow between your knees. This will keep your hips, pelvis, and spine in proper alignment. Read about which is the correct side to sleep.

Read Now!

Frequently Asked Questions

Why is back pain a common problem?

When my back hurts, I try to keep my movements to a minimum. Is that all right?

What is the distinction between a herniated disc, a slipped disc, a bulging disc, and a ruptured disc?

Is surgery the only truly effective treatment for back pain?

Is there a link between a headache or pain in the back of the head and back pain?

Is it possible to get rid of back pain for good?

What structure in the back translates literally to "horse's tail?"

Does osteoporosis affect the spine?

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Lactose intolerance

Also known as Lactose malabsorption and Lactose maldigestion

Overview

Lactose is a type of sugar that is present in mammalian milk and milk products. Lactose intolerance is a condition that is characterized by symptoms such as abdominal pain, bloating, loose stools, nausea, and cramps after consuming lactose containing food.

The major cause of lactose intolerance is the deficiency of the lactase enzyme which is responsible for its digestion.

Most people start avoiding milk as soon as lactose intolerance is confirmed. However, it is not suggested as it can lead to nutritional deficiency. Individuals with lactose intolerance should restrict the intake of lactose instead of avoiding it. This can be done by adding low dose lactose foods in the diet such as cheese, yogurt, and lactose hydrolyzed milk.

Key Facts

Usually seen in

Adults

Gender affected

Both men and women

Body part(s) involved

Digestive tract

Mimicking Conditions

Irritable bowel syndrome

Celiac disease

Tropical sprue

Cystic fibrosis

Inflammatory bowel disease

Diverticular disease

Intestinal Neoplasm or polyp

Excessive ingestion of laxatives

Viral gastroenteritis

Bacterial infection

Giardiasis

Gastrinoma

Necessary health tests/imaging

Lactose breath test (hydrogen breath test)

Lactose tolerance test

Stool acidity test

Milk tolerance test

Bowel biopsy

Treatment

Dietary modifications

Lactase enzyme

Probiotics

Specialists to consult

General physician

Gastroenterologist

Paediatrician(Children)

Symptoms Of Lactose Intolerance

The symptoms of lactose intolerance usually begin 30 minutes to 2 hours after consuming lactose-containing products. The undigested lactose build up in the intestine and cause:

Abdominal pain

Bloating

Loose stools

Flatulence

Borborygmi (a rumbling or gurgling noise made by the movement of fluid and gas in the intestines)

Fullness

Rarely, the individual may also experience:

Nausea

Vomiting

Headache

Constipation

Muscle pain

Joint pain

The malabsorption of lactose produces several toxic chemicals such as acetone, acetaldehyde, ethanol, and peptides. This can lead to the appearance of some extra-intestinal symptoms which include:

Memory deterioration

Musculoskeletal pain

Depression

Anxiety

Mouth ulcers

Heart rhythm disorders

Vertigo

Did you know?

The amount of lactose usually required to produce symptoms of lactose intolerance is about 8 to 12 oz (236 to 354 ml). However, the amount may vary from person to person.

Causes Of Lactose Intolerance

What is lactose?

Lactose is a type of sugar present in the milk of humans and mammals except for sea lions and walruses. It is also present in the products derived from milk such as cheese and yogurt. Breast milk and cow’s milk contain approximately 7.2 g of lactose per 100 ml and cow’s milk contains about 5g of lactose per 100 ml respectively.

During infancy, it provides a very good source of energy that helps in overall growth and development.

Interesting fact!

Lactose is the only sugar that does not increase the risk of dental caries.

How does the lactose digested and absorbed in the body?

The enzyme lactase present in the small intestine plays a very key role in the digestion of lactose.

Lactose contains two types of sugar molecules i.e. glucose and galactose. In the small intestine, lactose is broken down into these two simple sugars. The glucose is absorbed in the body and used as an energy source.

How does lactose intolerance take place?

The main cause of lactose intolerance is the deficiency or the inactivity of the lactase enzyme.

What happens if Lactose is not digested?

Accumulation of lactose in the large intestine

Bacteria present in the large intestine ferments lactose and produce gasses including hydrogen (H2 ), carbon dioxide (CO2 ), methane (CH4 ) and short-chain fatty acids (SCFA).

These gases affect the GI function and manifest as the symptoms mentioned above.

What is the difference between lactose intolerance and cow’s milk allergy?

Cow’s milk allergy is a type of immune mediated reaction unlike lactose intolerance which occurs primarily due to the deficiency in lactase enzyme. The symptoms of lactose intolerance start to appear at 5-6 years of age in contrast to milk allergy which peaks during the first year of life.

The distinguishing symptoms are skin rashes and swelling of the lips, tongue, and palate which are very less likely to appear in lactose intolerance.

Types Of Lactose Intolerance

There are four type of lactose intolerance depending upon the cause:

Congenital lactose intolerance

The congenital form is very rare and characterized by absent or reduced activity of lactase enzyme from birth.

It is a lifelong disorder that is manifested through the very first time the infant consumes either breast milk or formula.

Developmental lactose intolerance

It is seen in premature infants who are born at 28 to 37 weeks of gestation.

The premature infants have an underdeveloped intestine which leads to malabsorption of lactose.

Primary lactose intolerance

It is the most common cause of lactose intolerance, also known as adult type lactase deficiency.

Normally, there is a gradual decline in lactase enzyme activity after weaning –the process of switching an infant's diet from breast milk or formula to other foods and fluids. But, in some individuals the activity of the lactase enzyme persists in adulthood also. Those in which the activity does not persist will lead to lactose intolerance.

Secondary lactase deficiency

It occurs later in life due to some gastrointestinal illness such as gastroenteritis, giardiasis, or celiac disease.

These diseases damage the brush border of the small intestine that contains lactase enzymes.

It is usually reversible.

Risk Factors For Lactose Intolerance

Lactose intolerance is a non-preventable disease. But, there are following risk factors can initiate lactose intolerance or increase its severity:

Age: The risk of lactose intolerance is usually more in adulthood.

Race: Asians, Americans, Hispanics, are more prone to lactose intolerance.

Genes: Genes may also predetermine the production of lactase enzymes as well as gut microbiome, predisposing some to lactose intolerance. However, it is rare that someone is born with a lactase deficiency.

Premature birth: The premature babies have a high risk of lactose intolerance due to inability of the underdeveloped intestine to digest lactose.

Composition of gut microbiota: Certain bacteria present in the intestine ferment the lactose. The fermented products produce gas that increases the chances of developing symptoms of lactose intolerance.

Listen to our expert about tips to improve gut health.

Watch Now

Amount of lactose consumed: The severity of symptoms can be increased as the amount of lactose consumed is increased.

Food accompanying dairy products: The chances of developing symptoms are also increased if the lactose containing food items are taken alongwith the high protein and fatty food such as meat and fish. These foods stay longer in the large intestine and trigger the symptoms.

Gastrointestinal diseases: Some diseases may affect the brush border cells of the intestine. This can lead to the damage of lactase enzymes which can eventually cause lactose intolerance. The diseases include:

Celiac disease

Small intestinal bacterial overgrowth (SIBO)

Gastroenteritis

IBS-D

Cystic fibrosis

Inflammatory bowel disease (IBS)

Enterocolitis

Anxiety disorders: It is also seen that anxiety and depression also increases the possibility of developing lactose intolerance.

Cancer treatment: This risk of lactose intolerance increases if the individual has undergone chemotherapy or radiation therapy for the cancer of the stomach or intestine.

Diagnosis Of Lactose Intolerance

The diagnosis of lactose intolerance requires assessing the medical, family, and dietary history of the patient. The understanding of clinical history also helps in revealing the association between the ingestion of lactose and occurrence of symptoms.

Medical history is followed by physical examination in which signs of abdominal pain, tenderness, and bloating are evaluated.

The commonly used tests for the diagnosis of lactose intolerance include:

1. Lactose breath test (hydrogen breath test)

This test is most commonly used for the diagnosis of lactose intolerance. It involves breathing into a balloon-type container every 30 minutes over a few hours, to measure the amount of hydrogen in the breath. High amount of hydrogen gas indicates the presence of undigested lactose, a marker of lactose intolerance.

However, certain factors can affect the test result by altering the intestinal bacteria flora:

Use of some specific medications oral antibiotics, proton pump inhibitors, and aspirin

Abuse of laxatives (stool softeners)

Invasive procedures that require bowel cleansing with enemas

Use of probiotics before the test

Consumption of some foods such as beans, corn, white wheat, potatoes, and oats

2. Lactose tolerance test

This test measures the amount of glucose at regular intervals after consuming 50 gm lactose containing liquid. Readings are taken at 0, 60, and 120 minutes. The failure of the blood glucose levels to rise by 20g may indicate lactose intolerance.

The test has good sensitivity except in some conditions such as diabetes and small bacterial overgrowth. However, the test is useful in instances where there is absence of bacteria that does not produce hydrogen and hydrogen breath test can not be utilized.

Note: The measurement of breath hydrogen after ingestion of 25 to 50 g of lactose is more sensitive and specific than the lactose intolerance test.

3. Milk tolerance test

Normally, lactose is digested and absorbed as glucose. Lactose intolerance is characterized by malabsorption of glucose. In this test, 500 ml of milk is given to the individual followed by testing of blood sugar. A rise in blood sugar of less than 9 mg/dl indicates lactose intolerance.

4. Stool acidity test

This test measures the pH of stool. Lactose intolerance is characterized by decrease in the pH of the stool.

5. Bowel biopsy

In this, a small portion of the small intestine is removed for examination. Any damage in the cells of the small intestine that produce lactase enzyme is checked. This test is invasive and hence it is rarely performed. It is also used to rule out secondary causes of lactose intolerance.

Celebs affected

Kiara Advani

Kiara Advani, famous Indian actress revealed in an interview that she is lactose intolerant.

Try this at home!

Try eliminating lactose-containing foods from your diet. The absence of symptoms after removing such foods from the diet could indicate lactose intolerance. Consult your healthcare provider for further investigations and confirmation of diagnosis.

Click Here

Specialist To Visit

The symptoms of lactose intolerance resemble several other conditions such as irritable bowel syndrome (IBS) and milk protein allergy. So, it is very important to consult a doctor to confirm the disease.

When to see a doctor?

The doctor consultation is required if:

You are experiencing serious symptoms such as constant fatigue, joint pain, and headaches.

Your health is not improving even after cutting out lactose from your diet

Preparation for the appointment

Lactose intolerance is a disease that is based on dietary intake of lactose. So, it is very important to understand the occurrence of symptoms after consuming lactose-containing foods.

Keep a track of the number of servings of dairy foods such as milk, yogurt, cheese, and ice cream

Prepare a list of medicines and supplements that you are taking

Maintain a record of symptoms after taking dairy products

Record the information regarding disappearance of symptoms after cutting dairy products.

Doctors that can help you with this are:

Gastroenterologist

Pediatrician

Nutritionist

Gastroenterologists specialize in diagnosing and managing digestive disorders like lactose intolerance. They also help to manage the conditions such as inflammatory bowel disease and celiac disease that may trigger lactose intolerance.

Parents of lactose-intolerant children can seek treatment from Paediatricians.

While, nutritionists can help in optimizing the diet for lactose intolerance.

Consult India’s best doctors online.

Consult Now

Prevention Of Lactose Intolerance

Lactose intolerance is predominantly a genetic condition without many modifiable factors. However, dietary modification plays a crucial role in the avoidance of symptoms associated with lactose tolerance.

Studies suggest that adults can consume up to 12 g of lactose in a single dose with no or minimal symptoms. So, it is always advisable to look at the content of lactose in the serving before having. The following list includes food items to be limited and those that are allowed:

Foods to limit

All kinds of milk: whole, low fat, non-fat, cream, powdered, condensed, evaporated, goat, acidophilus, and chocolate

Milk products like butter, cottage cheese, ice cream, creamy/cheesy sauces, cream cheeses, soft cheeses (brie, ricotta), mozzarella, whipped cream, frozen yogurt

Milk and food items made from milk are not the only source of lactose. Lactose is also added in several foods to incorporate sweetness and softness. Individuals with severe intolerance should be aware about these products. Such food items with ‘Hidden Lactose’ include:

Milk Bread

Baked goods like muffins, biscuit, waffle, pancake

Processed breakfast cereals

Mixes for cakes, pancakes, biscuits, and cookies

Instant potatoes, soups, and breakfast drinks

Margarine

Salad dressings

Candies and other snacks

Foods allowed

Lactose-free milk, soy milk

Lactose-free dairy, hard cheeses (Parmigiano Reggiano, Pecorino, Grana Padano, fontina, taleggio, provolone, Swiss), gorgonzola

Fruits and vegetables

Legumes

Cereals

Meat, fish, and eggs

Learn more about healthy food substitutes for people with lactose intolerance.

Read Along

Treatment Of Lactose Intolerance

The treatment approach of lactose intolerance should be aimed to provide symptomatic relief along with improving the metabolism of lactose.

Objective of treatment

To provide symptomatic relief

To increase the absorption of lactose

To avoid the nutritional deficiencies of restricted diet

To treat the underlying condition in people with secondary lactase deficiency

Treatment approaches

Minimizing the lactose intake

Using alternative nutrient substitutes

Using enzymatic supplements or lactase supplements

Retaining the amount of calcium and Vitamin D

Dietary modification

The maximum tolerable dose of lactose is identified. This is done by avoiding lactose-containing dairy products for 2-4 weeks. It is followed by a reintroduction of dairy products that are low in lactose. The dose is gradually increased to determine the tolerable which the individual can safely consume without the occurrence of symptoms.

Foods to be limited and those that are allowed have been discussed in the prevention section.

Lactase enzyme supplements

Patients with mild lactose malabsorption may benefit from using lactase enzyme supplements. These supplements are taken whenever food containing lactose is consumed.

The main advantage of this treatment approach is that individuals can consume dairy products. This will not deprive the patient from nutritional benefits of milk products and avoid the risk of osteoporosis and other bone related disorders.

Probiotics

Probiotics contain lactase-producing bacteria that help in the digestion of lactose.

A significant amount of reduction is seen in the symptoms of lactose intolerance due to probiotics.

Here are some more health benefits of probiotics!

Read Now

Nutritional supplements

Dairy foods are a very rich source of calcium. It also contains proteins and magnesium along with several other minerals.

Lactose-free diets help in managing the symptoms but it will also abstain the person from nutritional benefits of the dairy products. So, it is important to augment the diet with other rich sources or supplements.

Order vitamin and mineral supplements from the comfort of your home.

Shop Now

Home Care For Lactose Intolerance

A few home remedies help in reducing the severity of symptoms that are associated with lactose intolerance. These include:

Cocoa powder: Research suggests that cocoa powder aids in the digestion of lactose by reducing the emptying time of the stomach. So, it helps to ease symptoms such as abdominal pain, nausea, and vomiting associated with lactose intolerance.

Apple cider vinegar: It aids in the digestion of lactose. It also helps to curb digestive problems associated with lactose intolerance due to its acid-neutralizing effect.

Ginger (Adrak): It is a very useful home remedy to alleviate symptoms such as nausea and gas associated with lactose intolerance.

Chamomile tea: It helps in reducing bloating by neutralizing stomach acid.

Yogurt: It is highly rich in good bacteria and helps in the digestion of dairy products.

Did you know?

Fermented foods such as idli and dosa help in creating helpful bacteria in the digestive system. The consistent intake of such foods aids in reducing the symptoms of lactose intolerance.

Complications Of Lactose Intolerance

Dairy products, especially milk, are a very good source of calcium, vitamins (A, B12, and D). Restricting these products can lead to several complications such as:

Osteopenia (weakening of the bones)

Osteoporosis (severe case of bone loss)

Malnutrition

Weight loss

Rickets (condition that affects bone development in children)

Growth failure or delay

Alternative Therapies For Lactose Intolerance

Homeopathy

Homeopathy has shown promise in the management of symptoms related to lactose intolerance. Some of these homeopathic medications include Magnesia muriaticum, Aethusa cynapium, Apis mellifica, and China officinalis.

Living With Lactose Intolerance

The cases of lactose intolerance are on a rise. The following adjustments in daily life may prove to be beneficial:

Restrict instead of avoid

Studies suggest that lactose-intolerant people can tolerate the following amount of lactose:

Up to 12 g of lactose at once (about 250 ml of milk)

Up to 24 g of lactose spread out across the day (about 500 ml of milk)

Most of the guidelines recommend the intake of tolerable amounts of lactose instead of completely eliminating lactose from diet. This helps in maintaining the optimum levels of calcium and Vitamin D. The following measures can be taken while consuming lactose-based products:

Add low-dose lactose-based foods such as cheeses and lactose-hydrolyzed milk products.

Eat fermented products to your diet since they are a good source of probiotics. It exerts beneficial effects on gastrointestinal microflora.

Identify the tolerable dose

The tolerable dose of lactose is different for every individual. The following steps can be followed to identify the dose:

Go on a temporary lactose-free diet to obtain remission of symptoms

Introduce foods that have low lactose content and gradually increase the dose to determine the tolerable dose.

Find the right alternatives

Some low lactose-based foods such as yogurt can also cause symptoms in a few patients. This is due to the varying amount of lactose in different types of yogurt. Greek yogurt has the least amount of lactose and can be safely consumed.

Plant-based alternatives are also available and can be consumed as per the individuals’s palatability and nutritional balance. Lactose-free vegan diets are increasing in the market due to their demand. There are several milk substitutes such as soy, almond, and rice milk which are completely lactose-free.

Eat in conjunction with other food

Lactose-intolerant people are advised to have dairy products along with other food items to reduce the symptoms of lactose intolerance. This is because other food items slow down the digestion process in the stomach.

Split the dairy foods

The low-dose lactose-containing food also should be divided into meals rather than eating in one go. This also helps in alleviating symptoms even after eating lactose.

Read the labels

Most of the individuals are aware of the milk and dairy products that contain lactose. But, lactose powder is also used in several packaged foods to enhance their flavor. So, it is very important to read the labels of all packaged food items.

Check on your vitamin and mineral intake

As dairy products are not an essential part of diet but they contain a lot of calcium along with other minerals. Calcium is required for the proper growth and development of bones and teeth. Children, adolescents, pregnant women, and older people need a higher amount of calcium.

Therefore, it is very important to add other food and drinks rich in calcium such as spinach or calcium-enriched soy milk.

Explore our wide range of calcium supplements.

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Quality of life

Lactose intolerance impacts the quality of life and nutritional status of the individual due to restrictive diets. The fear that food will trigger symptoms can lead to anxiety in the long run. This anxiety makes the individuals feel that most foods will cause the symptoms. This form of behavior is categorized as avoidant/restrictive food intake disorder which can even cause weight loss.

This can be avoided by making yourself aware about your maximum tolerable dose. In severe cases, seek help from a professional.

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Leprosy

Also known as Hansen’s Disease

Overview

Leprosy is a chronic infectious disease caused by a bacteria Mycobacterium leprae. M. leprae has a unique predilection for cooler areas of the body like the skin, nerves close to the surface of skin, eyes, earlobes, hands, feet and mucous membranes of the upper respiratory tract and testicles. Leprosy is known to develop slowly and can take from six months to 40 years to show any symptoms.

Leprosy is mildly contagious and not highly transmissible. The exact mechanism of transmission is not fully understood. The bacteria is most likely transmitted via droplets, from the nose and mouth, during prolonged, close and frequent contact with untreated cases. Although human-to-human transmission is the primary source of infection, certain animals can carry and rarely transfer M. leprae to humans. These include nine-banded armadillos, African chimpanzee, sooty mangabey, and cynomolgus macaque.

Even though the risk of contracting leprosy is quite low, one can reduce the risk by avoiding contact with body fluids and the rashes of people who have leprosy. Diagnosis of the condition is based on clinical symptoms and is confirmed by biopsy. Leprosy is curable with multidrug therapy (MDT). Majority of patients can take their medications at home and continue with their regular lives. Patients rapidly become non contagious after starting therapy and do not need to be isolated.

Key Facts

Usually seen in

Adults but increased risk from 5 -15 years and continued risk after 30 years

Gender affected

Both men and women.

Body part(s) involved

Skin

Peripheral nerves

Hands

Feet

Eyes

Earlobes

Nose

Testicles

Kidneys

Prevalence

Worldwide: 129,389 new cases (2020)

India: 65,164 new cases (2020-21)

Mimicking Conditions

Cutaneous leishmaniasis

Pityriasis alba

Lupus vulgaris

Granuloma annulare

Fungal infection

Annular psoriasis

Systemic lupus erythematosus

Keloid

Mycosis fungoides

Neurofibromatosis

Necessary health tests/imaging

Skin biopsy

Skin slit smear

Lepromin test

DNA PCR test

CBC test

Liver function tests

Creatinine test

Nerve biopsy

Nerve conduction velocity test

Treatment

Antibiotics: Clofazimine, Rifampicin & Dapsone

Neurotonics

Adjunct drugs for treatment of resistant cases: Clarithromycin, Minocycline, Ofloxacin, Moxifloxacin & Levofloxacin

See All

Symptoms Of Leprosy

This is a very slowly progressing disease, and it may take as many as 5 years on average for the symptoms to appear after the infection. You may be suffering from leprosy if you have the following symptoms:

Skin changes

Patchy discoloration of the skin.

Skin lesions which are typically flat, pale (hypopigmented) or reddish (erythematous) spots in the skin

Skin lesions with slightly decreased sensitivity to touch or pain.

Skin becomes thick, dry, and hard.

Hair loss in the affected area

Extra growth of nodules on the skin.

Growth of lumps on the face or earlobes that are painless.

Ulcer formation on the soles of feet that may be painless.

Thinning of eyebrows and eyelashes. Sometimes loss of eyebrows.

Change in the shape of the nose.

Neurological symptoms

Loss of sensation in the affected spots of the skin.

Diminished sensation or feeling in the affected areas (anesthesia)

Burning and tingling sensations (paresthesias).

Non-healing ulcers on the soles of the feet.

Muscle weakness and atrophy of the small muscles of the hands or feet, leading to paralysis or crippling.

Loss of sensation in toes and fingers.

Painful, tender, and enlarged nerves.

Vision changes.

Causes Of Leprosy

Leprosy is a chronic infectious disease caused by bacteria called Mycobacterium Leprae complex, which comprises M. leprae and M. lepromatosis. Leprosy is also called Hansen's disease, named after the scientist who discovered M. leprae in 1873.

Lab tests show that M. leprae grow optimally at temperatures ranging from 27 to 33 C. This explains its predilection for cooler regions of the body like skin, nerves close to the surface of skin, eyes and thin tissue lining the nose. It divides very slowly and takes years to reach a number sufficient to show any signs of infection.

The mode of transmission is not entirely understood. It is thought that disease transmission happens when a person actively suffering from the disease sneezes or coughs and releases the bacteria into the atmosphere and a healthy person breathes in the droplets. However, it is not easily transmissible or highly contagious. Prolonged close contact with a person actively suffering from this disease is essential for disease transmission.

Majority of people have a natural immunity to the disease and will not develop any symptoms even if they are exposed to it. Only about 5 percent of all people are susceptible to the disease.

Types Of Leprosy

In order to make the diagnosis simple and ensure prompt and quick treatment of leprosy, WHO (World Health Organization) has classified it into 2 types - multibacillary leprosy and paucibacillary leprosy.

Paucibacillary leprosy is when a person has around 1 to 5 skin lesions and no bacteria are detected in the skin samples. It is the least contagious form and can be further classified into tuberculoid (T.T.) and borderline tuberculoid (B.T.)

Multibacillary leprosy is when a person has more than 5 skin lesions and bacteria are detected in the skin smear, or both. It is the most contagious form and can be further classified into borderline (B.B), borderline lepromatous (B.L.) and lepromatous (L.L.).

Note: In tuberculoid leprosy (TT), the infection is localized and the patients are resistant to the bacillus whereas in lepromatous leprosy (LL) the infection is disseminated and the patients are extremely sensitive to the bacillus. The other borderline forms (BT, BB, BL) fall in between the two ends of the spectrum (TT and LL).

Risk Factors Of Leprosy

Overall, the risk of getting leprosy for any adult around the world is very low. That’s because more than 95% of all people have natural immunity to the disease. However, the following risk factors are associated with the disease:

Close contact: Prolonged direct contact with an active leprosy patient considerably increases the chances of contracting the disease.

Living in endemic areas: Living in areas where leprosy is endemic (parts of India, China, Japan, Nepal, Egypt, and other areas) increases the risk of contracting the disease.

Age: Older people are more prone to risk of contracting leprosy. Higher risk has also been seen in ages between 5 to 15 and continued risk after 30.

Genetic factor: Genetic defects in the immune system may cause certain people to be more likely to become infected (region q25 on chromosome 6).

Exposure to certain animals: People who handle certain animals known to carry the bacteria like nine-banded armadillos, african chimpanzee, sooty mangabey, and cynomolgus macaque, are at risk of getting the bacteria from the animals, especially if they do not wear gloves while doing so.

Immunosuppression: Leprosy typically occurs when immunity is suppressed like after solid organ transplantation, chemotherapy, HIV infection, or after administering agents for rheumatologic symptoms.

Did you know?

You do not catch leprosy from casual contact with an infected person The risk of transmission is high only through close and long-term contact with a person suffering from the condition and not through casual contact such as Shaking hands Hugging Sitting next to the person Eating with the person Talking to the person

Read More!

Diagnosis Of Leprosy

Usually, detailed observation and physical examination of the skin lesions are performed by the doctor, and the following supporting tests are used to confirm the diagnosis of leprosy:

Skin biopsy

A tiny piece of skin from the affected area is taken and studied under a microscope to check for the presence of leprosy-causing bacteria.

Skin slit smear

This test is used for multibacillary leprosy only. A small slit is made using a sharp blade over the skin of the forehead, earlobe, or lesions. Then a smear is made by scraping the exposed skin onto a glass slide and examining for bacteria under a microscope.

Lepromin test

In this test, a small number of inactive leprosy bacteria are injected into the skin, and the patient's immune response is studied. This test determines the type of leprosy rather than diagnosing the condition.

DNA PCR test

This is a very specific molecular test that checks for the presence of leprosy bacteria DNA in the blood sample and can establish the diagnosis with certainty.

The following tests might also be performed to help determine if any other organ systems have been affected by leprosy:

CBC test

Liver function tests

Creatinine test

Nerve biopsy

Nerve conduction velocity test

Prevention Of Leprosy

Leprosy can be transmitted only via prolonged and close contact with an active infected case. It is possible to prevent the transmission of leprosy by reducing close contact with the infected person. However, it is essential to note that leprosy cannot spread by a mere handshake, and discrimination against leprosy patients is strongly discouraged.

There is no commercially available vaccine available to prevent leprosy. However, the BCG vaccine which is used to prevent TB, provides some protection against leprosy but is not often used for that purpose.

Certain animals like nine-banded armadillos, African chimpanzee, sooty mangabey, and cynomolgus macaque can rarely transfer M. leprae to humans. It is advisable not to handle such animals in the wild.

If someone is extensively exposed to the bacteria, they may be started on prophylactic medicines to prevent the occurrence of the disease. Using Rifampicin reduces the development of paucibacillary leprosy by almost 50%.

Specialist To Visit

If you observe lesions on your skin and feel a loss of sensation in those parts or suffer from any other characteristic features of leprosy, you can consult the following specialists -

Dermatologist

Infectious disease specialist

Internal medicine specialist

Neurologist

Some patients might need to consult a general surgeon for rehabilitation and repair.

Treatment Of Leprosy

As leprosy is a bacterial disease, it is treated with a combination of antibiotics for a period of 6 months or 12 months depending upon the type of leprosy and can be extended as per individual case. As per the WHO guidelines, a 3-drug regimen of rifampicin, dapsone and clofazimine is recommended for all patients, with a treatment duration of 6 months for paucibacillary leprosy(PB) and 12 months for multibacillary leprosy (MB). This therapy helps to prevent the development of antibiotic resistance by the bacteria, which may further increase the course of treatment. The condition can be cured if the treatment is followed and completed as recommended by the doctor.

Antibiotics used to treat leprosy act by killing the bacteria, and hence, can cure the disease and prevent it from getting worse. However, it does not reverse the nerve damage or any physical deformation that has occurred prior to the diagnosis of the condition. Hence, it is extremely important to diagnose the condition at the earliest to prevent permanent nerve damage.

1. Antibiotics

Depending on the type and severity of leprosy( PB and MB) a combination of the following drugs is given for 6 or 12 months:

Clofazimine

Rifampicin

Dapsone

2. Nerve tonics (neurotonics)

Nerve tonics can help ease symptoms caused by nerve damage. However, the damage to the nerve is permanent.

3. Treatment of resistant cases

In cases which are resistant to one or two of above first line drugs, treatment can be extended to 24 months and following other drugs can be included in the multi drug therapy:

Clarithromycin

Minocycline

Ofloxacin

Moxifloxacin

Levofloxacin

Home Care For Leprosy

The aim of leprosy care at home is to minimize the occurrence of serious complications of the disease. You can do the following things at home:

Protect your eyes from dust, harsh sunlight, and dryness. Clean your eyes gently with a clean cloth every day. Look in the mirror to check for the appearance of any changes in the eyes.

Protect your hands and feet from injuries, and check for any undetected injuries every day. If there is a loss of sensation in the hands or feet, take extra care to prevent burns and injuries.

Clean your hands and feet daily with lukewarm water. Soak hands/feet in lukewarm water and scrape away the hardened skin. Apply an emollient cream to your hands and feet to prevent dryness.

Perform finger and toe exercises daily to prevent stiffness and loss of mobility of the digits.

Complications Of Leprosy

The complications of leprosy depend on how quickly the condition is diagnosed and effectively treated. Very few complications occur if physicians treat the disease early enough, but the following is a list of complications that can occur when diagnosis and treatment is either delayed or started late in the disease process:

Wounds and ulceration in the hands or feet

Permanent damage to the nerves of extremities

Progressive deformities in the fingers, toes and nose

Chronic nasal congestion, nosebleeds, and collapse of the nasal septum

Glaucoma which is an eye condition that damages the optic nerve

Uveitis or inflammation of eye

Blindness

Erectile dysfunction

Infertility

Kidney failure

Alternative Therapies Of Leprosy

Ayurveda

Leprosy is known as Kustha Roga in Ayurveda. There are several treatments in Ayurveda for leprosy, which include medicines for oral consumption, such as the compounds of Triphala, Khadira, Guduchi, Pippali, etc., or paste for topical application made from sulfur, mustard oil, turmeric, etc.

Physiotherapy

Physiotherapy exercises help maintain the function and mobility of the affected digits. It also helps prevent deformities, such as claw hand. It can also help improve the function of an already deformed hand.

Living With Leprosy

Leprosy patients need to be extra careful when taking care of their health as they are at an increased risk of getting injuries or burns due to reduced sensations. This necessitates special care for the extremities. Patients must be careful to wear gloves while holding hot utensils or other hot objects, and prompt medical care is essential even for minor cuts and injuries. Early treatment is the key to a successful outcome in leprosy.

Patients suffering from leprosy often have to battle social stigma and discrimination due to the misconceptions still prevalent about the disease. Due to this stigma most people do not seek medical help when the symptoms start to appear, which in turn delays the diagnosis as well as the treatment and increases the risk of disabilities.

Moreover, girls and women with leprosy have to face added social as well as gender discrimination which further affects the diagnosis and treatment. In some cases, this stigma can also interfere with the day-to-day life of the patient. Hence, it is very important to give due importance to mental health. Do not be apprehensive to consult a counselor or therapist. Sometimes sharing your feelings can help you deal with them better. It might be good to talk to someone who is going through exactly the same feelings as yours. Join a support group or you can also interact online, if you prefer to interact with people from the comfort of your own home.

Frequently Asked Questions

Why do I have leprosy?

Does everyone with leprosy get a claw hand?

How long should I take the medications?

Will I pass on leprosy to my family members?

Does leprosy spread by touch?

Does leprosy cause blindness?

Can leprosy be completely cured?

Do leprosy patients need to live in separate rooms or houses, isolated from family members?

How long is someone with leprosy contagious?

Where are the medicines for leprosy available?

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Leptospirosis

Overview

Leptospirosis is an infectious condition caused by a bacteria, Leptospira, that affects both humans and animals. While leptospirosis can occur worldwide, it is more common in tropical or subtropical regions. Outbreaks usually occur in monsoons, after heavy rainfall or flooding, particularly in areas with poor housing and sanitation.

The bacteria can be found in the urine of infected animals, such as rats, mice, livestock, and dogs, and can survive in soil and water for weeks to months. Human infection occurs through direct contact with infected animals or their urine, contact with urine-contaminated water and soil, or ingestion of contaminated food or water.

The symptoms of leptospirosis can vary widely, ranging from mild flu-like symptoms to severe illness. Common symptoms include high fever, headache, muscle aches, chills, vomiting, jaundice (yellowing of the skin and eyes), and red eyes.

Transmission can be prevented by avoiding walking, swimming, bathing, swallowing, or submerging head in potentially contaminated water especially after heavy rainfall or flooding. Drinking and preparing meals in only filtered or boiled water is also a must.

Treatment is generally based on the severity, and most commonly involves the administration of antibiotics which are effective in eliminating the bacteria.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Heart

Liver

Kidneys

Eyes

Lungs

Brain

Prevalence

World: 1.03 million cases (2018)

India: 0.1 - 1.0 million cases per year (2014)

Mimicking Conditions

Brucellosis

Dengue

Enterovirus infections

Hantavirus pulmonary syndrome

Hepatitis A

Kawasaki disease

Malaria

Measles

Meningitis

Q fever

Necessary health tests/imaging

Blood tests: Erythrocyte sedimentation rate (ESR), Liver functions tests, Kidney function tests, Peripheral blood smear.

Urine Analysis

Lumbar puncture

Polymerase chain reaction (PCR)

Serological and other indirect methods: Microscopic agglutination test (MAT), Enzyme-Linked immunosorbent assay (ELISA), Indirect haemagglutination assay (IHA), and Lepto dipstick assay

Treatment

Antibiotics: Doxycycline, Amoxicillin, Azithromycin, Ampicillin, Penicillin G, Ceftriaxone, Erythromycin.

Painkillers and antipyretics: Paracetamol, Ibuprofen, Naproxen

Other medical therapies: Mechanical ventilation and Dialysis.

See All

Symptoms Of Leptospirosis

In humans, leptospirosis can cause a wide range of symptoms. The common symptoms of leptospirosis include:

Fever

Nausea and vomiting

Sore throat

Loss of appetite

Abdominal pain

Conjunctivitis (irritation and redness of the eyes)

Cough

Short-lived rash

Jaundice (yellow skin and eyes)

Muscle aches

Shivering

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Symptoms in severe cases

Extreme fatigue

Hearing loss

Respiratory distress

Meningitis ( an infection of the meninges, protective tissue of the brain that causes stiff neck, headache, and fever)

Pulmonary hemorrhage (bleeding into the lower respiratory tract)

Note: The time between a person’s exposure to a contaminated source and becoming sick is 2 days to 4 weeks. The illness can last from a few days to 3 weeks or longer.

Phases of Leptospirosis

Leptospirosis usually presents in the following phases:

1. Anicteric syndrome

It is the most common form which is not very severe and shows symptoms similar to the flu. It starts suddenly and can cause a headache, cough, rash that doesn't itch, fever, shivering, muscle pain, loss of appetite, and diarrhea.

2. Immune phase

It refers to the progression of the disease where the body's immune system responds to the infection caused by the Leptospira bacteria. The anicteric syndrome can also have recurrence several days later, and this phase is called the immune stage. During this stage, aseptic meningitis (it is inflammation of the brain meninges that have negative cerebrospinal fluid (CSF) bacterial cultures) can occur.

3. Icteric phase

Also known as Weil's disease, it is a very serious infection that can last for several months and can cause a range of symptoms such as high fever, kidney failure, jaundice, bleeding in the lungs, and respiratory distress.

Causes Of Leptospirosis

Leptospirosis is caused by a bacteria called leptospira, which is found in the urine of infected animals. Animals like rodents, cattle, buffaloes, horses, sheep, goats, pigs, and dogs are considered common reservoirs of this bacteria.

The bacteria can survive for weeks to months in urine-contaminated water and soil.

The common modes by which people can get infected include:

Direct contact with infected animals or their urine, reproductive fluids, or body tissues

Contact with urine-contaminated water from floods, rivers, streams, and sewage (especially during high rain or monsoon season that causes the spreading of bacteria)

Contact with urine-contaminated wet soil

Intake of food or water contaminated by urine or urine containing water

Transmission occurs through mucous membranes, conjunctiva, and nonintact skin like skin cuts or abrasions. The incubation period is usually 5–14 days, with a range of 2–30 days.

Know how to monsoon-proof your health.

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Risk Factors Of Leptospirosis

Understanding the risk factors of leptospirosis is crucial for preventing this bacterial infection. They include:

1. Occupation

Direct contact with animals and activities that can lead to skin abrasions and water or soil exposure, such as clearing brush, trekking, and gardening are associated with a high risk of leptospirosis. The occupations which are more susceptible include:

Sewage workers

Butchers

Farmers

Veterinarians

Hunters

Fish workers

Dairy farmers

Military personnel

2. Outdoor activities

Swimming, rafting, kayaking, wading, or boating in flood water or freshwater (rivers, streams, lakes) that may be contaminated with animal urine increase the risk of leptospirosis.

Prolonged immersion or submerging head, or swallowing contaminated water can particularly increase risk.

3. Household exposure

Potentially contaminated sources like pet dogs, domesticated livestock, rainwater catchment systems, and infestation by infected rodents can increase the risk of leptospirosis.

4. Low socioeconomic status

Living in overcrowded urban areas with poor sanitation is also a known risk factor for getting infected with this infection.

5. Travel to endemic areas

Travel to areas with heavy rainfall or flooding can also lead to leptospirosis.

6. Mother-to-child transmission

An infected mother can transmit the infection to her baby during pregnancy or childbirth. It is important to seek medical care and take preventive measures to reduce the risk of transmission and protect both the mother and the baby.

Did you know?

Leptospirosis in pregnancy may be misdiagnosed as it can mimic other pregnancy-associated conditions, including infections, pregnancy-associated hypertension, acute fatty liver, and HELLP (hemolysis, elevated liver enzymes, and low platelet count syndrome).

Diagnosis Of Leptospirosis

Accurate diagnosis of leptospirosis is crucial for timely treatment and management of the disease, as early recognition allows for appropriate interventions and helps prevent potential complications. It consists of the following:

1. Medical history and physical examination

A doctor will ask whether a person may have acquired leptospirosis if he/she comes in contact with the urine of infected animals directly or through contaminated food, water, or soil. The doctor will also check for the occupation.

2. Blood tests

The various blood tests available for the detection of leptospirosis include:

Erythrocyte sedimentation rate (ESR): It is a simple blood test that measures inflammation or any infection in the body. The ESR rate is elevated in the case of leptospirosis.

Peripheral blood smear: A blood smear is a basic test that is used to determine abnormalities in the blood. It may be helpful in differentiating leptospirosis from other common acute febrile illnesses.

Liver function tests: These are a group of tests to evaluate the functioning of the liver. In icteric leptospirosis, liver function tests (LFT) generally show a significant rise in bilirubin and other liver enzymes.

Kidney function tests: It is a group of tests that may be performed together to evaluate kidney (renal) function. The kidneys are usually impaired by raised plasma creatinine in leptospirosis.

3. Urine analysis

It's used to detect the leptospires in the urine which can be absent from the blood during the immune phase.

4. Lumbar puncture

Also known as a spinal tap, it is a procedure used to collect a sample of cerebrospinal fluid (CSF) for testing. It is done to isolate leptospirae from the cerebrospinal fluid.

5. Polymerase chain reaction (PCR)

It enables rapid and direct diagnosis of leptospirosis DNA, even in the early and convalescent stages of infection.

6. Serological and other indirect methods

Serological tests are diagnostic methods that are used to identify antibodies and antigens in a patient's sample. They include:

Microscopic agglutination test (MAT): MAT has been widely used as the reference test for antibody detection in leptospirosis. However, this tests would not be useful at the early stages of the disease.

Enzyme-linked immunosorbent assay (ELISA): ELISA is a modern molecular technique for the detection of antigen-antibody interaction. Many studies have demonstrated ELISA to be more sensitive than MAT for the detection of cases early in acute illness.

Indirect haemagglutination assay (IHA): IHA was shown to detect both IgM and IgG classes of antibodies produced in defense to fight against leptospira.

Leptodipstick assay: The LEPTO dipstick assay is a newly developed test for the diagnosis of leptospirosis by detecting antibodies.

Book your tests with Tata 1mg to get accurate results.

Click here to get tested

Prevention Of Leptospirosis

Although human vaccines have been used in some countries with varying degrees of success, there are no WHO-prequalified vaccines currently available. The measures to prevent transmission of leptospirosis include the following:

Avoid exposure

Avoid walking, swimming, bathing, swallowing, or submerging head in potentially contaminated water bodies especially during monsoons, periods of heavy rainfall or flooding.

Cover open wounds with waterproof dressings.

Ensure safe drinking water

Drink only filtered or boiled water

Use filtered or boiled water to prepare food, brush teeth, and make ice

Avoid using water bottles without a seal

Store water in a clean and covered container

Cook and consume food vigilantly

Prepare food in filtered or boiled water

Wash fruits and vegetables with filtered or boiled water

Consume fruits and vegetables after peeling

Use of PPE (Personal protective equipment)

Animal handlers should treat all animals as if they are infected and wear full protection (waterproof coveralls/ clothing, gloves) at all times.

Wear full-cover, waterproof boots or shoes that do not allow water to enter from the top.

Farm, agricultural and horticultural workers should treat all wet soil and vegetation as if it is contaminated and wear full protection, particularly after heavy rain.

Chemoprophylaxis

Administration of doxycycline 200 mg, once a week, during the peak transmission season may be given to agricultural workers or high-risk individuals.

Rodent control

Rats are the main reservoirs for leptospirosis bacterium in India. Hence controlling these reservoir species with proper strategy planning and management planning will reduce the incidence of the disease. It includes:

Determining the host species responsible for the infection in the affected region

Defining specific areas for implementing rodent control measures

Conducting necessary activities before the onset of the monsoon season

Utilizing suitable technology for effective rodent control, ensuring accurate inputs and proper application methods.

Establishing a proper drainage system

The mapping of water bodies and human activities in water-logged areas should be

carried out. Farmers should be educated to drain out the urine from the cattle shed into a pit, instead of letting it flow and mix with rivers, ponds etc.

Tips to protect your pets

Keep your pets out of contaminated water, especially after heavy rainfall or flooding

Keep your pets away from other animal’s urine

Make sure your pets only drink clean filtered or boiled water

Keep your pets away from rodents, and wild animals

Vaccinate livestock and dogs. Vaccines are available for cattle, dogs, and pigs that provide short-term protection.

Install suitable fencing that separates livestock from access to potentially contaminated bodies of water (e.g. valley dams, rivers, ponds) and surrounding areas.

Did you know?

One of the diseases that can spread due to waterlogging is leptospirosis. Here are the 3 most common diseases that occur during the rainy season and ways by which you can safeguard yourself.

Click Here

Specialist To Visit

The specialists that can help diagnose and curate a treatment plan for leptospirosis include:

General physician

Internal medicine specialist

Infectious disease specialist

A general practitioner can evaluate the symptoms, start the treatment and if need be, refer to a specialist.

An internal medicine specialist provides comprehensive medical care, manages symptoms, and monitors organ function.

An infectious disease specialist specializes in the diagnosis, control, and treatment of infectious diseases.

If you are facing any health issues, talk to our healthcare experts to get the right diagnosis and treatment.

Consult Now

Treatment Of Leptospirosis

The following points help in the management of mild cases of leptospirosis:

Ensuring that you get plenty of rest to aid in recovery and conserve energy.

Having adequate fluid intake, such as water and electrolyte-rich beverages like coconut water to maintain hydration and support overall health.

Taking pain relievers like paracetamol, ibuprofen, or naproxen as advised by the physician.

Medical treatment depends on the severity of the symptoms and includes:

1. Medications

In outpatient cases, antibiotics that may be used include doxycycline, amoxicillin, azithromycin or ampicillin can be used to destroy harmful bacteria.

If the infection is severe, one may use intravenous penicillin G, ceftriaxone, or erythromycin.

Patients with severe leptospirosis usually need intensive care unit admission as multiple organs can be involved. In the case of kidney failure, corticosteroids can be administered.

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2. Medical therapies

At the hospital, depending on your clinical condition and the severity, you may require additional medical interventions, such as:

Mechanical ventilation: Respiratory distress due to lung involvement may require mechanical ventilation.

Dialysis: In advanced cases, dialysis helps in filtering toxins out of the blood and allows the kidneys to recover from the effects of the disease.

Additional therapies: These include the use of ophthalmic drops, diuretics, and inotropic agents (a group of medicines that affect the contraction of the heart muscle), renal-dose dopamine (renal dose dopamine is prescribed worldwide for the prevention and treatment of acute renal failure).

Did you know?

Monsoons can pose a big threat to health. Here are a few tips to protect oneself from the ill effects of the monsoon while enjoying the beautiful weather with your family.

Read more

Treatment in Pets

Leptospirosis can be effectively managed using antibiotics. Administering early treatment to an animal can lead to a faster recovery and potentially reduce the severity of organ damage. In some cases, additional treatment approaches like dialysis and hydration therapy may be necessary.

Have pets at home?

Try our range of pet care supplies to give your pets all the love and pampering they deserve.

Explore now

Home Care For Leptospirosis

Some home remedies can augment conventional medical treatment. These include:

Turmeric (Haldi): Studies suggest that turmeric is a potent antioxidant, anti-inflammatory, antimutagenic, and antimicrobial agent that can help combat infections.

You can consume it by adding a pinch of turmeric powder to a glass of milk and drink twice a day.

Buy turmeric products online

Ginger (Adrak): According to various studies conducted, it has been found that ginger extracts decrease anti-inflammatory components which can cause organ damage due to leptospirosis.

You can add freshly grated ginger to your meals, such as soups, stir-fries, etc, or brew a cup of ginger tea by steeping freshly sliced ginger in hot water for 5-10 minutes.

Want to know more about the health benefits of ginger?

Read this now

Milk thistle: It is a powerful antioxidant and research suggests that milk thistle extract not only prevents damage to the liver caused by leptospirosis but also helps repair it.

Note: This is a herbal supplement, so talk to your doctor regarding the dosage and frequency of consuming it.

Complications Of Leptospirosis

If untreated for a prolonged period leptospirosis may lead to:

Damage to the kidney

Severe lesions of the kidneys and heart

Inflammatory disease-causing swelling and damage to the eye tissue

Pulmonary or lung complications

Heart failure

Liver damage

Death of a fetus or abortion in pregnant women

Hemodynamic collapse (shock).

Did you know?

COVID-19 infections can mimic leptospirosis symptoms. Studies suggest that COVID-19 can show the signs and symptoms of other infectious diseases and confuse doctors in their search for a confirmatory diagnosis.

Learn everything about COVID-19.

Click here

Alternate Treatment For Leptospirosis

Alternative treatments alongside conventional medical treatment for leptospirosis have proven to be beneficial in some cases. It includes:

Ayurveda

According to Ayurveda, leptospirosis is Krumi Roga (worm infestation). Common ayurvedic herbs used are:

Ashwagandha: It is a potent herb that helps with pain and muscle aches associated with leptospirosis.

Shop for ashwagandha products.

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Mahashankh vati: It helps with re-establishing the digestive fire, enhances the appetite, and removes digestive endotoxins produced in leptospirosis.

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Frequently Asked Questions

Is leptospirosis a serious illness?

Is leptospirosis a common tropical disease?

Is there a vaccine for leptospirosis in humans?

Is there a cure for leptospirosis?

Can leptospirosis be transmitted from person to person?

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Liver cirrhosis

Also known as Hepatic cirrhosis

Overview

Cirrhosis is scarring (fibrosis) of the liver caused by long-term liver damage. The scar tissue prevents the liver from performing its function like making protein, helping fight infections, detoxifying the blood, helping digest food, and storing energy.

Individuals suffering from cirrhosis may have few or no symptoms and signs of liver disease initially. Some of the symptoms may be nonspecific like weakness, fatigue, nausea, vomiting, loss of appetite resulting & weight loss. However, as the disease progresses, more serious complications like small spider-like veins underneath the skin, severe itching, bleeding or bruising, jaundice, edema (swelling of legs, ankles, and feet), ascites (painful swollen stomach from a build-up of fluid), and mental confusion may develop.

Cirrhosis is usually caused by various factors some of which are hepatitis B and C infections, chronic alcoholism, genetic disorders, and certain infections. Treatment for cirrhosis varies based on the cause and how far the disease has progressed.

Key Facts

Usually seen in

Adults above 50 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Liver

Prevalence

Worldwide: 2 million (2021)

India: 10 lakh (2020)

Mimicking Conditions

Pseudocirrhosis

Fulminant hepatic failure

Miliary metastases

Necessary health tests/imaging

Liver function test (LFT)

Kidney function test (KFT)

Complete blood count (CBC)

Antinuclear antibody (ANA)

Anti-smooth muscle antibody (SMA)

Anti-mitochondrial antibody (AMA)

Abdominal ultrasound

Abdominal computed tomography (CT)

Magnetic resonance imaging (MRI)

Magnetic resonance cholangiopancreatography (MRCP)

Magnetic resonance elastography (MRE)

Transient elastography (fibroScan)

Upper endoscopy

Liver biopsy

Treatment

Alcohol dependence: Disulfiram & Acamprosate

Viral hepatitis: Lamivudine, Entecavir & Tenofovir disoproxil fumarate

Wilson’s disease: D-penicillamine & Trientine

Portal hypertension: Propranolol

Hepatic encephalopathy: Lactulose & Rifaximin

Ascites and edema: Spironolactone & Furosemide

Infections: Antibiotics

Itching: Cholestyramine & Colesevelam

Transjugular intrahepatic portosystemic shunt (TIPS)

Liver transplant

See All

Symptoms Of Liver Cirrhosis

Cirrhosis is usually asymptomatic, especially in the initial stages. The symptoms in the early stage of cirrhosis are not visible as the liver can still function despite being damaged. The symptoms start appearing after your liver becomes more severely damaged. The initial symptoms if your liver becomes more severely damaged are:

Tiredness and weakness

Malaise or feeling sick

Insomnia

Nausea and vomiting

Loss of appetite resulting in weight loss

Redness in the palms of the hands

Mild pain or discomfort in the upper right side of the abdomen

If cirrhosis progresses further, some of the symptoms and complications include:

Small spider-like veins underneath the skin

Severe itching

Easily bleeding or bruising, nosebleeds & bleeding gums

Yellowing of the skin (jaundice)

Vomit containing blood

Dark urine or tarry-looking stool

Swelling of legs, ankles, and feet (edema)

Painful swollen stomach from a build-up of fluid (ascites)

Confusion, drowsiness, memory loss, hallucinations or slurred speech (hepatic encephalopathy)

In women, heavy menstrual bleeding, irregular periods or absence of periods not related to menopause

In men, loss of sex drive, breast enlargement (gynecomastia), testicular atrophy or impotence

Causes Of Liver Cirrhosis

Liver cirrhosis may be caused by a wide range of diseases and disorders. Signs of liver cirrhosis progress gradually over time ultimately resulting in liver failure, if not adequately treated.

1. Long-term hepatitis infections (chronic)

A chronic liver infection can lead to damaged liver cells over a period of several years, resulting in cirrhosis. It is usually hepatitis B and C infections that mostly cause cirrhosis.

2. Chronic alcoholism

Consumption of alcohol causes inflammation to live cells, effectively poisoning them which results in the build-up of scar tissue in the liver. Excessive alcohol consumption (often consistently for more than a decade) leads to cirrhosis. The amount of damage varies from person to person and can also be influenced by familial susceptibility.

3. Non-alcoholic fatty liver (or steatohepatitis)

Fatty build-up in the liver over a prolonged period of time can lead to cirrhosis. Scar tissue which develops as a result is often linked with other conditions such as coronary artery disease, diabetes, obesity, high cholesterol, protein malnutrition, and treatment using corticosteroid medications.

4. Toxic substances or medications

Some medications such as alphamethyldopa, amiodarone, methotrexate, isoniazid or certain poisons, and environmental toxins, which are toxic to the liver, can contribute to scarring and damage.

5. Inherited (genetic) disorders

Genetic conditions can sometimes interfere with the metabolism process of the liver and its ability to handle accumulation of iron (hemochromatosis) and copper (Wilson’s disease) in the system. Some other disorders include cystic fibrosis, alpha-1 antitrypsin deficiency, tyrosinemia, fructose intolerance, glycogen storage disease, galactosemia, abetalipoproteinemia & urea cycle defects like ornithine carbamoyltransferase deficiency & alagille syndrome.

6. Autoimmune liver disease

Autoimmune infections occur when instead of attacking invasive organisms such as bacteria, allergens, and viruses, the body’s immune system ‘attacks’ healthy tissues in the body, including the organs (in this case, the liver). Autoimmune hepatitis is one example where the body’s immune response malfunctions and fights the normal system of the liver and damages its cells instead of fighting an infection.

7. Cardiac cirrhosis

The inability of the heart to pump effectively can also cause blood to collect in the liver. This chronic, passive congestion causes damage to the liver cells, swelling, and pain. Some of the factors which lead to cardiac cirrhosis are infection of the heart muscle or the sac around the heart, heart valve dysfunction, and smoking.

8. Biliary cirrhosis

Bile is a substance produced by the liver to help the body digest fats. The following conditions can affect the bile ducts, which help to drain bile. This can cause bile to back up and finally cause the breakdown of liver function. It could be due to:

Poorly formed bile ducts (biliary atresia)

Destruction of the bile ducts (primary biliary cirrhosis)

Hardening and scarring of the bile ducts (primary sclerosing cholangitis)

9. Infections

Infections such as congenital or tertiary syphilis, brucellosis, echinococcosis, schistosomiasis and can cause cirrhosis.

10. Idiopathic/miscellaneous

Some of the common idiopathic causes include:

Idiopathic portal fibrosis

Indian childhood cirrhosis

Polycystic liver disease

Stages Of liver cirrhosis

It is a severe condition that is progressive and could last long-term. Based on the severity of the liver damage, liver cirrhosis can be classified into four stages:

Stage 1: Inflammation

This is the initial stage of liver cirrhosis. The person may feel fatigued or lack vigor/energy. There are no notable symptoms or signs yet at this stage. However, if the root cause of liver cirrhosis can be cured and eliminated, there is a possibility of recovery at this stage.

Stage 2: Fibrosis

The second stage of liver cirrhosis shows an increase in the amount of scar tissue that replaces the healthy liver cells. This leads to an increase in blood pressure within the system of veins in the liver called portal hypertension. There is still the possibility of partial reversal of liver cirrhosis at this stage.

Stage 3: Liver cirrhosis

This stage of liver cirrhosis leads to the accumulation of fluid in the abdominal cavity, referred to as ascites. The volume of fluid accumulation gives an indication of liver damage. The symptoms which indicate that the liver is not working properly include eczema, widespread itchiness, weight loss, loss of appetite, confusion, or lower leg swelling, shortness of breath, yellow or pale skin, and changes in blood sugar level. At this stage, cirrhosis becomes irreversible and the patient may be recommended for a liver transplant.

Stage 4: Liver failure

The final stage of liver cirrhosis results from immense levels of scar tissue present in the liver. Stage 4 liver cirrhosis presents the same symptoms as stage 3, with the addition of intensified confusion, hand tremors, high fever, changes in personality, infection in the abdominal cavities, and kidney failure that results in infrequent urination. The need for a liver transplant becomes urgent by the time a patient reaches this final stage of liver cirrhosis.

Did you know?

Liver disease kills more of us than diabetes and road deaths combined. After heart attack, cancer, stroke, and lung disease, liver disease are responsible for the maximum casualties. Read to know a few more facts about liver cirrhosis.

Click To Know!

Risk Factors For Liver Cirrhosis

The risk factors of cirrhosis include:

High cholesterol (due to high cholesterol liver is unable to break the fatty deposit that can lead to damage to the liver)

Being overweight or obese

Excessive alcohol consumption

Pre-existing viral hepatitis

Hypertension

Sleep apnea

Gout

Long term treatment with corticosteroids

Chronic exposure to environmental toxins like arsenic

Diagnosis Of Liver Cirrhosis

People with early-stage cirrhosis of the liver usually don't have any symptoms. Cirrhosis is first detected by a routine blood test or checkup. A combination of laboratory and imaging tests are done to confirm a diagnosis.

The general diagnostic procedure will follow the below steps:

1. Medical history

A doctor will discuss all the obvious symptoms, the level of severity, the duration of time a person has been experiencing the symptoms, and also note down the complete medical history till date. A doctor will also assess necessary family history details and any signs of genetic history.

2. Physical examination

During a physical examination, a doctor will look for any physical signs of impaired liver function like pale skin, jaundice, red palms, impaired or excess breast tissue (in men), small or enlarged testicles, and enlarged liver or spleen. During a physical examination, an enlarged liver can be felt along the lower edge of the right rib cage and an enlarged spleen can be felt just below the left rib cage.

3. Blood tests

Your doctor may recommend the following blood tests:

Liver function test (LFT): This test can show abnormal liver enzyme levels, which may be a sign of liver damage. Increased levels of bilirubin, liver enzymes alanine transaminase (ALT), aspartate transaminase (AST), and alkaline phosphatase (ALP) or decreased levels of blood proteins can signal cirrhosis.

Kidney function test (KFT):This test will assess creatinine levels, it is a waste product, which will help to determine the normal or abnormal function of the kidneys. During the latter stages of cirrhosis, the kidneys begin to experience loss of function as well.

Complete blood count (CBC): This test may show signs of infection and anemia that may be caused due to internal bleeding.

Other blood tests: Antibodies are screened for hepatitis infections (mainly B and C), blood tests for autoimmune liver conditions, which include the antinuclear antibody (ANA), anti-smooth muscle antibody (SMA), and anti-mitochondrial antibody (AMA) tests.

4. Imaging tests

The following imaging tests can show the size, shape, texture, and stiffness of your liver, picking up abnormalities (scarring) on or within the organ.

Abdominal ultrasound: Abdominal ultrasound is a non-invasive, widely available procedure that uses sound waves to create pictures of the inside of the abdomen and/or pelvis, including images of gross appearance of the liver. Doppler ultrasound allows for evaluation of blood flow to and from the liver. Ultrasound is usually the first radiographic test performed in the evaluation of cirrhosis because it is the least expensive and does not pose a radiation exposure risk.

Abdominal computed tomography (CT): This procedure combines special x-ray equipment with computers to produce multiple, detailed digital images of the liver. It can help determine the severity of cirrhosis as well as other liver diseases.

Body magnetic resonance imaging (MRI): This imaging technique uses a powerful magnetic field, radio frequency pulses and a computer to produce detailed pictures of the liver. A dye may be injected into your vein. The dye helps the liver to be seen more clearly on the scan allowing for assessment of damage caused by various liver diseases.

Magnetic resonance cholangiopancreatography (MRCP): MRCP is a special type of MRI that is used to evaluate a part of the liver and gallbladder.

Magnetic resonance elastography (MRE): This test assesses the stiffness and severity of scarring in the liver. Elastography can detect stiffness of the liver caused by liver fibrosis earlier than other imaging tests. The test can be performed by ultrasound or MRI.

Transient elastography (fibroScan): This test helps to quantify liver fibrosis (scarring).

Upper endoscopy: A lighted flexible camera is inserted through the mouth into the upper digestive tract to view enlarged blood vessels that are at risk of bleeding because of cirrhosis.

5. Liver biopsy

In liver biopsy, small tissue samples are taken from the liver with a needle or during a surgery. It is usually considered when other tests have failed to confirm a diagnosis of cirrhosis and the benefit of biopsy outweighs the risk. The accuracy of diagnosis of cirrhosis ranges from 80 to 100 percent, depending on the number and size of the samples and on the sampling method.

Celebs affected

Meena Kumari

Meena Kumari was one of the most successful and adored actresses of the 60s before she started losing it all to alcohol and succumbed to liver cirrhosis.

Larry Hagman

Hagman suffered from advanced cirrhosis due to years of heavy drinking that later required a liver transplant.

Dennis Price

He was one of the finest comedians from England. Due to his addiction to alcohol, he eventually suffered from liver cirrhosis.

Prevention Of Liver Cirrhosis

Even though the liver is the only organ in the body having regenerative capacity, it is essential to never abuse it and treat the organ with respect and care. Following steps can be taken for the prevention of liver cirrhosis:

1. Limit alcohol intake

Alcohol should always be consumed in moderation. Men should not have more than two drinks per day while women and elderly are not supposed to consume more than one drink per day. However, it is always better to completely abstain from alcohol, especially in case of liver disease. This includes avoiding all beer, wine, coolers, whiskey, gin, rum, brandy, and liquors.

2. Diet considerations

Healthy diet plays an important role in prevention of liver diseases. Diet should include fruits, vegetables, whole grains, lean protein sources, unsalted nuts, seeds and low-fat dairy products.

Salt intake should be limited. If lack of salt affects taste, one can enhance the flavor with lemon juice, vinegar, herbs or spices. Ketchup, pickles, soy sauce, and hot sauces have a high sodium content and should be avoided. Restaurants and fast food, add a lot of salt to their food so try to avoid them or request for the meal to be prepared without salt. Canned vegetables which are loaded with salt should also be avoided.

Eating foods with healthy fats is also important. Unsaturated fats should be consumed instead of saturated fats and trans fats.

In case of hemochromatosis, iron supplements and multivitamins with iron and Vitamin C should be avoided.

In case of Wilson's disease, foods high in copper need to be eliminated from the diet. These foods include shellfish, organ meats, nuts, chocolate, mushrooms, kale, asparagus, parsley, potatoes with skin (both white and sweet), lima beans, soybean, sprouts and spinach.

3. Maintain a healthy weight

An excess amount of body fat can cause damage to your liver. Always consult a doctor regarding maintenance of weight and weight loss plan, if you are obese or overweight.

4. Reduce the risk of hepatitis

By avoiding hepatitis infection (particularly hepatitis B and C), a person reduces the risk of developing liver cirrhosis by many folds. To further lower the risk:

Avoid unprotected sex

Avoid sharing of needles

Do not get tattoos or body piercings in an unsterilised environment. Also, make sure the instruments are properly sterilized and needles are not shared.

Get vaccinated. It is recommended that all infants and high risk individuals like healthcare providers and rescue personnel should be vaccinated against hepatitis B. There is no vaccine for hepatitis C.

Here are a few more tips that can help in the detoxification of the liver.

Click Here!

Specialist To Visit

A general practitioner can evaluate causes of liver abnormalities and refer to the following specialists for assessment:

Gastroenterologist

Hepatologist

A gastroenterologist is a specialist in the treatment & management of the disorders of the digestive tract organs including the liver, while a hepatologist specializes in disorders of the liver biliary tract, gall bladder & pancreas.

If you are facing any symptoms, consult our healthcare professionals.

Consult Now!

Treatment Of Liver Cirrhosis

Treatment for cirrhosis depends on the cause and extent of your liver damage. The goals of treatment are to slow the progression of scar tissue in the liver. Cirrhosis cannot be cured but treatment focused on preventing further liver damage, easing symptoms, and reducing the impact of complications.

1. Treatment of alcohol dependence

People with cirrhosis caused by excessive alcohol should stop consumption of alcohol. If stopping alcohol is difficult, a doctor may recommend a treatment program for alcohol addiction. Some programs are as follows:

Counseling. This helps the individual to focus on how he/she can stop drinking

Rehab programs: It is a program to get help in case of alcohol addiction.

Prescribed medications: Disulfiram and acamprosate are used as prescription medicines for controlling alcohol craving and discomfort.

2. Medications

The medication required depends on what has caused the damage to the liver.

If cirrhosis is from long-term viral hepatitis, you may be prescribed antiviral medicines like lamivudine, entecavir, and tenofovir disoproxil fumarate.

If cirrhosis is caused by a copper build-up from Wilson’s disease medicine like D-penicillamine, and trientine are used.

In addition to any medication that might be used to treat the underlying cause of cirrhosis, certain medications may be used to treat the complications that can result from cirrhosis:

Portal hypertension: Blood pressure medications can help lower pressure in the portal vein, which brings blood to the liver. Lowering pressure in the portal vein can reduce the risk of internal bleeding and damage to the spleen. Propranolol is one of the commonly used drug.

Hepatic encephalopathy: Lactulose is a laxative that can help reduce the absorption of substances that can be harmful to the brain. Antibiotics like rifaximin are also used in hepatic encephalopathy.

Ascites and edema: Diuretics such as spironolactone or furosemide may be prescribed to reduce the accumulation of fluid in the abdomen or legs.

Infections: Antibiotics may be prescribed to prevent or treat infections. Intravenous antibiotics can be given to treat peritonitis that can occur with ascites.

Itching: Drugs that may be used to relieve itching associated with liver cirrhosis include cholestyramine and colesevelam. Both of these drugs are also used to lower high blood cholesterol level.

Malnutrition and osteoporosis: Nutritional supplements may be prescribed to counter malnutrition associated with cirrhosis and to prevent weak bones or osteoporosis.

3. Transjugular intrahepatic portosystemic shunt (TIPS)

This procedure is used to treat the portal hypertension caused by cirrhosis. A small tube or stent is placed into the liver to bypass blood flow into the liver by directing it back towards the heart.

4. Liver transplantation

In advanced cases of cirrhosis, when the liver ceases to function, a liver transplant is the last treatment option. A liver transplant is a procedure to replace a liver with a healthy liver from a deceased donor or with part of a liver from a living donor. Candidates for liver transplants have extensive testing to determine whether they are healthy enough to have a good outcome following surgery.

Home-care For Liver Cirrhosis

Cirrhosis of the liver is a chronic disease that occurs as a result of damage to the liver over several years. It’s a progressive disease in which healthy liver tissue is destroyed and replaced by scar tissue, resulting in poor liver functioning. While undergoing treatment, some home care tips which can be really helpful are:

1. Lifestyle changes

If a person is having cirrhosis, several lifestyle changes can be made to reduce the chances of further problems and complications. These include:

Quit smoking

Avoid alcohol

Practice good hygiene

2. Dietary changes

Malnutrition is common in cirrhosis as it makes it more difficult for your body to process nutrients, leading to weakness and weight loss. So it's important to eat a healthy, balanced diet including fruits, vegetables, whole grains, lean protein sources, unsalted nuts and seeds and low-fat dairy products.

Cutting down on salt can help reduce the swelling in the legs, feet, and tummy caused by the build-up of fluid.

Eating healthy snacks between meals, or having 3 or 4 small meals each day, rather than 1 or 2 large meals, may help.

Read about food items that you can include in your diet for a healthy liver.

Check Here!

3. Exercise

Yoga and tai chi may help patients overcome the fatigue that is commonly associated with liver disease. Some light exercises can include a home-based aerobic routine, dancing as a form of exercise, lifting light weights, and yoga such as pranayama.

Complications Of Liver Cirrhosis

If cirrhosis progresses and the liver is no longer able to function (decompensated cirrhosis), may get complications that need treatment.

1. Portal hypertension

Cirrhosis slows down the normal blood flow through the liver. This leads to portal hypertension which is an increase in the pressure within the portal vein. It is the vein that carries blood from the digestive organs to the liver.

2. Swollen or bleeding veins

Portal hypertension can cause blood to be redirected to smaller veins. This causes the veins in the food pipe (esophagus) or stomach to become swollen. These are called esophageal varices and gastric varices. Due to the excessive pressure, these smaller veins can burst, causing serious bleeding. If the liver is not able to make enough clotting factors, it can contribute to continuous bleeding.

3. Fluid retention in the tummy or legs

A build-up of fluid in your tummy area (ascites) or legs and ankles (peripheral edema) is a common complication of elevated portal pressure which causes fluid retention. Edema and ascites can also occur from the incapacity of the liver to make blood proteins like albumin.

4. Hepatic encephalopathy

Cirrhosis of the liver hampers its ability to clear toxins from the blood. These toxins can build up in the brain and cause symptoms like mental confusion, drowsiness and problems concentrating. Long term hepatic encephalopathy can also lead to unresponsiveness or coma.

5. Bleeding

Cirrhosis can affect the liver's ability to make enough clotting factors. Hence, there is a chance of severe bleeding in case of cuts and wounds, during surgeries or dental work.

6. Splenomegaly or enlargement of spleen

Portal hypertension can also cause swelling of the spleen along with entrapment of white blood cells and platelets. Reduction in white blood cells and platelets in blood tests could be the first sign of cirrhosis.

7. Jaundice

Cirrhosis of the liver affects its ability of the liver to eliminate bilirubin, a waste product from the blood. This leads to jaundice, a condition in which the skin, whites of the eyes and mucous membranes turn yellow.

8. Infections

Cirrhosis also reduces the body’s immunity to fight infections. Ascites or fluid retention in the abdomen can also cause a serious infection known as bacterial peritonitis.

9. Osteoporosis

Some patients of cirrhosis tend to lose their bone strength and are at a higher risk of bone fractures.

10. Diabetes

Diabetes may get worse if someone already has type 2 diabetes and develops cirrhosis. This is because, cirrhosis can increase your resistance to insulin, a hormone which controls blood sugar levels.

11. Liver cancer

Cirrhosis increases the chance of liver cancer, most commonly a type called hepatocellular carcinoma (HCC). Many symptoms of liver cancer are the same as symptoms of cirrhosis, so regular checks for liver cancer are important.

Alternative Therapies For Liver Cirrhosis

Home remedies

1. Papaya seeds: According to Ayurveda, papaya seeds can help in the treatment of cirrhosis of the liver by aiding liver detoxification.

Tip: Grind some fresh papaya seeds to extract 1 tablespoon of juice, add two tablespoons of lemon juice and drink this mixture twice a day for a month to improve liver functioning.

2. Vitamin C: It has protective effects against liver oxidative damage. It also prevents fatty buildup and cirrhosis.

Tip: Include vitamin C-rich foods like blackberries, lemons, and oranges in your diet.

3. Turmeric: It is a rich source of antiseptics, with antibacterial, antifungal, and antioxidant properties and can do wonders in treating liver disease.

Tip: Add a tablespoon of turmeric in hot milk with honey and drink this once a day for about a month.

4. Apple cider vinegar (ACV): The ACV is good as it helps improve fat metabolism. It also works as a detoxifying agent for the liver.

Tip: Take a glass of water and add a tablespoon of ACV and a teaspoon of honey to it. Drink this mixture 3 times a day to get a healthy liver.

5. Green tea: It is loaded with antioxidants that reduce oxidative stress, which initiates cirrhosis of tissues. It has a protective effect against liver disease and has antiviral properties that help fight viral hepatitis.

6. Milk thistle: It is a Mediterranean herb which has been used for centuries to treat liver problems. It acts a powerful liver cleanser by rebuilding liver cells, reducing liver damage, and removing toxins from the body that are processed through the liver.

Living With Liver Cirrhosis

Often, receiving a diagnosis of liver cirrhosis can be a life-altering and challenging situation for patients and their caregivers. Coming to terms with the diagnosis can invoke feelings of feeling loneliness, depression, anger, rage, guilt, and limiting the intake of alcohol. However, it is important to remember that a diagnosis of liver cirrhosis does not necessarily mean the end of life. It is possible to live a happy life even after being diagnosed with liver disease.

Make sure that the person understands the diagnosis and its health implications.

Motivate the patient to stay socially active such as going to a movie or taking a walk in a park. Engage them in community activities like attending functions or helping them join a support group.

Encourage them to spend time with friends and family so that if a person is indulged in alcohol, they can control his mood swings and calm his senses.

Love, understanding, patience, and reassurance are cornerstones of living with loved ones.

Frequently Asked Questions

What is the pathophysiology of liver cirrhosis?

What are some of the common symptoms that indicate a person is moving towards liver cirrhosis?

What should I avoid eating and drinking if I have cirrhosis?

Is cirrhosis of the liver serious?

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Low Immunity

Also known as Immune deficiency

Overview

Our body has a natural mechanism to fight against invading organisms and prevent serious infections. The inbuilt immune system is the body’s first line of defense against any foreign infections. If for some reason, the body’s immune defenses are weakened, there is an increased risk of being seriously affected by even the simplest of infections.

The white blood cells, specifically the neutrophils, the B-lymphocytes, and the T-lymphocytes, play a crucial role in fighting off infections. The condition in which the body’s immune system does not perform efficiently is called low immunity.

Immunodeficiency can be genetic or acquired. A person suffering from low immunity contracts frequent infections that can turn deadly. Adopting a healthy lifestyle involving a well balanced diet, exercise, minimal stress, etc., can strengthen your immune system and protect you by fighting off various diseases naturally.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Blood

WBCs

Immune System

Spleen

Lymph nodes

Mimicking Conditions

Anemia

Hypothyroidism

Chronic fatigue syndrome

Necessary health tests/imaging

Complete blood count (CBC)

Kidney function test

Liver function test

C-Reactive protein quantitative

Thyroid profile total

Vitamin D (25-OH)

Iron deficiency profile

Erythrocyte sedimentation rate

Treatment

Supplements for nutritional deficiencies: Vitamin A, Vitamin C, Vitamin D & Zinc

Antiviral medicines: Oseltamivir phosphate, Zanamivir & Acyclovir.

Antibiotics: Penicillin, Tetracycline & Azithromycin

Antifungals: Clotrimazole, Ketoconazole & Miconazole

Anti-retroviral drugs: Abacavir, Emtricitabine & Lamivudine

Chemotherapy drugs: Docetaxel, Ixabepilone & Paclitaxel

Anti-diabetic drugs: Metformin, Dapagliflozin & Glipizide

Human normal immunoglobulin

Interferon-gamma preparations

Donor plasma

Bone marrow or stem transplantation

Specialists to consult

Immunologist

Hematologist

Oncologist

HIV specialist

See All

Symptoms Of Low Immunity

The primary symptom of a weakened immune system is susceptibility to infection. You may be suffering from low immunity if you have the following symptoms:

Frequent infections of the

Respiratory tract, such as bronchitis, sinusitis, pneumonia.

Gastrointestinal tract, causing vomiting, diarrhea.

Urinary tract which causes a burning sensation or passing blood with urination and other symptoms of infections, such as rashes, etc.

Infections that are considered mild among the general population may often present with severe symptoms in immunocompromised individuals.

Abnormal blood counts such as low platelets or low white blood cells.

Chronic fatigue, tiredness, and breathlessness are also common in patients with low immunity.

A person with a weakened immune system is likely to get infections more frequently than most other people, and these illnesses might be more severe or harder to treat. Infections that people with a weak immune system often get include pneumonia, meningitis, bronchitis, and skin diseases. Moreover, these infections may recur with a high frequency.

Additionally, people with a weak immune system may be more likely to experience:

Autoimmune disorders

Inflammation of the internal organs

Blood disorders or abnormalities, such as anemia

Digestive issues, including loss of appetite, diarrhea, and abdominal cramping

Growth and developmental delays in infants and children.

Causes Of Low Immunity

A person may have low immunity by birth due to genetic abnormalities, or it may be acquired in later life due to various causes.

Primary immunodeficiency

The immune system is the protective mechanism of the body .It attacks the disease causing organisms,like bacteria, viruses and fungi. The immune system comprises various types of white blood cells. Each white blood cell type has specialized functions. Sometimes genetic mutations can affect the immune system and thereby cause immunodeficiency.

In primary immunodeficiency, from the time of birth, the immune system of a child does not function properly and cannot ward off infections. Due to a compromised immune system, these children fall ill frequently and for longer durations of time. They are also susceptible to infection from normal harmless organisms. Most primary immunodeficiencies are not fatal, however it is still essential to diagnose and treat them early so that they do not become life threatening.

Secondary immunodeficiency

These are acquired immune system defects that can occur due to conditions, such as:

1. Lifestyle factors

Poor sanitation: Lack of sanitation is a major health blockade which is linked to transmission of a wide spectrum of diseases which lower the body’s immunity. These include diseases like cholera, diarrhoea, typhoid, dysentery, intestinal helminth infections, hepatitis A etc.

Malnutrition: Protein deficit diets are the major cause of secondary immunodeficiency especially in the developing world. Malnutrition is not just a deficiency of calories, but it can also be a deficiency of one or more essential nutrients. Two nutrients that are particularly important to immunity, calcium and zinc, are more commonly deficient in the older population. However, this form of immunodeficiency will usually resolve if the malnutrition is treated.

Stressful lifestyle: When we are stressed, the immune system’s ability to fight off infections is reduced. The stress hormone can suppress the effectiveness of the immune system and make one more prone to infections.

Lack of exercise: Modern sedentary lifestyle severely restricts the immune capacity of the body.

2. Health conditions

Cancer: Various types of cancer and treatments for cancer, such as chemotherapy or radiation, can cause immunosuppression.

HIV/AIDS: HIV, which causes AIDS, is an acquired viral infection that destroys important white blood cells and weakens the immune system. People with HIV/AIDS can become seriously ill with infections that most people can fight off. These infections are called “opportunistic infections”.

Diabetes mellitus: People with diabetes mellitus have low immunity and are more susceptible to infections, as high blood sugar levels can weaken the patient's immune system defenses. In addition, some diabetes related problems, like nerve damage and reduced blood flow to the extremities, increase the body's vulnerability to infection.

COVID and low immunity

Coronavirus, as we all are aware, is a novel virus that affects the respiratory system and the immune system. When you contract an infection, your immune system produces certain protective proteins that fight the pathogen and help you recover from the infection. These proteins are called antibodies.

After people recover from infection with a virus, the immune system retains a memory of it. Immune cells and proteins that circulate in the body can recognize and kill the pathogen if it’s encountered again, protecting against disease and reducing illness severity. But the details of this immune response and how long it lasts after infection have been unclear. However, according to NIH, antibodies against the spike protein of SARS-CoV-2, were found in 98% of participants one month after symptom onset.

But if you have low immunity or suffer from pre-existing medical conditions such as diabetes, hypertension, obesity, chronic lung disease, or heart disease, then the chances of getting infected are high. Moreover, it can also impact the severity of the infection, duration of illness, treatment types, and chances of recovery.

To boost your immunity against COVID-19, it is important to get vaccinated against the virus. And, to lower your chances of getting infected, wear a mask and follow COVID-appropriate behavior.

Here’s more on COVID-19 to know about!

Risk Factors For Low Immunity

You may be at risk of primary or secondary immunodeficiency if:

Your parents or a close family relative suffers from genetic abnormalities that cause low immunity.

You lead a poor lifestyle that includes lack of sanitation, poor diet, lack of exercise, physical or psychological stress. Moreover, it also increases the chances of diseases like diabetes and cancers.

You engage in unsafe sexual practices that can increase the risk of transmission of HIV.

Sharing needles, razors, etc., with others can increase the risk of transmission of HIV.

If you have undergone splenectomy, i.e., surgical removal of the spleen due to trauma, cirrhosis, or other health conditions. The spleen is an organ that removes (filters) old and damaged blood cells, produces antibodies that help fight infection, and stores blood cells.

Diagnosis Of Low Immunity

White blood cells are the mediators of the immune system. The easiest way to determine their count is by performing a complete blood count (CBC). Further, thorough studies may be required if any abnormalities are observed in the complete blood counts.

An immunity test package involves:

Complete blood count (CBC) to check for the values of various blood cells

Kidney function test to assess the health of kidney

Liver function test to assess the health of the liver

C-Reactive protein quantitative to check for any acute infection or inflammation

Thyroid profile total to check for hypothyroidism or hyperthyroidism

Vitamin D (25-OH) to check for vitamin D deficiency

Iron deficiency profile to check for probable causes of anemia

Erythrocyte sedimentation rate to check for any ongoing inflammation in the body.

Infection profiling to detect the most potential immune markers like interleukin-6, procalcitonin, ferritin, d-dimer, etc to assess the body's immune response against infection. The elevated levels of these markers signify acute and chronic inflammatory diseases including Covid-19.

Additional studies may also be required, depending on the case.

Celebs affected

Charlie Sheen

Two and A Half Men’ fame actor Charlie Sheen suffers from HIV-AIDS, which is known to cause low immunity

Prevention Of Low Immunity

While genetic types of primary immunodeficiency or low immunity due to certain health conditions cannot be prevented, it is possible to prevent low immunity arising from a poor lifestyle. You can make the following changes to your lifestyle to stay healthy and have a robust immune system:

Take a wholesome diet rich in protein, vitamins, and minerals. Cut back on processed foods.

Drink plenty of water and fluids, such as fresh fruit juices and coconut water, as required throughout the day, and stay hydrated.

Establish a sound sleep schedule. Do not sleep during the day. Getting a sleep of 6-8 hours is crucial.

Cut down on caffeinated beverages and alcoholic beverages.

Quit smoking.

Exercise daily for at least 30-45 minutes. The exercises can be a mixture of aerobics and strengthening exercises.

Avoid getting in close contact with people who are sick

Indulge in wellness activities that promote physical and mental relaxation, such as those offered at a health spa.

Practice yoga or meditation. Learn to calm your stress and inculcate thoughts of positivity to keep anxiety away.

Additionally, here are a few recommendations for people with low immunity during the Covid-19 pandemic:

Stay at home if possible during the pandemic

Wash their hands frequently

Try to keep 6 feet away from other people

Clean and disinfect surfaces often

Seek medical help if health issues arise

Stay in touch with family, caregivers, and others who can help deliver necessary items and take action if the person gets sick

Our immunity is really a tricky entity. It is composed of various components like the good bacteria living in our stomach and the white blood cells that fight germs in our body. Doctors say that a weak immune system can also be partly genetic. However, all experts agree that the following simple steps can go a long way in strengthening one’s immunity.

Here are 10 ways to boost immunity with simple tips and tricks.

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Specialist To Visit

If you suffer from recurrent bouts of infections, you may have low immunity. You may consult with your primary physician, who will evaluate you and refer you to specialists as appropriate. The specialist doctors for patients with low immunity and related conditions are:

Immunologist

Oncologist

Infectious Disease Specialist

Internal Medicine Specialist

Hematologist

Treatment Of Low Immunity

The treatment for low immunity is vast and consists of supplements for nutritional deficiencies to increase/strengthen the immune system, managing or preventing infections and treating specific underlying disorders.

Supplements for nutritional deficiencies

It is rightly said that no food or supplement can prevent illness. However, good nutritional supplements, including vitamins A, B6, B12, C, E, probiotics, protein, and zinc on a regular basis, may offer protection from seasonal illnesses and can be helpful in boosting immunity.

Here are a few supplements that are known to have immune-boosting potential:

Vitamin A : Vitamin A is a fat-soluble vitamin. It plays a critical role in maintaining vision, neurological function, healthy skin, and more. Taking supplements of vitamin A helps in reducing inflammation by free radical damage.

Vitamin B complex : It helps to support a healthy immune system by supporting cell health, maintaining energy levels and cardiovascular health.The Vitamin B complex consists of eight vitamins that work together to fight off germs and infection.

Vitamin C: Vitamin C functions as a powerful antioxidant, protecting against damage induced by oxidative stress, which occurs with the accumulation of reactive molecules known as free radicals. Taking supplements of vitamin C has been shown to increase immunity especially for upper respiratory tract infections, including the common cold.

Vitamin D: Vitamin D is often called "the sunshine vitamin" because our bodies naturally produce it when we expose our skin to the sun. It is a fat-soluble nutrient essential to the health and functioning of your immune system.

Zinc : Zinc is needed for immune cell development, communication and plays an important role in the inflammatory response. This mineral is also helpful in preventing foreign pathogens from entering the tissue barriers.

Protein: Proteins are the backbone of the body's defence systems. Proteins are made up of amino acids that play a role in forging immunity.It is important to consume good quantity and quality of protein daily for the immune system to function at its best.

Managing infections

People with low immunity often battle infectious diseases due to bacteria, viruses, or fungi. Appropriate antimicrobial agents are used to treat these infections based on the causative organism such as:

Antiviral medicines: These drugs are used to treat viral infections as people with low immunity have higher chances of acquiring various virus infections. Antiviral drugs help to stop the viral replication and ease the symptoms. A few examples of antiviral drugs are oseltamivir phosphate, zanamivir, and acyclovir.

Antibiotics: People with a weak immune system have a higher risk of experiencing frequent bacterial infections. Antibiotics help in either killing or inhibiting the growth of bacteria. A few examples of antibiotics are penicillin, tetracycline, and azithromycin.

Antifungals: Fungal infections are also called opportunistic infections as they attack people with weakened immune systems. Antifungal drugs which are used to treat fungal infections work by damaging the cell wall of the fungus. A few examples of antifungal drugs are clotrimazole, ketoconazole and miconazole.

Supportive care for symptoms like fever, cough, etc., is given as needed.

Treatment of underlying disorder

The treatments for underlying disorders, such as cancer and HIV, are vast and differ from one case to another.

Anti-retroviral drugs are used to treat HIV infections. A few examples of antiretroviral drugs are abacavir, emtricitabine and lamivudine.

Chemotherapy drugs or others may be used, depending on the type of cancer. A few examples are docetaxel, ixabepilone and paclitaxel.

Anti-diabetic drugs like metformin, dapagliflozin and glipizide are used to manage diabetes mellitus.

Human normal immunoglobulin formulations are used to supplement the antibodies against a foreign infection.

Interferon-gamma preparations are synthetic interferons used to treat some types of primary immunodeficiency.

Donor plasma from a suitable donor who has antibodies against a particular infection is also used to treat life-threatening infections due to low immunity.

Bone marrow or stem cell transplantation are advised for treatment of primary immunodeficiencies.

Home Care For Low Immunity

You must take precautions to avoid catching an infection if you have poor immunity. If you are suffering from low immunity due to lifestyle disorders, making healthy changes can boost your immune system.

The following things can help if you are suffering from immunodeficiency:

Take a wholesome and balanced diet rich in vitamins and minerals.

Drink an adequate quantity of fluids in the form of water, coconut water, buttermilk, clear soups, herbal teas throughout the day.

Establish a sound sleep schedule and get at least 6-8 hours of sleep. Avoid daytime naps. It is better to get 8 hours of sound sleep at night rather than catching up on sleep in bits and parts.

Exercise daily for at least 30-45 minutes.

Go out for a walk in the early morning sun to get your daily dose of vitamin D.

Reduce the excessive consumption of caffeinated drinks (especially in the evening) and alcohol.

Quit smoking and recreational drugs.

Wash hands often and thoroughly with soap and water, especially before meals and after visiting the washroom.

Wear a surgical mask while interacting with crowds.

Complications Of Low Immnuity

If low immunity is left untreated, it may lead to the occurrence of severe and life-threatening infections, such as pneumonia, meningitis, septicemia, etc. A person with low immunity usually suffers from recurrent infections and succumbs to them unless appropriate medical care is available at the right time. There is also an increased possibility of damage occurring to vital organs like the heart, lungs, liver, etc.

Alternative Therapies Of Low Immunity

Along with the medical treatments for the underlying health conditions, immunity can be boosted with several alternative therapies like:

Diet

Consuming a balanced diet rich in essential nutrients is an excellent way of providing the body with the fuel it needs to perform activities. Including vitamin C-rich foods in your diet like lemons, oranges, bell peppers, and gooseberries are an excellent way of boosting your immunity. A balanced diet ensures there are no vitamin or mineral deficiencies that can often result in low immunity. Drinking plenty of water and fluids like fresh fruit juices, coconut water, etc., keeps your body hydrated and refreshed.

Meditation and relaxation

Meditation can help channel and conserve the body’s energy. It helps overcome feelings of anxiety or stress, which are an important cause for altered immune function. Meditation and relaxation techniques also help promote a sense of overall health and wellbeing.

Exercise and yoga

Light exercises and yoga help boost the body's energy levels and are a great way of boosting your immunity. Performing various exercises, such as aerobics, muscle strengthening, yogasanas like Shalabhasana, Tadasana, Bakasana, etc., for at least 30-45 minutes every day is a good way to keep your body healthy and immune system robust.

Ayurveda

Ayurveda has many remedies that can boost the immune system. Using herbs and spices, such as turmeric, ginger, garlic, etc., in day-to-day cooking, consuming decoctions or kadhas made from tulsi, cinnamon, black pepper, clove, honey, etc., are thought to boost immunity. Chyavanprash is an ayurvedic formulation famous for its immunity-boosting properties.

The role of Ayurvedic herbs to prevent and fight infections cannot be overemphasized to stay healthy and fit. Here are some commonly used ayurvedic herbs that can boost your immunity.

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Homeopathy

Homeopathic preparations in the form of oral drops/pills, such as Arsenicum album, Lycopodium, Rhus Toxicodendron, Sambucus nigra etc., are thought to be immunity-boosting. These are sometimes prescribed along with standard medicines to treat community outbreaks of infectious diseases.

Living With Low Immunity

Living with low immunity can be challenging. It affects one of the key systems of the body, making the body susceptible to severe and opportunistic infections. People with low immunity should take extra care of their hygiene and sanitation to prevent any kind of infection. Washing hands thoroughly with soap and water, especially before meals and after visiting the washroom are basic but absolutely essential measures to be followed. Adopting a healthy lifestyle, consuming a wholesome and well balanced diet, adequate rest and sleep along with managing stress can help boost immunity and offer some protection to those with weakened defenses. Wearing a surgical mask while interacting with crowds is also necessary especially in the times of the Covid 19 pandemic. Lifelong treatments are usually essential for those with primary immunodeficiencies and conditions, such as HIV or cancer.

Frequently Asked Questions

What is the difference between immunodeficiency disorders and autoimmune diseases?

What precautions should I take to avoid catching infections if I have low immunity?

What are some foods that boost immunity naturally?

Is HIV-AIDS deadly?

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Lung cancer

Also known as Lung carcinoma, Lung tumor and Cancer of the lungs

Overview

Cancer is a medical condition in which the body starts to uncontrollably grow some cells that can also end up spreading to other parts of the body. Lung cancer is a type of cancer that occurs and affects the infected person's lungs. It causes uncontrolled growth of lung tissues and can spread rapidly to other regions such as lymph nodes, brain, adrenal glands, liver, and bones.

The exact cause of lung cancer is still unknown. However, the leading cause of this disease is smoking, and the risk of incurring lung cancer has been associated with prolonged smoking. Quitting smoking has been shown to significantly decrease a person's chance of developing the disease.

In the initial stages, lung cancer does not show any symptoms. Symptoms that appear at an advanced stage usually include a persistent cough that doesn't go away, spotting blood while coughing, shortness of breath, hoarseness, losing weight, chest pain, and headaches.

There are different types of lung cancers, and the treatment for the same depends on the type and stage of the lung cancer. Treatment modalities can include a combination of surgery, chemotherapy, radiotherapy, and immunotherapy.

Key Facts

Usually seen in

Age above 70 years

Gender affected

Both men and women

Body part(s) involved

Bronchi

Lungs

Lymph nodes

Heart

Spine

Mimicking Conditions

Pneumonia

Asthma

Chronic obstructive pulmonary disease

Bronchitis

Pleural effusion

Pneumothorax

Tuberculosis

Acid reflux

Necessary health tests/imaging

X-ray

CT scan

MRI

PET scan

Biopsy

Treatment

Radiotherapy

Immunotherapy

Chemotherapy

Targeted drug therapy

Surgery: Wedge resection, Segmental resection & Pneumonectomy

Specialists to consult

General physician

Oncologist

Pulmonoligist

Symptoms Of Lung Cancer

Like other cancers, the symptoms of lung cancer become more evident in the later stages of the disease than in earlier stages. Patients usually notice these symptoms when the disease advances to the higher stages. A few symptoms seen in lung cancer include the following.

A persistent cough that doesn't go away

Spotting blood in cough

Hoarseness

Losing weight for no evident reason

Headache

Bone pain

Trouble in breathing

Shortness of breath

Chest pain

Cough that worsens with time

Persistent or recurrent chest infection

Trouble during swallowing

Wheezing

Loss of appetite

Fatigue

Swelling of the face and veins

Finger clubbing

Enlargement of lymph nodes in and above the clavicle

Thrombocytosis (excessive production of platelets)

Here are some common signs and symptoms that could be suggestive of cancer.

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Types Of Lung Cancer

Generally, the most common types of lung cancer are seen in the lungs itself, other rare types of cancer may also occur outside the lungs and chest wall. Types of lung cancer include:

Non-small cell lung cancer (NSCLC)

Cases of NSCLC are more commonly seen, and nearly 80%-85% of cases of lung cancer are non-small cell lung cancer. The subtypes of NSCLC are as follows:

1. Adenocarcinoma: This kind of cancer starts in the cells of the lungs that are responsible for secreting a substance called mucus. It is typically seen in smokers or past smokers but is also one of the most common cancers to affect non-smokers. Adenocarcinoma tends to affect women more than men and is likely to affect younger people. This cancer is usually found in the outer regions of the lungs and is typically diagnosed before it has spread to other parts of the body.

2. Squamous cell carcinoma: Squamous cells are flat cells that line the inside of the airways of the lungs. Squamous cell carcinoma starts in squamous cells and is linked with a history of smoking. Doctors tend to find this cancer in the centre of the lungs, typically near the main airway or bronchus.

3. Large cell carcinoma: This kind of cancer tends to appear in any part of the lung and is also known as undifferentiated cancer. Large cell carcinoma grows and spreads rapidly, which can make it harder to treat.

Small cell lung cancer (SCLC)

This kind of cancer is almost exclusively seen in heavy smokers and is found less commonly in non-smokers. Almost 10-15% of cases are SCLC, also referred to as oat cell cancer. This cancer tends to grow and spread faster than the other varieties, and almost 70% of affected people are diagnosed with the disease at a stage where cancer has already spread to other parts of the body. This kind of cancer responds better to treatment modalities such as chemotherapy and radiation therapy. However, the chances of SCLC returning are higher, and the patients are warned about the same.

Other types

1. Mesothelioma: Mesothelioma is a rare cancer of the chest lining, commonly caused by asbestos exposure. It accounts for about 5 percent of all lung cancer cases. Mesothelioma develops over a period of 30 to 50 years between exposure to asbestos and getting cancer.

2. Chest wall tumours: These are rare and can be malignant (cancerous) or benign (non-cancerous). Malignant tumours must be treated. Benign tumours are treated depending on where they are located and the symptoms they cause.

3. Metastatic lung cancer: These kinds of cancers don't start in the lungs and are not lung cancers. Often cancer can start in other parts of the body and spread to the lungs in the later stages, which are called metastatic cancer. Almost any cancer can metastasize to the lung. Some cancers that often spread to the lung are:

Bladder cancer

Breast cancer

Colon cancer

Kidney cancer

Neuroblastoma (cancer of immature nerve cells)

Sarcoma

Wilms' tumour (kidney cancer in children)

Prostate cancer

Learn everything about prostate cancer from causes and risk factors to treatment.

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Causes Of Lung Cancer

Typically smoking causes lung cancer. First-hand smoking or persistent exposure to second-hand smoke has been the leading cause of lung cancer. However, lung cancer can also develop in patients who aren't smokers and have never been exposed to second-hand smoke. In such cases, there is no clear cause behind the occurrence of lung cancer.

Doctors believe that smoking damages the lining of the lungs and hence causes lung cancer. Cigarette smoke is filled with heavy carcinogens (cancer-causing substances) that start affecting the healthy lining of the lungs. In the initial stages, the body tries its best to repair the damage. However, repeated exposure results in increasing damage to the lining of the lungs and over time, causes the lung cells to sustain permanent damage. This results in the development of cancer.

Risk Factors For Lung Cancer

A risk factor is anything that increases a person’s chance of getting a disease. Risk factors for lung cancan can be classified into the following:

Modifiable risk factors

1. Smoking: The number of cigarettes a person smokes and the number of years they have smoked affect a person's chances of incurring lung cancer. The risk of lung cancer increases if a person is a chronic smoker. It is advisable to quit smoking at any age to reduce the risk of developing lung cancer.

Here’s more on how smoking can affect your lungs.

Read Now!

2. Secondhand smoke: Getting exposed to second-hand smoke also increases a person’s risk of developing lung cancer.

3. Exposure to radon gas: These exposures can occur if you live in an area with a high level of radon, an element made by the breakdown of uranium in the soil, water, and rock. This radon becomes a part of the air you breathe and can accumulate to unsafe levels. According to the US Environmental Protection Agency (EPA), radon is the second leading cause of lung cancer in the US and is the leading cause among people who don't smoke.

4. Exposure to asbestos: Getting exposed in workplaces to elements such as asbestos can cause lung cancer and increase a person's chances of developing the disease. This risk is especially high in smokers. People exposed to large amounts of asbestos also have a greater risk of developing mesothelioma, a type of cancer that starts in the pleura (the lining surrounding the lungs).

5. Exposure at the workplace: Other carcinogens (agents that can cause cancer) found in some workplaces can increase the risk of developing lung cancer. They include:

Radioactive ores such as uranium

Inhaled chemicals such as arsenic, beryllium, cadmium, silica, vinyl chloride, nickel compounds, chromium compounds, coal products, mustard gas, and chloromethyl ethers

Diesel exhaust

6. Diet: Studies have suggested that diet is responsible for approximately 30% of all cancers. Many reports suggest that dietary factors contribute to the risk for lung cancers. For example, low serum concentrations of antioxidants, such as vitamins A, C, and E, have been associated with the development of lung cancer.

Non-modifiable risk factors

1. Family history: If you have a family history of lung cancer, the chances of you incurring the same can increase exponentially. Talk to your family about any history of lung cancer in the family.

2. Previous history of lung diseases: Chronic inflammatory lung diseases such as asthma, chronic obstructive lung disorder (COPD), and tuberculosis, are associated with an increased lung cancer risk in later life.

Patients with early-stage lung cancer are often misdiagnosed as tuberculosis due to the common symptoms which leads to a delay in the correct diagnosis. One should not go for antitubercular medication unless relevant investigations have been performed to rule out lung cancer. Read more about tuberculosis.

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3. Air pollution: In cities, with heavily trafficked roads, air pollution (especially near) appears to raise the risk of lung cancer slightly.

4. Gender: Smoking prevalence is higher among men than women which is the leading cause of lung cancer.

Diagnosis Of Lung Cancer

If your doctor suspects lung cancer, they will advise a series of tests to confirm the diagnosis.

Imaging tests

Imaging modalities such as an X-ray, CT scan, an MRI, or PET scan are advised by healthcare professionals to view the areas of lung tissues that can be affected by cancer.

A positron emission tomography (PET scan) is an imaging test that utilizes radiation to reveal the activity of cells within the body. It helps healthcare professionals to diagnose health conditions and the effectiveness of treatment plans. The PET scan reveals multidimensional colour images of the workings of the body and displays how the organ looks while also telling doctors about their functioning. A healthcare professional will inject a radiotracer (a radioactive material tagged to a natural chemical such as glucose) into the body, and the machine will detect the radiation released by the radiotracer. The areas of the body that need more energy are called the ‘hot spot’ and are seen bright on the PET scan. These hot spots indicate cancer cells since these cells are very active and use glucose more rapidly.

Tissue samples

A doctor may wish to test your tissues to check for cancer cells and send a sample of the affected tissue for a biopsy to the laboratory. This process is carried out using a fine needle aspiration biopsy (FNAC) or a bronchoscope. A bronchoscope is a device that has a thin, lighted end with a camera attached to its end. The device enters the mouth or nose, where a healthcare professional can view the organs through the camera on a screen and look for lesions. The scope will allow the doctors to take a sample from the lesions and send them for further diagnosis. Some less accessible areas may require more invasive surgeries, such as a thoracoscopy to remove lung tissue for a sample.

Prevention Of Lung Cancer

There is no certain way through which one can prevent lung cancer. However, there are certain steps that a person can take to reduce their risk of getting lung cancer.

Stop smoking

Smokers have shown to be at a higher risk of incurring lung cancer. If you have never smoked, stick to that and avoid smoking for any reason. If you are a smoker, quit smoking. Quitting at any stage of your life significantly reduces the risk of developing lung cancer. Talk to your family and healthcare professionals who specialise in helping people quit smoking.

Several clinics have tobacco cessation sessions that help people in quitting an addiction. You can also attend meetings and support groups where like-minded people gather to talk about their journey of quitting the said addiction. One can also opt for nicotine patches and other medications to help one quit smoking.

Want To Quit Smoking? 7 Practical Ways To Do So!

Read Here!

Avoid second-hand smoke

If you live in an area or with a family member who is a frequent smoker, encourage them to quit or like them to smoke outside. Getting frequently exposed to second-hand smoke can also increase a person's risk of developing lung cancer. Avoid visiting places where people would be smoking in closed confines such as bars and pubs.

Secondhand smoke is as dangerous as active smoking. Here are 20 common smoking myths busted!

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Test your home for radon

Contact your municipality officers for the methods through which you can test your home for radon levels. If you live in an area where the radon is a known problem, contact the local department to learn about how you can minimise your risk and take remedies to make your home a safer place for you and your family.

Avoid carcinogens

If you are employed in work fields that require you to follow certain safety protocols to avoid exposure to carcinogens such as asbestos, follow those precautions. Take advice from your doctor on ways through which you can protect yourself from carcinogens at work. If you are a frequent smoker, your risk of developing lung cancer from exposure to carcinogens at work increases to quite some extent. Take precautions to avoid getting exposed to toxic chemicals at your workplace.

Eat a healthy diet

Take a healthy diet that is rich in fruits and vegetables. Choose food sources that have a high nutrient value. Consult your doctor before taking vitamins in supplements form since some supplements can increase the risk of lung cancer. Vitamin A and its family of compounds (the retinoids) have shown to have chemopreventive properties.

Here are 5 superfoods that fight cancer and gift you healthy life.

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Try chemoprevention

Chemoprevention is defined as the use of agents to prevent, inhibit, or reverse the process of carcinogenesis.

Understand the biomarkers of cancer

A better understanding of the molecular events that occur during carcinogenesis has opened new areas of research in cancer prevention. Currently, pre-neoplasia is diagnosed based on histological examinations.

Lower exposure to workplace risk factors

Exposure to certain chemicals at the workplace have shown to increase the risk of lung cancer. Taking precautionary measures to avoid the exposure can be beneficial in the long run.

Exercise regularly

Exercising regularly or at least three days a week can promote a healthier lifestyle. Walking for at least 30 minutes a day is undoubtedly beneficial for overall health. It not only boosts your mood, and aids in weight loss but also improves your heart health, helps relieve stress, and increases your life expectancy.

Did you know?

Walking may improve the quality of life for people with advanced cancer. Click here to read more!

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Specialist To Visit

You should visit a doctor if you are experiencing symptoms such as loss of breath, difficulty in breathing, persistent coughing, blood in cough or sputum, fatigue, back pain, headache, wheezing, and pain in the chest. These symptoms might indicate the possibility of a medical condition behind the symptoms.

You can consult the following doctors for diagnosis:

General physician

Oncologist

Pulmonologist

A pulmonologist diagnoses and treats diseases of the respiratory system. An oncologist is a medical practitioner qualified to diagnose and treat tumours.

Consult India's best doctors online with a single click. Book an appointment now!

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Treatment Of Lung Cancer

Cancer is treated depending on the stage and extent of your cancer. The staging of cancer will help your healthcare professional decide the treatment modalities that will work the best for you. Your doctor will carry out some staging tests to determine the extent of your cancer. These tests will include the various diagnostic procedures mentioned above such as PET scan, CT, and MRI. The lowest stage of cancer indicates that the cancer is restricted to the lung. Higher stages indicate the spread of cancer, in which stage IV is considered an advanced stage and indicates that the disease has spread to other parts of the body other than the lungs.

Depending on your health and the stage of your cancer, your doctor will decide your treatment plan. Some people may not choose to undergo the treatment since they might feel that the risks of the treatment outweigh the benefits. Elderly people in advanced stages may feel this way; hence it is important to talk to your doctor about the various treatment plans and the potential risks they carry. Treatment options for cancer include:

Surgery

A surgical procedure may be carried out to remove the affected area along with a healthy margin of the tissue. These procedures include:

Wedge resection: In this, a small section of the lung is removed to resect the cancer cells along with a margin of healthy tissue.

Segmental resection: This allows a doctor to remove a larger area of the lung, whereas a lobectomy involves removing the entire affected lobe of the lung.

Pneumonectomy: This procedure involves the removal of an entire lung.

In the advanced stages of cancer, the lymph nodes may also get affected. In such cases, the surgeon may remove some lymph nodes to check for the signs of the spread of cancer. If your cancer is confined to the lungs, your surgeon may suggest surgery. However, large areas may require chemotherapy or radiotherapy before the surgery to reduce the size of the tumour. Sometimes, doctors may recommend radiotherapy or chemotherapy after a surgical process to ensure that all cancer cells are dead.

Radiation therapy

This is a treatment modality that uses high-powered energy beams that work as an effective treatment to kill cancer cells. During a radiation therapy appointment, the patient is asked to lie flat on a table. A large machine that emits the energy beam moves around the body and aims the beam at precise points. Radiation therapy is often recommended for patients who have localised lung cancer and can also be recommended after surgery to remove the affected tissue.

Radiation therapy can lead to some side effects including nausea and fatigue. It can also cause some level of skin erythema (redness) and irritation near the abdominal and groin areas. Before the radiation therapy, you can talk to your doctor about the side effects and methods of managing the same. Several men opt to preserve their sperm before beginning radiation therapy.

Stereotactic body radiotherapy

Radiotherapy, also known as stereotactic body radiotherapy, is an intense form of radiation treatment in which the cancer is subjected to several beams of radiation from different angles. Radiotherapy is usually done over one or few appointments and is considered a good option for people with small lung cancers that haven't spread to other parts of the body or for small cancers in sites that aren't accessible easily. It can also be used to treat cancer that has spread to other parts of the body.

Chemotherapy

Chemotherapy treatment is a treatment modality that uses strong medicines that are effective in killing cancer cells. These drugs circulate around the body and aim at destroying cancer cells that may have travelled from the original tumour. According to stage 0 lung cancer, chemotherapy may be your only treatment option, or a patient can be advised chemotherapy prior to or post a lymph node surgery. It can be advised alone or along with radiotherapy. Patients are given a combination of medications over a period of months or weeks where the medicines travel in the body via a vein or are given orally. Chemotherapy also helps in reducing the size of the tumours hence making it easier for surgeons to remove the mass completely.

Targeted drug therapy

This kind of treatment focuses on specific abnormalities that may be present within the cancer cells. These drugs block the abnormalities and hence can cause the cancer cells to die. Targeted drug therapy is often considered a treatment option for people with recurrent cancer or advanced cancer, and some targeted therapies work specifically in patients whose cancer cells have specific genetic mutations. Before undergoing targeted therapy, your cancer cells may be sent for testing in laboratories to check which drug is right for you.

Immunotherapy

Immunotherapy takes the help of the body’s own immune system to help in fighting cancer. Generally, the immune system helps in fighting foreign bodies such as cancer cells, however, sometimes, the immune system stops attacking the cancer cells because they start producing proteins that help the cancer cells in hiding from the immune system. Immunotherapy helps by interfering with that process and helps the immune system in identifying the cancer cells and lets it destroy them. This treatment modality is advised for people with advanced lung cancers and cancers that have metastasized (spread) to other parts of the body.

Home-care For Lung Cancer

Learning that one has cancer can be scary and cause people to panic. However, modern science has allowed several options to open up and the prognosis to look better than ever before. Getting diagnosed with cancer can be overwhelming; hence it is important to cope with the distress of the same and focus on your treatment with the help of your family and loved ones.

If you have been prescribed medications to manage your medical condition, make sure you take those medications on time.

Label your drugs and set the alarm to make sure you have the medicines every day at the same time. Follow all the instructions given to you by your doctor.

Follow the diet given to you by your doctor.

Ask your doctor about your diagnosis and the different treatment options available for you. Learning about cancer and having an idea about what's to come in the next few months can help you cope with the uncertainty of cancer. Learning about cancer can also help you in making the right choice regarding your treatment.

It is important to talk to your family and loved ones during the course of your treatment. Cancer treatments can be isolating and scary, and patients often require practical support to help them through the treatment.

You can opt for counsellors or support groups where people going through similar experiences gather to talk about their experiences with the disease. The shared concern and understanding can help you deal with the outcome of cancer.

Complications Of Lung Cancer

Progressive lung cancer can cause several complications down the road. This can be caused due to the spread of cancer to different parts of the body or as a result of certain cancer treatments.

Superior vena cava syndrome

The presence of tumors in the upper area of the right lung can prevent blood from flowing through the superior vena cava, a large vein that is responsible for carrying blood from the upper body towards the heart. This results in superior vena cava syndrome and is associated with loss of consciousness, dizziness and facial swelling.

Metastasis

Over time, cancer can spread to other parts of the body, such as the brain, adrenal glands, and bones. In some cases, cancer is detected after cancer has spread to other parts of the body from the original site and is commonly seen in advanced stages of cancer.

Lung infections

Patients with lung cancer are more prone to getting affected with infections such as bronchitis or pneumonia since the immune system has decreased activity due to cancer itself or as a result of cancer treatments.

Heart blockage

Sometimes, cancer can spread to the heart and result in compression of the veins and the arteries. This can result in the buildup of fluids and heart blockage along with arrhythmias or heart attacks.

Hypercalcemia

Hypercalcemia is a condition in which the body has high levels of calcium that can lead to vomiting, excessive thirst, and stomach pain.

Blood clots

People with lung cancer are at a higher risk of developing blood clots and deep vein thrombosis, which results from the formation of a blood clot in a deep vein. If the blood clot travels to the lungs, it can prevent the blood flow and result in a fatal condition called pulmonary embolism.

Neuropathy

Tumours present in the top of the lungs can affect the eyes, face and shoulders which can cause arm and shoulder pain. It can also result in Horner's syndrome, in which the patient experiences droopy eyelids and changes in the size of the pupil.

Spinal cord compression

Some patients may start experiencing constant back pain that can be due to the spread of cancer to the spine. This causes compression of the vertebrates (spinal bones), resulting in weakness and back pain. Around 28% of people with lung cancer may experience this condition.

Did you know?

In India, only 15-20% of lung cancer cases are detected in the early stages. Read about things you should know about lung cancer.

Click Now!

Alternative Therapies For Lung Cancer

Lung cancer requires orthodox medical treatment. However, some patients feel that a complementary approach via alternative therapies can help in the management of the side effects caused during the treatment. These consist of:

Acupuncture

Acupuncture has proven to be a successful alternative therapy form for patients that have lung cancer. But provide relief for patients and also ease symptoms such as nausea and vomiting, which are common side effects of cancer treatments. Acupuncture involves the insertion of needles through the skin at specific points on the body.

Aromatherapy

It uses a mix of essential oils for massages that can make a person feel relaxed. Often patients feel that alternative therapies such as aromatherapy help them cope with the treatment of cancer and allow them to feel relaxed.

Hypnosis

Hypnosis is carried out by a therapist who will help you through certain relaxation exercises that can encourage positive and relaxing thoughts. It also helps in reducing nausea and anxiety seen in people with cancer.

Meditation

It can help you centre your thoughts and promote the feeling of calmness and acceptance. Meditation is said to improve the quality of life and improve a person's mental state.

Practising meditation for just 10-15 minutes a day can go a long way in protecting you against diseases or helping manage them better. Read about 6 ways how meditation can improve your life.

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Living With Lung Cancer

Being diagnosed with lung cancer can cause stress and anxiety in patients. This medical condition directly affects the quality of life, and patients struggle with the concept of cancer itself. Cancer affects your day-to-day life and also affects the following months of your life. Here are a few things to keep in mind.

Take care of yourself

Preparing for the treatment of lung cancer can seem like a daunting task. To do so, you need to take care of yourself and your body. Eat a healthy diet that is well balanced. Increase the number of fruits and vegetables you intake and get plenty of rest every night. Try to practice meditation and eliminate sources of stress from your life prior to the treatment. Talk to your doctor about strategies that can help your body prepare for the treatment.

Try to relax

Patients with lung cancer can often feel short of breath, and fear and anxiety makes it even harder. Learn to identify these instances, and the next time you start feeling short of breath, focus on managing the fear by opting for an activity such as meditation to help you reduce your anxiety and help you relax. Focus on moving the muscles of your diaphragm instead of trying to fill your lungs with air and breathing with pursed lips while pacing your breathing.

Save your energy

Cancer often causes fatigue and makes a person feel tired during the course of the treatment. Cut down on non-essential tasks and enlist the support of your family members that can help you in carrying out day-to-day tasks.

Cope with emotions

Living with lung cancer can bring up emotions. To keep yourself emotionally healthy during your journey, talk to your friends and family, talk to other people in the same situation, know about your condition, do not try to do too much, and make time for yourself.

Get help from support groups

The lung cancer community is growing. Many people have been touched by lung cancer. There are lots of active support groups for patients and family caregivers, so no one has to face a lung cancer diagnosis alone.

Frequently Asked Questions

What is palliative care?

What are the treatment options for non-small lung cancer?

What are the other types of lung cancers?

What are the stages of small cell lung cancer?

What are the survival rates of lung cancer?

Does having a family history of lung cancer increase the chances of getting it?

Should a person get screened for lung cancer?

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Bell's palsy

Also known as Idiopathic facial palsy, Facial nerve palsy, Antoni’s palsy, Refrigeration palsy

Overview

Bell’s palsy, named after the scientist Sir Charles Bell, who described and researched the disease in detail, is the most common form of facial paralysis. Bell's palsy causes sudden weakness and paralysis of the muscles of the face over a period of 48- 72 hours. It is characterized by a droopy appearance of the face wherein the patient finds it difficult to move their mouth, raise their forehead and close their eye. The weakness may also affect saliva and tear production as well as the sense of taste.

Bell's palsy usually affects only one side of the face; however, in rare cases, it can affect both sides. People in the age group of 15 to 45 years are usually affected, but the disease may occur at any age. Women and men are equally affected or a slight female predilection is seen. The exact cause of the condition is unknown, but it is usually known to be a reaction that occurs after a viral infection.

Symptoms generally start to improve after a few weeks, with the recovery of some or all facial functions within six months. However, a prompt visit to the doctor and early treatment leads to a better outlook. It is also essential to rule out life-threatening conditions like stroke. Although most patients recover completely, some might have unfavorable functional and cosmetic outcomes due to chronic facial weakness. Relevant interventions and home care can help in improving the quality of life.

Key Facts

Usually seen in

Adults between 15 to 45 years of age

Gender affected

Both men and women or slightly more common in women

Body part(s) involved

Facial nerve of either side of the face or very rarely both sides

Prevalence

Worldwide: 15 to 30 cases per 100,000 people (2021)

Mimicking Conditions

Stroke

Damage to the facial nerve due to injury to skull or face

Ramsay hunt syndrome

Lyme disease

Otitis media

Myasthenia gravis

Sarcoidosis

Guillain-Barré syndrome

Tumor (involving brain or parotid glands)

Facial nerve schwannoma

Facial nerve venous malformation (hemangioma)

Necessary health tests/imaging

Blood tests

Hearing and balance tests

Taste and salivation tests

Tear test

Magnetic resonance imaging (MRI)

Computerized tomography (CT scan)

Electromyography (EMG)

Treatment

Oral corticosteroids: Prednisolone

Antiviral medication: Acyclovir & Valacyclovir

Pain relieving medications: Aspirin, Paracetamol & Ibuprofen

Botox injections

Laser therapy

Acupuncture

See All

Symptoms Of Bell's Palsy

Symptoms of Bell's palsy vary from patient to patient and range from mild weakness to total paralysis. They tend to appear suddenly and reach peak severity within 48 to 72 hours.

The facial nerve, also called the 7th cranial nerve, travels through a narrow bony shell in the skull, beneath the ear, to the muscles on each side of the face. Each facial nerve directs the muscles on one side of the face, including those that control facial expressions and eye blinking and closing. Additionally, the facial nerve carries signals to the salivary glands, lacrimal or tear glands, and the muscles of a small bone in the middle of the ear called the stapes. The facial nerve also transmits taste sensations from the tongue.

Generally, Bell's palsy affects only one of the paired facial nerves and one side of the face, however, in rare cases, it can affect both sides.

Because the facial nerve has multiple functions and is so complex, damage to the nerve or a disruption in its function can lead to a range of symptoms mentioned below.

Often the first symptom of Bell’s palsy is a dull aching pain around the jaw or in or behind the ear. This can occur for a day or two before facial weakness is noticed.

Weakness/paralysis/twitching of the muscles of the face.

Facial droop of the affected side of the face, with drooping of the eyebrow and corner of the mouth.

Problems smiling, talking or making facial expressions. Mouth may be drawn toward the unaffected side on smiling.

Drooling from one side of the mouth due to lack of control over the muscles of the face.

Difficulty eating and drinking. Food falls out from one side of the mouth.

Altered sense of taste.

Dry mouth (xerostomia).

Inability to close or blink eye.

Reduced tear production causing dry eyes (xerophthalmia), eye sores or infections.

Absence of forehead wrinkling.

On attempted closure, the eye rolls upward (Bell's phenomenon).

Pain in front or behind the ear on the affected side.

Intolerance to loud noise (hyperacusis).

Ringing in the ears (tinnitus).

Causes Of Bell's Palsy

Classically, Bell's palsy has been defined as idiopathic which means that a specific cause for the disease cannot be identified. However, the following causes have been proposed by the researchers.

1. Viral hypothesis: Researchers have long believed that the following virus may play a role in the development of Bell's palsy.

Herpes simplex type 1, which causes cold sores

Herpes simplex type 2, which causes genital herpes

Herpes zoster virus, which causes chickenpox and shingles

Epstein-Barr virus, which causes mononucleosis

HIV, which damages the immune system

Influenza B virus, which causes flu

Rubella virus, which causes german measles

Coxsackie virus, which causes hand-foot-and-mouth disease

Adenovirus, which causes respiratory illness

Cytomegalovirus infections

Paramyxovirus, which causes mumps

Most scientists believe that reactivation of an existing (dormant) viral infection may cause the disorder. While the actual mechanism in Bell's palsy is unknown, one proposed mechanism is that the patient had a primary viral infection in the past. The virus continues to live in the nerve for months to years and reactivates at a later stage and reproduces and travels along the nerve. The virus infects the cells surrounding the nerve. The immune system responds to the damaged cells, which causes inflammation of the nerve and subsequent weakness or paralysis of the face.

2. Vascular ischaemia: This theory believes that inflammation and swelling of the facial nerve in reaction to any infection or any other factor, causes compression within the bony canal that encases the facial nerve and leads to restricted blood and oxygen supply to the nerve cells. This in turn impacts the function of the nerve leading to facial paralysis.

3. Autoimmunity: It is also proposed that a viral infection may prompt an autoimmune reaction against a component of the nerve’s myelin covering, leading to the demyelination of the facial nerve, in a way that is not yet clear.

Did you know?

There have been rare case reports of Bell's palsy that accompany a COVID-19 infection or may present as a neurological manifestation after recovery from COVID. Since Bell’s palsy is usually thought to be caused by viral infections, it may be possible it could be caused by the Coronavirus. However, more research is required to prove this relationship.

Read More About COVID!

Risk Factors For Bell's Palsy

Most scientists believe that something can trigger reactivation of a dormant viral infection up and triggering Bell’s palsy. The potential triggers can be those that impair immunity like stress, sleep deprivation, physical trauma, minor illness etc.

Bell's palsy is more often associated with the following risk factors such as:

Diabetes

Hypertension

Pregnancy especially during the third trimester or after delivery

Upper respiratory infection

Ear infections

Facial anatomy with a narrow facial nerve canal

Migraine

Genetic predisposition

Exposure to extreme cold weather

Hypothyroidism

Sarcoidosis

Amyloidosis

Sjogren’s syndrome

Tumors of injury to brain

Diagnosis Of Bell's Palsy

A diagnosis of Bell's palsy is usually made based on current symptoms of acute facial nerve weakness on one side of the face with onset in less than 72 hours and by ruling out other possible causes of facial paralysis.

A full medical history, including any recent illnesses or viral infections is recorded. The doctor will carry out a comprehensive physical and neurological assessment.

There is no specific laboratory test to confirm diagnosis of Bell’s Palsy. Routine laboratory or imaging studies are not necessary for most cases, but to assist further with the diagnosis and to rule out other conditions, the doctor may recommend.

1. Blood tests

a) To rule out other potential causes such as lyme disease and Ramsay Hunt syndrome.

b) To determine fasting glucose or HbA1c to assess diabetes mellitus as a risk factor.

c) If herpes simplex virus-1 (HSV-1) or varicella zoster virus (VZV) are suspected, serology can be sent for confirmation.

2. Hearing and balance tests to assess any involvement of the inner ear.

3. Salivary flow test to evaluate changes in salivation.

4. Tear test to measure the eye’s ability to produce tears.

5. Magnetic Resonance Imaging (MRI) and Computerized Tomography (CT scan) are the imaging techniques used to rule out stroke and other structural causes of pressure on the facial nerve such as tumours or bone fracture.

6. Electromyography (EMG) to assess the facial nerve activity and extent of its damage. It may also help to predict time and course of recovery.

Celebs affected

Anupam Kher

Anupam Kher had revealed in a media interview that he suffered from facial paralysis while shooting for the blockbuster movie 'Hum Aapke Hain Kaun'.

George Clonney

George Clooney had Bell's Palsy when he was in middle school at the age of 14. He revealed this in an interview with Larry King in 2006 and said the condition lasted for almost 9 months.

Angelina Jolie

Angelina Jolie had revealed in a Vanity Fair interview that she was diagnosed with Bell's Palsy. In the interview she had credited acupuncture for her full recovery.

Pierce Brosnan

Pierce Brosnan, a James Bond veteran, was diagnosed with Bell's Palsy in the 1980s. According to a TV Guide report published in 1984, he was put on prednisone and went back to shooting with the camera focusing on the unaffected side of his face to mask the disorder. According to the report, the condition went away after a few weeks.

Sylvester Stallone

Sylvester Stallone, famous for his role in Rocky, is known for his slurred speech and his classic grin which are the residual effects of Bell's palsy.

Prevention Of Bell's Palsy

Currently there is no known way to prevent or avoid Bell’s palsy.

However, potential triggers like stress, sleep deprivation, exposure to extreme cold etc. can be avoided. Risk from factors like diabetes, hypertension, upper respiratory infection, ear infections & hypothyroidism can be reduced by proper management of the respective diseases.

Bell’s Palsy vs. Stroke

Bell's palsy is the most common cause of facial paralysis. It occurs when the facial nerve that controls the muscles of the face gets injured or fails to work properly. However, Stroke occurs due to lack of oxygen or blood supply to the brain thereby impacting the bodily functions controlled by that specific part of the brain.

Although Bell's palsy is not a stroke, both have many overlapping symptoms. Since stroke is a medical emergency it is advised to seek medical attention at the earliest.

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Specialist To Visit

Bell's palsy is not a life-threatening condition but it can produce symptoms similar to other more serious causes for facial paralysis such as a stroke. Hence, all episodes of facial weakness or paralysis should be immediately examined by a doctor to rule out the possibility of a stroke. Moreover, treatment of Bell's palsy is most effective when administered early, so patients should see their doctor as soon as they experience symptoms of Bell’s palsy.

If you have had a previous episode of Bell's palsy and have another similar episode, you should again be examined to rule out other more serious causes of the facial weakness. The following doctors can be consulted:

General physician

Neurologist

ENT specialist

Ophthalmologist

Referral to a neurologist should be considered for recurrent or bilateral cases. ENT specialist can be consulted for hearing and balancing issues. If the diagnosis is not straightforward, and a tumor is suspected, the patient should be referred to ENT specialist or a neurologist as appropriate. In case of any eye complications, an ophthalmologist can be consulted.

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors.

Consult Now!

Treatment Of Bell's Palsy

Bell's palsy affects each individual differently. Some cases are mild and do not require treatment as the symptoms usually subside on their own within 2 weeks.

There are no medications specifically approved to treat Bell's palsy. However, certain treatments can help.

1. Improve or fasten recovery

Oral corticosteroids

Oral corticosteroids such as prednisolone have traditionally been prescribed to reduce facial nerve inflammation and swelling in patients with Bell's palsy. Prednisolone is typically prescribed in a 10-day tapering course. It should be started within 72 hours of symptom onset if possible, to increase the probability of recovery. It shows significant treatment benefits in terms of both gain of complete recovery and reduction of long-term sequelae. However, some individuals with co-existing conditions may not respond well to or be able to take steroids.

Antiviral medication

Since viral infections are attributed as the cause of Bell's palsy, the antiviral drugs acyclovir and valacyclovir have been used to help in recovery. They are usually used in addition to corticosteroids. But evidence suggests that they are of limited benefit.

2. Reduce discomfort and complications

Pain management

Pain medicines such as aspirin, paracetamol, or ibuprofen may relieve pain associated with Bell's palsy. Warm wet cloth applied to the face can also help in alleviating pain. Because of possible drug interactions, individuals taking prescription medicines should always talk to their doctors before taking any over-the-counter drugs.

3. People with long-term Bell's palsy

Botox injections-

Botulinum toxin injections can help people with long-term Bell's palsy in the following ways. However, the effect of these injections is temporary and they need to be repeated every few months.

Relax tight facial muscles and reduce any unwanted muscle contractions.

Relax facial muscles on the unaffected side of the face if they become overactive.

Improve facial symmetry and appearance.

Reduce involuntary movements of muscles on the affected side of the face because of misdirected nerve regrowth.

Laser therapy

It has been shown to improve neural regeneration. A recent small trial using laser therapy on specific points of the face produced promising results, although further research is required.

Acupuncture

It may also help in improving facial nerve function and pain. However, it needs more scientific backing.

Surgical facial nerve decompression

This surgical intervention is controversial for management of Bell's palsy. Some physicians recommend surgical decompression during the first two weeks in patients showing the most severe nerve degeneration. However, the most common complication of this surgery is postoperative hearing loss. Based on the significant potential for harm and the rarity of data supporting benefit, it is usually not recommended.

Functional facial plastic or reconstructive surgery

These procedures can improve the appearance and symmetry of the face and assist with eyelid closure. Some patients experience enormous benefit if they are able to smile again. However, it does not cure the nerve problem.

Home-care For Bell's Palsy

1. Eye care: Patients with Bell’s palsy have difficulty in keeping their eye closed or blinking because the muscles which close the eye become weak. This can lead to dry eyes which can become quite painful and vision can be blurred. Hence it becomes very important to keep the eyes moist. Methods to help in the same are:

Using artificial tear eye drops, gels and ointments to keep the eye lubricated

Manual closure of the eye with a finger to keep it moist -- patients should use the back of their clean finger rather than the tip to insure that the eye is not injured

Using eye patch to protect the eye

Protective glasses which can prevent dust from entering the eye

Taping the eye shut while sleeping (placing the tape over a soft pad)

2. Facial exercises: Facial exercises may help to strengthen muscles and fasten recovery of nerve function. However, they are not suitable for all people with Bell's palsy.

3. Mime therapy: This is a type of physical therapy. The patient is taught a series of exercises which strengthen the facial muscles. This usually results in better coordination and a wider range of movement.

4. Oral care: Due to decrease in sensation in the mouth and strength in oral muscles, it is easy for food to pool in the mouth. This can lead to dental decay or gum diseases. Brushing and flossing can help prevent it.

5. Care while eating: Weak oral muscles can also lead to lip and inner cheek abrasion during chewing food. This can also cause oral ulcers. In such cases, strategic eating may lessen the impact. It is also advised to chew food well and eat slowly. Choosing soft foods can also help.

The inability to lower and evert the lower lip precludes eating certain foods. Temporary dental ‘spacers’ adhered to the lateral aspect of the molar teeth may be used to prevent biting of the inner surface of cheeks and lips.

6. Care while drinking: Sometimes, it is hard to drink from a glass when the mouth is droopy. To reduce the likelihood of dribbling water or other beverages down the chin, it is advisable to drink from a straw.

Complications Of Bell's Palsy

Most people with a mild case of Bell’s palsy completely recover without any complications. However, recovery from a more severe case involving total paralysis varies. Complications may include:

Eye complications

If the eyelid muscles are weakened by Bell's palsy, the patient is not able to blink easily and the eyelids cannot completely close. In this way, the protective and lubricating tear film of the eye may become ineffective. This can result in dry eyes and blurred vision. The risk of drying is even higher if Bell’s palsy has also caused a reduction in tear production.

The cornea (the clear surface at the front of the eye) is particularly sensitive to dryness. If it is dry for long periods of time, the cells of the cornea can flake off and this can lead to formation of ulcers. Corneal ulceration can be painful and result in infection or scarring of the cornea, which can eventually lead to loss of vision.

Muscle contracture

Contraction and permanent tightness of the facial muscles can lead to a greater appearance of facial asymmetry, particularly obvious when one eye appears smaller or a cheek appears larger. Swelling in the muscles is also there due to loss of nerve function.

Involuntary muscle movements

As the facial nerve heals from Bell's palsy, new nerve fibers regrow to replace the old, damaged ones. However, sometimes the nerve fibers regrow in an irregular pattern. For example nerve fibers that should connect the brain to the muscles of the mouth may grow back connecting the brain to the muscles of the eyelid. Hence, a patient may unintentionally close one eye while trying to smile. This is called eye-mouth synkinesis.

The problem can also happen the other way round – contraction of the facial muscles with twitching of the corner of mouth or dimpling of the chin, occurring at the same time while blinking. This is also called reversed jaw winking.

Crying while eating

Sometimes due to misdirected re-growth of nerve fibers, the ones that usually connect the brain to the salivary gland regrow to connect to the lacrimal gland that produces tears. Thereby, while eating the patient might start shedding tears. This is also called as Borgorad's syndrome or crocodile tears syndrome or gusto-lacrimal reflex.

Difficulties with speech

If the muscles that affect mouth movement are affected, slurred speech can occur.

Loss or altered sense of taste

If the branches of the facial nerve that connect the brain to the tongue do not repair properly, the sense of taste can be permanently altered. In more severe cases, it may even lead to ageusia, which is chronic loss of taste.

Complications associated with treatment with corticosteroids

Corticosteroids, such as prednisolone, used in the management of bell’s palsy can cause a range of side effects. Most of the more serious side effects associated occur with long-term rather than the short-term use that is required to treat Bell's palsy.

Side effects of prednisolone include:

Headache

Dizziness (spinning sensation)

Nausea

Tiredness

Increased sweating

Abdominal pain and bloating

Burning in the upper abdomen or chest pain due to irritation of the lining of the stomach or esophagus

Increased appetite

Indigestion

Difficulty sleeping

Mood changes such as feelings of anxiety

Acne

Dry skin

Thinning of skin

Candidiasis (oral thrush)

Delayed healing

These side effects generally improve within a couple of days of ceasing treatment. Doctors usually reduce the dose gradually towards the end of the course of steroid medication. This helps prevent withdrawal symptoms such as vomiting or tiredness.

Living With Bell's Palsy

In most cases, Bell's palsy has a good prognosis. Gradual improvement can be seen in a few weeks to some months. Prompt treatment along with physical therapy and good home care are promising for quick recovery.

However, facial expression is essential to an individual’s sense of wellbeing and ability to socialize. Marked facial asymmetry can lead to social agony and isolation, impaired interpersonal relationships leading to depression and anxiety. Thus in such a case, mental health is of utmost importance. If the patient is feeling down about one’s appearance, he/she should talk about their feelings with a trusted friend or seek help from a counselor or a therapist. These won’t cure your Bell’s palsy symptoms, but they might make you feel better.

Frequently Asked Questions

What is the main cause of Bell's palsy?

How long does Bell's palsy last?

How serious is Bell's palsy?

Is Bell's palsy a mini stroke?

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Malaria

Overview

Malaria is a parasitic infection that spreads when a mosquito infected with the Plasmodium parasite bites a person. The parasite then attacks the red blood cells, typically causing a high fever with chills, and other symptoms that may develop into life-threatening complications. Hence, timely diagnosis and treatment of malaria are very crucial.

The World Health Organization (WHO) reported 229 million cases of malaria worldwide in its Global Report 2019. Malaria poses a major public health problem especially in hot and tropical countries.

The best way to prevent and reduce the transmission of malaria is through vector control which includes preventing mosquitoes from breeding near your surroundings. To achieve this, avoid leaving stagnant water in plants and empty water from old pots, coolers, tyres and potholes on the road. Also use of devices such as nets, sprays, coils or electric bats and mosquito repellent creams is highly advised to prevent mosquito bites.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Liver

Blood

Prevalence

Worldwide: 229 million (2019)

India: 5.6 million (2019)

Mimicking Conditions

Dengue

Zika

Chikungunya

Influenza

Measles

Necessary health tests/imaging

Peripheral smear for malaria

Antigen tests

PCR test

Complete blood count (CBC)

Treatment

Chloroquine

Quinine

Primaquine

Mefloquine

Lumefantrine

Clindamycin

Paracetamol

Ibuprofen

See All

Symptoms Of Malaria

Malaria is an acute febrile illness which can cause a wide variety of symptoms that range from no symptoms in the early course of infection to severe symptoms and even death. After a bite by the infected Anopheles mosquito, it usually takes around a week to a month for the first symptom to appear. This period is known as the incubation period. The incubation period for an infection with P.falciparum (a type of malarial parasite, Plasmodium) is shorter as compared to the one with P.malariae (another malarial parasite).

The symptoms usually appear 10–15 days after the infective mosquito bite. The first symptoms – fever, headache, and chills – may be mild and difficult to recognize as malaria. If not treated within 24 hours, P. falciparum malaria can progress to severe illness, often leading to death. Some people with malaria experience cycles of malaria "attacks”, which usually starts with shivering and chills, followed by a high fever and sweating before it returns to normal temperature.

The attacks (malarial paroxysm) occur in three stages:

Cold stage -- sudden feeling of cold and shivering

Hot stage -- high fever

Sweating stage --stage before the temperature returns to normal

Other symptoms include:

Headache

Nausea and vomiting

Body pain especially in the muscles and joints

Loss of appetite

In severe cases, symptoms that may occur include:

Anemia

Bleeding

Jaundice

Convulsions

Did you know?

Almost half of the world’s population is at risk of malaria. Malaria is not just any mosquito bite! If not diagnosed and treated promptly, it can be life-threatening. Don’t ignore the symptoms and get tested.

Book Test Now!

Causes Of Malaria

Malaria is caused due to a bite by a female anopheles mosquito infected by the Plasmodium parasite. The bite transfers the parasite (sporozoites) into the blood which travels to the liver. In the liver, the parasites mature and multiply to form merozoites. This is followed by an invasion of the red blood cells that causes malaria.

Since the malaria parasite is found in red blood cells of an infected person, it can also be transmitted rarely through blood transfusions, organ transplant or by shared use of contaminated syringes or needles. Other mode of transmission can be from infected mother to child during pregnancy or labour.

In humans, malaria is caused by five different species of the parasite. These are P. falciparum, P. malariae, P. ovale, P. vivax and P. knowlesi. Among these, P. falciparum is the most common one (~75%) followed by P. vivax (~20%).

In India, malaria is mainly caused by P. vivax and P. falciparum. Malaria due to P. vivax is more prevalent in plain areas, while P. falciparum is responsible for most of the malaria cases in hilly areas and those covered with forests.

Risk Factors For Malaria

The following factors are associated with high rates of malarial transmission:

Staying or travelling to regions where malaria is endemic or highly prevelent. These include tropical, subtropical or areas of lower elevation.

Areas with high mosquito breeding sites

Open air or tented accomodations

Wetter and hotter months of the year

Conditions that lead to lower immunity (immunosuppression)

Age group with low immunity (children under 5 years of age or elderly)

Why do mosquitoes bite you more than the others?

Additionally, there might be times when you might have wondered why mosquitoes bite you more than others. Well, this could be because of

'O' Blood type

Mosquito attracting genes

Pregnancy

Consumption of alcohol

The reason being that alcohol consumption, pregnancy, and even exercise increase your metabolic rate. You exhale more CO2 and this attracts mosquitoes.

No Breeding Sites = No Mosquitoes

Don’t let water stagnate. Check and clean these spots which include AC trays and room coolers, potted plants, flower vases, water containers or water tanks, dark corners/rooms, behind the curtains, dust bins and clogged drains. Protect yourself and your family from mosquitoes with mosquito repellants.

Buy Now!

Diagnosis Of Malaria

The cyclical pattern of symptoms is a classical sign of malaria, and prompts the doctor to suspect malaria. The symptoms are generally periodical, and occur in cycles of 48 or 72 hours depending on the kind of malaria-parasite one is infected with. Your doctor will examine the symptoms and check for an enlarged liver or spleen to make a diagnosis. He/she might also take medical history along with symptoms.

Diagnosis involves finding the type of parasite causing malaria. Tests include:

1. Peripheral smear for Malaria

Also known as microscopy of thick blood smear, these are blood smears in which malarial parasites can be seen with thin and thick blood smears under a microscope. It helps to detect and identify the malarial parasite.

2. Antigen tests

Also known as a rapid diagnostic test, it is a blood test that helps to detect circulating parasite antigens. However, this test does not distinguish between the type of the malarial parasites. In most cases, it is followed by a blood smear which gives accurate information on the severity and the type of the parasites. These “Rapid Diagnostic Tests” (RDTs) offer a useful alternative to microscopy in situations where reliable microscopic diagnosis is not available.

3. PCR test

Polymerase Chain Reaction (PCR) test or molecular test, is most useful for confirming the species of malarial parasite after the diagnosis has been established by either smear microscopy or RDT. Moreover, it shows accurate results even if your parasite count is less or if the results of the blood smear are not proper.

4. Antibody tests

As the name suggests, this test helps you to detect the presence of antibodies in the blood which usually occurs post an infection. It uses either indirect immunofluorescence (IFA) or enzyme-linked immunosorbent assay (ELISA) technique. It does not detect current infection but rather identifies past exposure.

5. Drug resistance test

It is recommended in some cases where the malaria parasites are resistant to drugs. This test helps the doctor to decide if certain drugs can work or not to treat your condition and decide your treatment accordingly.

6. Other tests

In most cases, a complete blood count (CBC) is advised to check for parameters such as hemoglobin and blood cell count. This can give your doctor an idea about how severe the infection is and if you suffer from other conditions such as anemia due to the condition. Other tests that might be recommended (in rare cases) include tests to detect hypoglycemia, renal failure, hyperbilirubinemia, and acid-base disturbances.

Note: Malaria can be lethal and may lead to severe complications and requires hospitalization, if misdiagnosed or not treated in time.

Celebs affected

Rishi Kapoor

The late veteran actor Rishi Kapoor was admitted to a hospital due to malaria in the year 2014.

Kriti Kharbanda

Housefull 4 actress Kriti Kharbanda was down with malaria in 2020.

Surveen Chawla

Surveen Chawla, who is known for her performance in the movie Parched, was known to suffer from malaria in 2016.

Cheryl Cole

A singer, dancer and Judge of the popular British reality show, Cheryl Cole, was known to contract malaria while on a holiday in Tanzania.

John F Kennedy

The former US President, reportedly suffered from malaria during the world war 2, when he was stationed in Pacific.

Mother Teresa

The Noble Peace Prize winner Mother Teressa was hospitalized during her visit to Delhi after she fell ill with malaria.

Prevention Of Malaria

Prevention of malaria can be achieved by public health and community-based programs that aim at controlling the breeding of mosquitoes and destroying their breeding sites. On an individual level the following measures can be practised:

Wear clothes that cover arms, legs, and feet

Avoid sleeping or staying long in open areas

Use mosquito repellents in your home and clothes

Use mosquito screens on doors windows to prevent entry of mosquitoes in the homes

Use bed nets for all members of the family during night time

Use mosquito zapping devices like electric bats

Invest in mosquito-repelling plants, like tulsi and lemongrass

Use the following tips to prevent breeding of mosquitoes:

Do not overwater potted plants and always empty the trays to prevent it from becoming a breeding ground.

Change water regularly for indoor plants and decorative items where water can be collected such as birth baths, tabletop fountains, flower vases and fish tanks.

Empty out the water from AC trays, refrigerator trays and other containers such as feeding bowls of pets or birds.

Clean these tanks at least once every 15 days to break the breeding cycle of mosquitoes, which is around 15-20 days.

Turn over empty pails and buckets when not in use and cover the containers with proper lids to prevent mosquitoes from breeding.

Use dustbins with well-fitting lids and throw your trash every day as uncovered trash cans attract mosquitoes.

Practice regular fogging with mosquito repellents or larvicides and also spray pesticides like DDT on the possible breeding places of mosquitoes.

Mosquito repellent products

The following products can help you prevent mosquito bites and thereby prevent malaria:

Mosquito repellent bands can be worn on the wrist just like a fitness band or a watch. They are available as chemical bands which are DEET-impregnated and natural ones which contain essential oils like citronella oil, eucalyptus oil or mint oil.

Mosquito patches are stickers which need to be stuck on clothes i.e. on collars, sleeves, skirts, or shorts. They are available in both chemical and herbal forms.

Body lotion or mosquito sprays which contain synthetic repellents like DEET and permethrin or natural repellents like citronella, which offers protection against mosquitoes.

Mosquito repellent sticks are similar to incense sticks but are loaded with mosquito repellents. You can light these sticks and place them in open spaces such as gardens, terraces or balconies.

Mosquito nets are conventional options used to fight mosquitoes, The wire mesh of these nets must be extremely fine so as to prevent the entry of mosquitoes. An ideal wire mesh for this purpose should have 18 X 18 strands per inch in either direction (length and width). You can also install a wire mesh for window screens.

Apart from these repellents, there are products like blankets, floor cleaners, electric zappers and table-top fumigator machines, which help keep mosquitoes away.

Keep your doors and windows closed in the evening to prevent entry of mosquitoes.

Mosquitoes enter your house and hide in dark places such as behind the curtains, store rooms, behind cupboards and other corners of your room. The malaria mosquito usually bites between dusk and dawn. Hence, make sure you close your doors and windows in the evening. Want to know if your house is a mosquito magnet?

Read The Article!

Specialist To Visit

See a doctor if you have a high fever with chills and have mosquitoes breeding around your home. Also, if you experience a combination of symptoms such as sweats, headaches, body aches, weakness, nausea, and vomiting along with fever and chills, then do not think twice before visiting a doctor. Experts that can help you to diagnose and treat malaria include:

General physician

Pediatrician (for kids)

Internal medicine specialist

Infectious disease specialist

Treatment Of Malaria

The medicines prescribed depend on various factors such as the species of malarial parasite and the severity of the disease. Often the doctor prescribes a combination of drugs.

In most cases, the treatment for malaria includes administration of the medicine Chloroquine. For the severe form of disease IV Quinine or Quinidine may be given. Primaquine is used to kill dormant liver forms of P. vivax and P. ovale. Recently, chloroquine resistance has been seen in P. falciparum from some areas.

For chloroquine resistant malaria, Mefloquine, Halofantrine and Lumefantrine can be used along with artemisinin-based combination therapies (ACTs). ACT is a combination of two or more drugs that work against the malaria parasite in different ways. Examples are artemether-lumefantrine (Coartem) and artesunate-mefloquine.

Other drugs that may be prescribed include atovaquone-proguanil combinations, quinine sulfate combinations, primaquine phosphate, doxycycline, tetracycline, clindamycin. Also, drugs like paracetamol are prescribed to provide relief from pain, fever and body aches, which are commonly seen in people with malaria.

Here is a complete list of medications for malaria you may want to know.

Click To Read!

Home Care For Malaria

Try the following home remedies to bring down fever and treat other symptoms of malaria:

1. Boil some basil leaves along with black pepper (kalimirch) in 2 glasses of water until reduced to half. Drink this decoction whenever you have a fever.

2. Drink neem tea after meals to treat malaria. Boil a few neem leaves in water and use this decoction as tea.

3. Eat grapefruit or drink its juice to combat the malaria parasite.

4. Take half an inch of cinnamon (dalchini) stick and grind it. Boil in water. Drink it with honey and a pinch of black pepper.

5. Eat citrus fruits such as orange, lime, and lemon to boost immunity and speed up recovery.

Diet for malaria

In addition to taking medicines and using home remedies to treat malaria, eating a healthy and balanced diet can play a key role in improving your condition and fasten your recovery.

During the active disease

A diet consisting of juices and very light foods like rice, dal, vegetables with minimal fat content is highly recommended. Fresh seasonal fruits and fresh juices such as mangoes, apples, grapes, grapefruits papaya, and pineapple should also be given.

During the recovery period

A diet of fresh fruits and vegetables, milk, paneer, whole grains and nuts is advised. Tulsi is a natural anti-malarial and a few leaves boiled in water may be given daily along with the allopathic medicines.

After recovery

As there are high chances that a person might feel weak even after he/she is recovered from malaria. This is why a diet rich in protein is recommended to help the body repair the damage the infection has dealt. Cereals, pulses, nuts and meats are a great source of protein. Dark leafy green vegetables that are rich in iron, rice and whole grains should be consumed to help patients get back to normal health.

Complications Of Malaria

Malaria is a serious condition which if left unattended may lead to death. Although malaria can be a deadly disease, illness and death from malaria can usually be prevented with proper diagnosis, timely treatment and care.

If left untreated, it can cause severe organ failure and other health complications like:

Cerebral malaria that causes neurological abnormalities

Severe anemia due to destruction of the red blood cells

Blood in the urine or stools

Acute respiratory distress syndrome (ARDS) which causes a severe inflammatory reaction in the lungs

Abnormalities in blood coagulation

Hypotension or low blood pressure

Hypoglycemia or low blood glucose

Difficulty in breathing

Organ failure (lung, liver, or kidney failure)

Rupture of spleen leading to massive bleeding

Meningitis might occur, if malaria infects the brain

Alternative Therapies

Some of the common alternative therapies for protection from mosquito bites and malaria include:

1. Neem oil: Neem oil is an effective indoor mosquito repellent. Mix neem oil and coconut oil in equal portions and rub it on your body (all exposed parts). This will protect you from mosquito bites for at least eight hours.

2. Eucalyptus and lemon oil: The mixture of lemon oil and eucalyptus oil is effective in repelling mosquitoes. Both contain cineole, which has antiseptic and insect-repellent properties when applied to the skin. Mix lemon oil and eucalyptus oil in equal proportions and use it on exposed areas of your body.

3. Citronella oil: Citronella oil is an essential oil extracted from citronella grass. This oil has been known to prevent mosquito bites extremely efficiently. Apply citronella oil all over the body. You can also add a few drops of this essential oil in a candle or vaporizer. You can also use it as a spray for mosquito-prone areas of the house.

4. Camphor: known as “kapura” is an effective mosquito repellant. Light a small piece of camphor in your room and close all doors and windows. Leave the room closed for 15 min.

5. Tulsi: Tulsi plant is effective in killing mosquito larvae and keeping mosquitoes away. Plant a few Tulsi shrubs near your windows and doors. There are different varieties of basil like lemon basil and cinnamon basil that are more effective in warding off mosquitoes.

6. Marigold: The marigold plant has a distinct smell that keeps mosquitoes and other insects away. This is mainly due to the compound called pyrethrum which is also found in certain insect repellents. It is easy to grow and maintain. You can grow these plants in pots and place them in your garden.

7. Geranium: Geranium is an attractive flowering plant that grows easily with basic care. It is commonly grown indoors in hanging pots and therefore great for warding off mosquitoes inside the house. It needs lots of light and well-drained soil.

8. Lavender: The sweet lavender aroma that is highly sought after for perfumes is what repels mosquitoes. Even though it is widely grown in Europe, it can be grown in India too with little care. It can be grown indoors in pots with well-drained soil.

Frequently Asked Questions

How long does it take to recover from malaria?

Can malaria come back?

What are the 5 types of malaria?

Is malaria contagious?

How is malaria caused?

How can I prevent malaria?

Is there a vaccine for malaria?

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Mouth ulcers

Also known as Oral Ulcers, Canker Sores, Mouth Sores, Aphthous Ulcers

Overview

Mouth ulcers are usually small, painful sores or lesions that develop on the soft lining of the mouth. Anyone can get mouth ulcers and they are usually harmless. There is no definite cause of these ulcers however, factors like emotional stress, lack of sleep, certain nutritional deficiencies, trauma due to hard brushing, accidental bites or some allergies and infections are known to trigger them.

Most mouth ulcers heal on their own or with over-the-counter (OTC) products within one to two weeks. But if they last longer than three weeks and are recurrent in nature or extremely painful, they may require medical attention.

Ulcers cannot be prevented, but certain lifestyle modifications may help relieve symptoms and reduce their frequency. Various OTC products, such as oral gels, mouthwashes, etc., are available to provide relief from them. Prescription medicines are required in case of recurrent and non-healing ulcers.

Key Facts

Usually seen in

Adults above 25 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Mouth

Tongue

Gums

Lips

Prevalence

Worldwide: 1 in 10 people (2019)

Mimicking Conditions

Cold Sores

Stomatitis

Hand foot and mouth disease

Herpangina

Erythema multiforme

Herpes simplex virus infections

Varicella-Zoster infections

Oral lichen planus

Oral malignancy

Necessary health tests/imaging

Complete Blood Count (CBC)

Erythrocyte Sedimentation Rate (ESR)

C - Reactive Protein Quantitative

Vitamin B12

Vitamin B9

Treatment

Antiseptics

Steroids

GERD drugs

Topical anesthetics

Multivitamins

Antibiotics

Antipyretics and Analgesics

Sucralfate

Mouthwashes containing dexamethasone

See All

Symptoms Of Mouth Ulcers

Mouth ulcers are easy to recognise. They usually begin as a round yellowish spot or bump with a red border or halo. This later on breaks down into a punched out ulcer which is covered with a white,yellowish or greyish membrane. Surrounding area usually appears unaffected and healthy. The following symptoms are generally experienced with mouth ulcers:

A tingling or a burning sensation.

Pain and difficulty while chewing food, drinking or swallowing.

Increase in pain if irritated by movement while speaking, brushing teeth or consuming certain food like citrus fruits.

Severe mouth ulcers may also cause fever and swollen lymph nodes.

Types Of Mouth Ulcers

Mouth ulcers are a common occurrence, with an estimate of about 1 in 10 individuals being affected with mouth ulcers. Depending on the severity, mouth ulcers can be classified into the following types:

Minor mouth ulcers: These are the most common type of ulcers and account for 85% of the cases. They are usually small, rounded, or oval-shaped, have a well-defined edge, and heal within a week or two, without any scarring.

Major mouth ulcers: These ulcers are less common and account for about 10% of the cases. They are bigger, deeper, very painful, and may or may not have a well-defined edge. These types of ulcers take a long time to heal and may cause extensive scarring.

Herpetiform mouth ulcers: These are pinpoint lesions with irregular edges that occur in clusters and heal within a month without scarring. These ulcers occur rarely and usually appear on the tongue.

Causes Of Mouth Ulcers

The exact cause of mouth ulcers is not known. However, multiple reasons are associated with ulceration in the mouth, such as:

Physical factors

Accidental biting of the cheek or tongue

Ill-fitting dental braces or dentures

Site of a local anesthetic injection and dental treatment

Impacted or misaligned wisdom teeth that continually irritate the inner cheek

External trauma to the cheeks or the tongue

Hard pressure while brushing teeth or use of brush with hard bristles

Lifestyle factors

Excessive consumption of citrus,sour and spicy foods

Stress or lack of sleep

Excess alcohol intake

Smoking and cessation of smoking

Chewing of Tobacco

Using toothpaste or mouthwashes that contain Sodium Lauryl Sulphate

Health conditions

A weakened immune system occurring with conditions such as HIV-AIDs, post-chemotherapy, viral infections etc.

Nutritional deficiency of Vitamin B1, B2, B6, B12, folic acid, zinc, etc.

Helicobacter pylori infection

Hormonal changes during menstruation

Gastrointestinal diseases like celiac disease, Crohn’s disease, ulcerative colitis, etc.

Oral malignancies

Certain medications like Sodium hypochlorite, Piroxicam, Phenobarbital , Phenindione, Niflumic acid and Captopril

Did you know?

People with Vitamin B12 deficiency tend to suffer from sore and red throat known as Glossitis and mouth ulcers. It has been commonly observed that people with long-standing deficiencies have decreased taste sensation. Here’s more on the signs and symptoms that indicate Vitamin B-12 deficiency.

Click Here To Read!

Risk Factors Of Mouth Ulcers

There is a higher risk of getting mouth ulcers if you:

Are a woman

Have a family history of mouth ulcers

Follow poor oral hygiene

Are immunocompromised or have weak immunity

Have a stressful lifestyle

Diagnosis Of Mouth Ulcers

Minor mouth ulcers usually do not require any investigations and can be managed at home by the patients themselves. If you see a doctor, he/she will evaluate the site and type of lesion, along with a detailed history. Occasionally, for ulcers with repeated recurrence,severe symptoms and multiple lesions, doctors may ask for lab investigations, such as:

Complete Blood Count (CBC) to check for the overall health status.

Erythrocyte Sedimentation Rate (ESR), C - Reactive Protein Quantitative can give an idea about any ongoing infection, inflammation, etc., in the body. These infections may occur in certain health conditions which can further cause mouth ulcers.

Vitamin B12 and Vitamin B9 to check for nutritional deficiencies.

Any other tests which may be needed to evaluate further based on the initial laboratory testing.

Prevention Of Mouth Ulcers

Mouth ulcers cannot be prevented completely. However, it is possible to reduce the frequency of occurrence or troublesome symptoms by following the tips given below:

Reduce the intake of foods that irritate your mouth. Different people may react differently to various foodstuffs. You may be able to identify the items that cause your symptoms when you get frequent ulceration after consuming certain foods.

Restrict alcohol consumption

Do not smoke.If you are a smoker and trying to quit, there is an increased possibility of getting mouth ulcers during the cessation period.

Reduce emotional stress and engage in activities that boost mental health.

Try to get adequate and sound sleep.

Maintain good oral hygiene. Brush your teeth gently with a soft bristled toothbrush after every meal. Do not use toothpaste or mouthwashes with Sodium Lauryl Sulphate.

Take a balanced diet rich in vitamins and minerals to prevent nutritional deficiencies.

Consult your dentist for ill fitting or fractured dentures or fillings or for dental wax application over the sharp edges of your braces.

Specialist To Visit

Most mouth ulcers usually heal on their own within a week or two without any medical intervention. However, Over-the-counter products can help in relieving pain and discomfort associated with them.To diagnose and treat mouth ulcers, you can go to:

General physician

Dentist

You must seek medical attention if your mouth ulcers fail to heal within a week or two and if you have symptoms such as:

Recurrent mouth ulcers

Multiple or large-sized ulcers

Severe pain and difficulty while chewing, talking, or swallowing

Fever along with ulcers

Want to consult a doctor right now? It’s just a click away.

Book Now!

Treatment Of Mouth Ulcers

The treatment for mouth ulcers is broadly divided into two categories:

Symptomatic relief

Various OTC and prescription formulations are available for topical application to provide relief and promote faster healing of the mouth ulcers:

Topical gels containing anesthetics like benzocaine and lidocaine are used to give relief from pain.

Antiseptics can be used to prevent and treat infections associated with mouth ulcers.

Use of chlorhexidine gluconate mouthwash can decrease the duration of the ulcer.

Antibiotic Mouthwash containing Tetracycline helps in reducing the size of the ulcer and the pain associated with it.

Oral painkillers like diclofenac are used to relieve pain.

Oral Steroids and Mouthwashes containing dexamethasone are prescribed in cases of severe ulceration.

Drugs used in the treatment of gastrointestinal ulcers such as sucralfate may also provide some relief in mouth ulcers.

Dental lasers can be used to perform cautery, a kind of mini-surgery on mouth ulcers to promote healing.

Supportive care

Multivitamins or vitamin supplements are used to treat Vitamin B complex deficiencies.

Antipyretics such as paracetamol may be used to treat fever occurring along with the ulcers.

Antibiotics can be advised to treat any concurrent infections.

Home-Care For Mouth Ulcers

If you have mouth ulcers, you can do the following at home to help relieve symptoms and promote faster healing:

Follow good oral hygiene. Brush your teeth gently with a toothbrush with soft bristles after meals. Rinse your mouth well, preferably with an OTC mouthwash.

Avoid eating citrus fruits, acidic vegetables, spicy or hot foods that may further irritate the ulcer.

Avoid chewing foods on the ulcer side of the mouth if possible.

Warm saline gargles may also help in relieving symptoms.

You can suck on ice chips or apply an ice pack externally at the site of the mouth ulcer. Ice helps reduce inflammation and provides pain relief.

Take a balanced diet full of essential vitamins and minerals to ensure good nutrition.

Complications Of Mouth Ulcers

Most mouth ulcers heal within one to two weeks. Rarely, a person may suffer from major mouth ulcers that take longer to heal and may cause complications like:

Nutritional deficiencies due to the inability to chew or swallow food properly

Increased risk of oral malignancies

Secondary infections of the mouth may lead to cellulitis

Tooth abscess due to secondary dental infections

Bleeding from the ulcer

Alternative Therapies Of Mouth Ulcers

Diet: People who get recurrent mouth ulcers may be at a higher risk of nutritional deficiencies due to the difficulty in chewing or swallowing foods. And nutritional deficiencies, in turn, are a cause for recurrent mouth ulcers. This becomes a vicious circle. A diet rich in essential vitamins and minerals and low on irritant foods like oily or spicy foods is recommended for people with mouth ulcers. Include a lot of fresh leafy greens, whole-grain cereals, legumes, and pulses in your diet.

Homeopathy: Homeopathy preparations like Borax, Arsenicum album, Sulphuricum acidum, Mercurius solibis, Kali muitacum, etc., are used to treat mouth ulcers. Homeopathy treatment is ideally individualized to the patient and must be taken under the guidance of a homeopathy doctor only.

Ayurveda: Mouth ulcers are known as “Mukhpak’ or ‘Sarvasar Rog’ in Ayurveda. Topical usage of herbal remedies like aloe vera gel, licorice, and chamomile has been found useful in treating recurrent mouth ulcers. Oral Ayurvedic formulations prepared from Amla, Draksha, Hareetaki, Chandan, Triphala, etc., are also used in treating oral ulcers.

There are a few safe and simple home treatments to ease the pain of mouth ulcers. These home remedies can help to alleviate the pain and also speeds their healing process.

Click Here!

Living With Mouth Ulcers

Chronic or recurrent mouth ulcers can be a cause of severe frustration and pain. The person may not be able to enjoy their favorite foods and is at an increased risk of malnutrition. People with mouth ulcers often have poor oral hygiene and may also suffer from social embarrassment due to a bad mouth odor. Chronic pain, coupled with a lack of enjoyment of preferred meals, may become a source of anxiety for the patient.

Following good oral hygiene techniques, such as regular flossing, gentle brushing, and rinsing the mouth, must be followed by all those who suffer from mouth ulcers. Most mouth ulcers heal on their own if one follows good oral hygiene. If the ulcers are recurrent or do not heal within one to two weeks, or are accompanied by unbearable pain and fever, immediate medical care is essential.

Did you know?

Just like mouth ulcers, bad breath, clinically known as halitosis or oral malodor, is a very common oral condition. Bad breath not only indicates poor oral hygiene or oral problems but can also be a sign of an underlying serious medical condition. Read to know more about the types of bad breath and what it says about your health.

Click Here To Find Out!

Frequently Asked Questions

Are mouth ulcers and cold sores the same?

Why do I get mouth ulcers a few days before my periods?

What foods cause mouth ulcers?

What are some home remedies for mouth ulcers?

Are mouth ulcers a cause for concern?

Lack of which vitamin causes mouth ulcers?

Does putting salt on mouth ulcers help?

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Mucormycosis

Also known as Black fungus, Phycomycosis and Zygomycosis

Overview

Mucormycosis is a rare but serious fungal infection triggered by a group of fungi known as mucormycetes. These fungi are found in the soil, animal excreta, compost piles, rotten leaves, wood and are widespread in nature. Despite their extensive distribution, these molds rarely create medical problems.

However, they can induce severe, even life-threatening illnesses like mucormycosis in people with weaker immune systems in conditions such as diabetes, chronic steroid use, and use of immunosuppressant drugs.

Preliminary diagnosis of mucormycosis is made by patient history, physical exam, and the patient's risk factors while definitive diagnosis is derived by identifying the fungi in the patient's tissue. Treatment requires antifungal drugs like amphotericin B, a good control of underlying or causative medical conditions and surgical removal of infected tissue.

Mucormycosis was earlier a fairly scarce occurrence, but became quite common in the wake of the COVID-19 pandemic. The second wave in India in 2021 led to a multi-fold rise in cases of this disease. It is proposed that the use of steroids, monoclonal antibodies and prolonged hospitalization substantially compromised immunity or the COVID‑19 infection itself produced an immunocompromised state. The other reason could have been the use of non‑sterile water in oxygen cylinders.

Key Facts

Usually seen in

Adults between 41 to 60 years of age

Gender affected

Both men and women

Body part(s) involved

Sinuses

Brain

Lungs

Skin

Stomach

Intestine

Eyes

Heart

Spleen

Prevalence

Worldwide: 0.00017% (2021)

India: 0.014% (2021)

Mimicking Conditions

Rhinocerebral mucormycosis: Orbital cellulitis & Cavernous sinus thrombosis

Pulmonary mucormycosis: Aspergillosis, Nocardiosis & Wegener's granulomatosis

Necessary health tests/imaging

Blood tests

Magnetic resonance imaging (MRI)

CT Scan

Biopsy

Treatment

Antifungal medications: Amphotericin B, Posaconazole, & Isavuconazole

Immunostimulating drugs: Nivolumab

Surgical debridement

See All

Causes Of Mucormycosis

Mucormycosis is an infectious disease caused by a group of fungi of the class zygomycetes and the order of mucorales.

These fungi can be found in the soil, animal excreta, compost piles, rotten leaves, wood and are widespread in nature. Despite their common presence in nature, these molds rarely create issues.

However, they can induce severe, even life-threatening illnesses in people with weaker or compromised immune systems. The majority of people develop this sickness by inhaling mold spores. Infection occurs less frequently when spores enter the body through a cut or an open wound in the skin.

Know more about fungal infections.

Click Here!

Risk Factors For Mucormycosis

Numerous factors, like poor hygiene, certain medications, and a compromised immune system, can increase your risk of mucormycosis. These factors include:

Risk factors for immunocompromised patients

Hematological malignancies (blood cancer)

Hematopoietic stem cell transplantation

Solid tumors

Organ transplantation

Malnutrition

Premature birth

High dose of corticosteroids or immunosuppressants

Prophylaxis with voriconazole and deferoxamine therapy

Rheumatoid disorders

Multiple blood transfusions

Increased serum iron load

AIDS, renal failure, and liver disorders

Uncontrolled diabetes with ketoacidosis (high levels of ketones in the blood) and metabolic acidosis (too much acid in the blood)

What should a diabetic patient eat daily?

Read about the top 5 foods that people with diabetes should include in their diet.

Click Here!

Risk factors for individuals with a normal immune system

Fight-related injuries

Prolonged hospital stay

Natural calamities

Injection drug use

Contaminated medical instruments

Skin injuries, burns, and trauma

Risk factors for individuals affected with COVID-19

Patients recovering from COVID‑19 are at a higher risk of susceptibility to mucormycosis because:

There is an alteration of innate immunity due to decreased T cells.

Post-treatment, COVID‑19 patients have increased levels of IL‑2 R, IL‑6, IL‑10, and TNF‑α, which contribute to immunosuppression.

Administration of deferoxamine in patients with diabetic ketoacidosis can contribute to fungal growth.

Corticosteroid therapy can lead to glucose imbalance.

Are you at risk of mucormycosis post-COVID-19?

Click To Know!

Burns can be painful!

Managing burns at the earliest is very crucial as it can prevent infections. Read about 6 natural remedies for minor burns.

Click To Read!

Types of Mucormycosis

Mucormycosis can be classified into the following categories based on its anatomic localization:

1. Pulmonary mucormycosis: This is the most common type of mucormycosis. It affects the lungs and may occur in cancer patients and those who have had an organ or stem cell transplant.

2. Gastrointestinal mucormycosis: It affects the stomach and the intestines. It mainly occurs in young children who are premature or have taken antibiotics frequently.

3. Rhinocerebral mucormycosis: It is a sinus infection that can spread to the brain. People with uncontrolled diabetes and those who have received a kidney transplant are more likely to develop this condition.

4. Cutaneous mucormycosis: This condition occurs when the fungus infiltrates the body through a crack in the skin. After a burn, scrape, cut, surgery, or other sorts of skin trauma, this type of infection can develop. This mucormycosis is the most prevalent type in people who don't have a compromised immune system.

5. Disseminated mucormycosis: This mucormycosis occurs when an infection travels from one body section to another through the bloodstream. The infection is usually found in the brain, although it can also damage the spleen, heart, and skin.

6. Uncommon form of mucormycosis: Other less common or unusual focal forms of mucormycosis include:

Endocarditis: Life-threatening inflammation of the inner lining of the heart's chambers and valves.

Osteomyelitis: It is an infection of bones. The infection can reach a bone by traveling through the bloodstream or spreading from nearby tissue.

Peritonitis: It is the inflammation of the inner lining of the stomach.

Pyelonephritis: It is an infection that generally begins in the urethra or bladder and travels to one or both of the kidneys.

Did you know?

Mucormycosis and black fungus are actually different. Mucormycosis is caused by a group of related molds known as mucorales. Black fungus belongs to a class of pigmented fungi entirely different from mucor. People started calling mucormycosis 'black fungus' due to its characteristic symptom, which causes blackness in the tissue affected. Read in detail about black and white fungal infections post-COVID 19.

Click To Read!

Symptoms Of Mucormycosis

The symptoms of mucormycosis may vary depending on the body part affected. They may also depend on the severity of the infection. Some of the common signs and symptoms of mucormycosis based on the infection include:

1. Symptoms of rhino-orbito-cerebral mucormycosis

Non-ophthalmic (eye) symptoms

Headache

Fever

One-sided facial swelling

Nose bleed

Nasal discharge

Sinusitis

Facial numbness

Facial nerve paralysis (bell’s palsy)

Ulcerations in the nose

Toothache

Bone destructions

Alterations in the mental status

Ophthalmic symptoms:

Opthalmic symptoms

Eye pain

Decreased vision

Paralysis or weakening of eye muscles

Bulging of the eyes

Irritation in the eyes

Drooping of the upper eyelid over the eye

Infection of the soft tissues of the eye socket

Black lesions on the nasal bridge or upper inside of the mouth

2. Symptoms of pulmonary mucormycosis

Fever

Cough

Chest pain

Shortness of breath

Blood while coughing

Painful mouth ulcers?

Read in detail about how to prevent them and home remedies to treat them.

Click To Read!

3. Symptoms of gastrointestinal mucormycosis

Abdominal pain

Nausea

Vomiting

Gastrointestinal bleeding

Diarrhea

Abdominal distention (enlarged and swollen abdomen due to fluid accumulation)

Perforations (holes) in intestine or stomach

4. Symptoms of cutaneous (skin) mucormycosis

Erythematous (red) to purple lesions that become necrotic

Ulcers

Tender nodules

Lesions filled with pus

Pain, warmth, excessive redness, or swelling around a wound

5. Symptoms of renal mucormycosis

Fever

Lower back pain

Decreased urine output

Blood in the urine

Want to know more about mucormycosis? To get all your FAQs answered on mucormycosis, watch this video!

Diagnosis Of Mucormycosis

If you experience any symptoms of mucormycosis, such as nasal congestion, nasal pain, fever, cough, or skin necrosis, then consult a doctor immediately.

The doctor might recommend further investigation if your symptoms fail to show any improvement post-treatment or if you experience symptoms such as swelling or internal bleeding. The tests include:

1. Physical examination: As the first step, your doctor will physically examine you for signs of fungal infection. They may order various diagnostic tests if they find any blackened tissue or suspect damage to the organs, they may order various diagnostic tests. Nasal Endoscopy is used for the detection of Rhino-orbito-cerebral mucormycosis.

2. Laboratory tests: Tests done to detect acidosis and iron load include:

Complete blood count (CBC): To detect neutropenia (decreased levels of white blood cells in the blood).

Blood glucose: To check for diabetes.

Bicarbonate and electrolyte: To detect hemostasis (body's natural reaction to an injury that stops bleeding and repairs the damage).

Arterial blood gasses (ABG): To determine the level of acidosis and direct corrective treatment.

Iron tests: To test the availability of iron mass which has been shown to have high levels of ferritin and low iron binding capacity.

Other laboratory tests: Tests like staining using potassium hydroxide (KOH) and Calcofluor, fungal culture, and Polymerase chain reaction (PCR).

3. Imaging tests:

Magnetic resonance imaging (MRI scan): An MRI is a diagnostic tool that uses a magnetic field and computer-generated radio waves to generate cross-sectional and high-resolution images of different body parts.

Computed tomography (CT scan): A CT scan combines a series of X-ray images taken from different angles to deliver high-quality cross-sectional images of different body parts. In rhino-sinus mucormycosis, CT is the investigation of choice to study the invasion of bone and soft tissue abscesses, and extension to the nervous system.

Biopsy: In a biopsy, a small piece of tissue is extracted from the affected organ. It is then sent to a laboratory to detect the presence of fungal infection or evaluate the extent of scarring and damage.

Get your lab tests done with us, where the patient’s comfort and safety are the utmost priority.

Book Now!

How To Prevent Mucormycosis

1. Eat a well-balanced diet: Consuming a diet rich in vitamins and minerals will help strengthen your immunity and protect you from infections. Also, eating a diet low in processed and packaged foods, trans fats, and sugar may improve your symptoms and prevent the disease from worsening.

Are you wondering what the importance of a balanced diet is? Understand 6 tips to reap maximum benefits from it.

Tap To Know!

2. Wear masks: Mucormycosis is mainly contracted from spores that are present in the air. By wearing masks every time you step outside, you may be able to prevent the dust particles or spores from entering your body. Additionally, wearing full-sleeved shirts and trousers while visiting a dusty place may also prevent the fungus from coming in contact with your skin.

Are you using suitable masks?

Click To Read!

3. Maintain appropriate personal hygiene: Maintaining personal hygiene can go a long way in preventing mucormycosis. Wash your body regularly and make sure that you promptly treat any cuts or scrapes on your skin.

4. Judicious use of steroids: Steroids have anti-inflammatory effects that can help control inflammatory and autoimmune disorders. However, their prolonged use is known to suppress immunity in the long term. Low immunity makes it easier for several fungi and bacteria to invade your body.

Read more on do’s and don'ts of oral steroids’ use.

Click To Read!

5. Use clean water for humidifiers in oxygen therapy: Oxygen therapy is a treatment to provide oxygen to people with breathing difficulty. This treatment is provided extensively to patients with severe symptoms of COVID-19. The therapy uses water and humidifiers to provide breathable oxygen to a patient. However, if the water used for the treatment is unclean, it may increase one’s chances of inhaling mucormycosis-causing spores. To prevent it, use pure water and clean the humidifiers regularly.

6. Use antibiotics/antifungals judiciously: Antibiotic and antifungal medicines are prescribed to fight various bacterial and fungal infections. However, their regular use may make the bacteria and fungus resistant to them. Therefore, you should take these medicines only after consulting your medical provider.

Every infection is not necessarily a bacterial infection. Know when you need to take antibiotics and when you don’t!

Tap Here!

7. Visit your doctor regularly: You must visit your doctor regularly, especially if you suffer from any lifestyle or an autoimmune disease, like diabetes, blood pressure, or obesity. Get tested at regular intervals to ensure optimal health and functioning of your body. Apart from this, contact your doctor if you have recently suffered from COVID-19 and notice any symptoms of mucormycosis.

8. Check your medicines: Certain medicines can act as immunosuppressants and lower your immunity when consumed. A lowered immunity may serve as a gateway and increase your risk of developing mucormycosis. Check with your doctor whether the medicines prescribed are suitable for long-term consumption and won't put you at risk of developing any other illness.

9. Do not miss any signs and symptoms: All cases with blocked noses should not be considered cases of bacterial sinusitis, particularly in immunosuppression patients or those with COVID‑19 on immunomodulators. Appropriate investigations like KOH staining and microscopy, culture, and MALDI‑TOF, should be carried out to detect fungal causes.

Prevention of mucormycosis associated with COVID-19

In hospitals:

Ensure quality control of oxygen supply.

Proper sanitization of oxygen cylinders.

Preserve a hygienic hospital atmosphere.

Use disposable oxygen humidifiers.

Use clean distilled water in oxygen humidifiers and concentrators.

Follow better risk messaging strategies.

Proper use of medical checklists (like Mucor).

Increase the number of testing facilities.

Increase mass urine testing for diabetes.

Personal safety:

Maintain personal hygiene during and post-COVID-19.

Increase awareness during hospital discharge after recovery from COVID-19.

Avoid self-medication and panic-driven practices.

Judicious use of social media for attaining health information.

Barrier mask covering the nose and mouth.

Get vaccinated for COVID-19.

Know everything about COVID 19 vaccination!

Read Now!

Specialist To Visit

Mucormycosis symptoms are often challenging to deal with and may be confused with those of some other medical condition. If you experience nasal congestion or chest pain that seems different or worse than usual, consult a doctor. Also, if you experience swelling or blackening of skin tissue, do not think twice before visiting your doctor’s clinic to know the exact cause and get it treated.

Specialists that can help manage mucormycosis include:

General physician

ENT specialist

An ENT specialist is a doctor with special training in diagnosing and treating diseases of the ear, nose, and throat.

Consult India’s best doctors online

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Treatment Of Mucormycosis

The medications used to treat mucormycosis work by inhibiting its growth and spread. Some of the most common ways in which mucormycosis is treated are as follows:

1. Intravenous antifungal medications: Depending on the severity of the infection, your doctor may begin intravenous administration of antifungal medications as soon as you are diagnosed with mucormycosis. In this treatment, an IV tube is introduced into your body, which injects high doses of antifungal medications directly into your bloodstream. You may be hospitalized for this particular treatment. Antifungal medications which are provided intravenously include amphotericin B and liposomal amphotericin B products ≥ 5mg/kg

2. Surgical debridement: In this method, the doctors will surgically remove the affected tissue to stop the spread of infection to other body parts. This treatment may cause changes in the structure or shape of the affected area. In some cases, the surgical removal of the affected lung lobe or skin tissue has completely cured the infection without needing any other treatment. This is because the infection had not spread and was removed before it worsened.

3. Oral antifungal medications: These medicines work by inhibiting the growth of cell walls in the fungus and eradicating them. It is essential to control the spread of infections to different body parts. Initially, the patient is provided with antifungal medications intravenously, but once the infection is in control, they are switched to oral antifungal medications. Examples of oral antifungal medications include posaconazole and isavuconazole

4. Immunostimulating drugs: A recent study reported the benefit of treatment with the checkpoint inhibitor nivolumab and interferon-Υ for an immunocompetent patient with extensive abdominal mucormycosis unresponsive to conventional therapy.

Management of mucormycosis in COVID-19 patients

To manage mucormycosis in patients with COVID-19, the following points are to be considered:

Make an early disease diagnosis.

Do not miss early signs

Optimal and judicious use of systemic corticosteroids.

Rationale use of antibiotics.

Supervised use of drugs that may increase infection risk.

Maintain glycemic control.

Classify according to possible, probable, and proven infection.

Segregate patients based on COVID-19 disease status.

Timely therapy initiation.

Did you know?

Contrary to popular belief, mucormycosis is not contagious like COVID -19. It cannot be spread by an infected person like COVID -19. It is a complication that can be seen post a COVID-19 infection. Read more about COVID-19.

Read Now!

Home-care For Mucormycosis

Home remedies for mucormycosis

Though mucormycosis is treated under medical supervision, here are a few home remedies that can be helpful in management of mucormycosis. However, use them only after consulting your healthcare provider:

1. Probiotics and yogurt (Dahi): Yogurt and other probiotics are high in beneficial bacteria, which can help prevent many fungal diseases. Fermented foods are a good source of probiotics as well. If these don't work, try taking probiotic supplements with higher concentrations of healthy bacteria.

Read about 8 reasons to add dahi to your diet.

Read Now!

2. Tea tree oil: It is one of the most potent natural treatments for fungal infections. It has antifungal and antibacterial properties. Mix it with any carrier oil, such as coconut or olive oil, and apply it to the diseased area three to four times a day.

3. Coconut oil (Nariyal ka tel): Coconut oil, even in its unheated state, is an effective antifungal agent. Apply three times a day on the skin of the affected area.

4. Turmeric (Haldi): Turmeric has antibacterial and anti-inflammatory properties. It can be consumed orally with water or warm milk.

5. Neem: It can be consumed as an oral supplement. You can also boil neem leaves in water for 2 to 3 minutes to make neem water. This water has antimicrobial qualities and is incredibly beneficial for fungal-infected areas. Application of a mixture of neem oil, chalmogra oil and sesame oil in equal parts on the infected area can also be beneficial.

6. Aloe vera: It is a tried-and-tested natural remedy for treating any skin ailment. It not only profoundly cures the tissue but also heals and calms the skin.

7. Apple cider vinegar: Antifungal activities are found in apple cider vinegar. You can drink it by mixing two teaspoons in warm water or dabbing it on your skin with a cotton ball dipped in it. Doing this three times a day should yield positive outcomes.

Shop from an extensive range of apple cider vinegar!

Explore Now!

Complications Of Mucormycosis

Mucormycosis is a severe disease. If left unattended, it may cause several long-term issues and even death. Some of the complications that may occur if mucormycosis is left untreated are:

1. Brain infection: If the fungus spreads to the brain, it can cause severe brain infection. This infection, in turn, may cause brain hemorrhage or stroke.

2. Paralysis: As the name suggests, mucormycosis infection may cause paralysis of your body.

3. Pneumonia: Mucormycosis, if left untreated or unattended, can spread to the lungs and lead to pneumonia.

4. Hemorrhages: It is a condition in which the blood vessel in a particular organ ruptures due to infection. Untreated mucormycosis can spread to the brain, spleen, lungs, or heart and lead to hemorrhages.

5. Seizures: A seizure is a sudden electrical activity in the brain that can cause uncontrolled movements in the body’s muscles. The spread of mucormycosis infection to the brain may also lead to seizures.

6. Death: In rare cases, mucormycosis can be life threatening.

Mucormycosis is an aggressive, severe, and rare fungal infection affecting several COVID-19 patients. Read more on why it is important to take greater care if you have a chronic illness.

Read Now!

Living With Mucormycosis

If you suffer from mild mucormycosis, it can be treated immediately with antifungal medications. However, if the infection is chronic and has spread to different body parts, then in addition to diet and lifestyle changes, you may also need to undergo surgery to manage the disease and prevent any long-term complications. Also, post-discharge from the hospital, if you are taking prescribed medications, it is wise to pay timely visits to your doctor as advised.

Surgical management of mucormycosis may require complete debridement of infected tissue leading to loss of vital body parts in the process. Rehabilitation of these defects can restore the lost function. Rehabilitation also needs to be backed up by occupational therapy.

Psychological issues can manifest as an aftermath of a surgical debridement procedure for Mucormycosis. The following measures can be taken to address the same:

Routine preoperative counseling

Addition of psychiatrists and clinical psychologists to the treating team

Additional supportive psychotherapeutic sessions

Help from support groups and other people on management of post-recovery phase

All these interventions can help to improve the overall quality of life.

Try these 10 tips to keep yourself happy in difficult times.

Tap To Know!

Black fungus v/s yellow fungus v/s white Fungus

Although used interchangeably, these three terms have different meanings.

1. Black fungus: Also known as mucormycosis, it is a fungal disorder characterized by the intake of mucor through the air or contaminated food or water. This infection causes the blackening of tissue in the affected area and is highly fatal.

2. Yellow fungus: Yellow fungus spreads through polluted settings and occurs when a patient inhales mold from the environment. In terms of how it spreads, it differs from both black and white fungal infections.The yellow fungus assaults the body's internal organs and disrupts vital physical processes. The yellow fungus causes far more severe damage. As a result, people should begin observing its symptoms from the first day and seek medical advice.

3. White fungus: Candidiasis, often known as white fungus, is a fungal infection caused by Candida. This infection causes white-creamy patches on the affected areas, hence the name.

Frequently Asked Questions

How does someone get mucormycosis?

How can I lower the risk of mucormycosis?

Can babies contract mucormycosis?

How does steroid overuse cause mucormycosis?

Can we eat high-sugar foods in case of mucormycosis?

What does mucormycosis do to the body?

How long does it take to recover from mucormycosis?

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Multiple myeloma

Also known as Kahler’s disease, Myelomatosis, Plasma cell myeloma, Plasma cell dyscrasia, and Medullary plasmacytoma

Overview

Multiple myeloma is a rare type of blood cancer that affects the plasma cells. Plasma cells are a type of white blood cells (WBCs) responsible for producing antibodies and fighting infections. Plasma cells are found in the bone marrow, the hollow area within the bones. When the plasma cells grow out of control and become cancerous, it leads to multiple myeloma. The word “multiple” is often used because the cancer cells usually affect multiple areas of the bone marrow.

Although the exact cause of multiple myeloma is not yet known, researchers suggest that genetic abnormalities or environmental exposures may play a role.

The symptoms of multiple myeloma and its severity vary from person to person and stage of cancer. Some of the common symptoms include weight loss, bone pain, nausea, frequent infections, fatigue, confusion and loss of appetite.

The treatment of multiple myeloma is aimed at decreasing the severity of symptoms and slowing down its progress. Treatment involves medications, stem cell transplants, bisphosphonate therapy, platelet transfusions, and/or plasmapheresis.

Key Facts

Usually seen in

Adults above 50 years of age

Gender affected

Both men and women but slightly more common in men

Body part(s) involved

Blood

Kidney

Bones

Bone marrow

Mimicking Conditions

Plasma cell cancer

Necessary health tests/imaging

Physical examination and observation

Complete blood count (CBC)

Blood urea nitrogen (BUN) test

Urine test

Creatinine laboratory test

Albumin test

Calcium test

Lactate dehydrogenase test

Bone marrow studies and biopsy

X-rays scan

Magnetic resonance imaging (MRI)

CT scan

Treatment

Chemotherapy: Vincristine, Daunorubicin & Mercaptopurine

Radiation therapy

Targeted therapy: Bortezomib & Carfilzomib

Immunotherapy: Belantamab, Daratumumab, Elotuzumab & Isatuximab

Other drugs: Corticosteroids

Bone marrow transplant

Specialists to consult

Hematologist

Hemato-oncologist

Medical oncologist

Oncosurgeon

Bone marrow transplant specialist

See All

Symptoms Of Multiple Myeloma

During the initial stages of multiple myeloma the symptoms may not be noticeable and may vary depending on the person. However, as the disease progresses most people experience some of the commonly observed symptoms.

The common symptoms are generally referred to by the acronym CRAB which stands for:

C: Calcium (elevated levels)

R: Renal failure

A: Anemia

B: Bone damage

Other commonly observed signs and symptoms of multiple myeloma include:

Nausea

Bone pain, especially in the spine or chest

Constipation

Mental fogginess or confusion

Loss of appetite

Tiredness

Frequent infections

Weakness or numbness in your legs

Excessive thirst

Problems with urination

Vision loss or vision problems

Weight loss

Did you know?

Diseases very similar to multiple myeloma were found in descriptions obtained in Egyptian mummies. Years later, Rustizky in 1873 gave the term “Multiple Myeloma” after observing multiple bone lesions in one of his patients.

Causes Of Multiple Myeloma

In this type of cancer, abnormal plasma cells develop in the bone marrow and reproduce quickly. The rapid reproduction of cancerous myeloma cells overtakes the production of healthy cells in the bone marrow leading to the disease.

The exact cause of multiple myeloma is not known. However, frequent alterations and mutations of genes, especially chromosome 14, are commonly found in multiple myeloma. In addition, other mutated genes like c-Myc, NRAS, KRAS, and BRAF may participate in plasma cell proliferation.

The cancerous plasma cells continue trying to produce antibodies, as healthy plasma cells do, but these cells produce abnormal antibodies (monoclonal proteins, or M proteins) that do not function as normal antibodies. These abnormal antibodies build up in the body and cause complications like kidney damage. Infiltration of cancer cells also increases the risk of bone disorders.

Risk Factors For Multiple Myeloma

The exact cause for multiple myeloma is hard to know however, researchers believe that certain factors do increase the risk of getting the disease.

Increasing age

As one ages, the risk of getting multiple myeloma increases. Most people get diagnosed with the disease in their mid 60s. More than 75% of the cases were reported between the age group of 55-85 years.

Gender

Multiple myleoma is about 1.5 times more common among men than women, globally. Suggested underlying factors include discrepancies in health-risk behaviors such as smoking and alcohol consumption, and higher rates of obesity among men.

Ethnicity

According to medical literature, the black race is more likely to develop multiple myeloma compared to the other races.

Environmental factors

Exposure to chemicals such as benzene, insecticides, herbicides, hair dyes, organic solvents, and radiation have been found to increase the risk of developing multiple myeloma.

Family history

Inherited variations in certain genes could contribute to the development of multiple myeloma for some individuals. Therefore, close relatives of people with multiple myeloma may have an increased risk of developing the disease.

Personal history of monoclonal gammopathy of unknown or undetermined significance (MGUS)

MGUS is a benign proliferation of a plasma cell that results in production of monoclonal antibodies in high amounts (but not as high as seen with multiple myeloma). MGUS is a significant risk factor for the development of multiple myeloma. About 19% of MGUS patients develop multiple myeloma in about 2 to 19 years after diagnosis of MGUS.

Inflammatory diseases

Inflammatory diseases like type 2 diabetes, heart disease and rheumatoid arthritis can increase the risk of multiple myeloma. However, this relationship is not well established.

Other factors

Other factors contributing to disease occurrence include obesity, tobacco and alcohol consumption although they are not well established as the risk factors for multiple myeloma.

Did you know?

Blood cancer, also known as leukemia, is a condition in which there is an uncontrolled growth and multiplication of blood cells in the bone marrow and lymph nodes. Read more about the causes, symptoms, treatment and prevention of blood cancer.

Click Here!

Diagnosis Of Multiple Myeloma

A thorough clinical evaluation is required for the effective diagnosis of multiple myeloma. Based on the early signs and symptoms of the disease, your doctor will ask you to get a physical examination, followed by some laboratory tests, imaging tests and if needed, a biopsy as well. Here are the tests that will be a part of a comprehensive diagnosis of multiple myeloma.

Physical examination

When you experience the early signs and symptoms, book an appointment with your physician at the earliest. Your doctor may ask you questions and enquire about your medical history. Based on the answers, he may suggest some of the following clinical tests to confirm the presence of the disease:

A. Blood tests

1. Complete blood count (CBC)

CBC measures several components of the blood, including red blood cells, white blood cells, platelets and others. The following levels are checked while studying the results of a CBC.

A decreased level of hemoglobin (anemia)

A decreased platelet count (thrombocytopenia) that can cause bleeding problems

A decreased level of white blood cells (granulocytopenia) which causes a weakened immune system.

2. Blood urea nitrogen (BUN)

Urea nitrogen is the waste product formed by the body after consumption of food. The liver breaks down the protein in the food and produces urea nitrogen which is released into the blood and eventually ends up in the kidneys. When the kidneys are healthy, they effectively remove the blood urea nitrogen; however unhealthy kidneys are unable to do so and leave more of it in the blood. Therefore, BUN test helps to see how much of the waste product remains in the blood and helps to detect the health of the kidneys.

Laboratory based blood chemistry tests will help to check for the levels of blood creatinine, albumin, calcium, and other electrolytes.

3. Creatinine laboratory test

The creatinine test helps to measure how efficiently the kidneys are able to remove the waste from blood. Creatinine is a natural waste product which is present in the blood and urine. Kidneys remove creatinine from the body by filtering it from the blood and then releasing it into the urine. This test measures the amount of creatinine in the blood.

High creatinine levels mean that the kidneys are not functioning well and are common in people with myeloma.

4. Albumin test

Albumin is a protein produced by the liver and its function is to carry nutrients and prevent body fluids from leaking into the body. A serum albumin test checks the amount of albumin in the body. Any abnormality in the level of albumin indicates a likelihood of liver disease, kidney disease or nutritional deficiency. Low levels can be seen in myeloma.

5. Calcium test

Calcium is a mineral found in the body responsible for many vital functions like maintaining bones strength, muscles, nerves function, and blood clotting. Abnormal levels of calcium can lead to several complications in the body like kidney disease, bone disease, and multiple organ tumors.

Calcium levels may be high in people with advanced myeloma and cause symptoms of fatigue, weakness, and confusion.

6. Lactate dehydrogenase test

Serum lactate dehydrogenase (LDH) test measures the levels of the enzyme lactate dehydrogenase in the blood. This enzyme is majorly involved in energy production and is found in nearly all of the body’s cells, with the highest levels in the cells of the heart, liver, muscles and kidneys. It is released in the bloodstream as a result of damage to the tissues following an injury.

A blood test to measure lactic dehydrogenase (LDH) levels can be a useful indicator of a patient’s prognosis as high levels can indicate cancer recurrence.

7. Quantitative immunoglobulins

This test helps to measure the levels of different immunoglobulins present in the blood such as IgA, IgD, IgE, IgG, and IgM. The quantitative analysis of these immunoglobulins helps to see if they are abnormal, suggesting the presence of disease or infection. In multiple myeloma, their levels usually differ from what their normal ranges usually are.

B. Urine test

Urine tests can be used to:

Measure the amount of protein in the urine

Presence of free light chains

Test for creatinine, a waste product excreted by the kidneys

Presence of bilirubin, a breakdown product of hemoglobin

You might most likely be asked to give a sample of urine that has been collected over a 24-hour period, so it can measure how much myeloma protein is present.

Urine protein electrophoresis (UPE or UPEP) and urine immunofixation may be done to look for free light chains in the urine and to assess kidney function.

C. Bone marrow studies and biopsy

It is a medical procedure used as a diagnostic method in which a piece of the tissue or a sample of the cells is removed from the body and is tested in a laboratory. Multiple myeloma is characterized by an increased number of plasma cells in the bone marrow and therefore a bone marrow biopsy can help. It can be done at the doctor’s office or at the hospital.

1. Bone marrow aspiration

Bone marrow aspiration can be performed by numbing the back of the pelvic bone with local anesthesia. A needle is inserted into the bone and a syringe is used to remove a small amount of the liquid bone marrow. The bone marrow tissue is examined to check for the appearance, size, arrangement and shape of the cells and determine the presence of myeloma cells in the bone marrow.

The liquid part of the bone marrow called the aspirate can also be sent for other tests such as immunohistochemistry and flow cytometry, and chromosome analyses, including karyotype and fluorescent in situ hybridization (also known as FISH).

2. Immunohistochemistry

It is a laboratory method that uses antibodies to check for the presence of certain antigens (markers) in the tissue sample. The sample is treated with special proteins that cause color change and help to identify myeloma cells.

3. Flow cytometery

It is a technology that helps to analyze single cells or particles as they flow past multiple lasers while being suspended in a buffered salt based solution. The sample cells are treated with special proteins that stick only to certain cells. This in turn helps to identify if the cells are abnormal or cancerous cells.

D. Imaging tests

Along with the other chemical analysis and physical examination, the doctor may also recommend you to get a few imaging tests done. It will help provide a clear visual of the concerned/ affected organ or tissue.

1. X-rays scan

Multiple myeloma can cause tissue damage at the site of disease initiation. An X-ray produces images of the organs and confirms the presence of any tissue damage. It can be done to see if there is a suspicious area that might be cancer, or understand the spread of the cancer.

2. Magnetic resonance imaging (MRI)

It is an imaging test that uses a magnetic field to take pictures of organs and structures inside the human body. An MRI can help understand the initiation and spread of the disease.

3. CT scan

A CT scan, also known as computed tomography, is a machine that takes a series of x-rays to make a picture with minute details. The scan helps to image bones, blood vessels and soft tissues from different angles. It can also be used to guide a biopsy needle into an area of concern.

If your doctor diagnoses you with multiple myeloma, the doctor will then use the information gathered to classify the disease into the respective stages - stage I, II, III or IV.

Celebs affected

Lisa Ray

Lisa Ray is a well known Indian Canadian model turned actress who was diagnosed with multiple myeloma in 2009. The actress went for a stem cell transplant and was declared cancer free in 2010.

Kirron Kher

Kirron Kher, renowned Indian actress and politician, was diagnosed with multiple myeloma. While her treatment was going on, she continued working from home for her constituency.

Prevention Of Multiple Myeloma

As known, there aren't vaccines available for all the different cancers reported. There is no known way to prevent multiple myeloma. Scientists are still investigating if treating certain high risk factors such as smoldering multiple myeloma could help keep it from becoming active multiple myeloma.

It is best advised to practice a healthy lifestyle, healthy eating habits, avoid smoking and excessive alcohol consumption to minimize chances of developing any form of cancer.

Did you know?

Plants based foods are rich in cancer fighting phytonutrients and other special compounds. Here are 5 superfoods that fight cancer and gift you happy life.

Read To Know!

Specialist to Visit

If you suspect that you may have multiple myeloma or suffer from reportes symptoms like unintentional weight loss, bone pain, increased calcium levels and fatigue, it is essential to seek expert medical advice from a team of:

Hematologist

Hemato-oncologist

Medical oncologist

Oncosurgeon

Bone marrow transplant specialist

Consult India’s best doctor online from the comfort of your place.

Book Now!

Treatment Of Multiple Myeloma

There are different treatment options available for multiple myeloma depending on the severity of the disease. The options can help ease the pain, reduce complications and also slow the progression of the disease. Common treatment options include:

Chemotherapy

Chemotherapy medicines are the mainstay of treatment used to kill cancer cells. It is an aggressive form of drug therapy that helps to kill fast growing myeloma cells. In chemotherapy cycles, a certain number of days of treatment are followed by days of rest to allow the body to recover. Often, a combination of chemotherapy agents is used to treat cancer.

Commonly used chemotherapeutics are:

Vincristine

Daunorubicin

Cytarabine

Mercaptopurine

Ifosfamide

Radiation therapy

As the name suggests, radiation therapy uses radiation (high-energy rays similar to X-rays) to kill the cancer cells. The strong beams of energy kill the myeloma cells quickly enough in the specific sites.

This therapy can also be used along with other treatment modalities such as chemotherapy and surgery.

Targeted therapy

Targeted therapy medications help to block a chemical in the myeloma cells that destroys the protein and causes the cells to die. These drugs are given against a cancer cell-specific target. These targets are generally not present in normal dividing cells of our body therefore minimizing the adverse effects of the drug treatment. These therapies are generally expensive but more specific in their action.

Examples of targeted therapy include:

Bortezomib

Carfilzomib

Immunotherapy

This therapy is being considered as the game changer in the cancer treatment world. Immunotherapy uses your immune system to fight cancer. Your body's disease-fighting immune system may not attack your cancer because the cancer cells produce proteins that help them hide from the immune system cells. Immunotherapy works by interfering with that process.

Commonly used immunotherapeutics are:

Belantamab is an antibody-drug conjugate that targets the BCMA pathway and is approved for subsets of patients with advanced multiple myeloma.

Daratumumab is a monoclonal antibody that targets the CD38 pathway and is approved for subsets of patients with advanced multiple myeloma.

Elotuzumab is a monoclonal antibody that targets the SLAMF7 pathway and is approved for subsets of patients with advanced multiple myeloma.

Isatuximab is a monoclonal antibody that targets the CD38 pathway and is approved for subsets of patients with advanced multiple myeloma.

In addition to the FDA approved therapies, there are some second generation monoclonal antibodies targeting the CD38 and other targets, CAR- T cells and natural killer cells that are being investigated in clinical trials as well.

Corticosteroids

These are medications that help to regulate the immune system and thereby help to control the inflammation. This steroidal therapy has been found to be effective against multiple myeloma as well.

Here’s more on the do’s and don’ts to follow when using corticosteroids.

Click To Know!

Bone marrow transplant

Also known as stem cell transplant, it is a special type of therapy for patients with certain cancer types such as multiple myeloma. Through this process, the unhealthy bone marrow cells are treated to kill the abnormal cells, and the healthy cells are filtered and transfused back into the patient. Bone marrow transplants have been successfully used to treat cancers, immune deficiency disorders and solid tumor cancers since the 1960s.

Prior to being considered a candidate for bone marrow transplant, the doctors will evaluate if you are a good candidate for the same. You may be advised with some initial therapy which may include targeted therapy, immunotherapy, corticosteroids and even chemotherapy.

Depending on the stage of the disease, age and overall health, a combination of different treatment options is often considered as well.

Home-care For Multiple Myeloma

Patients with multiple myeloma may feel fatigued and are at an increased risk of frequent infections. Not to forget, the treatment regimen for multiple myeloma can be exhaustive and stressful as well. For instance, chemotherapy is often associated with several side-effects.

Here are a few things one can keep in mind while taking care of themself or a loved one suffering from multiple myeloma.

Follow good hand hygiene. Avoid crowded places. Make a conscious effort to keep infections away.

Eat fresh home-cooked meals and drink plenty of water or energy drinks daily.

Eat small and frequent meals throughout the day.

Embrace the side effects of chemotherapy such as loss of hair, skin discoloration, etc. Counseling and connecting with other people who are going through the same can help with the acceptance.

Nausea and vomiting due to chemotherapy can be managed with medications or home remedies like sucking on peppermint lozenges.

Meditation is a good way to practice relaxation. Try and incorporate it into your daily routine.

Engage in some sort of physical activity such as yoga or evening walks. It will help boost energy levels and help with symptoms of chronic fatigue.

Meditation is one of the simple and effective ways to keep your mind and body. Here’s the benefits of meditation.

Read To Know!

Complications Of Multiple Myeloma

Multiple myeloma can lead to several complications depending on the severity/stage of the disease and the effect of the treatment regime being undertaken. Common ones include:

Bone disorders

Multiple myeloma affects the bones - usually the back, hips and ribs. It is a frequent dull pain which can get worse due to movement. Multiple myeloma can also cause thinning and weakening of bones causing frequent fractures. The spine and long bones (arms and legs) are most often affected.

Blood related problems

A large part of the Indian population with myeloma have been found to have anemia. Anemia is a condition in which one lacks healthy red blood cells to carry adequate oxygen to the body’s tissues. Anemia by itself also causes fatigue and weakness. Multiple myeloma affects the production of blood cells in the bone marrow leading to anemia.

Frequent Infections

Myeloma cells, infact cancer cells in general, inhibit the body’s ability to fight against infections. The disease weakens the immune system in general and therefore the patient becomes prone to frequent infections.

Kidney damage

Multiple myeloma adversely affects the kidney function, therefore in case of severity, there is a chance of kidney damage or failure if left unaddressed or treated. Common signs of kidney impairment include weight loss, poor appetite, itchy skin, recurrent and continuous hiccups, tiredness and lack of energy.

Chronic pain

Multiple myeloma patients may suffer from chronic pain due to several reasons including bone lesions, neuropathy, bone marrow examination or pain related to medications.

Hypercalcemia

A high level of calcium in the blood can be observed due to excessive calcium release from the affected bones in people with multiple myeloma. Common symptoms of hypercalcemia include extreme thirst, stomach pain, constipation, confusion and drowsiness.

Here’s everything you need to know about hypercalcemia.

Click To Know!

Alternative Therapies For Multiple Myeloma

There aren't any alternative therapies known to treat multiple myeloma as such, however, it may help to cope with the stress, treatment regime and side effects of the disease. Some alternative therapies that will help cope with multiple myeloma while you are undergoing include:

Yoga

Yoga helps to lower fatigue, reduce stress, improve muscle tension and improve physical functioning for cancer patients. In case of multiple myeloma, strength is considered more important compared to cardio activity. Therefore, yoga could serve as another mode of physical activity that could support your fight against the disease.

Here are some of the health benefits of yoga.

Check Out!

Music therapy

Though there is no evidence to support that music therapy helps to treat cancer, it has been found to be a great psychological therapy for many cancer patients. Music has been found to relieve nausea and vomiting caused due to chemotherapy and other anti-cancer medications.

Exercise

According to a 2013 study published in BMC Cancer, prescribed exercise programs for multiple myeloma patients are acceptable and safe. Undergoing multiple myeloma treatment generally leads to loss of lean muscle mass. Therefore, it is best advised to build lean mass and develop more metabolically active muscle mass during the recovery phase. You may require some advice and appropriate input from physical therapists.

Massage therapy

Massage is considered as a relaxation and effective treatment for muscles and soft tissues, which is often what is needed for patients undergoing cancer treatment. It is a popular complementary therapy used by people living with cancer. Massage therapy helps to ease tension in the muscles, lowers stress and also helps to ease or release trigger points.

Diet

A healthy diet is essential for good health and nutrition. Include fresh fruits, vegetables, herbs and spices in your daily diet that can help to boost your energy levels. Stay hydrated by including fluids such as fresh fruit juices and water in your daily dietary intake. Preference should be given to home cooked food. Avoid raw, uncooked and packaged food.

A healthy diet is the key to keep up your energy levels and fight infections when sick. Stock our range of health foods and drinks now.

Explore Now!

Aromatherapy

It is considered as a popular complementary treatment for cancer patients. It is defined as the use of essential oils from plants (trees, flowers or herbs) to improve the physical, mental and spiritual well being. Research suggests that aromatherapy helps to relieve anxiety, nausea and vomiting in cancer patients.

Acupressure and acupuncture

Acupressure and acupuncture techniques help combat pain, fatigue, and other symptoms. Studies suggest that acupuncture and acupressure can reduce the need to prescribe opioids for cancer pain.

Living With Multiple Myeloma

Advancement in science and technology has led to better chances of survival for these patients. The fight against cancer can impact the emotional health of both the patient and their families, however it is worth the struggle if the patient manages to make it through.

Here are a few tips that can be of help for patients with multiple myeloma:

Join a support group

Staying positive during cancer treatment can be a lot easier if you have other people cheering you on. A support group can keep you motivated since the other participants will have their own insights into cancer treatment.

Surround yourself with positive people

When you’re feeling low, one of your friends or family members can provide some much-needed encouragement. When you’re feeling distressed, a trained mental health counselor can be of great help.

Learn and accept the diagnosis

Don’t be afraid to ask your healthcare team about anything you don’t understand. It is best to ask your doctor about your health and the condition.

Get rest

When you’re feeling anxious or depressed, or even just exhausted from your cancer treatment, get some sleep. Lack of sleep can make you feel even more anxious or despairing. You’re more likely to feel positive if you’re well rested.

Frequently Asked Questions

What is the most common complication of multiple myeloma?

What should I avoid if I have been diagnosed with multiple myeloma?

What is the most frequent cause of death in a patient with multiple myeloma?

What are my treatment options if I have multiple myeloma?

Can one lead a normal life with multiple myeloma?

What foods help with multiple myeloma?

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Multiple sclerosis (MS)

Also known as MS

Overview

Overview of Multiple Sclerosis

Multiple Sclerosis is an autoimmune disease (in which the body's immune system attacks its own healthy cells) of the central nervous system comprising the brain and spinal cord. In MS, the protective sheath covering the nerves called myelin gets destroyed, which disrupts the communication between the brain and the rest of the body.

MS generally strikes people at an age between 20 to 45 years. Women are twice more likely to develop this condition as compared to men.

Some common symptoms of the disease include muscle weakness (often in the hands and legs), tingling, burning sensations, numbness, chronic pain, coordination and balance issues, fatigue, dizziness, vision problems, slurred speech, and difficulty with bladder control.

Management includes medications for slowing the progression of the disease and managing its symptoms.

Symptoms Of Multiple Sclerosis

Multiple sclerosis can cause a wide range of symptoms and affect any part of the body. Each person with the condition is affected differently and the symptoms can be unpredictable. Some people have mild symptoms while others may have severe trouble in doing their daily tasks. These problems may come and go or persist and worsen over time.

The most common signs and symptoms of Multiple Sclerosis are:

Fatigue

Fatigue or tiredness is one of the most common symptoms of MS. It can significantly interfere with daily activities and tends to get worse towards the end of each day.

Vision Problems

Vision problems are usually observed in 1 out of 4 individuals. This is usually the first noticeable symptom. The person may experience eye pain, temporary loss of vision in the affected eye, and decreased vibrancy of colors.

Muscle spasms, stiffness, and weakness

MS can cause the muscles to become stiff and resistant to movement.

Mobility Problems

MS can make walking and moving around difficult, particularly if a person is experiencing muscle weakness and stiffness. The person may experience symptoms like difficulty in balancing and coordination, shaking of legs, dizziness, and vertigo.

Musculoskeletal pain

People with MS may find it difficult to walk or move around. This can cause pressure on the joints, resulting in back pain, neck pain, and other joint pain.

Bladder problems

Loss of bladder control is an early sign of MS. The person may find difficulty in emptying her/his bladder and get an urge to urinate suddenly.

Sexual problems

MS can affect the sexual activity of both men and women. In men, it leads to erectile dysfunction and may even lose the ability to ejaculate. In women, it includes difficulty in reaching orgasm, as well as decreased vaginal lubrication and sensation.

Bowel problems

MS can cause bowel dysfunctioning and the person might experience constipation (difficulty in passing stool), and bowel incontinence (not being able to control bowel movements and stool leaks from the rectum without warning).

Difficulties in thinking, learning and planning

Some people with MS may experience difficulties in thinking, learning and planning. This can include:

Slowness in processing information

Problem in understanding visual information

Problems in learning new things

Getting stuck on words

Mental issues

People with MS may experience periods of depression and anxiety. It’s not clear whether it is caused by the disease itself or the result of the stress of having to live with a long-term condition.

Struggling to cope up with anxiety and stress?

Watch this video now

Types Of Multiple Sclerosis

Multiple sclerosis (MS) affects each person differently. The most common types of MS are:

Clinically isolated syndrome (CIS)

Relapsing-remitting MS (RRMS)

Primary-progressive MS (PPMS)

Secondary-progressive MS (SPMS)

Clinically Isolated Syndrome (CIS)

CIS refers to a single episode of neurologic symptoms that lasts at least 24 hours and is caused by demyelination (loss of the myelin that covers the nerve cells) in the central nervous system (CNS). CIS can either be classified as monofocal or multifocal.

Monofocal episode: When a person experiences a single neurologic sign or symptom, for example, an optic neuritis attack (when swelling damages the optic nerve) which is caused by a single lesion.

Multifocal episode: When a person experiences more than one sign or symptom, for example, optic neuritis followed by numbness in the legs which is caused by a lesion at multiple locations.

Relapsing-remitting MS (RRMS)

This is the most common type of multiple sclerosis. Approximately 80 to 85 percent of MS patients are initially diagnosed with RRMS type of multiple sclerosis. The episode of attack faced is called relapse or exacerbation which is followed by periods of partial or complete recovery. RRMS can be further characterized as:

Active (evidence of new MRI activity over a specified period of time)

Not Active

Worsening (a confirmed state of disability following a relapse)

Not worsening

Primary-progressive MS (PPMS)

This form of MS progresses slowly yet steadily from the time of its onset. The symptoms stay at the same level of intensity without decreasing, and there is no remission period. Approximately 10 percent of the MS population is diagnosed with primary-progressive MS (PPMS).

PPMS can be further characterized as:

Active and not active

Worsening and not worsening

Secondary-progressive MS (SPMS)

SPMS may involve a period of relapsing-remitting activity, with symptoms flaring up followed by recovery periods. People originally diagnosed with RRMS progress to SPMS. With secondary-progressive multiple sclerosis, a person continues to accumulate nerve damage.

Did you know?

Every year on May 30 is observed as World Multiple Sclerosis Day, to create public awareness of multiple sclerosis (MS) and to make life less difficult for people affected by multiple sclerosis. Here are a few facts everyone should know about multiple sclerosis.

Click here to know more

Causes Of Multiple Sclerosis

The exact cause of the development of MS is not known. It is considered an autoimmune and inflammatory condition caused by a combination of genetic and environmental factors.

In MS, the myelin sheath covering the nerves in the brain and spinal cord becomes inflamed. These patches of inflammation can disrupt the messages traveling along the nerves. If the attacks are frequent and repeated, it can eventually lead to permanent damage to the underlying nerves.

Risk Factors of Multiple Sclerosis

Some of the factors that have been suggested as possible risk factors of multiple sclerosis include:

Age

It most commonly occurs in people during their 20s to 40s, although it can develop at any age.

Sex

According to the National Multiple Sclerosis Society, MS is at least two to three times more common in women than in men, it has been suggested that hormones may play a significant role in determining susceptibility to MS.

Family history

According to various family studies, 15–20% of MS patients have one or more affected relatives.

Genes

Multiple sclerosis is not an inherited disease, it is not passed from generation to generation. Although, there is a genetic risk that is inherited. Variations in various genes are involved in increasing the susceptibility of MS. Variation in the HLA-DRB1 gene is the strongest genetic risk factor for developing multiple sclerosis.

Race

Research has shown that MS occurs in most ethnic groups, including African Americans, Asians, and Hispanics, but is most common among white people of northern European descent.

Location

MS is more common in people at higher latitudes (staying farther from the equator) at a young age.

Vitamin D deficiency

It has been found in a research study that young children and adults spending more time outside reduced their odds of developing multiple sclerosis. Low levels of vitamin D in the blood have been identified as a risk factor for the development of MS. Vitamin D has been thought to support immune function and may help protect against immune-mediated diseases.

The symptoms of vitamin D deficiency are subtle, which is why most people do not realize they are deficient in Vitamin D. Here is a list of symptoms you can face during Vitamin D deficiency.

Click here

Smoking

People who smoke are about twice as likely to develop multiple sclerosis as compared with those who don't smoke. Smoking is associated with more severe disease and more rapid disease progression.

Want to quit smoking?

Try our range of smoking cessation products and detach yourself from this deadly habit.

Buy Now

Obesity

Obesity in early life increases a person's risk of developing MS and MS-related disabilities.

A few dietary tips for the prevention of obesity in kids.

Click here to know more

Click here to know more

EBV infection

Individuals who had a previous infection with epstein barr virus (EBV) infection contribute to the risk of developing MS. The virus might trigger the immune system, leading to the development of MS.

Diagnosis Of Multiple Sclerosis

It can be hard to diagnose multiple sclerosis, as some of the symptoms can be quite vague or similar to other conditions. Diagnosis of MS is complicated because no single test can positively confirm it.

History and physical examination

A general practitioner will assess the individual at the time of the appointment. This evaluation involves a complete health history and neurological exam. This includes:

Movement and coordination

Vision

Balance

Sensory exam

Cranial nerves Exam

Mental functioning

Checking the emotional functions

The doctor will also ask about the frequency of attacks in the last months. An attack is when any MS symptoms show up suddenly. Then after that, the doctor will send for further imaging tests and evaluation with a variety of tools to rule out other possible disorders. It also requires a series of lab tests to aid in diagnosis.

Blood Tests

Blood tests are performed to rule out other causes of various neurological symptoms. For example, to rule out conditions like neuromyelitis optica ( a rare condition where the immune system damages the spinal cord and the nerves of the eyes) which causes the same symptoms as MS and is often misdiagnosed as MS.

Book your tests from the comfort and safety of your home

Tap Here

Imaging tests

Magnetic Resonance Imaging (MRI) Test

An MRI scan is a painless imaging technique that uses a magnetic field and computer-generated radio waves to create detailed images of the organs and tissues in the body. It helps in checking the damage or scarring of the myelin sheath (the layer surrounding the nerves) in the brain and spinal cord.

Lumbar Puncture

A lumbar puncture is a procedure to remove a sample of your spinal fluid by inserting a needle into the lower back. Spinal fluid is the fluid surrounding the brain and spinal cord, and changes in the fluid are suggestive of problems in the nervous system. A lumbar puncture is performed to provide additional information if there are some abnormalities in the scans.

Evoked Potential Tests

Sensory evoked potentials is a painless test that measures the electrical activity in the brain in response to stimulation of sight, sound, or touch.

The most common test is assessing the functioning of the eyes. A light pattern is shown to the eyes while the brain waves are monitored using small sticky patches of electrodes placed on the head.

This test is used in combination with another diagnostic test to assist in the diagnosis of neurological disorders.

Prevention Of Multiple Sclerosis

Currently, there are no known ways to prevent getting MS.

However, a few lifestyle changes might help reduce the risk of getting this condition:

Maintain a healthy weight

Being overweight or obese in early life increases a person's risk of developing MS. Hence maintaining a healthy weight by regular exercising, consuming a nutritious well-balanced diet, and proper sleep are crucial in preventing the risk of MS.

Sustain optimum levels of Vitamin D

Exposure to the sun and taking proper vitamin D in diet is an important modifiable environmental risk factor for the development of multiple sclerosis.

Here are a few points which you need to know about vitamin D and why it is important.

Click here to know more

Avoid smoking

Smoking and exposure to secondary smoke from other people increase the risk of the development of MS and its progression. Hence avoiding or quitting smoking can not just reduce the risk of MS but also do wonders for your overall health.

Looking to quit smoking, but finding it very difficult? Read about some practical ways that will help you get rid of this unhealthy habit.

Check out

Specialist to Visit

The healthcare physician can thus refer the patient to the specialist’s doctor for better evaluation and treatment. These patients can be referred to:

Neurologists: A specialist doctor who treats diseases of the brain and spinal cord, peripheral nerves, and muscles.

Psychiatrists: A psychiatrist is a doctor who focuses on the diagnosis, treatment, and prevention of mental, emotional, and behavioral disorders.

Psychologists: Psychologists are specialists who seek to understand and explain thoughts, emotions, feelings, and behavior.

Get a consultation from our team of trusted doctors.

Book a consultation now

Treatment Of Multiple Sclerosis

Currently, there is no cure for multiple sclerosis. Management of MS includes medication for managing MS attacks, slowing the progression of the disease, and managing its symptoms:

Treatment for MS attacks

Corticosteroids such as oral prednisolone and iv methylprednisolone, are prescribed to reduce nerve inflammation and manage MS attacks.

Plasma exchange: Plasma exchange may be advised in case of new and/or severe symptoms and no response to corticosteroids. In this procedure, the plasma (liquid portion of the blood) is separated from the blood cells. The blood cells are then mixed with plasma from a donor or with a plasma substitute like protein (albumin) solution and injected back into the body.

Treatment to slow progression of MS

Several Disease modifying therapies (DMTs) are available to slow disease progression and reduce the number of attacks in multiple sclerosis. Treatment options include oral, injectable, and infusion medications. Some examples of each class are mentioned below.

Oral Medications

Dimethyl fumarate

Monomethyl fumarate

Diroximel fumarate

Fingolimod

Ponesimod

Teriflunomide

Injectables

Interferon beta

Glatiramer acetate

Infusion treatments

Mitoxantrone

Natalizumab

Ocrelizumab

Treatment of specific MS symptoms

MS can cause a range of symptoms that can be treated individually. Symptoms differ from person to person. Treatments for some of the main symptoms are discussed below.

Fatigue

Many people with MS experience fatigue, and medications like amantadine, modafinil, and methylphenidate are prescribed for dealing with fatigue caused by MS. Fatigue is also managed by light exercise, energy-saving patterns, and keeping healthy sleeping patterns.

Visual problems

MS-related visual problems often improve on their own. However, If symptoms are particularly severe, steroids may be prescribed to help speed up recovery.

Neuropathic Pain

Neuropathic pain is caused by damage to your nerves and is usually sharp and stabbing. This type of pain can be treated using antidepressants which are used as painkillers medicines like gabapentin and amitriptyline.

Muscle stiffness

Muscle relaxants such as baclofen, tizanidine, and cyclobenzaprine may be prescribed to manage painful or uncontrollable muscle spasms.

Other medications may be prescribed for depression, sexual dysfunction, insomnia, and bladder or bowel control issues, increasing walking speed, and other symptoms associated with MS.

Home Care For Multiple Sclerosis

Eat a healthy diet

Consume a healthy diet rich in fruits and vegetables, healthy fats, and whole grains. Also limit the intake of sugar, high salt, packaged and processed foods.

Add these to your diet

Omega fatty acids

Omega fatty acids have been found to play an important role in MS patients. The consumption of omega fatty acids from food sources such as walnuts, flax seeds, and fatty fish (including salmon and sardines), or in supplements is linked with decreased morbidity and mortality.

Meet your nutritional requirements with our wide range of Omega supplements.

Fill your cart now

Turmeric

Some studies have shown that turmeric has potential benefits in treating MS. Turmeric contains high levels of a natural compound curcumin, which has outstanding anti-inflammation and neuroprotective effects.

Manage stress

According to some studies, stress can precipitate MS relapses and worsen disability through a variety of mechanisms including excessive inflammatory response and worsening degeneration.

Read More About Stress.

Click here

Do regular exercise

Regular, moderate physical exercise is good for the body, mind, and mood and this is true for patients with MS. In the case of MS, exercise can improve fitness, endurance, and strength in the arms and legs. Exercise can give other benefits like giving better control over bowel and bladder functioning, along with a boost in mood.

The best exercises for individuals with MS are:

Stretching: It is the best way to maintain your range of motion, and ease symptoms related to muscle tightness or stiffness. Yoga can also be performed for stretching the body for 10- 15 minutes.

Resistance training: It helps to maintain muscle strength. This training can be performed twice a week.

Aerobic exercise: Also known as endurance activities or cardio exercises of low to high intensity that increase your heart rate, like walking, jogging, or swimming. It is recommended to perform these exercises thrice a week or a total of 120 minutes.

Avoid smoking and limit alcohol intake

Smoking and exposure to secondary smoke from other people increase the risk of the development of MS and its progression. Quitting smoking can help reduce the rate of disability progression.

The intake of alcohol affects the bladder by increasing urinary urgency and frequency. Even one drink of alcohol depresses the central nervous system and can interfere with certain medications that are commonly used to manage MS symptoms.

Maintain optimum Vitamin D levels

Vitamin D is essential for bone, muscle, nerve, and immune system health. Research over the years has shown that maintaining adequate levels of vitamin D may have a protective effect and lower the risk of developing multiple sclerosis.

Fill any gaps in your Vitamin D levels with dietary supplements. Check out our wide range of supplements.

Explore Now

Did you know?

Ginkgo biloba is a promising medicinal herb that may reduce inflammation and fatigue in individuals living with MS. However, caution should be exercised with ginkgo in patients with bleeding disorders or those who are taking nonsteroidal antiinflammatory drugs (NSAIDs) and anticoagulants such as heparin or warfarin.

Alternative Therapies for Multiple Sclerosis

The following therapies can be used to augment conventional treatment modalities. Do consult your doctor before starting any of these alternative therapies:

Stress management

Stress can make the MS symptoms get worse since it is linked to brain, health, and immune response. Stress management is crucial to practicing good sleep hygiene to maximize the restoration process during sleep. Relaxation techniques like deep breathing, progressive muscle relaxation, listening to music to unwind, and aromatherapy with essential oils like chamomile and lavender can be followed to manage stress.

Is stress affecting your overall well-being? Try some relaxation techniques to manage stress.

Read to explore

Yoga

If an individual is experiencing muscle spasticity, fatigue, pain or difficulty walking, due to MS yoga may offer relief. Yoga also helps in encouraging relaxation, as well as building core strength, strengthening your pelvic floor muscles, decreasing spasticity, and improving balance and coordination

Psychotherapy

Also known as talk therapy, it refers to a variety of treatments that aim to help a person identify and change troubling emotions, thoughts, and behaviors. A psychologist helps the person in modifying or removing existing symptoms and promotes personal growth.

The goals of psychotherapy are:

Alleviate emotional pain or confusion

Assist in developing a complete understanding of the psychological issues.

Establishing coping strategies or skills.

Acupuncture

Acupuncture typically uses thin needles to stimulate specific areas on the body. This ancient practice may help in getting relief from pain, muscle spasms, numbness, tingling, bladder problems, and depression associated with MS.

Living With Multiple Sclerosis

Right care and support may help people suffering from MS lead long, active, and healthy lives. Self-care is an integral part of daily life which includes taking responsibility for your own health and well-being, with support from people involved in care. Self-care includes engaging in activities like maintaining good physical and mental health, preventing illness or accidents, and effectively dealing with long-term complications.

Individuals living with MS can deal with the disease by including the following aspects like:

Get good sleep

MS can cause sleep problems, including insomnia, frequent nighttime urination, narcolepsy, and leg spasms. Practicing good sleep hygiene can help in battling MS fatigue. There are a few ways to get restful sleep.

Try to go to bed and wake up at the same time every day

Avoid caffeine in the late evening

Try meditation, yoga, and deep breathing during the day.

Struggling to fall asleep? Read about some amazing tips that will help you improve your quality of sleep.

Explore tips

Keep your body active

Exercise helps in improving muscle strength and fitness, improves posture, and reduces pain and fatigue in people with MS. Individuals participating in aerobic exercise programs are benefited by having improved cardiovascular fitness, increased strength, and better bladder, and bowel functioning.

Take a nutritious diet

Diet is an essential part of a person living with MS. Individuals having MS should go for a diet that is rich in fruits, vegetables, whole grains, and lean proteins.

A plant-based diet can lower fatigue, and mood swings and help in managing weight and cholesterol levels.

Intake of food rich in omega-3 fatty acids including fish oil supplements, walnuts, and flax seeds has been found to reduce the relapse and inflammation rate and improve the quality of life for individuals living with MS.

Taking enough fiber and drinking adequate water can help ease constipation, which further reduces gut inflammation and helps in fighting MS.

Talk to a Counselor

Counseling is a type of therapy that helps people manage emotions and understand thoughts and behaviors. It plays an important part in the management of MS patients

Coping with stress

Managing depression and anxiety

Improving communication with loved ones

Take care of your emotional and mental well being

Engaging in activities that are mentally stimulating contributes to personal growth that helps the mind to stay active, alert, and engaged even in the face of aging or changes caused by MS.

Staying connected to feelings, priorities, and values can help calm emotional turmoil by eliminating unnecessary stressors.

Relationships and bonding can provide support and opportunities for shared goals and problem-solving. Positive relationships reduce feelings of isolation and promote a sense of emotional well-being in everyday life.

Meditation can be amazing for your soul and body. Read how meditation can improve your life.

Tap Here

Join Support groups

Support groups can help a person to connect with other patients and caregivers and establish a valuable network for exchanging ideas, giving motivation and encouragement. This gives a sense of well-being to the individual having the disease and that you are not alone in this.

Celebs affected

Selma Blair

Actress Selma Blair announced her MS diagnosis in an Instagram post in 2018. A combination of chemotherapy and a stem cell transplant had put her MS into remission.

Key Facts

Usually seen in

Individuals between 20- 40s years of age.

Gender affected

Both men and women but more common in women

Body part(s) involved

Brain

Spinal cord

Nerves

Prevalence

Worldwide: 2.5 million (2019)

India: 2.3 million (2013)

Mimicking Conditions

Systemic Lupus Erythematosus

Myasthenia Gravis

Syphilis

Lyme disease

Vitamin B12 deficiency

Necessary health tests/imaging

History and physical examination

Blood tests

Imaging tests Magnetic Resonance Imaging, Lumbar Puncture

Evoked Potential Tests

Treatment

Oral medication

Corticosteroids:Methylprednisolone, Prednisone

Dimethyl fumarate

Fingolimod

Diroximel fumarate

Ponesimod

Injectables

Interferon beta

Mitoxantrone

Treating specific MS symptoms

Infusion treatments

Natalizumab

Ocrelizumab

See All

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Mumps

Also known as Parotitis, Viral parotitis, Infective parotitis and Epidemic parotitis

Overview

Mumps is a contagious infection caused by a virus known as paramyxovirus. The virus can spread through nasal secretions and saliva. People affected with mumps display symptoms such as headache, fever, tiredness, loss of appetite, and muscle aches. However, swollen parotid and other salivary glands are the hallmark symptom of mumps. This causes a tender and sensitive jaw and puffy cheeks.

Mumps is a self-resolving illness that simply runs its course. Patients are given supportive care treatment to manage symptoms associated with mumps. Rest, painkillers (except aspirin), adequate fluid intake and avoidance of sour and acidic foods help in recovery. Use of warm and cold compresses can provide relief from swollen and tender salivary glands.

The MMR vaccine is the mainstay for preventing the occurrence of mumps. This vaccine protects people against three diseases: measles, mumps, and rubella. This vaccine is safe in nature and works as an extremely effective prevention strategy.

The prognosis for a patient with mumps is good. Most children with mumps recover fully in about 2 weeks. Usually, adults are able to go back to work a week or ten days after being infected with mumps. Complications from mumps are rare, but can be serious, if left untreated.

Key Facts

Usually seen in

Children between 5 to 15 years of age

Gender affected

Both men and women

Body part(s) involved

Parotid gland

Ears

Jaws

Testicles

Ovaries

CNS

Mimicking Conditions

Viral Flu

Influenza

Cytomegalovirus infection

Epstein Barr virus infection

Coxsackievirus

Parvovirus B19

Human herpes 6

Bartonella

Sjogren’s syndrome

Sarcoidosis

Miculicz’s syndrome

Adenitis

Allergic reactions

Drug reactions

Mastoiditis

Measles

Myocarditis

Paediatric HIV infection

Paediatric meningitis

Paediatric rubella

Necessary health tests/imaging

Physical exam

Swab/saliva test

RT-PCR test

IgM test

Ig G test

CSF analysis

Treatment

Symptomatic treatment

Non-aspirin pain relief medications like acetaminophen or ibuprofen

Symptoms Of Mumps

Most children are asymptomatic or demonstrate mild respiratory symptoms like a cold. Symptoms are usually seen 7 to 21 days after contracting the infection. The following are the early symptoms of mumps that can be seen in both adults and children:

Low to moderate grade fever

Malaise or generalised feeling of discomfort/uneasiness

Myalgia or muscle pain

Headache

Anorexia or loss of appetite

These symptoms are followed by:

A high grade fever of 103°F or 104° F (about 39.5 or 40°C)

Parititis (swelling and discomfort in the salivary or parotid glands)

Swollen and tender jaw

Pain in the ears

Difficulty in eating, chewing, swallowing (particularly acidic drinks like citrus fruit juices) or talking.

Note: Parotitis is a condition in which there is a swelling and discomfort in the salivary glands (in the front of the neck) or the parotid glands (in front of the ears). Swelling of these glands usually occurs within 24 hours after the first symptoms appear but in some cases, might take as long as 1 week. Either of these glands may get involved on one or both sides of your face. The glands are tender when touched. Swelling causes cheeks to puff out.

10 things you should follow if your child has a fever.

Click To Read!

Causes Of Mumps

Mumps is caused by a virus known as paramyxovirus which is a member of the rubulavirus family.

The virus spreads easily through infected saliva and can be contacted by other people by inhaling infected air droplets released through coughing or sneezing.

Mumps can also spread if you use utensils or cups with someone who has already had the infection.

It also spreads by engaging in close contact activities with an infected person such as dancing, kissing or playing sports.

If one contracts mumps, the virus moves from the respiratory tract (the nose, mouth, and throat) into the parotid or other glands, where it begins to reproduce. This leads to inflammation, swelling, and tenderness of the glands.

Patients are most contagious 1-2 days before onset of symptoms but they can even spread the disease at least five days before their salivary glands begin to swell and one week after the appearance of symptoms.

Risk Factors For Mumps

You are more likely to develop mumps, if you are:

School going children

College students

Living or travelling to places where there is a high prevalence of mumps

Being exposed to someone who has been recently infected with mumps

Not being immunised against mumps

Being in a crowded setting

Having a weak immune system

Most cases of mumps are seen during late winters or early spring.

Diagnosis Of Mumps

Call your healthcare provider, if your child is showing any symptoms of mumps or has come in contact with someone who has been infected with mumps. Your doctor will provide you with specific instructions before you visit their clinic so as to protect other patients from acquiring the infection.

Your doctor will perform a routine examination and record the present symptoms to confirm if your child has mumps. No tests are needed in most cases. The doctor can usually diagnose mumps by looking at the symptoms.

However, the following tests might help in confirming the diagnosis of mumps, especially in cases of viral mumps infection in the absence of any parotid swelling and/or salivary gland involvement.

1. RT-PCR test

In RT-PCR based testing, viral RNA can be extracted directly from buccal (inner cheek) swabs, throat swabs and saliva for virus detection, particularly when obtained within 2 days of the appearance of symptoms.

The ability to detect viral RNA rapidly reduces beyond the first week after the onset of symptoms. Virus detection has been also found to be substantially lower in people who have received two doses of mumps vaccine in the past than in unvaccinated people.

2. IgM test

The mumps virus antibody IgM test is used for the laboratory diagnosis of mumps virus infection. Detection of IgM antibodies supports a clinical diagnosis of recent infection with the virus.

However, since most people are vaccinated, test results may not mount a detectable IgM response on reinfection. Thus, a negative IgM result does not necessarily rule out mumps. Moreover, IgM may not be detectable if the test is done prior to day 3 of symptom onset or beyond 6 weeks after symptom onset.

3. Ig G test

The presence of detectable quantities of IgG antibodies could mean a previous exposure to the mumps virus either through an infection or immunisation. Individuals testing positive are considered immune to the mumps virus.

4. CSF analysis

In case of complications involving the central nervous system (CNS), a lumbar puncture (spinal tap) may be used to rule out other potential causes.

Prevention Of Mumps

The best way to protect your child from acquiring the infection is to get them vaccinated with the MMR vaccine. The MMR vaccine protects people against three diseases: measles, mumps, and rubella. This vaccine is safe in nature and works as an extremely effective prevention strategy. Children usually do not show any side effects after getting the vaccination. If seen, the side effects are extremely mild in nature and present signs such as rash or low-grade fever.

Two shots of the vaccine are given to a child:

The first shot is given between the ages of 12 to 15 months

The second shot is a must for school-going children who are between the ages of 4 to 6 years old

The vaccine is effective after both the shots have been administered. A single dose cannot provide complete protection against the infection.

The following people are also advised to get timely vaccination:

Women who are not pregnant but are of childbearing age

Students who attend postsecondary school or college

People who work in healthcare facilities like hospitals or in schools or childcare centres

People who have been born before 1957

People who plan to travel by cruise or travel overseas

Note: People who are currently ill need to wait till they recover to get the vaccine. Also, pregnant women can wait till they deliver to get the vaccine.

You may not need the MMR vaccination, if you:

Have had two doses of MMR vaccination after 12 months of age

Have been receiving chemotherapy

Are on a long term immunosuppressive therapy

Have had blood tests that indicate you have immunity against measles, mumps, and rubella (due to a previous infection)

Also, MMR vaccination is contraindicated in:

People with a life-threatening allergy to gelatin, neomycin or any other constituents of the vaccine

Pregnant women or women who plan to get pregnant soon

People with compromised immune system

5 things to keep in mind when you vaccinate your child.

Read To Know!

Specialist To Visit

In case your child displays any signs such as fever, swelling of salivary glands, muscle aches, fatigue, and headaches, or if there have been other cases of mumps in the school and your child has come in close contact with an infected person, you can consult the following doctors for proper diagnosis:

General physician

Paediatrician

Infectious disease specialist

Treatment Of Mumps

Mumps is mostly a self-resolving illness. It does not require any specific treatment and it can't be treated using antibiotics as it is a viral infection. Treatment is supportive care for each presenting symptom.

Over-the-counter, non-aspirin pain relief medications like acetaminophen or ibuprofen can help to relieve symptoms. Do not give aspirin to your child since aspirin given during viral illness has been linked with cases of Reye syndrome, a life threatening disease that can cause liver failure and swelling of the brain.

Application of warm and cold compress to the painful parotid or other salivary gland area may be helpful in relieving tenderness.

The following treatment protocols are considered for management of complications of mumps:

Boys or men who have inflammation of the testes require bed rest. The scrotum can be supported with an athletic supporter or by an adhesive tape connecting the thighs. Elevation along with cold compression may also provide some relief from pain of tender testicles.

Studies have shown that treatment with interferon-α2B seems to be effective in preventing sterility and testicular atrophy after bilateral mumps orchitis. However, large scale studies are needed to establish these promising results.

Lumbar injection can be considered to relieve a headache associated with meningitis due to mumps viral infection.

Home-care For Mumps

Mumps is a self limiting disease and its management primarily involves taking care at home. This includes making yourself comfortable and resting until your symptoms pass away. To take care at home follow the given tips.

The most important step is to isolate yourself or your child to prevent spreading mumps to others. The CDC recommends isolation for 5 days after the onset of parotid or other salivary glands swelling.

Hygiene practices like thorough and frequent hand-washing, covering the mouth when sneezing or coughing along with sanitisation of regularly touched surfaces, are also important to prevent spread of disease.

Rest up whenever you feel tired. It is quite common to experience fatigue and muscle aches. It is important to rest up during these times.

You can apply warm and cold compresses regularly to soothe inflamed salivary glands.

Drink lots of fluids like filtered water, coconut water, soups etc to avoid dehydration due to fever.

It is recommended to avoid intake of acidic food or sour foods, such as citrus fruits or juices during this time. Acidic food tends to increase salivation that will increase pain in your salivary glands.

Consume a soft, bland diet including mashed potatoes, oatmeal, yoghurt, broth based soups or other soft foods that are easy to swallow and don't require a lot of chewing.

Complications Of Mumps

Mumps can lead to several complications which include the following:

1. Orchitis: This condition is seen in 15-30% of cases in post-pubertal men. It is characterised by inflammation of the tube that carries and stores sperm and/or the testicles. The inflammation of one of both the testicles is accompanied by fever, which typically occurs during the first week of parotitis but can develop after 6 weeks of parotitis. The testis becomes painful and gets enlarged to several times its normal size. This condition resolves usually within a week. Testicular atrophy develops in 50% of the affected men but sterility is rare.

2. Oophoritis: This condition involves inflammation of one of both ovaries and occurs in 5% of women with mumps. It may be associated with lower abdominal pain and vomiting. It rarely been associated with sterility or premature menopause.

3. Mastitis: Inflammation of breast tissue can be seen in some cases of mumps.

4. Pancreatitis: This condition involves inflammation of the pancreas that is present in the abdomen. Pancreatitis is a temporary condition that resolves when mumps resolve. Some of the common symptoms include nausea, vomiting, and pain in the abdomen.

5. Meningitis: Meningitis is the swelling of the membranes surrounding your brain and spinal cord. It is a fatal condition that requires immediate medical treatment.

6. Encephalitis: Encephalitis is the inflammation of the brain itself. Symptoms associated with the conditions include seizures, severe headaches, and loss of consciousness.

7. Hearing loss: Mumps, when left untreated, can lead to hearing loss in rare cases. 5 out of 10,000 cases are associated with a loss of hearing. The paramyxovirus can damage the cochlea of the ear, a structure present in the inner ear that aids in hearing.

8. Heart problems: Rarely, mumps has been associated with abnormal heartbeat and diseases of the heart muscle.

It is wise to consult a doctor if you have any symptoms or plan to get a second opinion from a doctor. Consult India’s best doctors here.

Consult Now!

Alternative Therapies For Mumps

Herbal remedies

You can make a paste out of ginger powder and use it on the swollen part for pain relief.

Aloe vera has soothing properties that can bring relief from swelling and pain.

Neem leaves have been used since ancient times to treat mumps. Neem leaves reduce itching and swelling and can be mixed with turmeric powder to form a paste that can be applied to the swelling.

Homoeopathy

Homoeopathic medications may be useful in managing mumps. Aconitum and Belladonna are two homoeopathic medicines that are said to help in managing the signs of mumps. Pilocarpine can help in controlling salivation and perspiration which can work as a great remedy for mumps.

Living With Mumps

Being diagnosed with mumps can cause stress and anxiety in parents. This medical condition can be painful for children and adults alike. However, the disease is mostly self resolving and tends to pass away in 10 to 12 days by itself. You have to simply let it run its course. However, timely diagnosis and treatment can help you get some relief from the symptoms and avoid more severe complications.

Mumps can cause muscle tiredness and fatigue. You will need to take sufficient rest and drink plenty of fluids to avoid dehydration due to fever. Use a warm and cold compress to relieve pain and swelling. Non- aspirin medications like acetaminophen or ibuprofen will help you in managing the pain associated with mumps.

Frequently Asked Questions

Can someone get mumps more than once?

What kind of vaccine is MMR?

How serious is mumps?

How long does it take to show the signs and symptoms of mumps?

At what age is the MMR vaccine given?

How effective is the MMR vaccine?

What are the side effects seen after the vaccine?

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Myocarditis

Also known as Inflammatory cardiomyopathy, Idiopathic myocarditis, and Viral cardiomyopathy

Overview

Myocarditis is a medical condition in which the myocardium, a heart muscle, gets inflamed. It is a rare cardiovascular disease that enlarges the heart, degenerates the heart muscle cells, and develops scar tissues. These factors force the heart to work harder to supply blood and oxygen all over the body. Generally, people relate heart conditions to old age. However, myocarditis is likely to affect anyone, regardless of age. In fact, the high-risk population includes young adults.

A wide range of possible agents like viruses, bacteria, fungi, parasites, autoimmune responses, and certain medications can trigger this disease. Some of the common symptoms of myocarditis include chest pain, irregular or rapid heartbeat, difficulty breathing, accumulation of fluid with swelling in lower extremities, fever, fatigue, etc.

In most cases myocarditis improves on its own without treatment and with complete recovery. Sometimes, treatment of the underlying cause like bacterial infections by antibiotics can lead to full recovery. Consequently, the diagnosis of the underlying cause of myocarditis can help in best possible treatment. However, individuals with more prolonged or severe cases of myocarditis may need more specific medications or even hospitalization.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Heart

Prevalence

Worldwide:10.2 to 105.6 per 100,000 (2021)

Mimicking Conditions

Acute myocarditis: Pericarditis, Acute coronary syndrome, Coronary artery disease, Coronary vasospasm, Myocardial ischemia/infarction, Pulmonary edema, Unstable angina, Congestive heart failure & Pericardial effusion

Viral myocarditis: Carnitine deficiency, Coarctation of the aorta, Coronary artery anomalies, Cardiac tumor, Dilated cardiomyopathy, Endocardial fibroelastosis, Enetroviral infections, Genetics of Von Gierke, Genetics of glycogen-storage disease type II, Medial necrosis of coronary arteries, Non viral myocarditis, Shock, Valvular aortic steniosis & Viral pericarditis.

Treatment

Antibiotics

Corticosteroids: Cyclosporine & Prednisone

Heart failure therapy: Enalapril (ACE inhibitor), Lisinopril (ACE inhibitor) & Metoprolol (Beta-blocker)

Antiviral drugs: Ribavirin or interferons

IVIG (intravenous immunoglobulin)

Heart transplant

Specialists to consult

Cardiologists

Cardiothoracic surgeons

Symptoms Of Myocarditis

People with myocarditis may not show any noticeable symptoms initially. Some of the common myocarditis symptoms include:

Symptoms in adults

1. Pain or discomfort in the chest

Chest pain in people with myocarditis may resemble the chest pain that occurs during a heart attack. It may last for a couple of minutes and make you experience an uncomfortable fullness and pressure in your chest.

2. Difficulty breathing or shortness of breath

A healthy adult, weighing around 70 kgs breathes at a rate of 14 breaths/minute when at rest. If this breathing pattern increases and hyperventilation (rapid breathing) occurs, one may experience shortness of breath or dyspnea. It may make one gasp for air.

3. Edema or swelling

Noticeable swelling in various parts of the body, including ankles, legs, and feet may be seen. It is due to fluid buildup and is often followed by fatigue.

4. Palpitations or abnormal heartbeat

An irregularity in the heartbeat might feel as if the heart is racing or has skipped a beat. Palpitations can also feel as if the chest is fluttering. In many cases, the abnormal heartbeat may also lead to fullness in the chest and shortness of breath.

5. Infection-related fever

If the myocardium has inflamed due to an infection, one may feel feverish and experience chills.

6. Other flu-like symptoms

Flu-like symptoms such as sore throat, headache, body aches, and joint pain can also be experienced in myocarditis.

Symptoms in children or infants

The symptoms of myocarditis are more nonspecific in infants and children. These include:

Poor appetite

Abdominal pain

Malaise

Chronic cough

Rashes

Fever

Diarrhea

Sore throat

Difficulty breathing

Pain in the joint

Did you know?

Patients with severe COVID-19, may present with new-onset heart failure in the absence of a history of cardiovascular disease. They can show symptoms like cough, fever, dyspnea, chest pain, and palpitations. However, these symptoms may be due to COVID-19 itself and not myocarditis. Therefore, these patients may have a silent presentation of COVID-19 myocarditis. Get all your FAQs answered on COVID-19.

Read Now!

Causes Of Myocarditis

Myocarditis is a rare health condition. However, in most cases, an infection (bacterial, viral, fungal, parasitic) in the body can cause myocardial infarction. The causes are discussed below:

1. Viruses

Viral infections are among the most prevalent causes of myocarditis (viral myocarditis). These include influenza virus, adenovirus, COVID 19 and Coxsackie B virus, to name a few. Viruses are likely to infect the tissue of the heart muscle. It may lead to immune response (acute to chronic) from the body.

2. Bacterias

The bacteria that may cause inflammation of the myocardium to include corynebacterium, meningococci, Streptococci, clostridia, etc.

3. Fungi

Although rare, fungal myocarditis can occur due to infections caused by various fungi including candida, aspergillus, and histoplasma.

4. Parasites

Some parasites may directly or indirectly affect various structures of the heart, with infections manifested as myocarditis. Some of these parasites include Trypanosoma cruzi, Toxoplasma, and Trichinella. Chagas' disease is by far the most important parasitic infection of the heart.

5. Hypersensitivity or toxic reaction

Toxic myocarditis may be triggered by numerous drugs such as

Dobutamine

Phenytoin

Antibiotics like:

Ampicillin

Azithromycin

Cephalosporins

Tetracyclines

Psychiatric medications like:

Tricyclic antidepressants

Benzodiazepines

Clozapine

Recreational/illicit drugs like

Methamphetamine

Cocaine

Other agents include:

Heavy metals (copper, lead and arsenicals)

Antineoplastic agents (e.g., anthracyclines, cyclophosphamide, 5-fluorouracil and tyrosine kinase inhibitors).

6. Autoimmunity

When the immune system makes a mistake and attacks the body's own tissues or organs it is known as autoimmunity. Autoimmunity can be the main factor sustaining inflammation and disease progression in myocarditis. Pathogens, such as viruses, can initiate autoimmune mechanisms that lead to myocarditis.

Autoimmune disorders like lupus and rheumatoid arthritis can also lead to myocarditis.

Studies have shown that 50% of individuals with RA show cardiac involvement. To read more about RA.

Click Here!

7. Idiopathic myocarditis

When inflammation of the heart muscle develops without any identified cause, it is called an idiopathic condition.

Did you know!

70% of urban Indians are at risk of heart diseases. Know why young Indians are developing heart disorders.

Click To Know!

Risk Factors for Myocarditis

The risk factors for myocarditis include the following:

1. Age

Although myocarditis can affect all ages, it mostly occurs in young adults.

2. Gender

Men are often more prone to developing myocarditis than women. This is true except when the inflammation is caused by autoimmune diseases, such as lupus and rheumatoid arthritis, which are more common in women.

Know the 4 major risk factors leading to heart disease in women.

Tap Now!

3. Family history and genetics

Genetics may be partly responsible for developing myocarditis and how the body responds to infection and inflammation.

Certain rare inherited conditions can affect how the body controls inflammation. For example, familial Mediterranean fever or tumor necrosis factor receptor-associated periodic syndrome (TRAPS) can increase the risk of developing myocarditis.

4. Medical conditions

Certain medical conditions can increase the risk of developing myocarditis:

Diabetes

HIV/AIDS

COVID 19

Eating disorders such as anorexia

Skin injuries caused by burns or infections

5. Lifestyle choices

Excessive consumption of alcohol

Use cocaine, amphetamines, or intravenous recreational drugs

6. Environment

Chagas disease, common in Central and South America, can cause acute and chronic myocarditis. It is caused by a parasite that is spread by certain types of insects.

7. Other causes

Some of these medical problems that can put you at a higher risk of getting myocarditis include:

Poor dental health

Chest injury

End-stage kidney disease

Know 7 risk factors causing heart diseases and ways to manage them.

Click Here!

Diagnosis Of Myocarditis

After a physical checkup and evaluation of medical history, the doctor may recommend the following tests to confirm the diagnosis:

Blood tests

Creatine kinase (CK): It is a blood test that checks the level of CK in the blood. If it is more than the normal range, it might indicate an infection in the myocardium.

Total leukocyte count: Abnormal WBC (white blood cells) count can be helpful in diagnosing myocarditis due to infections.

CRP: Increased levels of CRP (C-reactive protein) act as an inflammatory marker.

ESR: Elevated ESR (Erythrocyte Sedimentation rate) is also another marker for inflammation in the body.

Troponin levels: Increased level of troponin (circulating) in the blood indicates damage to the heart muscle.

Imaging tests

Electrocardiography: Electrocardiogram is performed to detect the electrical activity of the heart.

Chest X-ray: A chest X-ray may help to check for enlargement of the heart or accumulation of fluid in the heart's sac.

Echocardiography: It is a vital component in myocarditis diagnosis. It uses high-pitched sound waves to produce a picture of your heart. It also helps with blood flow analysis and analysis of any valve problems, heart enlargement, and the presence of a clot within or around the heart.

Cardiac magnetic resonance imaging (MRI): A cardiac MRI uses radio waves and a magnetic field to show the size, shape, as well as swelling, inflammation, or scarring of the heart.

Biopsy

Cardiac Catheterization is performed by threading a tiny tube through a vein, into the heart to take measurements or collect a biopsy sample to check for inflammation or infection. Biopsy is not routinely performed and is suggested in special cases of:

Severe arrhythmia

Conventional supportive therapy that did not work

Suspected acute dilated cardiomyopathy (A heart condition that is caused due to blockage in the coronary arteries).

Micro-RNA profiling

This test is done to detect acute and chronic myocarditis. It also helps in identifying the severity of myocardial damage.

Make sure to get the right diagnosis with reliable medical tests. Book a test.

Book Now!

Prevention Of Myocarditis

Although there is no specific preventive measure to practice, one may follow the below tips to minimize the risks of getting infected:

1. Avoid exposure to germs

Make sure to avoid people with flu-like symptoms. Similarly, if you have a viral infection, try not to expose others.

2. Practice hand hygiene

Following hygienic practices, such as washing hands every time before and after eating, or using the toilet is always a good idea. Washing cuts or scrapes right away can also help to prevent any infection.

3. Dental care

Brush and floss your teeth every day. Visit the dentist regularly for timely diagnosis and treatment of any dental issues.

4. Practice safe sex

Safe sex practices can prevent an HIV infection. This condition weakens the immune system and makes one more susceptible to develop myocarditis.

5. Avoid use of illegal drugs

As myocarditis is likely to affect people with a compromised immune system, it is advisable to avoid any illegal drugs.

6. Avoid exposure to ticks

Make sure to wear long pants and cover hands if you live in a tick-infested region. You may also use tick repellents containing DEET (N, N-Diethyl-meta-toluamide).

7. Get vaccinated

Make sure to get vaccinated to prevent COVID-19, influenza, rubella, measles, mumps, and poliomyelitis.

Get all your queries answered about COVID 19 vaccination.

Click Now!

“Take care of your heart and don’t let it fall apart”

It is of utmost importance for all of us to take care of your heart health. Read simple ways to prevent heart diseases!

Click Here!

Specialist To Visit

Always remember, that the symptoms of myocarditis are familiar to that of a heart attack. Make sure to get in touch with your doctor if you experience any of the signs of myocarditis, especially shortness of breath and chest pain. Severe symptoms may require hospitalization.

Specialists that can help diagnose and treat myocarditis include:

Cardiologists

Cardiothoracic surgeons

Consult India’s best doctors online.

Click Here!

Did you know how many people died of cardiomyopathy (a heart muscle disease), including myocarditis worldwide?

Nearly 400,000 people lost their lives due to cardiomyopathy, including myocarditis, in the year 2010, worldwide. This statistic includes 160,000 and 240,000 women and men, respectively. Therefore, it is highly advisable to get in touch with your doctor if you experience any of the symptoms of myocarditis.

Treatment Of Myocarditis

Myocarditis treatment options differ from person to person, depending on the underlying causes and seriousness of the condition. The following treatment protocols are used for managing myocarditis:

1. Antibiotics

If myocarditis is due to an underlying cause, like a bacterial infection, the doctor may prescribe antibiotics. However, people with severe and prolonged illness due to myocarditis are likely to need specific medicines and sometimes hospitalization.

2. Corticosteroids

Sometimes autoimmune conditions like lupus may also cause myocarditis. In such cases, doctors may prescribe corticosteroids to minimize the immune response of your body. Some medications may include:

Ciclosporin

Prednisone

3. Medications for heart failure

The doctor is likely to prescribe diuretics, beta-blockers, and ACE (angiotensin-converting enzyme)-inhibitors to minimize edema and the workload on the heart. These may include the following:

Enalapril (ACE inhibitor)

Lisinopril (ACE inhibitor)

Metoprolol (Beta-blocker)

Furosemide (Diuretic)

Captopril (ACE inhibitor)

Ramipril (ACE inhibitor)

Carvedilol (Beta-blocker)

4. Antiviral drugs

Antiviral therapy with ribavirin or interferons in viral myocarditis can help to prevent onset of cardiomyopathy, reduce the severity of the disease, and decrease mortality.

If the symptoms are severe and medications are not working the way they should, more proactive treatment options might be tried. These include the following:

1. IVIG (Intravenous immunoglobulin)

To make sure the body's inflammatory and immune responses are under check, the doctor may recommend intravenous immunoglobulin (IVIG).

2. VAD (ventricular assist device)

It is a mechanical device that is used to pump an adequate amount of blood from the ventricles (lower chambers) of the heart to the other parts of the body.

3. Intra-aortic balloon pump

Intra-aortic balloon pump, also known as IABP, is a therapeutic device. It allows the heart to pump more blood and reduce its load.

4. Extracorporeal membrane oxygenation (ECMO)

ECMO is a respiratory or cardiac support machine. It allows the lungs and heart to function normally.

5. Heart transplant

In case of severe conditions and if the other myocarditis treatment did not work, the doctor is likely to suggest heart transplantation surgery.

Prevention of a disease is always better than cure. There are certain habits that can cause harm to the heart. Understand what they are and to avoid them effectively.

Read This!

Home-care For Myocarditis

Myocarditis is marked by inflammation of the heart. Here are some home care tips if one has been diagnosed with myocarditis:

1. Take adequate rest

Rest and reducing the strain on the heart is an important part of myocarditis recovery. If you have or had myocarditis, ask your health care provider which type and amount of physical activity are safe for you. If you have myocarditis, you should avoid competitive sports for at least 3 to 6 months.

2. Eat a heart-friendly diet

Foods that are good for your heart include green leafy vegetables, fruits, nuts, whole grains & low-fat dairy products. Try to limit the consumption of trans fat, salt, saturated fats, cholesterol, red meat, and sugary foods. Have an anti-inflammatory diet that focuses on fresh produce, including fruits, vegetables, and nuts.

Read more about foods that can keep your heart healthy.

Tap To Know!

3. Avoid stress

Stress can increase blood pressure, hence it is important to manage it effectively. Yoga, meditation and deep breathing exercises are effective in managing stress.

Find out how yoga can keep your heart healthy.

Read To Know!

4. Limit fluid intake

Do not drink more than 1.5 liters or 6 cups of fluid every day. Fluids include water, juice, soup, tea, coffee, and even some fruits like watermelons. Maintain a fluid balance chart to track the quantity of fluid consumption.

5. Maintain a healthy weight

Obesity directly increases the risk of complications due to myocarditis. A healthy weight can go a long way in keeping the heart healthy.

6. Reduce alcohol intake

Drinking excessive alcohol can increase the levels of certain fats known as triglycerides in the blood and might harm the immune system. Thus, it is important to keep alcohol intake to a minimum.

7. Quit smoking

Smoking is known to increase heart rate and blood pressure, so it is important to quit smoking in order to improve the symptoms of myocarditis.

Explore our smoking cessation range that can help you quit smoking.

Visit Now!

8. Stay physically active

Supervised moderate exercise is an integral part of a healthy heart regimen. Consult your doctor to understand the range of physical activities you can do.

Know more about 6 amazing benefits of aerobics.

Read This!

Complications Of Myocarditis

Timely treatment of myocarditis has a good prognosis without having any long-term complications. However, severe cases may have some permanent complications related to heart muscles. These include the following:

1. Heart failure

Myocarditis, if left untreated, is likely to damage the heart muscles, making it inefficient to work properly. It may also lead to heart failure.

2. Stroke or heart attack

If the heart is unable to pump an adequate amount of blood, there is a risk of blood clot formation in the heart. If a blood clot creates a blockage in an artery of the heart, one may suffer a heart attack. Also, if the clot travels to the brain it can cause a stroke.

3. Arrhythmia

When the heart muscles are injured or become weak, it may lead to arrhythmia or irregular heart rhythm.

4. Ventricular dysrhythmias

These are abnormal heart rhythms that make the lower chambers of the heart twitch instead

pump. This can limit or stop the heart from supplying blood to the body.

5. Left ventricular aneurysm

It forms when a section of the heart muscle in the left ventricle (the chamber of the heart that pumps blood to the body) stretches and becomes very thin.

6. Dilated cardiomyopathy

It is a type of heart muscle disease that causes the heart chambers (ventricles) to thin and stretch, growing larger.

7. Cardiogenic shock

This is a life-threatening condition in which your heart suddenly can't pump enough blood to meet the body's needs.

8. Sudden cardiac death or SCD

It is a life-threatening complication in which the heart may stop beating due to severe arrhythmia.

Myocarditis is often related to an increased possibility of SCD (sudden cardiac death) in young people. The number of myocarditis-related SCD ranges from 1% to 14% in the younger population. Know why sudden cardiac arrests happens.

Read This!

Alternative Treatment For Myocarditis

There are various alternative treatment modalities that can help in management of myocarditis or factors affecting it, like stress. However, it is always advised to consult your healthcare provider before starting any herbal medication:

1. Chinese herbal medicine

Astragalus membranaceus: Astragalus membranaceus is a medicinal herb widely used in traditional Chinese medicine. In light of myocarditis, it helps to improve cardiac function and manage arrhythmia.

Salvia miltiorrhiza: Commonly known as red or Chinese sage, Salvia miltiorrhiza holds a special place in traditional Chinese medicine. According to various studies, a shot (injection) of this medicinal plan showed a noticeable decrease in arrhythmia. It also helps to reduce LDH (Lactate dehydrogenase) levels.

Shenmai injection (SMI): It is also a Chinese medicine that helps improve cardiac function significantly.

Hawthorn extract: Hawthorn is a shrub native to North America, Western Asia, Europe, and North Africa. Studies opine that the leaves of the hawthorn plant can considerably reduce the symptoms of minor heart failure, including fatigue and breathlessness.

There are certain Indian herbs and spices that are good for your heart health.

Read To Know!

2. Yoga

There are plenty of benefits of yoga supported by scientific evidence. Some of the yogasanas you may perform for stress relief include Savasana, Balasana, Viparita Karani, and Marjaryasana to Bitilasana.

3. Meditation

It is indeed an effective tool for stress management. If you are trying it for the first time, you might find it hard to focus. In such a situation, guided meditation audio may help.

Meditation can do wonders for your body and soul!

Read More!

4. Breathing exercises

The next time you feel stressed out, try deep breathing exercises. These will help you calm down and relax your senses so that you may get relief from stress. Some deep breathing techniques you may try include belly breathing, box breathing, alternate-nostril breathing, lion breathing, and 4-7-8 breathing, to mention a few.

Read more about deep breathing exercises.

Click Here!

Living With Myocarditis

In some people with myocarditis, no symptoms show up. Some do not even know if they have the condition. In most such cases, the symptoms resolve on their own. Many people who have had treatment for myocarditis live their usual life span like normal individuals sans any complications.

Some people may require treatment in the form of medications, while some might need heart surgery. Besides medications and alternative therapies, a healthy lifestyle may also help your heart work well. Here are some tips that can help you improve heart conditions like myocarditis more effectively:

Reduce the amount of sodium in diet ( less than 1,500 milligrams a day)

Keep a watch on daily fluid intake and weight

Maintain a healthy weight

Eat wholesome and well balanced diet

Quit smoking

Limit alcohol intake

Avoid strenuous exercises and competitive sports

Prefer light physical activity

Avoid stress

Track your symptoms

Monitor blood pressure regularly

Follow proper medication regimen

Ensure regular follow-up with the cardiologist

Get vaccinated as flu and pneumonia pose a greater danger to people with heart conditions.

Your heart health is the key to overall good health! Read tips from cardiologists to keep your heart healthy.

Tap Here!

Endocarditis Vs. Myocarditis Vs. Pericarditis

Endocarditis

Endocarditis is a heart condition where inflammation develops in the endocardium of the heart. The endocardium is the inner lining of the valves and chambers of the heart. It is an uncommon health condition and can be fatal if left untreated.

Myocarditis

Myocarditis is also a rare disease in which the myocardium (a heart muscle) swells. This condition is likely to affect a little or large portion of the myocardium. It makes your heart work harder to pump blood and carry it to the rest of the body. It may also lead to heart failure and stroke.

Pericarditis

It is another type of heart inflammation that affects the pericardium, the membrane that covers the heart. The pericardium ensures that your heart is in position in the thoracic girdle while protecting it from infections. The pericardium comprises two thin sheaths of tissue with a small amount of fluid in it. It reduces the friction between the layers when your heart pumps.

Frequently Asked Questions

How long does it likely to heal after myocarditis?

Are people with myocarditis allowed to fly?

Is myocarditis curable?

Can diet help reduce inflammation in the heart? What should you eat?

Do the symptoms of myocarditis recur?

Myocarditis can lead to sudden death. Who is at risk?

Is testosterone level in men associated with myocarditis? How?

Can the mRNA COVID-19 vaccine lead to myocarditis?

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Male infertility

Also known as Sterility and Impotence

Overview

Infertility refers to the inability to conceive after having regular, unprotected intercourse for at least a year. Many couples face this problem and both men and women can have fertility issues.

Infertility in men is caused by low sperm production, poor sperm quality, or blockages that prevent the delivery of sperm.

Various medical conditions, including genitourinary infections, trauma, prior surgery, or certain medications increase the risk of infertility in males. Environmental and lifestyle factors also negatively impact fertility. These include smoking, alcoholism, obesity, stress, exposure to heavy metals like lead and cadmium, exposure to ionizing radiation, and high temperatures.

There is a lot of stigma and taboo around infertility that can take a toll on your physical and emotional well-being. Thanks to many medical advancements, there are a lot of treatment options available now. Talk to a fertility specialist to understand them well. They can recommend the best fertility treatment option and lifestyle changes that can help you.

Key Facts

Usually seen in

Men above 35 years of age

Body part(s) involved

Male reproductive system

Prevalence

India: 23% (2017)

Mimicking Conditions

Adult growth hormone deficiency

Brain damage from tumors or trauma

Cryptorchidism

Cushing disease

Ejaculatory duct obstruction

Estrogen excess

Follicle-stimulating hormone (FSH) abnormalities

Hypogonadism

Hypopituitarism

Myotonic dystrophy

Noonan syndrome (male Turner syndrome)

Pituitary adenomas

Primary hypogonadism

Necessary health tests/imaging

Semen tests: Semen analysis, Semen DNA fragmentation, and Seminal oxidative stress measure

Blood tests: Levels of testosterone, Luteinizing hormone (LH), and Follicle stimulating hormone (FSH).

Genetic screening: Sperm chromatin and abnormal DNA assays, Chromosome and genetic studies.

Imaging tests: Ultrasound, Doppler blood flow, Vasograpy, MRI pelvis, and MRI scrotum.

Testicular biopsy

Treatment

Antioxidants: Vitamin C, Vitamin E, Zinc, and Clomiphene.

Dopamine antagonists: Bromocriptine and Cabergoline

Selective estrogen receptor modulators (SERMs): Clomiphene citrate (CC), Tamoxifen, and Toremifene.

Aromatase inhibitor (AI): Anastrozole

Hormonal therapy: Testosterone replacement therapy, Human chorionic gonadotropin (rec-hCGrecombinant), The combined therapy of (hCG), LH, FSH, GnRH, and human menopausal gonadotropin (HMG).

Surgery: Laparoscopic varicocelectomy, Vasoepididymostomy (VE) and Vasovasostomy (VV), and Microsurgical epididymal sperm aspiration/testicular sperm extraction (MESA/TESE).

Assisted Reproductive Technology (ART): Artificial insemination, IVF, GIFT, and other techniques.

Specialists to consult

Andrlogist

Urologist

Endocrinologist

IVF specialist

Dermatologist

Internal medicine specialist

Symptoms Of Male infertility

Male infertility is the inability to conceive a child after 1 year of regular intercourse without any birth control. Infertility by itself is a symptom. Various signs and symptoms that may be associated with male infertility include:

Difficulty with ejaculation or small volumes of fluid ejaculated

Reduced sexual desire

Erectile dysfunction (difficulty maintaining an erection)

Pain, swelling, or a lump in the testicle area

Gynecomastia (abnormal fullness in breasts)

Hormonal abnormality (decreased facial or body hair)

Recurrent respiratory tract infections

Inability to smell

Reduced body mass

Obesity

Trying to lose weight? To start your weight loss journey

Tap here

Causes Of Male infertility

Male infertility is mainly caused due to anatomical abnormalities and ejaculatory disorders. Causes can be broadly classified into the following:

1. Pre-testicular causes

Quality and quantity of semen: Over 90% of cases of male infertility are related directly to sperm numbers or poor sperm quality.

Hormonal deficiency/imbalance: Male sex hormones exhibit a significant and focal role in the growth, improvement, and proliferation of testicles. eg. isolated LH and FSH deficiencies are linked to infertility.

Genetics: A few chromosomal defects are directly related to male infertility. Examples include myotonic dystrophy, microdeletion, and Kallmann's syndrome amongst others.

Oxidative stress: It is a phenomenon caused by an imbalance between the production and accumulation of oxygen reactive species (ROS) in cells. It can cause sperm dysfunction leading to infertility in men.

Pituitary diseases: The pituitary is a small, pea-sized gland located at the base of your brain. Disorders like pituitary insufficiency, hyperprolactinemia, exogenous hormones, and growth hormone deficiency can cause infertility in men.

2. Testicular causes

Orchiectomy: It refers to the surgical removal of both testes.

Primitive testicular dysfunction: This may result from testosterone deficiency or impaired sperm production leading to male infertility.

Cryptorchidism: It is a condition in which one or both of the testes fail to descend from the stomach into the scrotum (a bag of skin that holds and helps to protect the testicles).

Atrophic testes: Small or shrunk testicles.

Varicoceles: These are enlarged veins on the scrotum that are associated with male infertility.

Epididymitis: It is swelling or pain in the back of the testicle caused due to sexually transmitted infections.

Malignancies: Testicular tumors or adrenal tumors leading to an excess of androgens, radiotherapy, and chemotherapy can lead to male infertility.

Chromosomal disorders: Disorders like Klinefelter’s syndrome and XYY male affect the testicles and can lead to infertility.

Sertoli- cell-only syndrome: Also known as del Castillo syndrome or germ cell aplasia, is one of the most common causes of the absence of sperm in infertile men. This syndrome affects sperm production in men.

3. Post-testicular causes

Ejaculatory duct obstruction: It is a pathological condition that is characterized by the obstruction of one or both ejaculatory ducts. It can be present at birth or acquired later in life.

Cystic fibrosis: It is a congenital condition that affects the lungs, heart, and other organs. Most men with cystic fibrosis are infertile because of an absence of the sperm canal, known as the congenital bilateral absence of the vas deferens (CBAVD).

Antisperm antibodies: These are antibodies that work against the sperms. They can severely impact sperm quality, sperm count, and sperm motility.

Did you know?

COVID-19 infections can potentially increase the risk of infertility in men. A few studies have shown that SARS-CoV-2 infection has a negative impact on male reproductive health by a possibility of testicular damage. Safeguard yourself and your loved ones with COVID-19 essentials.

Buy them now

Risk Factors For Male infertility

Male infertility is influenced by many biological and environmental factors. The factors that can increase the risk of infertility include:

1. Local factors

Genito-urinary infection: Infections in the male genital tract can lead to male infertility due to inflammation. These infections are generally sexually transmitted.

Trauma to testicles: Men can experience problems with fertility after trauma to the testicles due to an injury or accident.

2. Environmental factors

Obesity: Overweight (BMI 25–<30 kg/m2) and obese (BMI 30 kg/m2) males are associated with a low seminal discharge volume, low sperm concentration, and low total sperm count.

Do you know how obesity can be harmful to your overall health? Know more about health risks due to obesity.

Click here

Smoking: Tobacco chewing and smoking are responsible for DNA damage and lead to lower sperm count and severely affect fertility.

Want to quit smoking, but are unable to do so?

Check out these tips now

Alcohol: Heavy consumption of alcohol can cause changes in the shape and size of the sperm. Also, damage to the liver caused by alcohol can lead to male infertility as well.

Diet: Studies indicated that regular overconsumption of red and processed meat, fatty dairy products, refined grains, caffeine, and aerated and non-aerated sweet drinks are prone to poor semen quality.

Healthy eating habits are the foundation of good health. Listen to our expert discuss adopting healthy eating habits to prevent various lifestyle diseases. Watch this video now

Stress: Long-term stress can be detrimental to male reproductive potential. It is linked to diminished levels of testosterone leading to decreased sperm counts, altered sperm morphology, and decreased motility.

Sleep disturbances: Insufficient sleep along with poor sleep quality can possibly have adverse effects on male fertility.

Advanced paternal age (APA): Few studies find advancing paternal age a risk factor for infertility. It is usually between 35 and 50 years of age in men.

Exposure of the genitals to high temperatures: Excessive heat to the genital organs has a damaging impact on the testicle increasing the risk of infertility in men.

Chemicals: Factors such as volatile organic solvents, silicones, chemical dust, air pollution, and pesticides have a negative effect on male fertility.

Radiation: It can destroy sperm cells and the stem cells that make sperm. Radiation therapy to the brain can damage the pituitary gland and decrease the production of sperm and cause testosterone imbalance.

3. Systemic conditions

Diabetes: Uncontrolled diabetes can damage blood vessels and nerves, and increase the risk. As a result, it is associated with erectile dysfunction, decreased sex drive, ejaculation problems, and inflammation of the foreskin.

Medications: Cannabinoids, opioids, and psychotropic drugs along with certain antibiotics and antifungal agents have been known to cause male infertility.

Systemic Infection: Tissue damage and inflammation caused by bacterial infection can lead to male infertility by negatively affecting sperm production and testosterone levels.

4. Other factors

Early or late puberty: Studies demonstrate that pubertal timing is very likely to be associated with male reproductive health as it can affect the quality of the semen.

Hernia repair: Though extremely rare hernia surgeries can cause a narrowing of the tube and prevent the sperms from being delivered into the prostate.

Did you know?

The use of mobile phones is potentially linked to male infertility. Studies have shown that exposure to radiofrequency electromagnetic waves radiation emitted by mobile phone use may exert harmful effects on the testis. Read more on ways to increase male infertility and things to avoid for better results.

Click here

Diagnosis Of Male infertility

Diagnosing the exact cause of infertility is important in determining the course of treatment. Most of the time, there is more than one cause of infertility. Here are a few tests the doctors at fertility clinics may conduct. They include:

1. Medical history

This consists of taking a detailed reproductive history, medical history, any history of past surgeries, and if the individual is on any medications.

2. Physical examination

This consists of examining the following:

General appearance: It consists of seeing the hair distribution, and body habitus.

Abdominal examination: During this examination, the abdomen is examined for any hernias or surgical scars.

Genital examination: This examination is done in both standing and supine positions. It is done by palpating the testes, epididymis, vasa deferentia, spermatic cord, and phallus.

Digital rectal examination: This is done in men who are over 40 years of age. Presence of lower urinary tract symptoms (LUTS) or low sperm volume.

3. Semen testing

Semen analysis: Semen samples are sent to laboratories to measure the number, motility, and shape of the sperms present. In most cases, doctors conduct several tests to ensure accuracy.

Semen DNA fragmentation: This test is done to evaluate lifestyle risk factors, recurrent miscarriages, and failure of IVF and IUF treatments.

Seminal oxidative stress measures: This test is indicated in unexplained infertility, to detect varicocele, a history of genitourinary infection, and to evaluate lifestyle risk factors.

4. Blood tests

Hormone testing: Hormones produced by the pituitary glands, hypothalamus, and testicles can affect fertility significantly. Doctors will take a blood test to measure the level of the following hormones:

Testosterone

Luteinizing hormone (LH)

Follicle stimulating hormone (FSH)

Prolactin

Estradiol

Immunobead test (IBT): This test is designed to look for the presence of antibodies (IgA) in motile sperm.

5. Genetic screening

Sperm chromatin and abnormal DNA assays: This is a new diagnostic tool that can detect sperm samples that have a high degree of DNA fragmentation.

Chromosome and genetic studies: This test evaluates male factors that detect signs of genetic abnormalities affecting the Y chromosome (unique to only men).

6. Testicular biopsy

It is a procedure in which a small portion of the testicle is removed for examination. The sample is then viewed under the microscope to check for any abnormalities. Bilateral testicular biopsy (TBO) is recommended while diagnosing male infertility. It is predominantly useful for the investigation of decreased or absence of sperms.

7. Imaging tests

Ultrasound: Doctors may conduct scrotal or transrectal ultrasounds to see if there is any problem with the testicles or prostate gland that can affect fertility. In a scrotal ultrasound, the doctor will see if there are any problems in the testicles. In the rectal one, they will insert a lubed wand into your rectum to check your prostate for blockages.

Doppler blood flow: This test is done to check for any inflammation, swelling, or torsion of testicles in the case of varicocele.

MRI pituitary: Indicated to detect true prolactinoma (noncancerous tumor of the pituitary gland that produces a hormone called prolactin).

MRI pelvis/scrotum: This test is done to check for undescended testes and suspicious testicular lesions.

Vasography: It is mainly done to rule out any kind of obstructions, especially before surgery.

Get all the tests done in one place, under the guidance of trusted technicians and doctors.

Book your tests now

Prevention Of Male infertility

Consume a healthy diet

A healthy, balanced, and wholesome diet plays a pivotal role in the prevention of male infertility. Here are some food items that you should prefer and the others you should avoid in your diet.

Foods to prefer

Green leafy vegetables

Legumes

Whole fruits

Whole grains like wheat, brown rice, jowar, ragi and bajra

Low-fat or fat-free milk or yogurt

Eggs, fish, seafood, lean poultry

Foods to limit or avoid

Refined grains like white flour or white bread

Table sugar

Sugar-sweetened beverages

Packaged foods

Red and processed meats

Shed those extra kgs

A healthy weight can keep infertility at bay. Regular exercise and a healthy diet are the cornerstones of attaining and maintaining a healthy weight.

Track your weight with our widest range of weighing scales.

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Stay away from recreational drugs

Drugs like marijuana, cocaine, anabolic–androgenic steroids (AAS), opiates (narcotics), and methamphetamines are examples of illicit drugs that can have a negative influence on male fertility. Say no to drugs not just for boosting fertility but also for overall health.

Quit smoking

Tobacco can harm your health, and it can affect fertility as well. Heavy smoking also increases the risk of erectile dysfunction. People who have been trying should try quitting to optimize their chances of conceiving.

Leave this deadly habit behind with our extensive range of smoking cessation products.

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Be mindful while consuming alcohol

Drinking too much can alter sperm count, shape, size, and motility. It can lower testosterone levels and affect ejaculation. So try to avoid or limit drinking alcohol.

Keep calm and manage stress

Everyone suffers from stress from time to time. However, too much stress is an important risk factor affecting male infertility. You can de-stress by working out, reading, meditating, or doing what you love.

Did you know, there are a few foods that can help you manage stress efficiently?

Know more

Give importance to sleep

Research shows that lack of sleep time may reduce sperm quality in men. Getting adequate sleep of at least 7-8 hours is vital to maintaining your reproductive health.

Avoid heat around your testicles

Heat near the testicles can kill sperm cells and result in the production of abnormally shaped sperm. Avoid keeping your laptop on your lap while working, take cold showers, and wear loose clothes.

Did you know?

Cycling is associated with increased generation of testicular heat. A few studies (usually focused on road bikers) have shown that long-term low-to-intensive cycling training is potentially linked to deleterious effects on sperm. Hence, cyclists may routinely take sufficient rest after their training sessions to ensure the sperm's healthy parameters.

Specialist To Visit

If you have failed to conceive for a year or if you are 35 or above, you may consider going to the following doctors:

Reproductive endocrinologist

Urologist

Andrologist

Reproductive endocrinologists are specially trained gynecologists that focus on fertility-related problems in both men and women. They are typically the primary consultants through the entire fertility testing and treatment process. If a male fertility specialist is needed, patients may be referred to a specialized type of urologist called an andrologist.

Consult India’s best doctors online to give you all the care and guidance you need in this journey.

Click here

Treatment Of Male infertility

There are several treatment options available for infertility in men. They include:

1. Medications

Antioxidants: These are used to reduce oxidative stress, which can be causing male infertility. Pharmacological management includes antioxidants that can help combat the problem. The most commonly used ones include:

Vitamin C

Vitamin E

Zinc

Clomiphene

Carnitines

Dopamine antagonists: These are indicated for the treatment of infertility and the pituitary tumor. The drugs used are:

Bromocriptine

Cabergoline

Selective estrogen receptor modulators (SERMs): These are SERMs compounds that act on the estrogen receptor as agonists or antagonists. Before These were used earlier to treat infertility for unknown reasons. They increase sperm production by increasing LH and FSH levels. Drugs used are:

Clomiphene citrate (CC)

Tamoxifen

Toremifene

Aromatase inhibitor (AI): It is prescribed for treatment of men with idiopathic azoospermia (no sperms). Anastrozole is the most commonly used drug in this category. However, treating male infertility is an off-label use of this medication.

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2. Hormonal therapy

When infertility is due to a decrease in the levels of hormones, doctors may suggest replacements or medications such as hormone replacement therapy. These include:

Testosterone replacement therapy

Human chorionic gonadotropin (rec-hCGrecombinant)

Recombinant LH (rec-hLH)

Recombinant FSH (rec-hFSH)

Purified urinary gonadotropins (GTs)

The combined therapy of (hCG), LH, FSH, GnRH and human menopausal gonadotropin (HMG).

3. Surgery

Surgery may be advised in the case of a varicocele or an obstruction. Surgical techniques are classified into microsurgical, laparoscopic, and conventional open methods. These include:

Laparoscopic varicocelectomy: It is surgery to repair a varicocele. It has a significant improvement rate with lesser complications.

Vasoepididymostomy (VE) and Vasovasostomy (VV): These two are procedures that are used to bypass any obstruction in the male genital tract.

Microsurgical epididymal sperm aspiration/testicular sperm extraction (MESA/TESE): These procedures are used to retrieve sperm-containing fluid from optimal areas.

4. Assisted Reproductive Technology (ART)

This is a range of treatments that involve getting sperm from a man by normal ejaculation or surgical extraction to insert it into the female genital tract. They include:

Artificial insemination: This method puts healthy sperm at the entrance of the cervix or right into the female’s uterus.

IVF, GIFT, and other techniques: In vitro fertilization (IVF) and gamete intra-fallopian transfer (GIFT) work like artificial insemination. In these techniques, your doctor collects your sperm, then mixes your partner’s eggs with a lot of high-quality sperm. These are then planted into the female fallopian tube.

Intracytoplasmic sperm injection (ICSI): In this procedure, a single sperm is injected into an egg. Fertilization then takes place under a microscope. Once fertilized, your doctor puts the fertilized egg in the female uterus.

Did you know?

There is a biological clock ticking for men as well. Studies show plummeting sperm counts and declining sperm quality is seen in men after the age of 40. To tackle the female and male biological clock men can consider freezing their sperms.

Home Care For Male infertility

Male infertility can sometimes be due to poor lifestyle choices. Follow all the points mentioned in the prevention section along with these important home care remedies:

Avoid certain prescription medications

Certain prescription medications like anti-androgens, anti-inflammatories, antipsychotics, opiates, antidepressants, and steroids can potentially decrease healthy sperm production. Talk to your doctor about their replacement.

Try the fenugreek (methi) supplement

Studies show that fenugreek can be used to improve sperm count and overall sperm quality.

Get your daily dose of vitamin D

Studies suggest that Vitamin D increases sperm motility and supports sperm health. Try to maintain optimum levels of vitamin D by basking in morning sunlight or through foods or supplements.

Want to know the right way to take Vitamin D?

Read along

Take ashwagandha

Also known as Indian ginseng, which is a traditional medicine that acts as a remedy for several forms of sexual dysfunction. Studies show that oral intake of Ashwagandha roots has been found to improve sperm count and motility.

Buy ashwagandha products here.

Tap now

Load your plate with antioxidant-rich foods

Several vitamins and minerals act as antioxidants, for example, Vitamin C, Vitamin E, selenium, zinc, etc. Make sure to add food items that are rich in these antioxidants to boost fertility.

If you are unable to meet your daily requirements with your diet, add supplements after consulting with your doctor. Check out vitamin and mineral supplements here.

Click now

Keep your cell phones at bay

Cell phones emit electromagnetic radiation and especially when kept in pant pockets or near the groin region can have a negative effect on the testis.

Complications Of Infertility in Males

Complications of infertility in men are generally related to emotions and mental health as the treatment itself can be a long journey. These complications can include:

Issues with the marital relationship: Infertility can often lead to issues in communicating, frustration, or in extreme cases, depression.

Psychological distress: Continuous trying and treatment can lead to feelings of stress, depression, guilt, or anxiety in men. This can cause psychogenic impotence, which gives feelings of inadequacy.

Alternative Therapies For Male infertility

Although the treatment options may work for you and your partner, some people may have to look at other options. Here are some alternative options:

Acupuncture

Acupuncture works by putting tiny, delicate needles into particular body locations. Research shows that acupuncture can help restore fertility in patients, by improving sperm quality and balancing the endocrine system and hormones.

Sperm donation

A sperm donor is a man who donates his semen to help an individual or couple trying to conceive. The donated sperm can be injected into women’s reproductive organs or used to fertilize mature eggs through IVF. Before going on with the procedure, the donor has to go through a series of tests to ensure there are no risk factors.

Living With Male infertility

There are a lot of treatments available for infertility, all you need to do is embrace this journey with grace. Some tips that might help include:

1. Get your facts right

If you have been trying for a long time, and are unable to conceive, don’t jump to any conclusions. Go to an expert, get your sperm tested, ask questions, and read as much as you can. There is no point in just being disheartened and giving up, understanding what your particular issue is, and what you can do to improve your chances of conception.

2. Set your expectations

Before you decide on any procedure, consider your and your partner’s expectations, your financial situation, and your recovery time.

3. Know all your options

Talk through all the options like adoption, IVF, or donor sperm before deciding anything. Talking about potential avenues will help you prepare for any setbacks and you will be ready with other options that you and your partner may want to try.

4. Talk about it

Communicating with your partner and doctor can be the key to managing the stress and anxiety around infertility. Your doctor can help you understand how each procedure works, and it can help you suggest methods that will meet your expectations.

Infertility comes with its own share of myths.

Bust some myths!

Frequently Asked Questions

Can a stressful lifestyle cause infertility?

When should I see my doctor, to talk about infertility?

What questions should I ask my doctor, regarding male infertility?

What is fertility preservation?

Can male infertility be treated completely?

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Measles

Rubeola, 10-day measles, Red measles and Morbilli

Overview

Measles is a preventable, serious, highly contagious and acute febrile disease caused by the virus of the paramyxovirus family. It is an airborne disease in which the virus first attacks the respiratory tract and then spreads throughout the body. Symptoms of measles may develop about 7 to 14 days after exposure to the virus and usually lasts about 10 to 14 days. Some of the common symptoms of measles include high fever, runny nose, cough, and small white spots that can develop inside the cheek during the initial days. Some serious complications of measles include blindness, severe respiratory infections like pneumonia, and ear infections.

Measles spreads easily from person to person and slightest contact with an active case may infect a susceptible person. Hence, all precautions should be taken to its spread especially to those with weakened immunity like infants, children, pregnant ladies or immunocompromised patients.

Measles can be prevented by timely administration of the measles, mumps, and rubella (MMR) vaccine. It is a safe and effective way to protect you and your family from measles. There is no specific treatment for measles. However, symptomatic care including good nutrition, adequate fluid intake, and rest along with vitamin A supplements can help in alleviating symptoms.

Key Facts

Usually seen in

Children below 5 years of age

Adults above 20 years of age

Gender affected

Both men and women

Body part(s) involved

Skin

Lungs

Ear

Central nervous system

Mimicking Conditions

Kawasaki disease

Infectious mononucleosis

Scarlet fever

Rocky mountain spotted fever

Chickenpox

Dengue

Malaria

Drug infections

Erythema infectiosum

Meningitis

Parvovirus B19 infection

Pediatric enteroviral infections

Pediatric rubella

Pediatric sepsis

Pediatric toxic shock syndrome

Necessary health tests/imaging

IgM antibody

Real-time polymerase chain reaction

Urine sample

Molecular analysis

Treatment

Paracetamol

Ibuprofen

Vitamin A supplements

Fluid therapy

Specialists to consult

General physician

Pediatrician

Infectious disease specialist

Symptoms Of Measles

The first symptoms of measles develop 7 to 14 days after contact with the virus. It includes cough, runny nose, watery eyes, and fever. Measles rashe appear 3 to 5 days after the first symptoms.

1. Initial symptoms

The first symptoms develop after 7 to 14 days of infection. It begins with a high temperature that reaches around 104°F. The other symptoms include cough, runny nose, swollen eyelids, weakness, loss of appetite, watery eyes, and red eyes that may be sensitive to light.

2. Koplik spots

A day or two before the rashes appear Koplik spots may appear inside the mouth (small grayish-white spots). These spots usually last for a few days and not everyone develops these spots.

3. Measles rash

A measles rash appears 2 weeks after the initial symptoms. The symptoms become severe and signals towards the host’s immune response towards the replicating virus. It usually begins as red spots. The rash is made up of small, red, brown spots that may join together into large blotchy patches. It first appears on the neck or head before spreading to the rest of the body. The rash fades slowly in the same order of progression as it appeared. Resolution of rash may be followed by desquamation (shedding of outer layer of skin), particularly in undernourished children.

As the rash of measles is a consequence of immune response, it may be absent in immunocompromised individuals.

4. Other symptoms

Other symptoms like headache, abdominal pain, vomiting, diarrhea, and myalgia may be present.

Did you know?

Measles can be dangerous for babies and young children. Call your healthcare provider or seek help immediately, if your child has been exposed to measles.

Consult Now!

Causes Of Measles

Measles is caused by an extremely contagious virus called morbillivirus, a member of the paramyxoviridae family. It is spread by:

Contaminated droplets that are transmitted through the air while coughing, sneezing, talking or coming in direct contact with infected nasal or throat secretions. The virus remains contagious in the air for up to two hours.

Sharing food, drinks and utensils with someone who has measles.

Kissing someone with measles.

Shaking hands or hugging someone with someone who has measles.

Pregnant women to their babies during the pregnancy, delivery or while breastfeeding.

It can take one to three weeks to show symptoms of measles after being infected. This is the incubation period. This period may be shorter in infants and longer in adults.

Note: One is contagious about four days before developing a rash to about four days after the rash appears.

Types of Measles

Measles caused by the Rubeola virus is the most common but there are different types of measles such as:

1. Atypical measles syndrome

Individuals who are vaccinated may develop atypical measles syndrome (AMS) on exposure to measles due to incomplete immunity. The symptoms include headache, fever, cough, edema, and rashes.

2. Modified measles

It is seen in people who receive immunoglobulin as postexposure prophylaxis. It is characterized by a short-lived rash and a prolonged incubation period.

3. Hemorrhagic measles

It is characterized by a purpuric rash and bleeding from the nose, mouth or bowel.

Risk Factors Of Measles

While measles can affect anyone, some risk factors elevate the risk of contracting the disease. Some of the risk factors are:

1. Vitamin A deficiency

Measles is a major cause of morbidity and mortality. If you have Vitamin A deficiency, there is a very high chance of measles infection.

2. Being unvaccinated

Unvaccinated young children are prone to measles and its complications including death. Unvaccinated pregnant women and non-immune people can become infected.

3. International traveling

Traveling to countries where measles is common and less controlled puts you at a higher risk of developing the disease.

4. Countries experiencing a measles outbreak

Countries experiencing or recovering from a natural disaster. Damage to health infrastructures interrupts routine immunization and greatly increases the risk of infection.

Here are 10 things you should follow if your child has a fever.

Click To Read!

Diagnosis Of Measles

It is important to detect measles as soon as possible since it is a contagious disease. Establishing a diagnosis for measles involves the following:

1. Clinical evaluation

Healthcare providers should consider measles in patients with febrile rash symptoms and white centers in your mouth (koplik spots). Koplik spots are especially helpful because they appear early. If the child has recently traveled or is unvaccinated, measles is even more likely. Sometimes other diseases can be complicated with measles, but measles rashes are easy to differentiate from other rashes. The rash starts on the hands and face rather than the trunk.

2. Lab tests

Laboratory confirmation is important after the clinical evaluation is done by the doctor.

IgM antibody: Detection of Measles specific IgM antibody in serum. The antibody is usually present soon after the rashes appear. The level of antibody is highest during the 14th day and is not present after the 30 days.

IgG antibody: A four fold or greater increase in measles virus specific IgG antibody levels is seen between acute and convalescent phase serum specimens.

Virus culture: Measles can also be diagnosed by isolation of the virus in cell culture from respiratory secretions, nasopharyngeal or conjunctival swabs, blood or urine.

Giant cell test: Direct detection of giant cells in the respiratory secretions, urine or tissue obtained by biopsy provides another method of diagnosis.

Real-time polymerase chain reaction (RT-PCR): Measles RNA by RT-PCR is a common method for confirming measles. Serum samples as well as the throat swab are used for sample collection.

Urine sample: A urine sample can also contain the virus. Collecting urine samples can increase the chances of detecting the measles virus.

3. Molecular analysis

Genotyping is done to map the transmission pathway of the measles virus. Genotyping is the way to distinguish between wild-type measles virus infection and rashes induced by measles vaccination.

Specialist To Visit

Patients exhibiting the signs and symptoms of measles should visit first to a general physician. The doctor will be able to diagnose measles from the combination of the symptoms especially with the characteristics of rashes and if the condition worsens many complications can also be seen. If needed, your doctor may recommend you to go to a specialist such as:

Infectious disease specialist

Pediatrician

Consult India’s best doctors online with a single click.

Consult Now!

Prevention Of Measles

As measles is a viral disease, taking antibiotics cannot treat it. The best thing is to learn how to prevent it:

1. Measles, mumps and rubella (MMR) vaccine

Getting vaccinated is the best way to prevent measles. You can either take the measles, mumps, rubella and varicella (MMRV) combination vaccine and opt for MMR. From time to time, boosters of the vaccine need to be taken to prevent oneself from getting the disease.

The following people should get themselves vaccinated to safeguard themselves:

People who never had measles

Infants between 6 to 11 months of age

If you are not sure if you are vaccinated in the past

The second dose should be given at 3 years and 4 months of age

Note: Measles vaccine has been well tolerated and immunogenic in HIV-1 infected children and adults, although the antibody levels may wane. Because of the potential severity of wild type measles virus infection in HIV-1 infected children, routine measles vaccine is recommended except for those who are severely immunocompromised.

Measles vaccine is contraindicated in individuals who are severely immunocompromised because of the possibility of progressive pulmonary or CNS infection with the vaccine virus.

5 things to keep in mind when you vaccinate your child.

Read To Know!

2. Human normal immunoglobulin (HNIG)

HNIG is a special concentration of antibodies that give short-term but immediate protection against measles. It is recommended for people in the following age group if they are exposed to someone with measles.

Babies under 6 months of age

Pregnant women who have not been fully vaccinated

People with compromised immune systems

In immunocompetent persons, administration of immunoglobulin within 72 hours of exposure usually prevents measles virus infection and almost always prevents clinical measles. Administered upto 6 days after exposure, immunoglobulin will still prevent or modify the disease.

3. Special circumstances

A dose of MMR vaccine can also be given to children over 6 months of age under certain circumstances. For example, in conditions like:

If there is an outbreak of measles in your area

Exposure to measles

Planning to travel where measles is widespread

4. Isolation

To prevent measles, keep a distance from the person having the infection. An infected person should be isolated for a few days to a few weeks to return to normal activities.

5. Practice hygiene and cleanliness

To prevent measles keep yourself clean and free of infections. The steps to be taken care of:

Avoid touching your nose, mouth as much as possible

Use tissue paper while coughing and sneezing

Always use a sanitizer

How well do you wash your hands? Learn the right way!

Click Here!

Treatment Of Measles

There is no specific treatment for measles and the condition usually improves by itself within 7 to 10 days. To avoid the spreading of infection avoid contact with people who are vulnerable like pregnant women, immunocompromised people, and young children. Also try to stay away from work or school at least for 4 days when the measles rash first appears.

The treatment includes relieving the symptoms & fighting the infection. If symptoms are causing discomfort then the symptoms need to be treated first, while you wait for your body to fight off the virus. The treatment approach includes:

1. Controlling fever and relieving pain

Paracetamol and Ibuprofen can be taken to control fever and the pain caused by the fever.

Liquid infant paracetamol can be used for young children.

2. Taking Vitamin A supplements

Children with low levels of Vitamin A are more likely to show more severe symptoms of measles. Vitamin A has been found to be effective in reducing the severity of measles. The WHO recommends administration of once daily doses of 200,000 IU of Vitamin A for 2 consecutive days to all children with measles who are >12 months of age and lower doses for children 6-12 months of age.

3. Drinking plenty of fluids

If your child is having a high temperature drink a lot of fluids to eliminate the risk of dehydration.

4. Treating sore eyes

Cleaning your child’s eyelids and closing curtains or dimming lights can help in soothing the eyes.

5. Treating cold-like symptoms

If your child has cold-like symptoms that make them sit in a hot bathroom, drinking warm drinks containing honey can help to relax the airway and soothe a cough.

6. Dealing with other illnesses

Medical care is necessary to avoid serious complications because of the measles virus. Some serious problems are:

Shortness of breath

Convulsions

Sharp chest pain

7. Ribavirin (antiviral)

Some case reports have been published in favor of intravenous ribavirin in immunocompromised patients. However, the benefits of ribavirin in measles have not been conclusively demonstrated in trials.

Home-care For Measles

There is no specific home care treatment for measles. The patient requires care and time to time medicines and few precautions since it is a contagious disease. Home care is to be taken to make the disease tolerable:

Get plenty of rest

A sponge bath can reduce discomfort due to fever

Drink plenty of water

Pain relievers and analgesics such as acetaminophen

To reduce itching from the rash, one can use witch hazel on the rashes or add oatmeal to a bath.

Wondering how to make your young one eat better? Here’s the answer.

Click To Know!

Complications Of Measles

Measles can cause the following complications:

1. Common complications

The most common complications are otitis media and bacterial pneumonia.

Other respiratory complications include laryngitis, tracheitis, bronchitis, giant cell pneumonia, bronchiectasis and flaring up of latent M. tuberculosis infection.

Gastrointestinal complications include persistent diarrhea, appendicitis, hepatitis, and ileocolitis.

2. Severe complications in children and adults

The severe complications include pneumonia and encephalitis. These complications can be life threatening and the patients require hospitalization for proper recovery.

3. Long-term complications

Subacute sclerosing panencephalitis (SSPE) is a rare and fatal disease of the central nervous system that develops 7 to 10 years after a person has measles at a frequency of 1 per 100,000 cases.

4. Rare complications

In rare cases, measles can lead to heart and nervous system problems and serious eye disorders.

Alternative Therapies For Measles

Home remedies for measles

The following home remedies can help in recovery from measles.

1. Aloe vera: It is applied on the inflamed area and helps in soothing inflamed skin.

2. Neem leaves: Neem has antibacterial and anti-allergic properties. It is used to relieve the itching sensation caused due to skin rashes. Take neem leaves and make a thin paste of them and apply them to the affected area and let them dry.

3. Licorice herb: It is an ancient herb to cure measles. Tea can be prepared by adding licorice herb and it helps in reducing the cough caused by measles.

4. Baking soda: One cup of baking soda can be added to bathing water and this will provide quick relief from itching.

5. Coconut water: It is rich in nutrients and cleanses the body. Drinking plenty of coconut water helps in flushing the toxins out of the body. It keeps the body hydrated.

6. Turmeric: It has both antioxidant and antiseptic properties. It is used as an ancient home remedy. Drinking hot water infused with turmeric and honey helps reduce symptoms associated with measles.

7. Green tea: Green tea can be consumed for antioxidant, anti-inflammatory, and immune boosting effects. Try to consume caffeine-free green tea.

8. Phyllanthus amarus: It is a medicinal plant used in the treatment of measles. However, phyllanthus can interact with lithium, diabetes and blood-thinning medications such as warfarin. Hence, should be consumed only after consultation with your doctor.

Dietary modifications

Drink 8 glasses of filtered water daily.

Avoid refined foods, such as white breads, pastas, and sugar.

Use healthy oils in cooking, such as olive oil, coconut oil or ghee.

Reduce or eliminate trans fats found in processed and packaged foods like biscuits, namkeens, and cakes etc.

Limit caffeine containing beverages like coffee.

Avoid alcohol and tobacco.

Nutritional supplements

A multivitamin containing antioxidants, vitamins A, B, C, E, and minerals such as magnesium, calcium, zinc, and selenium, should be taken daily.

Omega-3-fatty acids such as fish oil and flaxseed oil can be taken to reduce inflammation and improve immunity.

Probiotic supplements can be taken for maintaining gastrointestinal and immune health.

Frequently Asked Questions

What is the difference between measles and German measles?

Do adults need the MMR vaccine?

How effective is the measles vaccine?

How is measles treated?

Is the measles vaccine safe?

Can a person get measles more than once?

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Melanoma

Also known as Malignant melanoma, Melanoblastoma, Melanocarcinoma, Melanoepithelioma, Melanosarcoma, Melanoscirrhus, Melanotic Carcinoma and Nevus Pigmentosa

Overview

Melanoma is a cancer of the cells which give color to skin, called the melanocytes. It can be more threatening than the other forms of skin cancer because it tends to metastasize or spread to other parts of the body, causing serious complications.

Risk factors for melanoma include fair skin, light hair and light-colored eyes, a history of prolonged and fierce sun exposure, close family members with melanoma, and moles that are irregular and large in size and number.

Early detection and diagnosis of melanoma are crucial. Changing or unusual spots on the skin should be brought to medical attention without delay. Diagnosis is usually done by a biopsy in which a piece of skin containing the pigmented tumor is removed for lab analysis.

Caught early, most melanomas can be managed with relatively minor surgical removal. However, treatment at the later stages becomes challenging and mostly comprises surgery, chemotherapy, radiation, immunotherapy, and targeted therapy.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men and women

Body part(s) involved

Skin

Prevalence

Worldwide: 1.7% (2018)

Mimicking Conditions

Solar lentigo

Seborrheic keratosis

Blue nevus

Dermatofibroma

Keratoacanthoma

Pyogenic granuloma

Atypical fibroxanthoma

Basal cell carcinoma

Epithelioid tumor

Halo nevus

Histiocytoid hemangioma

Mycosis fungoides

Pigmented spindle cell tumor

Sebaceous carcinoma

Necessary health tests/imaging

Biopsy: Punch biopsy, incisional biopsy, Fine needle aspiration cytology (FNAC) & Surgical (excisional) lymph node biopsy

Imaging tests: Chest x-ray, Ultrasound, Computed tomography (CT) scan& CT-guided needle biopsy

Blood tests: Lactate dehydrogenase (LDH), Complete blood count (CBC), Liver function tests (LFT) & Kidney function tests (KFT)

Treatment

Immunotherapy: Nivolumab, Pembrolizumab, & Pegylated Interferon Alpha 2B.

Chemotherapy: Carboplatin & Abraxane.

Radiation therapy

Targeted therapy

Surgery

See All

Symptoms Of Melanoma

Several symptoms can indicate the presence of melanoma in your body. However, few common symptoms of melanoma can overlap with those of several skin cancer types. Nevertheless, several symptoms are specific to melanoma.

Melanoma can start developing in any part of your body. But it is most commonly seen in the areas, which are exposed to the sun. These body parts include the face, legs, arms, and back.

People who have a darker skin shade can also have melanoma developing in areas with less sun exposure. These body parts include the palms of your hand, the fingernail beds, and the soles of your feet. These are known as hidden melanomas.

Some of the earliest symptoms of melanoma can be:

A change or development in a pre-existing mole

A new mole, pigmented skin, or growth starts developing on your skin

However, it is important to note that melanoma doesn’t always start from a mole. There are some easy ways to differentiate between a normal mole and a mole that can become carcinogenic. To remember this, all you need to think of are the letters ABCDE:

‘A’ stands for asymmetry: A mole that has a chance of becoming cancerous will most likely have an asymmetrical shape. Therefore, the mole will not have identical halves and will look like it has no particular shape.

‘B’ stands for border: In a cancerous mole, the border will be irregular. It will not be circular or oval, like normal moles. Instead, it might have a notched or scalloped border.

‘C’ stands for color: Carcinogenic moles can change colors with time. Try looking for unusual growths that have different colors instead of one particular color. Some of these moles might have a single color, but they might be unevenly distributed, which can also be an indication.

‘D’ stands for diameter: Usually, moles are about ¼ inch or 6 millimeters. Anything larger than that can be carcinogenic.

‘E’ stands for evolving: The most significant indicator of a cancerous mole is that it changes over time. Try to see if the mole grows in size or changes its colors. It might even change its shape or become itchy. In some cases, one might even note bleeding.

Is it skin cancer? Read more about 6 usual signs you need to be aware of.

Click Here!

Types Of Melanoma

Melanoma can be classified into the following types:

1. Cutaneous (skin) melanoma

There are four major types of cutaneous melanoma:

Superficial spreading melanoma: This is the most common form of the disease, responsible for about 70% of cases. This type usually develops in a pre-existing mole.

Nodular melanoma: This is the second most common, responsible for 15 to 30% of cases. These are more aggressive and usually develop more rapidly than superficial melanomas.

Lentigo maligna: This type of melanoma appears as large, flat lesions most commonly found on the faces of light-skinned women over the age of 50. This form of melanoma, responsible for about 4% to 10% of cases, has a lower risk of metastasis than other types.

Acral lentiginous melanoma: This occurs on the palms, soles of the feet or beneath the nail beds. They account for only 2% to 8% of melanomas in fair-skinned patients, but up to 60% of melanomas in darker-skinned patients. This type of melanoma is extremely aggressive and large, with an average diameter of three centimeters.

2. Mucosal melanoma

Mucosal melanomas are rare, making up only about 1% of all diagnosed melanoma cases. This disease occurs in mucosal tissue, which lines body cavities and hollow organs like the nasal cavity, mouth and esophagus, rectum, urinary tract and vagina. It can be very hard to detect, and even when diagnosed and treated, the prognosis is poor.

3. Ocular melanoma

Because the eyes contain melanocytes, or pigment producing cells, they can be susceptible to melanoma. Two types of ocular melanoma include:

Uveal melanoma: It is a cancer (melanoma) of the eye involving the iris, ciliary body, or choroid (collectively referred to as the uvea).

Conjunctival: This is the melanoma of the conjunctiva that presents as a raised, pigmented or nonpigmented lesion that appears in adult life.

Causes Of Melanoma

Melanoma occurs when there is a problem with the melanocytes present in your body. Melanocytes are the cells that produce melanin, which gives color to your skin. Melanoma generally begins through moles, but most moles are not carcinogenic.

Usually, healthy cells push the old cells through your skin, where they perish and fall off. But when cells have DNA damage, the new cells start multiplying abnormally and accumulate around the old cells, creating a cluster of cancerous cells.

Even after several years of research, scientists have not pinpointed a precise reason behind melanoma development in a person. But there could be several factors that might be responsible for melanoma.

The cancerous moles can be a result of DNA mutations. DNA mutations can cause different types of cancers.

The gene mutations resulting in melanoma can be of two types:

1. Acquired gene mutations

Generally, the gene mutations that result in melanoma are acquired during a person's life rather than getting inherited. Sometimes these changes can occur randomly without any specific reason. But at other times, it can be linked to an external cause.

One of the most common causes attributed to melanoma development is exposure to ultraviolet rays (UV). UV rays can damage skin cells and affect the genes responsible for cell growth, making them cancerous.

Usually, UV ray exposure is because of the sun, but sometimes it can be caused by manufactured products such as tanning beds and tanning lamps. UV ray exposure does not cause cancer immediately - it might take several years to develop and manifest. Hence, melanoma is more common in adults rather than in children or teenagers.

When melanoma develops in areas with no sun exposure, it is usually due to changes in different genes rather than the ones exposed to the sun. They can also be due to several environmental factors, but the most probable cause is genetic changes.

2. Inherited gene mutations

People can also inherit the gene changes that are responsible for melanoma from their parents. However, this is a rare scenario. These people have specific DNAs that are more likely to develop melanomas, especially in regions exposed to the sun.

Did you know?

You can identify the mutations and changes in your genes by a simple test. This can help with the prevention and diagnosis. Read more about cancer 50 gene panel.

Read Now!

Risk Factors For Melanoma

There are several risk factors for melanoma. Some of these include:

1. Dysplastic moles

A dysplastic nevus is a type of mole that looks different from a common mole (nevi). The risk of melanoma is greatest for people who have a large number of dysplastic nevi. This risk is high especially for people with a family history of both dysplastic nevi and melanoma.

2. Fair skin

Melanoma occurs more frequently in people who have fair skin that burns or freckles easily (these people also usually have red or blond hair and blue eyes) than in people with dark skin.

3. Ethnicity

Studies show that caucasians get melanoma far more often than do black people, probably because light skin is more easily damaged by the sun.

4. Personal or family history of melanoma or other skin cancers

People who have been treated for melanoma have a high risk of a second melanoma. Melanoma sometimes runs in families. Having two or more close relatives who have had this disease is a risk factor. When melanoma runs in a family, a doctor should check all family members regularly.

5. Atypical mole syndrome (formerly termed B-K mole syndrome, dysplastic nevus syndrome)

People with this inherited condition have many dysplastic nevi. If at least one close relative has had melanoma, this condition is called as familial atypical multiple mole and melanoma syndrome, or FAMMM.

6. Age

Melanoma is more likely to occur in older people, but it is also found in younger people. The median age of melanoma is around 50 years, which means that about half of people with melanoma are diagnosed when they are younger than 50 and about half are diagnosed when they are older than 50. Melanoma that runs in families may occur at a younger age.

7. Ultraviolet (UV) radiation

Experts believe that melanoma is related to an increase in the amount of time people spend in the sun. This disease is also more common in people who live in areas that are at higher altitudes.

8. Indoor tanning

People who use tanning beds, tanning parlors, or sun lamps have an increased risk of developing all types of skin cancer. Using indoor tanning devices is strongly discouraged.

9. Severe, blistering sunburns

People who have had at least one severe, blistering sunburn as a child or teenager are at increased risk of developing melanoma. Sun protection may reduce the risk of melanoma later in life. Sunburns in adulthood are also a risk factor for melanoma.

Are you getting sunburns? Read more about natural remedies for sunburns.

Tap To Read!

10. Weakened immune system

People whose immune system is weakened by certain cancers, by drugs given following organ transplantation, or by HIV are at increased risk of developing melanoma.

The risk to cancer patients due to COVID-19! Any infection can possibly affect a cancer patient more than any healthy individual. For the patients undergoing chemotherapy, it is all the more challenging. Even amongst cancer patients, children are at maximum risk of getting affected due to this infection.

Know about COVID -19 care plan.

Read Now!

11. Other inherited conditions

People with specific inherited genetic conditions have an increased risk of developing melanoma. These conditions include:

Xeroderma pigmentosum: It is an inherited condition characterized by an extreme sensitivity to ultraviolet (UV) rays from sunlight.

Retinoblastoma: It is cancer of the retina.

Li-Fraumeni syndrome: It is a rare hereditary or genetic disorder that increases the risk of developing cancer.

Werner syndrome: This syndrome is characterized by the dramatic, rapid appearance of features associated with normal aging.

Hereditary breast and ovarian cancer syndromes: It is a genetic condition that makes it more likely for a person to get breast, ovarian, and other cancers.

12. Socioeconomic status

Lower socioeconomic status has been linked to more advanced cases of melanoma at the time of detection.This could be because low socioeconomic status individuals have less risk perception and knowledge of the disease.

Did you know?

A study, conducted by Harvard and Brown University, was focused to determine the risk of developing melanoma due to increased consumption of alcohol. Understand how wine consumption can increase your chances of getting melanoma.

Read Here!

Diagnosis Of Melanoma

Several tests and procedures can be conducted to diagnose melanoma. Some of the standard tests include:

1. Physical exam

The doctor will first ask you various questions about your medical and health history. After that, they will inspect your skin to find any symptoms or signs that might indicate melanoma.

2. Biopsy

If the doctor finds a part of the skin that might be suspicious, they will examine that part of the skin. The doctor might take a tissue sample from that part of the skin and send it to a lab for biopsy. Types of biopsy include:

Shave (tangential) biopsy: A shave biopsy is useful in diagnosing many types of skin diseases and in sampling moles when the risk of melanoma is very low.

Punch biopsy: The doctor rotates the punch biopsy tool on the skin until it cuts through all the layers of the skin. The sample is removed and the edges of the biopsy site are often stitched together.

Excisional biopsy: It is done to examine a tumor that might have grown into deeper layers of the skin.

Incisional biopsy: An incisional biopsy removes only a portion of the tumor.

3. Biopsies of melanoma that may have metastasized (spread)

Biopsies of areas other than the skin may be needed in some cases. For example, if melanoma has already been diagnosed on the skin, nearby lymph nodes may be biopsied to see if cancer has spread to them. These include:

Fine needle aspiration cytology (FNAC): It may be used to biopsy large lymph nodes near a melanoma to find out if the melanoma has spread to them.

Surgical (excisional) lymph node biopsy: This procedure can be used to remove an enlarged lymph node through a small incision (cut) in the skin.

Sentinel lymph node biopsy: If melanoma has been diagnosed and has any concerning features (such as being at least a certain thickness), a sentinel lymph node biopsy (SLNB) is often done to see if the cancer has spread to nearby lymph nodes, which in turn might affect treatment options.

4. Imaging tests

Imaging tests can also be done to help determine how well treatment is working or to look for possible signs of cancer coming back (recurring) after treatment. These include:

Chest x-ray: This test might be done to help determine if melanoma has spread to the lungs.

Ultrasound: It uses sound waves to create images of the inside of your body on a computer screen.

Ultrasound-guided needle biopsy: This is done to help guide a biopsy needle into a suspicious lymph node.

Computed tomography (CT) scan: The CT scan uses x-rays to make detailed, cross-sectional images of your body.

CT-guided needle biopsy: CT scans can also be used to help guide a biopsy needle into a suspicious area within the body.

Magnetic resonance imaging (MRI) scan: MRI scans use radio waves and strong magnets instead and can be very helpful in looking at any tumor in the brain and spinal cord.

Positron emission tomography (PET) scan: A PET scan can help show if the cancer has spread to lymph nodes or other parts of the body. It is most useful in people with more advanced stages of melanoma.

PET/CT scan: This lets the doctor compare areas of higher radioactivity on the PET scan with the more detailed appearance of that area on the CT scan.

5. Blood tests

Blood tests aren’t used to diagnose melanoma, but some tests may be done before or during treatment, especially for more advanced melanomas. These include:

Lactate dehydrogenase (LDH)

Complete blood count (CBC)

Liver function tests (LFT)

Kidney function tests (KFT)

Make sure to get the right diagnosis with reliable medical test.

Book Now!

Celebs affected

Khloe Kardashian

From the famous Kardashian family, Khloe had two moles removed from her back. Unfortunately, one of these was melanoma. She now self-examines regularly and is a vocal spokesperson for cancer.

Andy Cohen

The popular talk show host had a mole on his lip, which turned out to be melanoma. He said that it might have been due to his habit of tanning. He now takes sun safety measures.

Prevention Of Melanoma

There are several different ways to reduce the risk of getting melanoma and all other types of skin cancer.

1. Do not go out in the middle of the day

The sun is at its highest point during the middle of the day. It means that the sun's rays are more direct, which increases the chances of UV light exposure. UV light radiation is one of the primary risk factors for melanoma. To lower your chances of getting skin cancer, you should not go out often between 10 am and 4 pm. If you have to go out during the day, try to seek as much shade as possible.

2. Avoid getting suntans or sunburns

Accumulated sun exposure over your life can cause skin cancer later in life. Remember, there is no such thing as a healthy suntan and a blistering sunburn can significantly increase the chances of getting melanoma.

4. Wear sunscreen all year long

Wearing sunscreen is one of the easiest ways to avoid getting a suntan or sunburn and protect your skin against the sun's UV rays. You should wear sunscreen all year long, even when the sky is cloudy. Ensure that the sunscreen has an SPF higher than 30 if you are out in the sun for extended periods. Also, reapply every two hours if you sweat or swim.

Use sunscreen before going out in the sun! If you are trying to avoid getting melanoma in the future, the best way to ensure the safety of your skin is by regularly applying sunscreen. If you are going out for longer hours, get water-resistant sunscreen that has an SPF of 30 or higher.

Learn the basics of using sunscreens the right way.

Click Here!

5. Cover yourself

Always cover yourself completely when going out in the sun. Wear full-sleeved clothes, and favor darker colors and tighter clothing items. Also, cover your head with a broad-brimmed hat. The hat will provide better protection compared to a visor or a baseball cap. Finally, don’t forget to add a pair of sunglasses or UV-blocking glasses.

6. Do not use tanning beds or lamps

Tanning beds and lamps tan your body using UV rays. Direct exposure to them can increase your chances of getting skin cancer.

7. Examine your skin regularly

Make sure that you inspect your skin regularly and notice any new changes. Make sure that you note any new moles, unusual growths, freckles, birthmarks, or bumps. Try to check all parts of your body, even the ones that don’t receive sunlight. Also, go to a dermatologist once a year to get a body checkup.

Early detection of cancer can be life-saving and can be easy to treat if it is in the initial stage at the time of diagnosis.

Read about 8 common signs of cancer that you should be aware of.

Read To Know!

Specialist To Visit

Consult a dermatologist (skin doctor) if you see any changes in your skin that you think is new or if you are worried about your skin. If you are diagnosed with melanoma, you will be required to consult several different types of doctors and specialists. All these doctors will help deal with varying aspects of the disease and figure out the best treatment plan for you.

Some common specialists you should consult include:

Dermatologist

Surgical oncologist

Radiation oncologist

Medical oncologist

A surgical oncologist is a surgeon who has special training in performing biopsies and other surgical procedures in cancer patients. A radiation oncologist is a doctor who has special training in using radiation to treat cancer. A medical oncologist treats cancer using chemotherapy and other medications like targeted therapy or immunotherapy.

Seek medical advice from our world-class professionals to diagnose and treat melanoma.

Book An Appointment!

Treatment Of Melanoma

In its early stages, the easiest way to treat melanoma is through surgery. However, when melanoma spreads beyond the skin, several different methods might get used for treatment in its later stages.

1. Removal of lymph nodes

It is a surgical method used if the melanoma has spread beyond the skin to the lymph nodes. The doctor will remove the affected lymph nodes and a small part of the surrounding area to stop the spread.

2. Immunotherapy

It is a drug treatment that is commonly recommended after surgery. There are two major types of drugs that are used in immunotherapy.

Immune checkpoint inhibitors: These drugs enable the proteins in the immune system, which are disabled by the cancerous cells. Therefore, the immune system again starts attacking the cancer cells. Some common drugs include:

Nivolumab

Pembrolizumab

Ipilimumab

Cytokines: The body produces proteins called cytokines which help in boosting the immune system. In some cases, doctors recommend artificial cytokines for melanoma. These drugs make it difficult for cancer cells to divide and multiply. Some common drugs include:

Interferon Alpha 2A

Interferon Alpha 2B

Pegylated Interferon Alpha 2B

Pegylated Interferon Alpha 2A

3. Targeted therapy

In targeted therapies, drugs are aimed at a distinct point in the cancer cells responsible for multiplying and dividing abnormally. This therapy is unique to every patient, depending on how their cancer cells react to the drug.

4. Chemotherapy

These are drugs that kill cancer cells. These are often used as the last resort while treating melanoma. Some common chemotherapy drugs include:

Carboplatin

Abraxane

5. Radiation therapy

In this procedure, X-Rays or other high-energy beams are given to the patient to kill the cancer cells. It is suggested if the melanoma has spread to the lymph nodes and beyond, and can’t be treated by surgery.

Home-Care For Melanoma

Diet might not be closely linked to melanoma, but it can help in building immunity and helping you fight against the side effects that can occur due to the drug treatments. Here are some things you can do to take care of melanoma at home:

1. Eat right

Protein-rich food like lean meats, eggs, low-fat dairy products, nuts, etc can be beneficial. Include whole grains in your diet like whole-wheat bread, oatmeal, brown rice, etc. Also try to eat fat from healthy sources like olive oil, nuts, seeds, etc. Avoid eating a lot of sweets or added sugars.

In addition, you should eat foods rich in antioxidants and even take antioxidant supplements, if necessary. Studies have shown that green tea (known for its healing abilities and abundance of antioxidants) can inhibit the growth of melanocytic cells.

Eat Your Way Out Of Cancer! According to the National Cancer Institute USA, about one-third of cancer deaths are related to poor dietary choices. You can do your bit to prevent cancer by making healthy lifestyle choices, and including fruits to your diet.

Read about 8 fruits that can help keep cancer at bay.

Explore Now!

2. Stay hydrated

Fluids carry nutrients to cells, flush bacteria from the bladder and prevent constipation. Staying hydrated makes treatment side effects less severe and lowers your chances of missing or delaying cancer treatments.

3. Exercise

Exercising daily can also help you relieve stress and reduce tiredness.

Know how walking daily for 30 mins can improve the quality of life in advanced cancer.

Read This!

Complications of Melanoma

Some common complications of melanoma are:

Recurrence: Cancer always has a chance of recurring in your lifetime, even after it has been completely removed. It is best to check yourself regularly, even when the treatment is complete.

Metastasis: In this scenario, cancer can spread beyond the skin to the muscles, organs, and nerves of the body.

Secondary infection: This is seen due to disruption of the normal skin barrier.

Scarring: Can result from the lesion itself or treatments.

Lymphedema: It refers to tissue swelling caused by an accumulation of protein-rich fluid systems. It commonly occurs secondary to the removal of lymph nodes but can result from cancer alone.

Depression and anxiety: A higher prevalence of anxiety and depression have been identified in patients with advanced melanoma compared to those with early disease.

Alternative Treatment for Melanoma

Cancer cannot get treated entirely without professional medical help, but these therapies can help your immune system become more vital and make you healthier. Some standard alternative therapies include:

1. Acupressure and acupuncture

These are physical therapies that can help in lowering the pain experienced when you have cancer. In acupressure, the energy is released by putting pressure on different body parts, while in acupuncture, needles are used to release the stored energy.

2. Massage and physiotherapy

These techniques can help you in dealing with the chronic pain that a cancer patient experiences. In addition, if cancer has progressed to a higher stage, massages and physiotherapy can be beneficial.

3. Mind and body therapy

Exercise is one of the best ways to become healthier and stronger. It is highly recommended to patients dealing with melanoma. They also help in maintaining a healthy body weight which is vital during the treatment process. There is no need to do strenuous activities, and you can just do light activities like walking regularly and yoga.

Yoga for good health! Read about the 12 benefits of yoga.

Click To Read!

4. Hyperthermia

This is a type of treatment in which body tissue is heated to as high as 113 °F to help damage and kill cancer cells with little or no harm to normal tissue. Hyperthermia to treat cancer is also called thermal therapy, thermal ablation, or thermotherapy. However, hyperthermia to treat cancer is not widely available.

Living With Melanoma

Having cancer can be a life-altering event. It can be tremendously difficult for someone to cope with it both mentally and physically. It can change the course of your life, and when you first get the diagnosis, it can be pretty confusing as to what to do. Here are some tips which might help you.

1. Educate yourself

After getting a diagnosis, make sure that you learn as much as you can about melanoma. Ask your doctor all the questions you have. Do not depend on the internet to answer them. It can provide you with some basic information and help you know what to do. Make sure that you research treatment options, diet, and prognosis of the disease. It will also help you make better decisions and be confident about them.

2. Maintain close relationships

Cancer can feel like a very lonely experience. Make sure that you are in close touch with your family and friends. This will help you have a strong support system and let you maintain a healthy mental state. They can also provide care for you during the surgical procedures and just be there for you during a tough time.

3. Communicate

While going through a traumatic experience, one of the best things is to find someone to confide in. This person can be a friend or a family member to whom you are close. If you find it awkward speaking to people you know, you can go to a therapist or counselor. Cancer support groups can also be beneficial in these situations.

Join cancer support groups. Cancer can be a complex disease to deal with. It can change your outlook on life and make you feel depressed, anxious, and stressed. If you have cancer, you should find people who relate to you and to whom you can talk about this life-altering experience. These can be medical professionals or therapists. Joining a cancer support group can be helpful as it can help you cope with the stress of cancer.

Read everything related to cancer support.

Click Here!

Frequently Asked Questions

Is melanoma always fatal?

How is melanoma caused?

Is melanoma considered cancer?

Can you have melanoma for a long time and not know?

Where does melanoma spread first?

What is the survival rate for stage IV melanoma?

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Melasma

Also known as Chloasma and Mask of pregnancy

Overview

Melasma is a common skin condition that is characterized by the appearance of brown to gray-brown patches primarily on the face. It is more common in females and individuals with darker skin tones.

Sun exposure is the most important risk factor for the development of melasma. Hormonal imbalances due to pregnancy, periods, and hormonal contraceptives also stimulate the development of melasma in females.

The basic preventive measures include having a strict sun protection regimen that involves use of a broad-spectrum sunscreen, limiting time in sun, wearing a hat while going out, and using an umbrella.

Several treatment options are available for melasma including topical hydroquinone, which is the mainstay of treatment. However, the management of melasma is challenging due its slow response to treatment and recurrence.

While melasma does not cause any bodily complications, individuals often feel conscious about their facial appearance which can impact their emotional and mental health.

Key Facts

Usually seen in

Women between 20 to 30 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Cheeks

Chin

Nose bridge

Forehead

Upper lip

Prevalence

Actinic Lichen Planus

Acanthosis Nigricans

Discoid Lupus Erythematosus

Drug-Induced Photosensitivity

Exogenous Ochronosis

Frictional Melanosis

Pigmented Contact Dermatitis

Post-inflammatory Hyperpigmentation

Necessary health tests/imaging

Physical examination

Wood lamp examination

Electron microscopy

Hormonal assays: Follicle stimulating hormone (FSH), Luteinizing hormone (LH), Prolactin, and Thyroid hormones.

Dermoscopy

Treatment

Bleaching agents: Hydroquinone

Epidermal turnover enhancers: Retinoids (tretinoin, adapalene and isotretinoin), Alpha hydroxy acids (mandelic acid) & salicylic acid

Ingredients that target various pathways of melanin synthesis: Retinoids (tretinoin, adapalene and isotretinoin), Arbutin (α or β Arbutin), Azelaic acid & Kojic acid

Antioxidants: Vitamin E (α-Tocoferol acetate), Vitamin C (Sodium ascorbyl phosphate, Ascorbyl Palmitate & Ascorbyl Glucoside

Topical steroids: Fluocinolone acetonide & Dexamethasone

Combination formulas: HQ + Tretinoin + Fluocinolone acetonide, HQ+ Tretinoin  + Dexamethasone+ Modified Kligman's formula (KF), Modified KF + Glycolic acid, Kojic Acid + Glycolic Acid & Azelaic acid + Retinoic acid

Oral agents: Tranexamic acid

Newer agents: Melatonin, Glutathione, Cysteamine, Methimazole & Flutamide

Device based therapies: Intense pulsed lights (IPLs), Fractional lasers (Er:Glass laser, Er:YAG laser, CO2 laser), Ablative lasers, Q-switched lasers (QSL), Picosecond lasers, Sublative lasers(fractional 1927 nm, thulium fiber laser)

Platelet-rich plasma therapy (PRP)

Specialists to consult

General physician

Dermatologist

Gynecologist (in case of pregnancy)

Symptoms Of Melasma

The classical symptom of melasma is the appearance of brown to gray-brown patches primarily on the face. The expression of the patches are predominant in the areas that are exposed to sun. It includes organs such as cheeks, upper lip, chin, and forehead.

In rare cases, melasma occurs on the jawline, neck, arms, or any other organ. The color of the patches vary depending upon the skin tone of the individual and the severity of the condition. Sometimes, the patches look bluish-gray in darker skin individuals.

There are three patterns in which melasma can be distributed:

Centrofacial: It is the most common pattern of melasma. The patches are distributed over the cheeks, nose, forehead, upper lip, and chin.

Malar: This pattern involves the cheeks and nose.

Mandibular: It involves the jaw.

Characteristics of patches

There are several conditions that can cause patches on the skin. The specific characteristic of melasma include:

The color of the patches and spots are darker than the natural skin color.

The patches develop on both sides of the face.

The size of the patch is large due to the joining of the small unevenly shaped patches.

The patches are more visible in sunlight.

The patches are neither itchy nor painful.

Types Of Melasma

Melasma can be divided into three categories based on the layer of skin involved.

Epidermal melasma

In this, the patches are formed in the uppermost layer of the skin known as the epidermis. The patches are usually of dark brown color with a well-defined border. Epidermal melasma has a good response to the treatment.

Dermal melasma

It is characterized by the presence of light brown to blue-gray patches that extend to the second deeper layer of the skin – the dermis. The border of the patches is usually disoriented. Dermal melasma shows a poor recovery even after the treatment.

Mixed melasma

It is the most common type of melasma. It is characterized by a combination of blue-gray, light brown, and dark brown patches in both the dermis and epidermis. Treatment usually shows a partial improvement in such type of melasma.

Causes Of Melasma

Melasma is a hyperpigmentation disorder in which there is an overproduction of a pigment called melanin which is responsible for skin color. Increased melanin gets deposited in the layers of the skin and forms patches. The exact cause of melasma is complex, however, these structural and functional changes in the skin can be triggered by various risk factors discussed in the next section.

Risk Factors For Melasma

Melasma is triggered by various modifiable and non-modifiable factors discussed below.

Sunlight exposure

Exposure to the sun is the biggest risk factor for melasma. Sunrays contain UV radiations which triggers the body to produce more melanin. The areas exposed to sun such as face, neck, and arms are more prone to melasma.

Skin tone

Individuals with darker skin tones are more likely to develop melasma due to more melanin-producing cells.

Race

Some races are more prone to develop melasma. These include Latin, Asian, Black, or Native American heritage.

Family history

Melasma tends to run in families. Studies suggest that in 40% cases of melasma individuals, there is one close relative affected with this condition.

Gender

Women between the age of 20 to 40 are more susceptible to melasma.

Pregnancy

Studies suggest that the chances of developing melasma in pregnancy is as high as 15 to 50%. This happens due to hormonal fluctuations. The risk is even higher during the third trimester of pregnancy due increase in the level of estrogen, progesterone, and melanocyte-stimulating hormone during that phase. The patches usually disappear on their own after delivery. If the melasma continues postpartum, it predisposes the women to premenstrual hyperpigmentation.

Medications

Certain medications may trigger melasma. These include anti-seizure medications and birth control pills. Certain antibiotics, antihypertensives, and retinoids also make the skin more sensitive to sunlight and thus increase the risk of melasma.

Certain cosmetics

The use of some cosmetics products may trigger melasma formation. It includes products containing chemical substances such as psoralen, tar derivatives, hexachlorophene etc.

Tanning beds

A tanning bed is a device that emits ultraviolet radiation to give people a tan. These beds produce stronger UV rays even than sunlight. Skin exposed to UV rays triggers the production of melanin. People who use tanning beds frequently have an increased risk of melasma.

Medical conditions

People with thyroid disease are at increased risk of developing melasma.

Stress

Stress has a very strong link in the development of melasma so it is also regarded as a “stress mask”. Stress increases the level of the hormone cortisol which increases melanin production.

Long-term stress can adversely affect every system in the body.

Read how!

Diagnosis Of Melasma

There are no laboratory tests for melasma. In most of the cases, diagnosis is based on clinical symptoms. Various steps of diagnosis include:

Physical examination

Most of the diagnosis of melasma is made upon physical examination of the skin. The color, texture, and border of the lesion is examined. Melasma is characterized by irregular borders with a “stuck-on” appearance. The color also indicates the type of melasma.

Wood lamp examination

The test uses ultraviolet radiation to look at the skin closely in a dark room. It is used to assess the clinical status of the lesions. The change in brightness of the lesion during examination depicts epidermal melasma. Dermal melasma is characterized by no change in color.

Hormonal assays

Some hormonal fluctuations can also cause melasma to develop. Their levels are measured to identify the cause of melasma. The hormones that can be involved in melasma include follicle stimulating hormone (FSH), luteinizing hormone (LH), melanocyte-stimulating hormone (MSH), prolactin, and thyroid hormones.

Electron microscopy

This includes examination of the cells of the lesion under an electron microscope. The high amount of melanin within all the layers of epidermis (topmost layer of skin) and dermis (skin layer below epidermis) indicate melasma.

Dermoscopy

It is a device in which skin lesions are examined using an instrument called dermatoscope. The technique uses a computer screen to capture images of the patches. It helps to analyze the severity of melasma through assessing the deposition level of melanin.

Celebs affected

Molly Sims

The famous American fashion model and actress, Molly Sims has shared her experience about melasma several times. She wrote that she developed melasma because of not using sunscreen.

Sarah Silverman

Sarah Kate Silverman is an American stand-up comedian, actress, and writer. She shared her experience with melasma through her Instagram post. She emphasized on the importance of proper sun protection.

Specialist To Visit

Melasma does not lead to health complications, however, it affects quality of life by impacting self-esteem.

Any change in the color of the face should be consulted with the doctor. A doctor consultation is also required to diagnose the exact condition due to its resembling symptoms with several other skin conditions.

The specialist doctors that can help with this condition include:

General physician

Dermatologist - The doctor who has a specialization in managing and treating skin disorders.

Gynecologist (in case of pregnancy)

Consult India’s best doctors online from the comfort of your home.

Consult Now!

Prevention Of Melasma

Melasma has multiple causes and triggers. Most of the triggers of melasma are uncontrollable and cannot be avoided. However, preventing the exposure of sun can play a role in preventing the disease.

The following measures can be taken to prevent exposure of the sun:

Spend less time in sun

Exposure to the sun should be restricted to prevent melasma. The person should avoid going outdoors when the sun is at its peak, which is usually 11 am to 3 pm.

Cover yourself up

The following measures should be kept in mind while wearing clothes for the best sun protection:

Wear lightweight clothing

Use wide-brimmed hats

Wear long-sleeved shirts and long pants

Use clothes made from tight woven fabric

Use thoroughly dry clothes

Prefer darker-colored clothes. They prevent more rays overall from reaching your skin. Within the same color, more saturated hues outperform paler ones.

The level of their photoprotection offered by clothes can be measured by a factor called ultraviolet protection factor (UPF). It’s similar to SPF (Sun Protection Factor), the rating system used for sunscreens. UPF measures a fabric's effectiveness at filtering both ultraviolet A (UVA) and ultraviolet B (UVB) light. Look for a UPF above 15 and greater for good sun protection.

HAT FACTS!

How effective are hats at providing protection from the sun? Did you know that protection from the sun is dependent on the brim width of the hat?

Brim width of more than 7.5 cm has an SPF of 7 for the nose, 5 for the neck, 3 for the cheeks, and 2 for the chin.

Brim width of 2.5 to 7.5 cm has an SPF of 3 for the nose, 2 for the neck and cheek, and 0 for the chin.

Brim of less than 2.5 cm has an SPF of 1.5 for the nose and a minimal amount for the chin and neck.

Find shade from the sun

Staying under an umbrella, tree, or any surface also protects the skin to get exposed to the sun when needed.

Wear sunglasses

Sunglasses not only protect eyes but they also protect the soft skin around the eyes. They should be used while moving out under the sun.

Use sunscreens diligently

A strict sunscreen regimen is the cornerstone of sun protection. All individuals (older than 6 months) should wear high-quality sunscreen to protect their skin while spending time under the sun. The following points will help you in choosing the right sunscreen as well as the correct method of application:

A. Type of sunscreen

There are broadly two types of sunscreens:

1. Chemical (organic) sunscreens: These sunscreens contain ingredients that absorb UV radiations and convert them to a very low level of heat.

UV-A filters

Benzophenones (UVB and UVA2 absorbers) - Oxybenzone, Sulisobenzone, Dioxybenzone

Avobenzone or Parsol 1789 (UVA1 absorber)

Meradimate (UVA2 absorber)

UV-B filters

PABA derivatives – Padimate O

Cinnamates – Octinoxate, Cinoxate

Salicylates – Octisalate, Homosalate, Trolamine salicylate

Octocrylene

Ensulizole

Newer generation broad spectrum (UVA + UVB) filters

Ecamsule (Mexoryl SX)

Sila Triazole (Mexoryl XL)

Bemotrizinol (Tinosorb S)

Bisoctrizole (Tinosorb M)

2. Physical (inorganic) sunscreens: These sunscreens function by reflecting, scattering or absorbing UV radiation. Their opaque nature gives a “whitening effect” which is an inherent disadvantage. However, this demerit can be minimized by the use of microfine particles. Examples include:

Zinc oxide

Titanium oxide

Iron oxide

Calamine

Talc

Kaolin

Cannot decide which sunscreen to use? Watch our expert discuss how to choose the right sunscreen for your skin type.

Click here

B. Sun protection factor (SPF): Sunscreens are assigned a sun protection factor (SPF), which is a number that rates how well they filter out UV-B rays. Higher numbers indicate more protection. A broad-spectrum sunscreen that blocks both UV-A and UV-B rays should be used with a SPF 30 or more.

C.Protection factor (PA+): PA stands for protection grade of UV-A. It measures the ability of sunscreen to block UVA rays.This is an important distinction because SPF (sun protection factor) measures only UVB protection while the PA rating only measures UVA protection.

This is what each PA rating means:

PA+ = Some UVA protection.

PA++ = Moderate UVA protection.

PA+++ = High UVA protection.

PA++++ = Extremely High UVA protection.

D. Dosage and application: It is commonly seen that the efficacy of sunscreens fails due to insufficient application or less practice of reapplication. According to the Food and Drug Administration (FDA), 2 mg/cm2 of sunscreen should be applied to the exposed skin. It should be allowed to dry completely before sun exposure.

E. Reapplication: Sunscreen should be applied generously to all the areas exposed to sun. It should be applied daily to in order to prevent any skin damage. It should be reapplied after every 2 hours after swimming, vigorous activity, excessive sweating, or toweling.

Will sunscreen application reduce Vitamin D levels?

Sun Rays are responsible for more than 90% of Vitamin D production in the skin. There have been concerns that the use of sunscreens may lead to a reduction in Vitamin D production. However, research suggests that the daily use of sunscreen does not compromise Vitamin D production in healthy individuals. Although, screening for vitamin D status and supplementation are recommended in patients with photosensitivity disorders.

Avoid sunbath

The cells of the melasma are easily stimulated by ultraviolet B, ultraviolet A, and visible light. Sunbath should be avoided in order to maintain a good skin tone.

Preventing sun exposure in the employees working under the sun

Workers that work at the sites are more likely to develop melasma. However, the following measures can help prevent the same:

Sun protection should be provided when possible

Tents, shelters, and cooling stations should be provided at worksites

Works schedule that minimize sun exposure should be created

Breaks in the shade should be given to reapply sunscreen

Here are some common sunscreen mistakes that you may be making daily and should avoid.

Know More!

Treatment Of Melasma

The identification of cause and triggers plays a very pivotal role in the type of treatment given to the person. The basic principle of all the treatment options is to reduce melanin in the skin. There are numerous treatment options available for melasma. The choice of treatment depends upon:

Type of melasma

Financial status of the individual

Response to prior treatments

Expectations of the patient

Skin tone

Severity of melasma

Aim of the treatment

Eliminate already existing pigmentation

Block new pigmentation

Restoring the natural color of the skin

A.Topical agents

These are the preparations that are directly applied to the affected skin. They are the first-line agents for treating melasma and are mostly available as creams and ointments.

Bleaching agents

These are the preparations that lighten the skin by blocking the production of melanin.

Hydroquinone (HQ) is the most commonly prescribed depigmenting agent worldwide and it has remained the gold standard for the treatment of melasma.

NOTE: HQ comes with its own adverse reactions like irritation, redness, stinging, and allergic contact dermatitis, nail discoloration, etc and should only be used under strict medical supervision.

Epidermal turnover enhancers

These medications increase the turnover of the outer layer of skin. The pigmented cells of the outer layer get peeled off and the skin replaces them with normally pigmented cells. Examples include

Retinoids (tretinoin, adapalene and isotretinoin)

Alpha hydroxy acids like mandelic acid, glycolic acid

Beta hydroxy acid like salicylic acid

Ingredients that target various pathways of melanin synthesis

Excessive melanin production is responsible for melasma. Some examples of agents that block the various ways of melanin production include:

Retinoids (tretinoin, adapalene and isotretinoin)

Arbutin (α or β Arbutin)

Azelaic acid

Kojic acid

Niacinamide (Vit B3)

Antioxidants

They work via scavenging the free radicals in the skin. Examples include:

Vitamin E (α-Tocoferol acetate)

Vitamin C (Sodium ascorbyl phosphate, Ascorbyl Palmitate, Ascorbyl Glucoside)

Topical steroids

Steroids are used usually due to its anti-inflammatory effect. They are used along with other topical medications. The common examples include Fluocinolone acetonide and Dexamethasone.

Combination formulas

Various topical agents can be combined for a better therapeutic effect. In addition to having a synergistic effect, a particular drug may reduce side effects of another drug. For example, topical steroids may reduce the irritant effects of HQ or retinoids. On the other hand, retinoids may prevent steroids induced skin degeneration or atrophy. Some examples of combinations that are available in the market to treat melasma include:

HQ + Tretinoin + Fluocinolone acetonide

HQ+ Tretinoin  + Dexamethasone+ Modified Kligman's formula (KF) which is a triple combination of 4% hydroquinone, 0.05% tretinoin, and 0.01% fluocinolone acetonide

Modified KF + Glycolic acid

Kojic Acid + Glycolic Acid

HQ  + Glycolic acid

Azelaic acid + Retinoic acid

B.Oral agents

Oral agents are used when the individual is not finding any improvement with topical agents. Tranexamic acid is used orally to reduce the patches of melasma. Individuals taking oral medication can use topical creams and sun protection to augment the process.

C.Newer agents

It includes recently researched medications for melasma. They have shown promising evidence in the management of melasma, both alone and in conjunction with other melasma therapies. However more research is warranted for their use. Few examples include:

Melatonin

Glutathione

Cysteamine

Methimazole

Flutamide

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D. Device-based therapies

Laser and light-based therapies are usually reserved for resistant cases and are considered as third-line agents in the treatment of melasma. This approach is most effective in light-skinned individuals. Various types of lasers used in the management of melasma include:

Intense pulsed lights (IPLs)

Fractional lasers (Er:Glass laser, Er:YAG laser, CO2 laser)

Ablative lasers

Q-switched lasers (QSL)

Picosecond lasers

Sublative lasers(fractional 1927 nm, thulium fiber laser)

Other lasers - copper bromide laser

Various combinations of lasers

E. Platelet-rich plasma therapy (PRP)

In PRP, the patient's blood is drawn and placed into a device called a centrifuge. The centrifuge rapidly spins the blood, separating the other components of the blood from the platelets (a type of blood cells) and concentrating them within the plasma. A small volume of this plasma containing a high concentration of platelets is injected back into the body of the patient.

PRP has shown promise when used in combination or alone as treatment for melasma.

Special considerations- Treatment during pregnancy

Treatment may not be necessary because melasma in pregnancy may be transient and removal of the hormonal trigger after childbirth may result in considerable improvement. Moreover, melasma is more resistant to treatment during pregnancy because of the persistent hormonal trigger. Hence, treatment for melasma is mostly deferred until after delivery.

Listen to our expert discuss melasma in detail and answer most FAQs regarding the condition.

Watch now!

Home Care For Melasma

The following home remedies are known to decrease hyperpigmentation associated with melasma. However, they should be tried only after consent from the doctor.

Turmeric (Haldi): Studies have shown reduction in the appearance of facial hyperpigmentation, fine lines and wrinkles after applying topical extract of turmeric.

It can also be mixed with milk and applied directly on the skin.

Aloe-vera: Aloe vera contains an ingredient called aloesin which is known to reduce the synthesis of melanin. Apart from this, the highly moisturizing effect of the aloe vera prevents dryness and irritation as well.

Licorice (Mulethi): The compound liquiritin possesses properties that help in reducing pigmentation associated with melasma. It is shown to reduce inflammation and UV-B-induced pigmentation. The powder of mulethi can be mixed with water to make a face pack.

Green tea: Green tea is known for its antioxidant and anti-inflammatory properties. Studies have shown its effect in treating melasma also. Apply the wet green tea bags to the pigmented areas of the skin, and massage in gentle circular motions until the tea is absorbed. You can also mix it with some water to make a face pack.

Soyabean: The application of soy extract has been shown to reduce the pigmentation of melasma.

Red lentils (Masoor daal): The face mask made of red lentils can be used in skin pigmentation. It can be applied as a paste by mixing the grinded paste of soaked lentils with water or milk.

Mulberry (Shahtoot) leaves: The extract of mulberry leaves is known to be used traditionally for the management and prevention of diabetes. Recent studies suggest its role in melasma as it helps in reducing the synthesis of melanin.

Mulberries are a powerhouse of nutrients. Read about the health benefits of mulberries.

Tap here!

Tomato: It contains lycopene which is a potent antioxidant that neutralizes free radicals. It helps in preventing the redness caused by UV radiation. It also reduces the damaging effect of UV light and protects the skin from sunburn and thus melasma.

The tomato pulp can be applied directly on the face or as a paste mixed with olive oil.

Cucumber (Kheera): The extract of cucumber has strong moisturizing abilities. It is known for its ability to remove dead skin cells. Recent studies have also shown its effect on protecting the skin from sun exposure. It can be simply applied on the affected areas as a grated piece.

Indian beech tree: Studies have shown that the extract of leaves of the Indian beech tree have a potential sunscreen activity with good absorbance of UV rays.

Almond (Badam): Topical application of almond extract has significant photoprotective activity. Soak almonds overnight. Peel them and make a paste with water or honey to make a facepack.

Saffron (Kesar): The dried pollen of the saffron plant can be used to protect the skin from sun. Take water in a bowl and sprinkle a few strands of saffron in it. Add 2 tablespoons of turmeric powder and make a paste. The paste can be directly applied on the affected skin.

Natural oils

Jojoba oil: This oil is known for its effect in treating skin conditions such as eczema, psoriasis and dry skin. It also contains a chemical called myristic acid which provides sun protection.

Carrot seed oil: This oil possesses significant antioxidant, antiseptic, and antifungal properties. It provides natural sun protection when applied topically to the skin.

Complications Of Melasma

Melasma does not lead to any complications but it has a huge impact on the emotional health of the individual. Individuals often feel conscious or distressed about their appearance. Self-image and self-esteem may suffer as a result of this condition.

Note: There is a tool known as The Melasma Quality of Life Scale (MelasQOL) that is designed to provide quantification of melasma’s impact on a patient's quality of life.

Alternative Therapies For Melasma

Microneedling (mesotherapy)

It is a technique in which small channels in the skin are created to deliver the drug. This is used to deliver the drug in the layers of the skin. Studies suggest an improvement in melasma when micro-needling is used with topical medications.

Cosmetic camouflage

It includes the use of concealers and other pigmented cover-ups to even skin complexion. This approach is used as an adjuvant therapy that has been proven to improve psychosocial effects and quality of life.

Living With Melasma

Seek help from a professional

Melasma should be treated strictly under a medical practitioner. Over the counter medications can prove to be ineffective or damaging to the skin.

Protect your skin from the sun every day

Sunrays are the most important trigger for melasma. It is very important to protect the skin from the sun even on cloudy days. Sunscreen should be applied daily irrespective of the weather.

Choose a sunscreen from our extensive range

Order Now

Apply skincare correctly

Individuals with melasma should apply skincare and make-up in the right order. The recommended order that the dermatologist recommends includes first the application of topical medication followed by sunscreen and camouflage make up.

Establish a good face-cleansing regimen

Individuals having melasma should follow a good cleansing regimen since dirty skin is prone to melasma. Pollution can contribute to melasma by corroding the protective surface of the skin. The corroded skin is more susceptible to sun damage. Patients should clean their skin regularly with a gentle cleanser before going to bed. The skin cleansing regimen should also be followed after coming home from the outside.

Order skin cleanser from the comfort of your home.

Shop Now

Combat skin stress with antioxidants

Antioxidant serums containing Vitamin C and E helps in healing the damage from sunlight. Individuals with melasma should apply these serums to protect the skin from photodamage.

Confused about choosing the right serum for your skin?

Watch this video to help you decide

Moisturize your skin regularly

Dry skin is more prone to sun damage. So, use a good moisturizer after applying serum to restore the lipid barrier of the skin.

Explore our wide range of moisturizers for smooth supple skin.

Order Now

Avoid waxing

Waxing the skin area having melasma should be avoided as it may cause skin inflammation and aggravation of hyperpigmentation

Here are some important do’s and don'ts of melasma care.

Read here!

Managing the emotions

Melasma impacts emotional well-being due to the presence of prominent facial lesions. Counseling focusing on the duration of treatment is proven to be helpful for emotional stability. The condition can be frustrating to both the patient and the doctor because of its slow response to treatment and recurrence. Studies revealed that melasma affects quality of life (QoL) negatively. QoL includes physical, mental, and social well-being of an individual. Many people affected emotionally may spend a lot on medical and cosmetic treatments without satisfactory results.

The following measures might help:

Engage yourself in activities you like such as crafting, painting, and singing

Do regular exercise as it helps in reducing stress

Join any support group either online or offline

Ask help from a professional counselor

Meet someone who is undergoing the same type of treatment

Be patient. Even with treatment, it may take months for melasma to clear up.

Be diligent. Melasma will be quick to return if you're not careful about sun protection. So, long-term maintenance requires an ongoing commitment to protecting your skin.

Frequently Asked Questions

Is the linea nigra of pregnancy related to melasma?

Will melasma resolve completely after pregnancy?

What is the treatment option of melasma during pregnancy?

Why is melasma difficult to treat?

Is melasma seasonal?

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Meningitis

Also known as Inflammation of meninges, Meningoencephalitis, Brain fever, Cerebrospinal fever, Cerebromeningitis, Epidemic meningitis and Leptomeningitis

Overview

Meningitis is the inflammation of the meninges, the covering of the brain and spinal cord. The most common symptoms of this disease include decreased consciousness, seizures, lethargy, confusion, high fever, rashes, rapid breathing, and stiffness in the neck.

Meningitis can be caused by bacteria, viruses, fungi, parasites or non-infectious causes like cancers, systemic lupus erythematosus (lupus), certain medications, head injury, and brain surgery. Poor vaccination, advanced age, chronic health problems, poor sanitation, and living in high endemic areas are the major risk factors of meningitis.

Meningitis is an emergency which requires immediate medical attention. Bacterial meningitis is treated by antibiotics and steroids, whereas viral meningitis is usually managed by supportive treatment. Timely management is necessary to avoid severe complications such as hearing loss, memory problems, speech problems, and sepsis.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Prevalence

Worldwide: 8.7 million cases (2015)

Mimicking Conditions

Stroke

Subdural hematoma

Subarachnoid hemorrhage

Metastatic brain disease

Brain abscess

Medication induced hypersensitivity meningitis

Lymphomatous meningitis

Necessary health tests/imaging

Complete blood count (CBC)

Coagulation studies

Electrolytes

Blood cultures

CSF examination

CT scan head

Treatment

Viral meningitis: Supportive treatment & Acyclovir

Bacterial meningitis: Cefotaxime, Vancomycin & Dexamethasone

Fungal meningitis: Amphotericin B (IV) & Flucytosine (orally)

Specialists to consult

Infectious disease specialist

Emergency physician

Neurologist

Neurosurgeon

Rheumatologist

See All

Causes of Meningitis

There are various causes of meningitis depending on the type of meningitis.

1. Bacterial meningitis

This type of meningitis is caused by bacteria like Streptococcus pneumoniae, Group B Streptococcus, Neisseria meningitides, Haemophilus influenzae, Listeria monocytogenes, and Escherichia coli. Mycobacterium tuberculosis, which generally causes tuberculosis or TB, is a less common cause of bacterial meningitis (called TB meningitis).

Bacteria can enter a person’s meninges in various ways as follows:

Via the bloodstream

Ear, throat or sinus infections

Defect in the dura mater (dense outer layer of meninges)

Skull fracture

Neurosurgical procedures

The spread of bacterial meningitis generally depends on the type of bacteria that causes it. Bacterial meningitis can spread from person to person and also via certain foods such as unpasteurized dairy or deli meats. A person can be a carrier for bacterial meningitis and pass it on to others without getting sick themselves.

Bacterial meningitis is a serious condition and requires medical attention right away. It can be life threatening or cause permanent disabilities, such as brain damage, hearing loss, and learning disabilities, in case the treatment is delayed.

2. Viral meningitis

Meningitis caused by a virus is called viral meningitis and it is the most common type. Non-polio enteroviruses are the most common cause of viral meningitis however, other viruses that cause this disease are mumps virus, herpes viruses (Epstein-barr virus, herpes simplex viruses, cytomegalovirus, and varicella-zoster virus), measles virus, influenza virus, arboviruses (west nile virus and zika virus), and lymphocytic choriomeningitis virus.

Most people get better on their own without treatment however infants and people with a weakened immune system are more likely to get a severe form of illness.

3. Fungal meningitis

It spreads from fungal infections at any other part of the body that goes and infects the brain and spinal cord. Some causes of fungal meningitis are Cryptococcus, Histoplasma, Blastomyces, Coccidioides, Candida, and Mucormycosis. It is most likely to affect immunocompromised individuals such as HIV patients, cancer patients or transplant recipients.

4. Parasitic meningitis

Various parasites can affect the brain or nervous system in many ways and cause meningitis. Overall, parasitic meningitis is much less common than viral and bacterial meningitis. Some parasites can cause a rare form of meningitis called eosinophilic meningitis, eosinophilic meningoencephalitis, or EM.

The three main parasites that can cause EM are Angiostrongylus cantonensis (neurologic angiostrongyliasis), Baylisascaris procyonis (baylisascariasis and neural larva migrans), and Gnathostoma spinigerum (neurognathostomiasis).

5. Amebic meningitis

Primary amebic meningoencephalitis (PAM) is caused by Naegleria fowleri and is a rare brain infection that is usually fatal. Naegleria fowleri is a free-living ameba (a single-celled living organism that is too small to be seen without a microscope).

Naegleria fowleri is found in soil and warm freshwater around the world. It grows best at higher temperatures up to 115°F (46°C) and can survive for short periods at higher temperatures.

6. Non-infectious meningitis

This type of meningitis is not caused due to pathogens that spread between people but due to reasons other than infections like cancers, systemic lupus erythematosus (lupus), certain medications, head injury, and brain surgery.

Symptoms Of Meningitis

Early symptoms of meningitis may mimic the flu-like (influenza) symptoms and may develop over several hours or over a few days. You may suspect a meningitis infection, if you see one or more of the following symptoms:

A high grade fever

Vomiting

Confusion

Rapid breathing

Decreased level of consciousness

Seizures

Muscle and joint pain

Pale & blotchy skin

Rashes

Cold hands and feet

Headache

Stiffness in the neck

Sleepiness & difficulty waking up

Soft bulging spot on the top of the head (in babies)

Risk Factors For Meningitis

You are at a higher risk of meningitis if:

You recently had surgery on your brain or spinal cord

You have a birth defect of your skull or spine

You have a chronic condition such as kidney failure, diabetes, adrenal insufficiency or cystic fibrosis

Advanced age

Poor vaccination

Immunosuppressed condition in case of AIDS, transplant recipients, and congenital immunodeficiencies

Living in poorly sanitized crowded conditions

A recent trip to endemic areas

Exposure to vectors such as ticks and mosquitoes

Excessive use of alcohol

Splenectomy (Removal of spleen)

Bacterial endocarditis

IV drug use

Sickle cell anemia

Also, different types of meningitis pose a higher risk to certain groups of people such as:

Newborns are most often affected by group B streptococcus meningitis

Adolescents are at greater risk for meningococcal meningitis

Adults with bacterial meningitis are most likely to have pneumococcal meningitis

Older adults (50 and older) and pregnant women are more susceptible to listeria meningitis

Did you know?

Fungal, parasitic, and non-infectious meningitis is not contagious but viral and bacterial meningitis are highly contagious. Viral and bacterial meningitis can be spread through sneezing, coughing, kissing, and sharing utensils, cutlery, or toothbrushes. The infection is usually spread by people who carry these viruses or bacteria in their nose or throat but are not sick themselves. Consult your doctor to know more about it.

Consult Now!

Diagnosis Of Meningitis

The clinical diagnosis of meningitis is based on the symptoms. Meningitis can be confirmed by one or more of the following diagnostic tests:

1. Blood tests

Initial blood tests in the case of meningitis suspicion should include:

Complete blood count (CBC)

Coagulation studies

Electrolytes

Blood cultures

2. Lumbar puncture

A lumbar puncture (spinal tap) is done to collect cerebrospinal fluid (CSF) and definitively diagnose meningitis. In people with meningitis, the CSF often shows a low sugar level along with an elevated white blood cell count and protein.

3. CSF analysis

CSF fluid should also be sent for gram staining, standard culture, and polymerase chain reaction (PCR). CSF analysis helps to pinpoint which bacteria caused meningitis. PCR testing is more advantageous than culture for the diagnosis of infection as this technique is more rapid and is able to detect a variety of strains of even non-viable bacteria and antibodies against certain viruses

4. Dilated fundus examination

Dilated fundus examination is a diagnostic procedure that employs the use of eye drops to dilate or enlarge the pupil of the eye to obtain a better view of the fundus of the eye. The fundus can be examined to look for signs of papilledema (swelling of the optic nerve, which connects the eye and brain), a surrogate marker for raised intracranial pressure. In an immunocompetent patient with no known history of recent head trauma, normal level of consciousness and no evidence of papilledema or focal neurological deficits, it is considered safe to perform lumbar puncture (LP) without prior neuroimaging.

5. Imaging tests

If your doctor advises, imaging tests such as CT scan head can be performed before a lumbar puncture to rule out any hemorrhage and raised intracranial pressure. The criteria for getting a CT scan include advanced age (greater than 60), focal neurologic deficits, immunodeficiency, new-onset seizures, altered mental status, and central nervous system disease in the past.

Celebs affected

Victoria Beckham

The English singer, fashion designer, and TV personality, Victoria Beckham was known to be down with viral meningitis in the year 2000.

Brad Pitt

In the year 2005, Hollywood actor Brad Pitt was diagnosed with a mild case of viral meningitis. He was advised to take rest at home for several days after being discharged from the hospital.

Prevention Of Meningitis

Some forms of viral and bacterial meningitis are contagious. The organisms can spread through the exchange of secretions like coughing, sneezing, kissing, or sharing utensils, toothbrush or cigarette. Sometimes, meningitis can spread to other people who have had close or prolonged contact with a patient with meningitis.

The following steps can be taken to prevent meningitis:

Regular and thorough hand washing especially before eating and after using the toilet, spending time in a crowded public place or petting animals helps to prevent the spread of infections.

Avoid sharing drinks, foods, straws, utensils, lip balms or toothbrushes with anyone else.

Maintain your immunity by getting enough rest, morning sunlight, regular exercise, eating a wholesome, balanced and healthy diet and following sleep hygiene tips.

Cover your mouth and nose while coughing or sneezing or sneeze into your elbow. Throw tissues into the dustbin after use and wash your hands.

Avoid smoking and excessive alcohol.

Pregnant ladies should reduce their risk of listeriosis by thoroughly cooking food and avoiding cheese made from unpasteurized milk.

Avoid contact with sick patients. If you have been in close contact with someone who has had a bacterial meningococcal infection, your doctor can prescribe you preventive antibiotics to decrease your chances of developing the disease.

Till date, there is no vaccine to prevent viral meningitis. However, vaccination against bacterial meningitis is available and helps in preventing meningitis. Some of them are as follows:

Haemophilus vaccine (HiB vaccine)

Pneumococcal conjugate vaccine

Pneumococcal polysaccharide vaccine

Meningococcal conjugate vaccine

Did you know?

Just like in kids, vaccination in adults can help prevent the risk of various diseases such as tetanus, pneumonia, influenza, hepatitis, typhoid, etc. In fact, as you become old, your immunity decreases which in turn makes you susceptible to various diseases. Here is everything about the types of adult vaccines, why you need adult vaccines, and when you should get them.

Click To Know More!

Specialist To Visit

If you suspect you have any symptoms of meningitis, you can consult these specialists:

Infectious disease specialist

Emergency physician

Neurologist

Neurosurgeon

Rheumatologist

Consult our specialist doctor to know more about it.

Consult Now!

Treatment Of Meningitis

A. Viral meningitis

Viral meningitis is managed by supportive treatment. Bed rest, plenty of fluids and electrolytes balance along with over-the-counter pain medications to help reduce fever and relieve body aches are the mainstay for treatment for viral meningitis. However, oral or intravenous acyclovir may be of benefit in patients with meningitis caused by herpes simplex virus-1 or 2 (HSV-1 or 2) and in cases of severe Epstein Barr Virus (EBV) or varicella zoster virus (VZV) infection. Patients with HIV meningitis are administered highly active antiretroviral therapy (HAART).

B. Bacterial meningitis

Bacterial meningitis on the other hand, is a serious condition and requires immediate treatment with antibiotics. Delay in the treatment can lead to severe complications and increased mortality. Following is the treatment for meningitis:

1. Antibiotics

If a patient comes with undifferentiated acute bacterial meningitis, broad-spectrum antibiotics are usually prescribed. Antibiotic therapy of seven days is usually enough to treat suspected cases of meningococcal meningitis.

The treatment for adults usually begins with the administration of the following antibiotics:

Cefotaxime

Ceftriaxone

Cefepime

Vancomycin

Ampicillin

For meningitis caused by N. meningitidis, third-generation cephalosporins & penicillin are usually given. Patients who cannot tolerate beta-lactam antibiotics, chloramphenicol (IV) is the treatment choice for meningococcal meningitis.

For confirmed cases of pseudomonas meningitis, treatment with ceftazidime or meropenem can be given. For anaerobic bacteria like bacteroides and fusobacterium, metronidazole may be added.

2. Corticosteroids

Patients suffering from meningitis due to S. pneumoniae and H. influenzae are given corticosteroids like dexamethasone usually 20-30 minutes before starting antibiotic therapy to reduce the inflammation associated with meningitis.

C. Fungal meningitis

The following medications are advised in management of fungal meningitis:

Amphotericin B (IV)

Flucytosine (orally)

D. Noninfectious meningitis

Non-infectious meningitis due to allergic reaction or autoimmune disease may be treated with corticosteroids.

Home-care For Meningitis

If you had meningitis in the past and have been discharged from the hospital, you need to keep in mind the following home care tips in mind:

Take adequate rest and do not indulge in high-functioning tasks to conserve energy

Create an aseptic environment by following simple home infection control procedures

Pay extra attention to your diet. Take foods that are healthy and safe

Avoid drinking alcohol and smoking

Do not go to high altitudes

Always be with someone at all times

Consult your doctor immediately in case you face any health discomfort

Do not skip or change your medications without consulting your doctor first

Complications Of Meningitis

With appropriate treatment, symptoms like headache and fever improve. However, if this condition is ignored, you may have a more severe infection and inflammation. Common complications of meningitis include the following:

Hearing problems (due to damage to the nerves)

Seizures or epilepsy

Hydrocephalus (a build-up of CSF in and around the brain)

Memory problems, changes in personality and behavior

Learning disorders

Speech problems

Weakness in one side of the body

Septicemia (if bacteria enters the bloodstream and cause blood poisoning)

Amputation of limbs, if the infection spreads to other parts of the body (including the bloodstream)

Parotitis, orchitis, oophoritis, pancreatitis may be seen, especially in cases of mumps meningitis

Alternative Therapies Of Meningitis

The following herbal remedies can be useful as an adjunct to treatment of bacterial infections such as meningitis:

Garlic (lahsun): Garlic is an easily available superfood that is effective in various infectious conditions including meningitis. Allicin present in garlic is effective against various bacteria and viruses and helps in their effective elimination. You can take cloves of garlic in a raw form for its maximum effect.

Astragalus: Flavonoids and saponins present in the astragalus plant can help in treating the ill effects of an infection. This is an extremely safe remedy that can be taken by kids as well.

Reishi mushrooms: These mushrooms are bright red in appearance and are useful in infectious diseases by boosting your immune system and reducing the inflammation caused by this disease.

Chlorella: Due to the high chlorophyll content present in this plant, it is known to improve cell production, blood purification, and quicker recovery from infectious agents.

Ginseng: Ginsenosides present in ginseng are useful in eliminating the infection from the body by acting directly on the membranes. You can consume ginseng directly or in tea for its maximum effect.

Hypericum: Hypericum or St. John’s wort contains hyperforin as the main active ingredient, which has the capacity to cross the blood-brain barrier and work against certain infectious agents causing the disease.

Living With Meningitis

Most people tend to recover quickly from meningitis with timely treatment. However, for some people, life after meningitis is tough as they struggle to perform everyday activities such as:

Some people complain of severe persistent headaches, fatigue, memory problems, changes in personality, and depression after meningitis. If these problems do not get better or you notice problems with your vision, consult your doctor as early as possible.

It is advised to take plenty of rest while recovering from the after-effects of meningitis and not indulge in activities that are exhausting.

Children and adolescents who are planning to return to their school or work should take it slow, even if they are having a good recovery. Look out for any after-effects and consult your doctor if any of them bothers you.

Frequently Asked Questions

How do people get meningitis?

What are the early signs of meningitis?

Can meningitis go away on its own?

What should I eat for meningitis?

How can I prevent meningitis?

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Menopause

Also known as Climateric

Overview

Menopause is a natural biological occurrence that happens between the age of 40-60 years. It marks the end of your menstrual cycle and is diagnosed after 12 months have passed without the occurrence of a menstrual period.

Menopause is neither a disease nor a disorder and is considered a natural process of aging. While some women may experience zero symptoms and face no issues while transitioning into menopause, some might go through various symptoms like trouble sleeping, hot flashes, night sweats, irritability, mood swings, hair loss, joint pain, and weight gain.

The years leading up to menopause will include some gradual changes in the physiology and body of a woman. However, it is also common to feel relieved about not having to worry about periods.

Key Facts

Usually seen in

Adults between 40 to 50 years of age

Gender affected

Women

Body part(s) involved

Uterus

Vagina

Bone

Heart

Bladder

Mimicking Conditions

Hypothyroidism

Depression

Preeclampsia

Congestive heart failure

Necessary health tests/imaging

Physical exam

Vaginal swab

Follicle-stimulating hormone (FSH) test

Thyroid-stimulating hormone (TSH) test

PicoAMH Elisa diagnostic test

Treatment

Hormonal therapy: Estrogen

Vaginal estrogen

Antidepressants: Paroxetine

Anti-seizure medications: Gabapentin

Clonidine

Vitamin D supplements

Novel therapies

Specialists to consult

General physician

Gynaecologist

Endocrinologist

Symptoms Of Menopause

Menopause can bring in different kinds of signs and symptoms. You may experience the following symptoms as you come closer to menopause such as:

Vaginal dryness

Mood changes

Sleep problems

Night sweats

Decrease in metabolism

Weight gain

Loss of breast fullness

Thinning of hair

Dry skin

Difficulty in concentrating

Increased irritability

Mild depression

Joint aches

Decreased libido or sex drive

Increased heart rate

Loss of bladder control

Urinary tract infections

Women who are transitioning to menopause (perimenopause) may also experience the following symptoms such as:

Irregular periods

Skipping periods

Periods that are heavier or lighter

Breast tenderness

Worsening of premenstrual syndrome (PMS)

Not all women experience these symptoms, whereas some may experience more than one. Women affected by urinary changes, racing heart, or new medical problems should consult a doctor to rule out other possibilities.

Here is a list of types of gynecologists you can consult for your gynaecological problems.

Know More!

Causes Of Menopause

Your reproductive cycle starts from puberty and ends near the age of 40-50. Various complex methods and hormones control the process. Hypothalamus is a brain structure near the pituitary gland that produces certain chemicals that release essential sex hormones called estrogen and progesterone.

These hormones stimulate the release of eggs from the ovary. If the egg fails to fertilise, the thickened lining of the uterus is shed through the vagina in the form of periods. As women age, their reproductive cycle starts to slow down and eventually stops.

When your body starts nearing menopause, the ovaries start producing less of a hormone called estrogen. This decline in the hormone leads to changes in the pattern of your menstrual cycle. It starts becoming irregular, or there might be changes in the flow of your period. With these hormonal changes, your body also undergoes some physical changes as it tries to adapt to the new level of hormones.

The symptoms that women experience during this transitory phase or menopause are part of their body’s attempt to adjust to these changes. For women undergoing natural menopause, the process occurs in three stages.

Perimenopause

This can start ten years before the onset of menopause. This is the time when your ovaries gradually begin producing less and less of the hormone estrogen. Women in their 40s generally experience menopause, but some may start experiencing it in their 30s.

The period of perimenopause lasts until menopause when ovaries completely stop producing eggs. Before that, the fluctuating level of hormones causes various symptoms in women. Women undergo different hormonal fluctuations during this transitory period, hence each woman experiences perimenopause in a different manner.

The increased levels of progesterone and estrogen during anovulatory cycles (absence of menstrual cycle) may lead to endometrial cancer or hyperplasia (thickening of the uterus lining), uterine polyps (growths attached to the inner wall of the uterus), and leiomyoma (also known as fibroids) in women of perimenopausal age.

Menopause

Menopause is the stage when your ovaries stop producing eggs and most of its hormone estrogen. It is diagnosed when a woman has gone 12 months without any occurrence of periods.

The conditions that can cause premature menopause include:

Primary ovarian insufficiency: Premature menopause may result from the failure of ovaries to produce normal levels of reproductive hormones , which can stem from genetic factors or autoimmune disease. For these women, hormone therapy is typically recommended until the natural age of menopause.

Induced menopause: This can happen, if ovaries are removed due to for medical reasons such as uterine cancer or endometriosis.

Cancer therapies like chemotherapy and radiation therapy can induce menopause if they cause damage to the ovaries. Symptoms such as hot flashes can be experienced during or shortly after the course of treatment. The halt to menstruation (and fertility) is not always permanent following chemotherapy, so birth control measures need to be taken. Radiation therapy only affects ovarian function, if radiation is directed at the ovaries. Radiation therapy to other parts of the body such as breast tissue or the head and neck does not premature menopause.

Postmenopause

After going through menopause, you will be in the post-menopause phase for the rest of your life. Since, the body has nearly stopped producing estrogen, postmenopausal women are at an increased risk of various health conditions such as heart diseases, osteoporosis (weakening of bones), and urinary tract infections.

Many women may also experience relief in the symptoms they were undergoing during the perimenopause phase. Hot flashes may ease after some time, but some females continue experiencing these symptoms for ten more years or longer. Every women’s risk and experience post menopause is different. It is essential to learn more about the potential risks and consult your doctor for the same.

Risk Factors For Menopause

It is natural for every woman to go through menopause. However, some women may experience premature menopause. This means that their menstrual cycle would stop earlier than the expected mean age. Premature menopause occurs when a woman is 40 and early menopause occurs at the age of 45.

You are at an increased risk of developing early menopause, if you:

Had surgery to remove the ovaries

Are a chronic smoker

Underwent surgery to remove the uterus (hysterectomy)

Have side effects of chemotherapy or radiation

Have a family history of early menopause

Have certain medical conditions such as rheumatoid arthritis, inflammatory bowel disease, epilepsy, thyroid disorders, HIV/AIDS or chromosomal abnormalities

Have certain infections such as mumps

Did you know?

Women are not the only ones who go through menopause during old age. Even men experience low levels of hormones as they age, a condition known as andropause or male menopause. Here’s more about the causes, symptoms and treatment of male menopause.

Read To Know!

Diagnosis Of Menopause

The tests that are essential for diagnosing menopause are:

1. Physical exam

Before visiting your doctor, you can try tracking your symptoms and noting them somewhere. You can also record their frequency and severity along with your last period and any irregularities in your cycle. Talk to your doctor about any medications or supplements that you might be taking.

Usually, the described symptoms are enough evidence for the diagnosis of menopause.

2. Vaginal swab

Your healthcare provider may direct you to take a vaginal swab. This will help them test your vaginal pH. The vaginal pH is around 4.5 during your reproductive years and can rise to a pH balance of 6 during menopause. Reduced estrogen during menopause affects a woman’s vaginal pH.

3. Follicle-stimulating hormone (FSH) test

Your doctor may order a blood test to check the levels of FSH along with estrogen. When women undergo menopause, their FSH levels tend to increase, and estrogen levels decrease.

FSH is responsible for stimulating the maturation of eggs and for producing estradiol, a form of estrogen. Estradiol has several functions, including regulating the menstrual cycle and protecting the female reproductive system. When a woman’s FSH levels have constantly been elevated to 30 mIU/mL or higher, and she hasn’t had periods for over 12 months, it is generally diagnosed as menopause.

However, a single FSH rest with elevated results does not necessarily indicate menopause. Multiple subsequent tests are needed to establish the diagnosis. Along with this, the FSH tests can detect signs of pituitary disorder since the anterior pituitary gland releases FSH.

4. Thyroid-stimulating hormone (TSH) test

Your doctor may order a TSH test since the symptoms of hypothyroidism often resemble those of menopause. Hypothyroidism is a medical condition in which the thyroid gland produces less than the average amount of thyroid. The TSH test also indicates how much T4 hormone is being made.

A high TSH level means that the thyroid gland is making excessive T4 because there isn’t enough T4 available in the body. This indicates hypothyroidism. The result of this test will help your doctor rule out the possibility of hypothyroidism.

5. PicoAMH Elisa diagnostic test

This recent test allows a diagnostician to evaluate if you have reached menopause or are likely to reach it. It measures the levels of anti-mullerian hormone (AMH) in the blood, a protein hormone released during pregnancy. The test alone is not enough for the diagnosis of menopause. It can be used along with bone mineral density tests and hormonal tests.

Along with this, your doctor may order some other tests such as a lipid profile and tests for liver and kidney functions. Women experience a change in their lipid profile during menopause that can help with the final diagnosis.

6. Inhibin A and inhibin B

The fall in inhibin A and inhibin B may also be useful for assessing reproductive ageing. Studies have shown that the disappearance of these hormones is an important indicator of the approaching menopause.

Celebs affected

Michelle Obama

Michelle Obama is an American attorney, author and wife of the former US president Barack Obama. She recently spoke about menopause on her podcast.

Oprah Winfrey

Oprah Winfrey is a famous talk show host and author. She has talked about her life after menopause and hopes to shed light on the issue.

Prevention Of Menopause

Menopause is a natural biological process of a woman’s body in response to age. There is no method of preventing menopause, and it should be accepted as a part of your body’s natural cycle. You can prevent the onset of early menopause by making lifestyle modifications such as:

Having balanced meals

Avoiding smoking

Exercising daily

Reducing weight

If you have a family history or a relevant medical history that can cause early menopause, talk to your doctor about the same.

Did you know?

Minimal and simple exercise regimens such as even a simple routine walk or jog may help to prevent weight gain and other lifestyle diseases in women post-menopause. Read to know more.

Click To Read!

Specialist To Visit

You should visit a doctor if you are experiencing symptoms such as racing heart, loss of urinary control, hot flashes, heart palpitations, and weakening of bones. It is advisable to visit your doctor once you start noticing the onset of menopause. This will help you manage your symptoms and prevent any complications related to menopause. You can consult the following doctors for a diagnosis:

General physician

Gynaecologist

Endocrinologist

Note: Always consult your doctor if you have bleeding from your vagina after menopause.

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Treatment Of Menopause

Menopause doesn't require any treatment. There are certain medications and therapies available to relieve and manage the signs and symptoms of menopause. Your doctor will also help you with treatment modalities to prevent the development of any chronic medical condition resulting from menopause.

1. Hormone therapy

Doctors recommend taking the estrogen hormone as it's an effective way to manage menopausal hot flashes. A hot flash is a sudden feeling of warmth over the upper body that is more intense over your face and neck. To relieve your symptoms, your doctor can provide you with a low dosage of estrogen for a limited time. The dosage will be decided based on your family history and personal medical history.

In some, cases your doctor may also prescribe you progestin along with estrogen. Definite benefits of hormone therapy include improvement in symptoms of menopause, increase in bone mineral density and decrease in fracture risk.

Long-term usage of hormones can increase the risk of endometrial cancer, pulmonary embolism, deep vein thrombosis, breast cancer, or gallbladder disease.

However, taking these medications for a limited time period has proven to be beneficial for women going through the symptoms of menopause. It is essential to talk to your doctor about your medical and family history, along with the risks and benefits of taking hormonal therapy.

2. Vaginal estrogen

It is common for women to experience increased vaginal dryness during perimenopause and postmenopause. To relieve that, estrogen hormone can be administered directly into the vagina. This is done through a vaginal cream, tablet or a ring. The vaginal estrogen modalities work by releasing low amounts of estrogen directly into the vagina that is absorbed by the vaginal walls. It helps in relieving vaginal dryness and manages discomfort associated with intercourse and urinary problems.

3. Antidepressants

Certain medications from the class of selective serotonin reuptake inhibitors (SSRIs) can relieve menopausal hot flashes. A low dose antidepressant is helpful for women looking for ways to manage their hot flashes. It is usually prescribed for women who cannot take estrogen due to allergy or other health reasons. Women who are suffering from mood disorders due to menopause are also prescribed low dosages of antidepressants.

Paroxetine is a selective serotonin reuptake inhibitor (SSRI) antidepressant which works by increasing the levels of serotonin, a chemical messenger in the brain. This improves mood and physical symptoms of depression and also relieves symptoms of panic and obsessive disorders.

4. Anti-seizure medications

Gabapentin is an anti-seizure drug that is used to treat seizures. It has also shown promising results in managing menopausal hot flashes in women who can't use estrogen therapy. It is also helpful for women who have hot flashes at night.

5. Clonidine

This drug is an adrenergic agonist and has been found to reduce the frequency of hot flashes significantly. It is widely used as a non-hormonal treatment for hot flashes in breast cancer patients too. Your doctor will observe the effectiveness of the drug for two to four weeks. If there is no significant reduction in hot flashes, then the drug usage will be reviewed.

6. Vitamin D supplements

The decline in estrogen level after menopause is known to affect bone density in women. Depending on your needs, you may need treatment to prevent or treat osteoporosis. There are several medications available that can improve osteoporosis and reduce the risk of fractures. Several women are also given Vitamin D supplements to strengthen bone density.

Home-care For Menopause

If you have started noticing signs and symptoms of menopause, note down your symptoms and record your menstrual cycle with its irregularities. Your doctor will be able to give you a diagnosis based on these observations.

If you have been experiencing hot flashes, talk to your doctor about getting medications to help you manage these symptoms. In the case of hormonal pills, make sure to take your medicines on time.

Do not take the medications for longer than the recommended time without the advice of your doctor. You can keep your pills in a marked case to ensure that you don't skip taking the medications regularly.

Here are a few simple tips to manage the symptoms of menopause naturally.

Click To Read!

Complications Of Menopause

The decline in estrogen hormone increases the risk for women developing various health complications. However, estrogen is solely not responsible for these diseases. Age and other factors also play a role in their development.

1. Heart diseases

The risk of developing heart conditions increases after menopause. Postmenopausal women are more likely to have a heart attack than men. The steep decline in estrogen levels post-menopause increases the risk of having irregular heartbeats (palpitations). If a woman suffers heart palpitations, it is pertinent to meet a doctor to decide the best course of action.

2. Osteoporosis

The decline in estrogen levels puts postmenopausal women at an increased risk of developing osteoporosis. Estrogen plays a vital role in supporting the production of new osteoblasts responsible for creating bone. After menopause, the osteoblasts are not able to get an ample amount of estrogen hormone. This eventually leads to the cells failing to regenerate new bone structures. Ultimately osteoclasts responsible for absorbing bone overpower the rate of bone regeneration leading to the weakening of bone. Osteoporosis can lead to an increased rate of fractures in the hips and spine. Having a fracture at an older age is a serious problem since the body recovers at a slower pace.

Here is more about postmenopausal osteoporosis and ways to deal with it.

Click To Know More!

3. Urinary problems

Urinary incontinence occurs when women experience an involuntary release of urine. It is common in aging and postmenopausal women. The reduced estrogen level causes the thinning of the lining of the urethra (the tube that joins the bladder to the body's exterior) and the vaginal wall. This can lead to urinary leakage and often occurs during sudden movements such as sneezing or laughing.

4. Sexual problems

Vaginal dryness from decreased moisture production and loss of elasticity can cause discomfort and slight bleeding during sexual intercourse. Also, decreased sensation may reduce your desire for sexual activity (libido). Water-based vaginal moisturisers and lubricants may help. If a vaginal lubricant isn't enough, many women benefit from the use of local vaginal estrogen treatment, available as a vaginal cream, tablet, or ring.

5. Weight gain

Several women experience weight gain after hitting menopause. This is also the result of aging, along with the effects of menopause. With increasing age, it's harder to maintain muscle mass, and the decreased muscle mass further reduces metabolism. This makes the process of weight gain easier than before. Women often end up gaining weight around the abdominal region after menopause. This increase in fat increases the risk of heart diseases.

6. Visual disturbances

Estrogen gives more elasticity to the corneas of the eyes. In menopause and perimenopause, when estrogen levels are reduced, the corneas do not get as much estrogen. Thereby, the corneas begin to stiffen which can affect how light travels into your eyes. This can also lead to blurred vision.

Dry eyes can also be experienced during menopause. Symptoms may include itchiness, a burning sensation, eye pain, certainly dryness, mucus discharge from the eye, and it may even feel like there’s a foreign body actually on your eyeball. Wearing contact lenses can also get uncomfortable.

7. Central nervous system problems

Alzheimer's disease is more common in women after menopause. It is possible that estrogen plays a role in protecting the brain from the damage caused by Alzheimer's.

Alternative Therapies For Menopause

1. Diet

Make sure to include a variety of fruits and vegetables in your diet. You should also increase the amount of fibre and whole grains in your food. Take calcium and Vitamin D supplements to meet your daily requirements.

2. Exercise regularly

With an increased risk of developing cardiac problems and gaining weight, it is essential to living an active lifestyle. After menopause, it is common for women's metabolism to slow down. This further increases the chances of gaining weight. To avoid that, you can try walking every day for at least an hour. Other than that, menopausal women can try doing Kegel exercises that focus on strengthening the pelvic floor. This can help reduce urinary incontinence.

3. Talk to a therapist

Talk to a therapist or a doctor about any mood changes or irritability you may experience after menopause. Several women display signs of depression, anxiety, and isolation after going through menopause. Try talking to your family members and loved ones about your increased feelings of anxiety or irritability. It is important to communicate your feelings to let people know your needs.

4. Practice relaxation techniques

Due to the increased risk of experiencing mood changes and becoming more irritable, it is vital to practice relaxation techniques that can help you manage stress. You can try indulging in light yoga or meditation. Yoga has proven health benefits that can help you manage weight and control stress levels.

Read more about ways to relax and unwind yourself.

Click Here!

5. Manage sleep issues

If you are experiencing sleep issues, opt for natural sleeping aids like drinking chamomile tea before sleep. If you still have problems sleeping, then do consult your doctor to know the cause and get it treated.

6. Natural supplements

Some natural supplements are said to manage menopause symptoms such as soy, Vitamin E, isoflavone, melatonin, and flax seeds.

7. Cognitive behaviour therapy (CBT)

It is a non-medical approach that can be helpful for a range of problems associated with menopause such as anxiety, stress, depression, hot flushes, night sweats, sleep issues and fatigue. CBT helps people to develop practical ways of managing problems and provides new coping mechanisms and useful strategies.

8. Hypnotherapy

Hypnotherapy has been shown to reduce the frequency and intensity of hot flashes along with helping with mild depression and anxiety. Hypnotherapy tools like focusing on cooling imagery and flash control dial have been found to be effective to control hot flashes and can help prevent them altogether.

Living With Menopause

Menopause is a natural cessation of a woman's fertile cycle. It brings a lot of physical and emotional changes to the body. Several women find it hard to adapt to these different changes and feel confused about the sudden changes in personality and physical appearance. But menopause can be managed by implementing certain lifestyle modifications and medications. It is important to be aware of the complications that arise after menopause and take timely action to prevent them.

1. Maintain a healthy weight

A decrease in the level of estrogen increases your rate of weight gain. It also leads to a decline in the basal metabolic rate. This leads to weight gain, especially around the abdominal region. To prevent this, it is important to stay physically active and eat healthily. You can restrict your calorie intake by 400 to 600 to compensate for your body burning fewer calories.

Losing weight is not an easy task. Get help from our weight loss products ranges to kick start your journey.

Tap To Buy!

2. Quit smoking and limit your alcohol intake

Quitting smoking is an essential step towards leading a healthy life after menopause. Smoking increases your risk of developing heart disease, stroke, and osteoporosis. It also increases the frequency of hot flashes after menopause.

3. Get enough sleep

Avoid drinking caffeinated drinks that can make it harder for you to fall asleep. Exercise during the day instead of the night to ensure proper sleep. If you experience hot flashes during sleep, talk to your doctor about finding ways to manage them.

4. Cool your hot flashes

Dress in cool layers and keep yourself hydrated. Drink a glass of cool water or shift to a cooler room. Try to pinpoint the triggers behind your hot flashes. These triggers may include beverages, caffeine, alcohol, or heat.

You can even check out our range of feminine hygiene and care products.

Browse Here!

Frequently Asked Questions

What is estrogen-progesterone therapy?

What causes postmenopausal bleeding?

Are there risks related to hormone therapy?

What kind of food can I have to improve my menopausal symptoms?

Can I get pregnant after menopause?

How do I know that my periods are changing?

Can menopause affect my sex life?

Do all women experience discomfort after menopause?

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Migraine

Also migraine headache

Overview

Migraine is a condition that causes intense, unprovoked pain, mostly on one or both sides of the head. Unlike a normal headache, it includes additional symptoms like nausea, vomiting, and sensitivity to light and sound. It is estimated that migraine affects around 12% of the global population (Burch RC, et al).

Migraine attacks can last for hours to days, and the pain can be serious enough to interfere with your daily life, such as your ability to work or study. Just about any movement or physical activity can worsen a migraine attack.

Women are more likely to have migraines as compared to men. The condition can begin in childhood or may not occur until early adulthood. Some people have more than one episode each week, while others have them only occasionally.

Medications can help prevent some migraines and make them less painful. Certain over-the-counter (OTC) pain-relief medications may be helpful for some headache types, but must not be overused. Moreover, medication overuse can make your attacks worse. The right medicines, combined with self-help remedies and lifestyle changes, can provide aid in managing migraine headaches.

Key Facts

Usually seen in

Adults between 30 to 40 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Brain

Blood vessels

Neurons

Mimicking Conditions

Tension-type headache

Cluster headache

Cerebral aneurysms

Chronic paroxysmal hemicrania

Dissection syndromes

Encephalitis

Subarachnoid/intracranial hemorrhage

Meningitis

Temporal/giant cell arteritis

Necessary health tests/imaging

CT Scan (Head) (To rule out other conditions)

MRI (To rule out other conditions)

Treatment

Nonsteroidal anti-inflammatory drugs (NSAIDs): Aspiri, Diclofenac & Ibuprofen

Triptans: Sumatriptan, Zolmitriptan & Naratriptan

Ergotns:Ergotamine & Caffeine+Ergotamine+Paracetamol+Prochlorperazine

Antiemetics:Metoclopramide & Prochlorperazine

CGRP antagonists: Erenumab & Fremanezumab

Lasmiditan

Beta blockers: Propanolol & Metoprolol

Antidepressants: Amitriptyline & Fluoxetine

Antiepileptics: Topiramate & Sodium valproate

Calcium channel blockers: Flunarizine & Verapamil

Specialists to consult

General Physician

Neurologist

Symptoms Of Migraine

The main symptom of a migraine is identified as an intense headache, more commonly on 1 side of the head. In some cases, the pain can occur on both sides of your head and may affect your face or neck. The pain is usually a moderate or severe throbbing sensation that gets worse when you move and prevents you from carrying out normal activities. Nausea and vomiting can frequently or infrequently accompany migraine headaches.

The symptoms of migraine differ from person to person. A migraine attack may last from hours to days and typically passes through four stages. These include:

Prodromal phase: Also known as the premonitory phase. In this stage, the symptoms tend to occur 24 to 48 hours before the onset of a headache. Some of the common symptoms seen in this stage include increased yawning, irritability, neck stiffness, craving for specific foods, and depression.

Aura phase: This is the phase in which the symptoms arise from the nervous system and often involve your vision. The symptoms may last anywhere between 5 minutes to a few hours. These include hallucinations, tunnel vision, temporary loss of vision, weakness in arms & legs, ringing in the ears, changes in speech and smell, taste, or touch.

NOTE: An aura is a group of sensory, motor, and speech symptoms that usually act like warning signals indicating that a migraine headache is about to begin.

Headache phase: It often begins as a dull pain that grows into throbbing pain which can start from one side of the head to the other. This phase can last for more than 3 days and may appear frequently.

Postdromal phase: It is also known as the recovery phase, which lasts up to a day after a headache. The symptoms include feeling tired, muscle pain/weakness, or lack of appetite.

Is it a migraine or a headache?

Migraine is more than just a headache. Here’s how to differentiate between a headache and migraine. The most common features that differentiate a migraine from a headache are POUND, where:

P means Pulsating pain

O means One-day duration of severe pain if left untreated

U means Unilateral (one-sided) pain

N means Nausea and vomiting

D means Disabling intensity

Causes Of Migraine

The precise cause of migraine is unknown, but it is believed to occur due to abnormal brain activity temporarily affecting nerve signals, chemicals, and blood vessels in the brain.

It's ambiguous as to what leads to this abnormal activity in the brain, but researchers speculate that your genes make you more likely to experience migraines as a result of a specific trigger. It is also reported that a higher level of the protein calcitonin gene-related peptide (CGRP) in blood causes inflammation and pain in the nervous system leading to migraine attacks.

Types Of Migraine

There are several types of migraine. These include:

1. Migraine without aura (common migraine)

There are no early symptoms. Pain is usually felt on one side of the head, often beginning around the eye and temple before spreading to the back of the head.

2. Migraine with aura (classical migraine)

About 20% of people experience early symptoms, called an aura, before a migraine episode, like vision changes, dizziness, confusion, feeling prickling skin, and weakness. Vision changes may include halos, sparkles or flashing lights, wavy lines, and even temporary loss of vision.

3. Status migrainosus

This is a severe and long-lasting migraine headache, also called an intractable migraine. These headaches affect less than 1% of people with migraine. However, they are intense and may stick around for longer than 72 hours.

4. Ophthalmoplegic migraine

This is a unique disorder characterized by recurrent attacks to a specific nerve in the brain (third cranial nerve) following severe migrainous headaches. The condition almost always begins in childhood and is believed to be rare in adults.

5. Retinal migraine

Retinal migraine events typically occur in one eye. Patients with retinal migraine frequently experience a negative visual phenomenon described as a graying or blackout of vision.

Can chocolates cause migraine?

Not really. There are many triggers of migraine which include foods too. Chocolate doesn’t cause migraine on its own but can aggravate migraine.

Read To Know More

Triggers For Migraine

Nearly everyone with a migraine headache has one or more triggers. These triggers can vary in each individual. For such cases, maintaining a diary may help see if you can identify a consistent trigger.

Some of the most common triggers for a migraine headache are:

1. General triggers

Changing weather (humidity and heat)

Lack of sleep or oversleeping

Fatigue

Hormonal changes in women (before or during periods)

Mental and emotional stress

Traveling

Going out in the sun

2. Dietary triggers

Missing a meal

Alcohol, especially red wine

Chocolate

Aged cheese

An increase or decrease in caffeine

Monosodium glutamate or MSG

3. Sensory triggers

Bright or flickering lights

Loud noises

Strong smells like perfume or paints

These triggers can be dealt by using simple tips such as having your meals at the same time every day, not stepping out in unfavorable weather conditions, avoiding certain foods, and sleeping well for at least 7-8 hours.

Risk Factors For Migraine

You can have migraine or get migraine attacks with or without the below-listed risk factors. But, the more risk factors you have, the greater your chances of having migraine headaches. These risk factors include:

1. Female sex

There is no doubt that women tend to be at a higher risk of suffering from migraine as compared to men. However, the exact cause for this is not yet known.

2. Family history

Migraines tend to run in families. A child who has one parent with migraine has a 50% chance of inheriting it to the next generation. In the same lines, if both parents have migraines, the chances may rise up to 75%. Research tells us that about 90% of migraines can be attributed to a family history of the disease.

3. Lifestyle factors

Several lifestyle factors such as stress, tiredness, smoking, not getting enough exercise or sleep, medication overuse, and caffeine overuse are known to increase the risk of migraine.

4. Health conditions

Some of the common health conditions that can up your risk of migraine headache include obesity and depression.

Female gender and family history are non-remedial risk factors, which means one doesn’t have control on them. However, one can definitely seek help for medical conditions and bring about changes in lifestyle to reduce their risk of having migraines.

Celebs affected

Suniel Shetty

Bollywood actor Suniel Shetty revealed in many interviews online that he suffered constant migraine attacks at some point but is coping well now with medicines.

Diagnosis Of Migraine

There's no specific test to diagnose migraines. To know if you have migraine, your doctor will identify a pattern of recurring headaches along with the associated symptoms. You may have to be patient with your doctor as he may take some time to confirm the final diagnosis.

Clinical history and examination

On your first visit, after analyzing your detailed medical history, your doctor may check your vision, coordination, reflexes, and sensations. These will enable him to rule out or confirm some other possible underlying causes of your symptoms or conditions causing headaches.

They may ask if your headaches are:

On 1 side of the head.

A pulsating pain.

Severe enough to prevent you from carrying out daily activities.

Made worse by physical activity or moving about.

Accompanied by feeling and being sick.

Accompanied by sensitivity to light and noise.

Note: If you have headaches which are suspicious, your doctor might ask you to get a CT or MRI of the brain to rule out other disorders which can cause headaches resembling migraines.

Prevention Of Migraine

One of the best ways of preventing migraine attacks is by avoiding the triggers. Some suggestions include:

Have your meals at the same time every day.

Track the triggers which start the migraine pain and try to avoid them.

If weather conditions don’t favor, try to stay at home and fix your schedule accordingly.

Sleep well for at least 7-8 hours with dim or no lights.

Avoid using gadgets before going to sleep.

Avoid bright lights and extreme temperatures.

Avoid loud music and noisy places.

Avoid chocolates, cheese, processed food, alcohol, and smoking.

Avoid stress as much as possible.

Specialist To Visit

You should get in touch with your doctor if you have frequent or severe migraine symptoms that cannot be managed with the occasional use of over-the-counter painkillers. Try not to use painkillers frequently as this could lead to medication-overuse headache and make it harder to treat your condition over time.

You should also contact your doctor to seek preventive treatment if:

You have migraine episodes more than 3 times a month, even if they can be controlled with medicine.

You have a migraine which interferes with your daily activities.

If you are experiencing headaches or any other symptoms of migraine, you can visit:

General Physician (Family Doctor)

Neurologist

Consult India's best doctors online from the comfort of your home.

Consult NOW

Treatment Of Migraine

There are many different medications used to treat and prevent migraines. However, natural treatments can also be used as alternatives or to supplement medical treatment.

The treatment for migraine is based on the severity of the migraine and the associated symptoms. Non-specific drugs such as analgesics and nonsteroidal anti-inflammatory drugs (NSAIDs) are the medicines of the first choice for mild or moderate migraine. Specific drugs such as ergot derivatives and triptans are also recommended to treat migraine in more severe cases depending upon the individual requirement. New class of drugs such as calcitonin gene-related protein (CGRP) antagonists and lasmitadin are given in case of acute attacks.

1. Nonsteroidal anti-inflammatory drugs (NSAIDs)

Non-steroidal anti-inflammatory drugs (NSAIDs) are the first choice of drugs for migraine. These medicines aid in relieving pain by inhibiting the synthesis of prostaglandins. Prostaglandins are compounds which are known to trigger an inflammatory response.

However, some patients may experience gastrointestinal side effects such as dyspepsia, abdominal burning or discomfort, and diarrhea. Some of the common examples of NSAIDs include:

Aspirin

Diclofenac

Ibuprofen

Naproxen

2. Triptans

This class of drugs are usually advised when other pain relievers such as NSAIDs fail to show any improvement in the symptoms or if the headache is severe. They work by constricting (narrowing) the blood vessels in the head, stopping transmission of pain signals to the brain, and blocking the release of chemicals that cause nausea and other migraine symptoms.

Some of the commonly prescribed drugs in this category include:

Sumatriptan

Zolmitriptan

Naratriptan

Rizatriptan

Eletriptan

Almotriptan

3. Ergots

This class of drugs acts as serotonin receptor antagonists. Just like triptans, they also work by constricting (narrowing) the blood vessels in the head, stopping transmission of pain signals to the brain, and blocking the release of chemicals that cause nausea and other migraine symptoms. They also inhibit the production of pro-inflammatory neuropeptide (chemical messenger) which is responsible for migraine pain.

As these medicines cause vasoconstriction, these are not advised in people with hypertension and heart disease. Examples include:

Ergotamine

Caffeine+Ergotamine+Paracetamol+Prochlorperazine

4. Antiemetics

If a migraine is associated with nausea or vomiting, then an antiemetic class of drug is prescribed for effective treatment. It is mostly prescribed in combination with an NSAID or triptan but can also be used as monotherapy.

Common examples of antiemetics include:

Metoclopramide

Prochlorperazine

Metoclopramide+Paracetamol

Patients admitted to an emergency room with severe migraine headaches associated with nausea and vomiting are advised to take sumatriptan or antiemetics/dopamine receptor blockers to manage the condition.

5. CGRP antagonists

This is a new class of drug used to treat and prevent migraine attack. The medication works by blocking the activity of the protein known as calcitonin gene-related peptide (CGRP). CGRP may cause pain and inflammation which may further worsen the migraine attacks. It is available in the form of an injection.

Examples include:

Erenumab

Fremanezumab

6. Lasmiditan

It is a newly approved drug for the treatment of acute migraine. Lasmiditan acts as a selective serotonin receptor without causing vasoconstriction (narrowing of the blood vessels), unlike triptans. Hence, this medicine can also be advised for people with cardiovascular risk factors, heart disease, and those who respond poorly to the current treatment of migraine. It is available in the form of a pill.

7. Prophylactic therapy

There are certain classes of medicines which are used to prevent future attacks of migraine. These drugs are given in cases where there is/are:

Frequent or long-lasting migraine headaches

Migraine attacks that cause significant disability or diminished quality of life despite appropriate acute treatment

Contraindication, failure or serious adverse effect with therapies used for acute attacks

Risk of medication-overuse headache

Menstrual migraine

These drug groups include:

Beta-blockers such as propanolol, metoprolol, and atenolol

Antidepressants such as amitriptyline and fluoxetine

Antiepileptics such as topiramate and sodium valproate

Calcium channel blockers such as flunarizine and verapamil

CGRP antagonists like erenumab and fremanezumab (in refractory cases)

NOTE: It is never advised to self-medicate as these medicines have a range of harmful side effects. Also, frequent use of painkillers to relieve migraine could lead to medication-overuse headache.

Home-care For Migraine

1. Watch what you eat

Foods that contain tyramine, a natural amino acid, may trigger your migraine headaches. Some of the foods containing tyramine are aged cheese, nuts, and chicken livers. Below is a list of some examples of foods rich in tyramine that can be consumed with caution or avoided.

Food groups: Meat, fish, poultry, & eggs

Use with caution: Sausage, bologna, meats with nitrates or nitrites added.

Avoid: Aged, dried, fermented, salted, smoked, or pickled products. Pepperoni, salami, and liverwurst. Non-fresh meat or liver and pickled herring.

Food groups: Dairy

Use with caution: Yogurt, buttermilk, sour cream

Avoid: Aged cheese: cheddar, Swiss, mozzarella

2. Build a healthy routine

Get at least eight hours of sleep daily.

Exercise regularly.

Avoid skipping meals and eat small frequent meals throughout the day.

Stay well hydrated. Drink 6-8 glasses of water daily.

Avoid stress.

Try muscle relaxation exercises like meditation or yoga.

Take your medications as advised by your doctor.

Identify your triggers and try to avoid them.

NOTE: Keep a headache diary to learn about what triggers your migraines and what treatment is most effective.

3. Other home-based solutions

You can try out some of the below options to relieve a migraine headache at home:

Take some time off: Do not let the fast-paced life take a toll on your life. Instead, make sure you take a break and relax right away when you feel being hit by a headache.

Try heat therapy: Place a hot compress such as a towel soaked in warm water on your forehead and relax in a room with dim or no lights.

Yoga: Yoga asanas that can help relieve the tension and ease headache include seated neck release, viparita karani, adho hastapadasana (standing forward bend), setu bandhasana (bridge pose), shishuasana (child pose), marjariasana (cat stretch), paschimottanasana (two-legged forward bend), adho mukha svanasana (downward facing dog pose), padmasana (lotus pose), shavasana (corpse pose), etc.

Massage using essential oils: Gently massage the area where the eyebrows meet and the temples, with the knuckles to improve circulation and treat headaches. Use exotic essential oils like peppermint oil, basil oil, and lavender oil.

Alternative Therapies Of Migraine

1. Ayurvedic Remedies

Ayurveda can play a crucial role in managing headaches and improving other symptoms of migraine. You can find all these natural ingredients in your kitchen to help you with migraine. These include:

1. Ginger: A well-known remedy for headaches, it reduces inflammation of the blood vessels of the head, thereby relieving headache. Smash ½ an inch of ginger and brew a cup of tea with it and see the effects. It also aids digestion and reduces the feeling of nausea that occurs during migraines.

2. Lemon: Rich in antioxidants, lemon juice soothes irritated sinuses that helps reduce headaches. Prepare a cup of tea with the juice of a lemon and honey and have it warm. One may also grind the skin of lemons and apply it on the temple for alleviating headaches.

3. Pepper: It will reduce inflammation and decongest the nose that will ultimately help you breathe freely and get rid of the headache. Try a hot bowl of soup with a dash of ground pepper.

4. Cinnamon: Cinnamon reduces the effect of inflammatory markers in blood vessels, thereby reducing the frequency, severity, and duration of pain attacks. Make a thick paste of cinnamon and water and apply to the forehead to get relief from headache.

Check out some of the common herbs whose benefits have been backed by science for migraine relief. Click here to know more!

2. Acupuncture

Acupuncture is a traditional Chinese medicine therapy that involves inserting thin needles into specific points on the body, known as acupoints, to ease pain. Although the exact action mechanism is not known, it is believed that this therapy reduces nerve activity to modulate pain response and transmission. Ear acupuncture, a type of acupuncture, is also known to ease migraine pain in people without aura attacks.

3. Neuromodulation techniques

In this, electrical stimulation is delivered to the targeted sites to alter nerve activity and relieve pain. Single pulse transcranial magnetic stimulation, a noninvasive neuromodulation technique, is the most widely used method to treat migraine pain.

Living With Migraine

Living with migraine is a duanting task as not many people realise how much pain you go through on a regular basis as you put a smiling face. Although it is understandable to feel angry and defeated, training yourself to look at things positively can help you to manage it better and improve your quality of life.

Moreover, people with migraines do not come out in the open due to the stigma. But one thing you must bear in mind is making simple changes in your routine life to lead a better and happy life. Here are a few tips that people living with migraine can follow to improve their condition and fight migraine attacks.

1. Always be positive

You may feel angry and helpless with migraine but that will not help and only add up to worsen the condition. So, do not let negative feelings harm you. Instead, train your brain to be happy and positive to improve your condition.

2. Learn about your condition

Suffering from migraine is not anyone’s fault, so instead of blaming yourself, it is wise to learn and educate yourself about the condition. However, do not search online about it but talk to your doctor about the condition, its medication, triggers, and ways you can help you or your closed ones to fight the condition.

3. Find the right doctor

Just like getting the right medicines is necessary to fight a condition, getting in touch with the right doctor is of utmost importance when it comes to dealing with migraine. Be it calling your doctor when you have sudden and severe migraine attacks or just asking him/her about medicines, your doctor can play a key role in treating your condition and preventing future attacks/complications.

4. Join a support group

Just the mere idea of sharing your thoughts and talking to someone who knows about migraine gives you relief. So joining a support group can be of great help as it helps you to connect with people suffering from migraines and share your concerns or queries with like-minded people. Joining online communities and participating in their workshops can help you to understand more about the real-life experiences and share your stories with them.

5. Indulge in self-care

Thinking about migraine day-in and day-out can be very taxing on your mental health as well. So instead of physically burdening yourself with added work at home or office to divert your mind or mentalling straining yourself, try out different activities to keep yourself occupied. These activities include listening to music in your free time, enjoying time with your pet/friends, taking a stroll in a park, or sharing workload with your partner when you are stressed. Making these simple tweaks to your everyday life can be of great respite.

It isn't justified to change your doctor frequently. No one can cure migraine but with meds these migraine bouts can be managed and frequent episodes can be converted to less frequent one.

Whatever is the trigger, you need to know about the types of headache and watch out for signs that indicate you should consult a doctor immediately.

To know more about the types and when to visit a doctor for a headache, read the article.

Click To Read

Migraine and comorbidities

1. Migraine and stress: The International Headache Society doesn’t classify stress migraine as one of the types, however, stress is a known trigger for migraine. So if you feel stress is the trigger for your headache, you can try relaxation techniques like deep breathing, meditation, or yoga to calm down.

2. Migraine and nausea: Nausea is one of the most common symptoms seen in almost half of the people suffering from migraine. Taking antiemetic drugs can help to deal with this symptom, but if you also experience vomiting along with a headache, then it is wise to consult a doctor and get it treated. You can even try home remedies such as ginger, lemon, cinnamon, etc to deal with it.

3. Menstruatal-related migraine: More than 50% of the women who suffer from migraine tend to experience menstrual-related migraine. As the name suggests, migraine can occur before, during, or after menstruation. This could be due to a sudden shift in the hormones during periods.

Frequently Asked Questions

Is migraine curable?

Can children get migraines?

Are migraine headaches hereditary?

How long do migraines last?

How does a migraine feel?

What foods make migraines worse?

Do migraines get worse with age?

What is the fastest way to get rid of a migraine?

At what age do migraines stop?

Why am I suddenly getting lots of migraines?

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Monkeypox

Overview

Monkeypox is a viral zoonotic disease, which means that the infection spreads from animals to humans. The infection is transmitted to humans through scratches or bites from infected rodents such as rats, mice, and squirrels, or by eating bush meat. Monkeypox is commonly found in Central and West Africa, but cases have been identified in other countries due to travel from regions where monkeypox is endemic.

Monkeypox was discovered in 1958, when two outbreaks of a pox-like disease occurred in groups of monkeys being used for research. As the disease was first discovered in monkeys, hence the name monkeypox. This disease is caused by the monkeypox virus, similar to but with a notably lower death rate. Monkeypox typically presents with fever and rash but the main symptom that distinguishes it from smallpox is swollen lymph nodes.

Transmission of the virus can happen from an infected animal to human or human to human but is limited to close household contacts or health-care workers not wearing personal protective equipment. Once the patient is diagnosed, he/she should be isolated in a separate room at home or an isolation room in the hospital with separate ventilation.

Monkeypox is usually a mild and self-limiting disease. Currently, there is no definite treatment approved for this infection. The treatment plan mainly involves supportive care to ease the patient’s symptoms. Most patients who have mild diseases recover without medical intervention.

Key Facts

Usually seen in

All age groups

Children between 5-9 years of age

Gender affected

Both men and women

Body part(s) involved

Skin

Mouth

Muscles

Lymph nodes

Prevalence

Worldwide: 257 confirmed cases (2022)

Mimicking Conditions

Smallpox

Chickenpox

Rickettsialpox

Scabies

Secondary syphilis

Yaws

Measles

Generalized vaccinia

Disseminated zoster

Bacterial skin infections

Drug-associated eruption

Eczema herpeticum

Disseminated herpes simplex

Chancroid

Hand foot mouth disease

Infectious mononucleosis

Molluscum contagiosum

Necessary health tests/imaging

Molecular analysis: Virus isolation & Electron microscopy

Blood analysis: Real-time polymerase chain reaction (PCR), Enzyme-linked immunosorbent assay (ELISA) & Immunofluorescent antibody assay

Urine analysis

Treatment

Supportive care: Paracetamol, Antiemetics & Antihistamines

Medical management: Antivirals, Tecovirimat, Brincidofovir & Cidofovir

See All

Symptoms Of Monkeypox

Monkeypox symptoms in humans are similar to smallpox but they are milder. The main symptom that differentiates it from smallpox is lymphadenopathy (enlargement or swelling of the lymph nodes). The incubation period (time taken for the symptoms to appear after being infected) for monkeypox is usually 6−13 days but can range from 5−21 days. The most common symptoms include:

Fever

Headache

Myalgia (muscle aches)

Backache

Lymphadenopathy

Chills

Malaise (tiredness)

Exhaustion

Sore throat

Dry cough

Dyspnea (shortness of breath)

Progression of the disease

Lesions appear on the tongue and mouth within 1 to 3 days after fever.

The patient generally develops a rash, often beginning on the face and then spreading to other parts of the body within 24 hours.

By the 4th to 5th day, the lesions become raised and filled with pus.

By the end of the 2nd week, they dry up and crust. The scabs usually remain for a week before they start to fall off.

This illness typically lasts for about 2-4 weeks and lesions progress through the following stages.

Note: The skin manifestation depends on vaccination status, age, nutritional status associated HIV status. Has all the news about monkeypox got you worried? There is no need to panic. Read on to get all your queries answered about monkeypox.

Click To Read!

Causes Of Monkeypox

Monkeypox is caused by the monkeypox virus that belongs to the Poxviridae family. It is generally acquired through rodents such as rats, mice, and squirrels (who are the carrier of the virus) in parts of West and Central Africa.

Any person can get monkeypox by the following ways:

Bite from an infected animal or touching its blood, body fluids, spots, blisters, or scabs.

Eating meat of an infected animal from Central or West Africa that has not been cooked thoroughly.

Touching the skin or fur of the infected animals.

Transmission

This infection can spread through direct physical contact with the infected blood, body fluids, skin lesions, blisters, or scabs from an infected animal. The monkeypox virus mainly causes animal-to-human transmission but in rare cases, human-to-human transmission is also possible when there is close contact or large respiratory droplets.

Animal-to-human transmission

This can happen through the following:

Coming in close contact with an infected animal.

Eating meat of an infected animal that is not cooked thoroughly.

A bite or scratch from animals like rats or squirrels infected by the virus.

Human-to-human transmission

This occurs through:

Close physical contact with a person infected by the monkeypox virus.

Touching clothes, bedding, or towels contaminated with the virus.

Saliva or respiratory droplets while coughing or sneezing.

The placenta from mother to fetus.

Mother to baby during and after childbirth.

Unprotected sex with an infected person.

Man to man sex.

Here are some common mistakes that men make while using a condom and how to use it the right way.

Tap To Read!

Risk Factors For Monkeypox

Anyone who has close physical contact with an infected animal or someone who has symptoms of monkeypox are at the highest risk of developing the infection. Other people, who are at a greater risk of developing serious symptoms from monkeypox include:

Newborns

Children

Immuno-deficient patients

Patients with a history of chronic illness

Healthcare workers

Laboratory professionals

Diagnosis Of Monkeypox

The investigation should consist of the following:

Examining the patients clinically using appropriate infection prevention and control (IPC) measures.

Questioning the patient about possible sources of infection and the presence of similar disease or symptoms in the patient’s community and contacts.

Collecting and dispatching the specimens safely for laboratory examination of monkeypox.

If monkeypox is suspected, health-care workers should collect an appropriate sample and have it transported safely to a laboratory with appropriate capability. This is because confirmation of monkeypox depends on the type and quality of the specimen and the type of laboratory test.

Samples are usually collected from a person showing symptoms, especially a traveler from a region where monkeypox is endemic, having an outbreak or there is community (person to person) spread.

Asymptomatic travelers are kept under observation for 21 days and samples are collected once signs and symptoms appear.

The various clinical samples that can be collected to make the diagnosis based on the different stages are:

1. During rash phase

Nasopharyngeal and oropharyngeal swabs or lesions from the roof, base scraping, fluid, and crust or scab. Collection of sample from lesion should be done from multiple sites

Blood in specialized tubes like EDTA and SSGT

Urine in sterile container

2. During the recovery phase

Blood in EDTA/SSGT tube

Urine in a sterile container

For the confirmation of monkeypox on the suspected clinical specimens (blood/lesion/swabs/urine):

PCR for orthopoxvirus genus (cowpox, buffalopox, camelpox, and monkeypox) will be done.

If specimen will show positivity for the Orthopoxvirus, it would be further confirmed by monkeypox specific conventional PCR or real time PCR for monkeypox DNA.

Additionally, virus isolation and the next generation sequencing of clinical samples (miniseq and nextseq) will be used for characterization of the positive clinical specimens.

Get your lab tests done with us, where patient comfort and safety are the utmost priority.

Book Now!

Prevention Of Monkeypox

Monkeypox prevention depends on decreasing human contact with infected animals and limiting person-to-person spread. Monkeypox can be prevented by following these measures:

Avoid contact with infected animals, especially sick or dead ones.

Cook all foods that contain animal meat or parts thoroughly.

Avoid any kind of contact with bedding and other materials contaminated with the virus.

Maintain hygiene by washing your hands with soap and water or alcohol hand rub after coming into contact with an infected animal or person or handling their products.

Avoid close contact with an infected person.

Use personal protective equipment (PPE) when caring for an infected person.

Get vaccinated.

Humans have a close connection with microorganisms. Viruses are tiny microorganisms that range in size from about 20 to 400 nanometers in diameter. Read how viruses are transmitted and ways to prevent them.

Tap Here!

Vaccination

There is a vaccine recently approved for monkeypox which is not yet widely available. Vaccines used during the smallpox eradication program can be used for protection against this disease. However, post 1980, when WHO declared that smallpox was eradicated globally, no vaccine has been manufactured in India.

Smallpox vaccines can provide protection against monkeypox. Certain countries have timely vaccination of close contacts as post-exposure prophylaxis or for certain groups of health care workers for pre-exposure vaccination.

JYNNEOS TM also known as Immune or Imvanex is a live attenuated virus vaccine that has been approved by the U.S. Food and Drug Administration (FDA) for the prevention of monkeypox.

Specialist To Visit

If any person develops a rash, accompanied by fever, discomfort or illness, along with swollen lymph nodes, they should contact their doctor and get tested for monkeypox. Doctors that can help treat the symptoms and diagnose monkeypox are:

General physician

Infectious disease specialist

Internal medicine specialist

Contact your doctor immediately if you notice the following:

Chest pain

Seizures

Pain in the eye or blurring of vision

Shortness of breath

Difficulty in breathing

Altered consciousness

Decreased urine output

Loss of appetite

Extreme tiredness

If you are facing any such issues, seek advice from our professionals.

Consult Now!

Treatment Of Monkeypox

Currently, there are no specific clinically proven treatments for monkeypox infection. As with most viral illnesses, the treatment is supportive management of symptoms. Monkeypox is usually a mild and self-limiting disease. Most patients who have mild diseases recover without medical intervention. The treatment and management mainly involve the following:

Supportive care

According to the MOHFW guidelines, the supportive treatment of monkeypox includes the following:

1. Skin rash

Not touching or scratching the lesions as it can worsen the rash and increase the risk of infections.

Cleaning the area with an antiseptic ointment such as mupirocin acid or fucidin and covering the lesion with light dressing.

Taking antibiotics in case of secondary infection.

2. Ulcers

Sitz bath for genital ulcers.

Warm salt gargling and use of topical oral anti-inflammatory gel for mouth ulcers.

Most mouth ulcers heal on their own or with over-the-counter (OTC) products within one to two weeks. Ulcers cannot be prevented, but certain lifestyle modifications may help relieve symptoms and reduce their frequency.

Read in detail about the causes, symptoms, treatment, and prevention of mouth ulcers.

3. Dehydration

Taking adequate fluids like juices and ORS.

Eating a balanced, nutrient-rich diet.

In severe cases, intravenous drip may be required.

Here’s more on what to do if you feel dehydrated. Click to know!

4. Other symptoms

Paracetamol for fever

Antiemetics for nausea and vomiting

Antihistamines for itching

Medical management

However, there are various antivirals used to treat monkeypox in other countries. Certain cases of monkeypox are treated with the following:

Antivirals: Several antivirals may be useful for the treatment of monkeypox. These drugs were approved for the treatment of smallpox based on animal models but are expected to have the same activity against human monkeypox as well.

Tecovirimat: It is a potent inhibitor of an orthopoxvirus protein. The recommended dose depends upon the patient's weight.

Brincidofovir: This drug was approved in June 2021 for use in the United States for the treatment of smallpox and can be used for monkeypox as well.

Cidofovir: This drug has an in-vitro activity against monkeypox and has been shown to be effective against lethal challenges in animal models.

Home-care For Monkeypox

The symptoms of monkeypox are mild and may not require hospitalization in most cases. Home-care approach for these patients involve:

Encouraging the infected person to self-isolate and cover any skin lesions.

Wearing a medical mask, when in close contact with an infected person.

Making the patient wear a mask especially if they are coughing or have lesions in their mouth.

Using disposable gloves if you have any direct contact with lesions to avoid skin-to- skin contact.

Wearing a mask even when handling any clothes or bedding of the person infected with the virus.

Washing the infected person’s clothes, towels, and bedsheets and eating utensils separately with warm water and detergent.

Not allowing pets or any other domestic animals near the patient’s room.

Cleaning and disinfecting contaminated surfaces, if any, daily.

Disposing of the contaminated waste (e.g., dressings) appropriately.

Not sharing dishes or any other eating utensils with family members.

Masks have become an integral part of our fight against the novel coronavirus, especially in places where social distancing may not get followed by easing. With cases of monkeypox increasing around the world it is even more important to wear the masks the right way.

Click To Read!

Complications Of Monkeypox

People with monkeypox are infectious to others from the onset of fever until all lesions scab over. Monkeypox complications include:

Dehydration including:

Vomiting

Diarrhea

Decreased food intake due to painful oral lesion

Fluid loss from widespread skin disruptions

Pneumonia

Sepsis

Bacterial superinfection of skin

Permanent skin scarring

Hyperpigmentation or hypopigmentation

Permanent scarring of the cornea (vision loss)

Encephalitis (inflammation of the brain)

Shortness of breath, chest pain, difficulty in breathing

Altered consciousness

Seizures

Decrease in urine output

Lethargy

Death

Living With Monkeypox

With the increase in cases, the social stigma around monkeypox has also increased. Social stigma is generally a negative association between a person or group of people who share certain characteristics of a specific disease. It may mean that people are labeled, stereotyped, discriminated against, treated separately, and/or experience loss of status because of a perceived link with a disease, especially during an outbreak. This can negatively affect the patients, as well as their caregivers, family, and friends.

The current increase in monkeypox cases and media coverage can also lead to stress and anxiety in patients and their family members. Here are some tips to deal with the psychological effects of the same:

Do not believe the experiences of others all the time.

Talk about the mental health issues with healthcare professionals.

Do not hide away or isolate from the world.

Reach out to family, friends, coaches or religious leaders for the support.

Get help from a therapist or psychologist, if needed.

Join a mental health support group, if required.

Understand it’s not personal.

Monkeypox is causing similar uncertainty amongst the people as COVID-19 had caused during its inception. Read more about living with COVID-19.

Click Now!

Frequently Asked Questions

Which countries are at a higher risk of monkeypox?

Is monkeypox a common disease?

What is the duration of illness for monkeypox?

Does monkeypox affect children?

Is monkeypox fatal?

Are there any guidelines for international travelers?

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Motion sickness

Also known as kinetosis, Air sickness, Car sickness, Riders' vertigo, Sea sickness, Queasiness and Travel sickness

Overview

It is a condition in which an individual experiences nausea, dizziness, vomiting, and other symptoms when they are exposed to motion or movement.

It is believed to occur when there is a mismatch between the information received by the brain from the inner ear balance mechanism and what the eyes see.

Any mode of transportation, whether on land, in the air, or on the water, can cause motion sickness. It can also be caused by amusement rides and playground equipment.

Anyone can get motion sickness; however, some people have a higher threshold than others. Travel sickness is known to commonly affect children aged 2 to 12 years, pregnant women, and people suffering from migraine.

It is critical to get plenty of rest the night before traveling and to avoid alcohol. If you are prone to motion sickness, you should avoid dehydration and anxiety. It is recommended that you keep a home remedy handy while traveling. Medications can also help in managing the symptoms.

Key Facts

Usually seen in

Children between 2 and 12 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Central nervous system (CNS)

Prevalence

Worldwide: 65% (2019)

Mimicking Conditions

Vestibulopathy

Cerebrovascular Event

Necessary health tests/imaging

Medical history

Physical examination

Treatment

Anticholinergic: Scopolamine

Antihistamine: Diphenhydramine, cyclizine, Meclizine, Cinnarizine , Promethazine

Sympathomimetic: Dextroamphetamine

Behavioral Management: Biofeedback training and relaxation, cognitive behavioral therapy, breathing techniques

See All

Symptoms Of Motion Sickness

The most common signs and symptoms of motion sickness include:

Nausea and vomiting

Cold sweats

Pale appearance

Headache

Drowsiness

Yawning

Loss of appetite

Increased salivation

Lack of interest, and enthusiasm

Increased sensitivity to odors

General discomfort

In Children:

Before age 6, the main symptom is dizziness and the need to lie down.

After age 12, the main symptom is nausea (feeling sick to the stomach).

Have you been vomiting quite frequently?

Know what can cause vomiting and when to visit a doctor.

Enlighten Yourself

Causes Of Motion Sickness

During motion, one part of the sensing system, such as the eyes and sensory nerves, detect movement, whereas the other parts, such as the inner ear, do not. Thus, the brain receives conflicting signals, which results in motion sickness.

The brain may recognise such a situation as the effect of a poison, and vomiting may occur as a natural reaction to get rid of the poison. The brain is not able to function properly as a result of the mixed signals, causing symptoms like dizziness, headache, and nausea.

Risk Factors For Motion Sickness

The following are the most common risk factors that increase your chances of getting motion sickness:

1. Age

Children aged 2 to 12 years are particularly vulnerable, but infants and toddlers are usually immune. There is a subsequent decline during teen years due to habituation. Adults over the age of 50 are less prone to motion sickness.

2. Sex

Women are more prone to motion sickness, particularly when pregnant, menstruating, or taking hormone supplements.

3. Genetic factors

People who have a first-degree relative (for example, a parent or sibling) who is highly susceptible to motion sickness are more likely than the general public to get motion sickness themselves.

4. Certain medications

Certain prescription medications, such as antibiotics, NSAIDs (ibuprofen or naproxen), birth control pills can increase the chances of experiencing motion sickness while traveling, or worsen the condition.

5. Hormones

The use of hormonal contraception, pregnancy, and the menstrual cycle all increase the susceptibility to motion sickness due to hormonal fluctuations.

6. Medical conditions

Patients suffering from vertigo, an inner ear disorder, Parkinson’s disease, Meniere’s disease, and migraine headaches are more prone to motion sickness, especially during a migraine attack.

Struggling with migraine?

Watch our expert, a leading neurologist decode it for you.

Diagnosis Of Motion Sickness

It is usually based on the patient’s complaint of the relevant symptoms during travel. The doctor will take the history related to traveling and symptoms of motion sickness.

The doctor will look for any inner ear problems that may be exacerbating the symptoms of motion sickness.

Celebs affected

Tia Mowry

Tia Mowry is an American actress, who has also experienced motion sickness. In one of her interviews she said, “I actually wear these nausea bands—they're like motion sickness bands that people wear on, like, cruise ships and stuff,—and they have been my best friends. They're part of my wardrobe now."

Prevention Of Motion Sickness

Gradually increasing your exposure to motion (habituation training) can help you become accustomed to traveling while also reducing the severity and frequency of motion sickness.

Here are a few common preventive measures that may be useful:

Being aware of the triggers that aggravate the symptoms.

Closing your eyes, sleeping, or staring at the horizon while traveling.

Adding distractions such as breathing control, music, or aromatherapy scents such as mint or lavender. Flavored lozenges may also be beneficial.

Positioning yourself optimally to reduce motion or motion perception.

Lightly pressing your inner arm about 6 to 7 cm away from your wrist. You can also use a wristband for this purpose.

Avoiding overeating during travel.

Exposing oneself gradually to continuous or repeated motion sickness triggers.

Here are a few specific preventive measures to prevent motion sickness in a car, plane or boat:

Prevention of car motion sickness

Sit in the front seat of a car.

Rest your head against the seat back.

Turn the air vents in the direction of your face.

Avoid foods that make you feel unusually full or have strong odors.

Do not read.

Do not smoke.

Prevention of motion sickness on a plane

Try to avoid big, greasy meals and alcohol the night before air travel.

Eat light meals or snacks that are low in calories 24 hours before air travel.

Try choosing a seat towards the front of the aircraft or in a seat over the wing.

Prevention of motion sickness on a boat

Ask for a cabin on the upper deck or towards the front of the ship.

When on deck, keep your eyes fixed on the horizon or land.

Prevention of motion sickness in children

Before the trip, choose bland foods over spicy foods. This alleviates hunger pangs, which appear to aggravate the symptoms.

Try to focus the child’s attention away from the queasy feeling. Listen to the radio, sing, or converse.

Allow your child to look at things outside the car rather than at books or games.

A cool cloth on the forehead can also help to alleviate symptoms.

Travel during the night if possible.

If your child begins to experience motion sickness symptoms, you may need to make frequent short stops.

Prevention of motion sickness during pregnancy

Eat small, frequent meals. Going too long without eating during pregnancy can cause nausea or make it worse.

Avoid greasy, high-fat foods.

Drinking peppermint, spearmint and chamomile teas may help.

Eat plenty of carbohydrate-rich foods such as cereal, fruit, bread and rice. They are easy to digest and provide energy.

Limit your consumption of coffee. It stimulates acid secretion, which can make the nausea worse.

Wear sea sickness wristbands.

Did you know?

When you overeat, your body tries to deal with the extra food by triggering nausea. In severe cases, the body may respond to this trigger by forcibly emptying the stomach through vomiting. Hence, it is important to keep a tab on what and how much you eat. Here are a few simple ways to control overeating.

Click To Know

Doctor To Visit

Nausea can be caused due to several reasons. It is essential to see a doctor in case of the following symptoms:

Chronic, persistent nausea or vomiting.

Motion sickness symptoms when you’re not involved in a moving activity.

The symptoms of motion sickness last for more than 8 hours.

Symptoms of dehydration.

Your child has motion sickness symptoms even when she is not participating in a movement activity, especially if she also has a headache, difficulty hearing, seeing, walking, or talking.

The doctors you need to visit are:

General Physician

Paediatrician (in case of children)

Gastroenterologist

A gastroenterologist is a doctor who treats diseases of the esophagus, stomach, small intestine, colon and rectum, pancreas, and gallbladder.

If you or your child have persistent nausea or experience prolonged motion sickness, do not delay and get medical advice from our world-class doctors.

Consult Now

Treatment Of Motion sickness

Treatment for motion sickness comprises removing the patient from the factor that is causing motion sickness. The symptoms of motion sickness usually subside once you stop traveling.

In the case of severe motion sickness, treatment may include:

A. Medications

Medications can be subdivided into categories: anticholinergic, antihistamine and sympathomimetic.

1. Anticholinergics:

Scopolamine- Scopolamine patch can be placed behind the ear at least 4 hours before traveling. A single scopolamine patch will work for 3 days.

2. Antihistamines:

Diphenhydramine

Cyclizine

Meclizine

Cinnarizine

Promethazine

3. Sympathomimetic

Dextroamphetamine

4. Administration of I.V. fluids

In severe cases of vomiting and dehydration, administration of I.V. fluids might be required.

Special considerations

Medications for pregnant women

Medications used for morning sickness are felt to be safe for use in motion sickness. Some examples include:

Meclizine

Dimenhydrinate

These are category B medications (No risk in animal studies. There are no adequate studies in humans, but animal studies do not demonstrate a risk to the fetus).

Note: Scopolamine and promethazine are category C medications (Risk cannot be ruled out. There are no satisfactory studies in pregnant women, but animal studies demonstrate a risk to the fetus. Potential benefits of the drug may outweigh the risks in pregnancy).

Medication of children (2–12 years of age): These can be given 1 hour before travel and every 6 hours during the trip. Some examples include:

Dimenhydrinate

Diphenhydramine

Note: Scopolamine can cause dangerous adverse effects in children and should not be used.

B. Behavioral Management

1. Biofeedback Training and Relaxation

Biofeedback training is a noninvasive therapy that can teach you how to control body functions such as your heart rate. Combining biofeedback with gradual muscle relaxation may control nausea in a more effective way.

2. Cognitive Behavioral Therapy

It may be helpful in reducing the anxiety that some people with motion sickness experience.

3. Breathing Techniques

Slowing down your breath rate has been shown to reduce motion sickness. Deep breathing may also be especially beneficial if you are anxious about getting motion sick, which makes you feel even more nauseous.

Home care For Motion sickness

The first and foremost step is to keep yourself hydrated. There are a few herbs that are sometimes used for nausea and may provide some relief for motion sickness

Ginger (Adrak): Ginger is a popular herb because of its many health benefits, especially as an antiemetic. It is a common treatment for motion sickness, and some studies suggest it may also help with nausea and vomiting.

It is often taken in the form of lozenges, tea, capsules, tablets, crystallized root, candies, or ginger ale

Peppermint oil: It effectively diminishes the symptoms of motion sickness and queasiness. For relief from motion sickness or general nausea, simply apply a small amount of peppermint oil to your abdomen, dab a drop on your wrists, or inhale its fragrance. However, several drugs can interact with peppermint. Make sure to consult your doctor before using it.

Chamomile: Chamomile tea is frequently used to alleviate or prevent nausea, vomiting, and motion sickness.

Feeling nauseated?

Try these 6 foods to get instant relief.

Read More Now

Complications Of Motion Sickness

Vomiting due to motion sickness can cause excessive loss of fluids from the body and may lead to dehydration, electrolyte imbalance, low blood pressure, rapid heart rate and even passing out.

Malnutrition and weight loss are other complications seen in patients with chronic nausea, as they often avoid consuming full meals out of fear.

Motion sickness can cause anxiety and stress, leading to avoidance of activities and limiting experiences. It can disrupt daily life, restrict participation in motion-related activities, and increase the risk of accidents.

Severe cases may have psychological consequences, including frustration, embarrassment, and the development of phobias related to motion or travel.

Alternative Therapies For Motion Sickness

Alternative therapies have shown some good results in the management of motion sickness. However, it is always advised to consult your healthcare provider before starting any of the following alternative therapies:

1. Acupressure

Acupressure aims to stimulate specific points on the body by applying pressure. Applying pressure to the acupressure point known as "pericardium 6," or "P6," can make you feel better. The point is situated between the two tendons on the inside side of the forearm, about two inches (or three finger widths) above the wrist crease.

2. Aromatherapy therapy

During your travels, you can incorporate aromatherapy by inhaling the scent through a tissue or, or applying diluted essential oil to specific areas like temples, wrists, and neck. Another option is to use aromatherapy jewelry for a soothing experience throughout your journey.

Before diffusing essential oils, check with your doctor if you have asthma or another respiratory disease.

Buy essential oil products online to get rid of the unwelcoming feeling of nausea and vomiting. Fill your cart now.

Tap Here

3. Motion sickness glasses

Anti-motion sickness glasses are a novel approach to a common issue. Four circular rims frame the eyeglasses, two in front and one on each side. It aids in matching the sensory input from your eyes and ears. The liquid in your rims moves as your vehicle rises, falls, or turns. Its purpose is to create a false horizon in your field of vision.

Did you know?

Acupressure bands are also available commercially to help prevent motion sickness. Studies suggest these bands may help delay the onset of symptoms. To know our wide range of acupressure products

Click Here

Living With Motion sickness

Almost everyone experiences motion sickness at some point in their lives. You may vomit due to the queasy feeling and nausea. You can't always avoid the movement that's making you sick, especially when traveling.

However, nausea and vomiting are distressing symptoms that may significantly affect the overall quality of life and greatly influence an individual’s overall mood and social activities.

Prevention is more effective than treatment for motion sickness, so identifying and/or avoiding triggers is critical. Here are some tips for dealing with stress more effectively.

Know the triggers that are causing motion sickness and work on it.

Accustom yourself to motion sickness by beginning with small movements that cause dizziness or nausea and gradually increasing each day. It is a long-term approach that provides the most reliable antidotes to motion sickness.

Don't be afraid to seek professional medical assistance.

Frequently Asked Questions

Will motion sickness pills help with vertigo?

Are motion sickness patches safe?

Can motion sickness develop at any age?

Can new prescription glasses cause motion sickness?

Can reading in the car cause car sickness?

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Benign prostatic hyperplasia

Also known as Benign prostatic enlargement

Overview

Benign prostatic hyperplasia (BPH) is a medical condition that commonly occurs in older men. It is a benign (non-cancerous) condition in which the prostate (a walnut-sized gland) enlarges in size. The prostate gland surrounds the urethra, a tube that carries urine and semen outside of the body. When the prostate gland enlarges, it can make the passage of urine and semen through the urethra a difficult process. This causes symptoms such as blocking urine outflow, frequent urge to urinate, difficulty in starting urination, dribbling at the end of urine flow, urinary tract infection etc.

In India, benign prostatic hyperplasia is a common elderly problem with an incidence rate of 92.97% and 93.3%. AUA guidelines suggested that BPH incidence worldwide will increase, and by the age of 60 years, more than 50% of men would have some evidence of the disease.

There are several treatment options available for benign prostate hyperplasia. If you have been diagnosed with the condition, you might be prescribed medications such as finasteride and dutasteride. These medications have proven to be effective in treating BPH. Depending on your condition, your doctor may also advise different types of surgeries that can be used to remove the prostate tissue that is blocking the urinary flow.

Key Facts

Usually seen in

Adults above 40 years of age

Gender affected

Men

Body part(s) involved

Prostate gland

Bladder

Kidney

Mimicking Conditions

Prostate cancer

Bladder stones

Bladder trauma

Overactive bladder

Prostatitis

Necessary health tests/imaging

Digital rectal exam

Ultrasound KUB

Intravenous pyelogram (IVP)

Uroflowmetry

Cystoscopy

Prostate-specific antigen test

Treatment

Alpha-blockers: Prazosin, Terazosin & Tamsulosin

5-alpha reductase inhibitors: Finasteride & Dutasteride

Tadalafil

Transurethral resection of the prostate (TURP)

Transurethral incision of the prostate (TUIP)

Other therapies: Transurethral microwave thermotherapy, Ablative laser therapy, Enucleation procedure & Prostatic urethral lift

Specialists to consult

Urologist

General surgeon

General physician

Symptoms Of Benign Prostatic Hyperplasia

Benign prostatic hyperplasia can cause several symptoms that affect your urine flow. It is possible to experience more than one symptom at the same time. Some of the common symptoms are:

Decreased flow of urine

Weak urine flow

Sensation of incomplete bladder emptying

Need to start and stop urine several times

Trouble in starting urination or straining to pass urine

Dribbling at the end of urine flow

Urge to urinate frequently

Increase in the urgency to urinate

Increased need to get up at night to urinate

Pain while urinating or ejaculation

Urine that looks or feels different

If your condition worsens with time, then you might experience:

Development of bladder stone

Bladder infection

Damage to kidneys because of backpressure caused due to retention of large amounts of urine in the bladder

Blood in urine

Pus in urine

Experiencing pain in the lower part of abdomen or genitals during urination

Inability to urinate

Chills or fever while urinating

In severe cases, BPH can lead to bladder damage and infection. In such cases, you can spot blood in the urine. It can also cause kidney damage, if left untreated for a long time and can lead on to development of chronic kidney disease and renal failure.

Here are a few common causes of frequent urination and why you should not ignore this symptom.

Click To Read!

Causes Of Benign Prostatic Hyperplasia

The prostate gland is located beneath your bladder. The urethra is a tube that passes urine from your bladder to the outside of your penis. The urethral tube passes through the centre of the prostate. When the prostate enlarges, urine flow can begin to get blocked. The actual cause of BPH is not exactly well understood.

It is postulated that testosterone, a hormone produced by testicles, is a major contributing factor towards BPH. Men produce testosterone, the primary male sex hormone, throughout their lives, along with a minute amount of estrogen. With declining age, the testosterone produced by the body also reduces. This, in turn, increases the proportion of estrogen in the system. Studies have suggested that benign prostatic hyperplasia may result due to this disproportion between estrogen and testosterone. The high level of estrogen within the prostate boosts the activity of substances that increase the growth of prostate cells.

Experts also believe that dihydrotestosterone (DHT), a hormonal byproduct of testosterone, plays a vital role in the growth of the prostate gland. Research has revealed that older adults continue producing DHT that gets accumulated within the prostate despite a drop in testosterone levels. This increase in DHT may boost the growth of prostate cells. Studies have also shown that a decline in the level of DHT improves BPH.

Risk Factors For Benign Prostatic Hyperplasia

You are more likely to develop benign prostatic hyperplasia, if you:

Are 40 years of age or above

Have a family history of BPH

Have medical conditions such as cardiovascular problems, obesity and type 2 diabetes

Lack physical exercise and live a sedentary lifestyle

Have erectile dysfunction

Did you know?

Men also go through hormonal changes during old age which can put them at risk of male menopause. Also known as andropause, it as a condition which causes a decrease in sexual satisfaction or a decline in the generalized feeling of well-being due to testosterone deficiency. Click here to know more about it.

Read Here!

Diagnosis Of Benign Prostatic Hyperplasia

Your doctor will consider your symptoms and carry out some tests to rule out the diseases that mimic the symptoms of benign prostate hyperplasia.

1. Digital rectal exam

Your prostate can be felt through the anus. Your doctor will smear some topical anaesthesia (numbing gel) onto your anal passage. Then the doctor will insert a gloved hand into the rectum to feel the prostate's shape, thickness, and size. This will give them an idea if your prostate has an average size or is more prominent than usual.

2. Cystoscopy

This procedure allows a healthcare provider to examine the lining of your bladder and urethral tube. A hollow tube called a cystoscope that has a lens will be inserted inside your urethra. Slowly the doctor will advance the cystoscope inside your bladder. This procedure usually doesn't hurt but can cause some discomfort. You may feel that you need to pee during the process, but it only lasts for a few minutes.

3. Ultrasound

Ultrasound has become the standard first-line investigation after the urologist's finger. Ultrasound of the kidneys and urinary bladder (USG KUB) is done routinely to evaluate size and volume of prostate gland.

4. Intravenous pyelogram (IVP)

An intravenous pyelogram (IVP) is a type of x-ray that provides images of the urinary tract. During an IVP, a health care provider will inject one of your veins with a substance called contrast dye. The dye travels through your bloodstream and into your urinary tract. It helps in detection of an enlarged prostate. Due to availability of better alternatives, IVP is not commonly used these days.

5. Urine tests

Your doctor may ask for a urine test. This will help them rule out any infection or other urinary conditions that cause similar symptoms.

6. Prostate-specific antigen (PSA) test

Prostate-specific antigen is a compound released by your prostate. When you have an enlarged prostate, your levels of PSA will also increase. It helps detect prostate cancer, but it's not perfect and doesn't detect all prostate cancers. Your PSA levels can be elevated due to recent procedures, surgeries or infections.

7. Urinary flow test

This test measures your urine flow. You will be asked to urinate into a receptacle that is attached to a machine. This machine will measure the strength and amount of your urine flow and determine, if your condition is improving or worsening over time.

8. Postvoid residual volume test

This test evaluates if you can fully empty your bladder while urinating. The test can be done through ultrasound or by inserting a catheter into your bladder after you finish urinating. This will allow a healthcare provider to measure how much urine is left in your bladder.

9. 24-hour voiding diary

Your doctor may ask you to maintain a record of the frequency and amount of urine you pass. This is especially helpful if more than one-third of your daily urine output occurs during the night.

10. Prostate biopsy

Transrectal ultrasound is an ultrasound probe inserted into the rectum to measure and evaluate your prostate health. The probe sends and receives sound waves through the wall of the rectum into the prostate gland which is situated right in front of the rectum. Your doctor can suggest a prostate biopsy using a transrectal biopsy. A needle will be guided inside the rectum to take tissue samples of the prostate. Examining the tissue will help the doctor evaluate if you have prostate cancer or not.

11. Urodynamic and pressure flow studies

This test allows doctors to measure and determine how well your bladder muscles are functioning. Your doctor will insert a catheter inside your urethra and into your bladder. Water or air is slowly injected into the bladder, which allows for the evaluation of muscle functioning.

Celebs affected

Ronald Wilson Reagan

The 40th USA president underwent prostatic surgery in 1967 and 1986 to relieve discomfort associated with BPH.

Ian McKellen

Famous British actor Ian McKellen was diagnosed with prostate cancer in 2005.

Prevention Of Benign Prostatic Hyperplasia

Unfortunately, researchers have not found a way to prevent benign prostatic hyperplasia till date. Men who have risk factors for BPH such as being over 40 years of age or having a family history of BPH, should contact their doctor.

You can talk to their doctor if you identify any symptoms of BPH. Moreover, you can also go for regular prostate exams as it can help you to identify early signs of prostate cancer. Getting early treatment can minimise prostatic hyperplasia effects and reduce the chances of enlarged prostate.

Specialist To Visit

You should visit a doctor, if you are experiencing symptoms such as difficulty in urinating, blood in urine, pain while passing urine, straining while urinating, dribbling at the end of urine, weak urine flow or increased frequency of urination during the night. These symptoms might indicate the possibility of benign prostate hyperplasia. You can consult the following doctors for diagnosis:

Urologist

General surgeon

General physician

Here’s more on who is the right expert to consult for male sexual and reproductive health problems.

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Treatment Of Benign Prostatic Hyperplasia

BPH can be managed through several kinds of treatment modalities. The best approach is decided based on the patient's age, overall wellbeing, underlying cause and severity of the disorder. If your symptoms are tolerable, your doctor might advise you to postpone treatment and monitor the condition for some time. The treatments include:

1. Alpha-blockers

These medications work by relaxing the prostate muscles, making it easier to pass urine. Alpha-blockers work effectively in men with relatively small prostates. These medications might cause low blood pressure (orthostatic hypotension), dizziness and retrograde ejaculation (a condition in which the semen goes back into the bladder instead of going out of the tip of the penis). These drugs start exerting their effects early, within days to weeks. Some of the commonly recommended medicines are:

Prazosin

Terazosin

Tamsulosin

2. 5-alpha reductase inhibitors

These drugs act by shrinking the size of your prostate by preventing the formation of dihydrotestosterone (DHT). Medications such as finasteride and dutasteride inhibit the 5-alpha reductase enzyme that converts testosterone into DHT. A decline in the DHT level causes the prostate size to decrease. The effect usually starts after a month and may take upto 6 months for maximum effect. Some common side effects are low libido, decreased ejaculate volume and impotence. Some of the common medications are:

Finasteride

Dutasteride

3. Tadalafil

Tadalafil is a medication that is primarily used to treat erectile dysfunction. Studies have shown that it's also effective in treating prostate enlargement.

4. Transurethral resection of the prostate (TURP)

TURP is a surgical procedure that helps in quickly relieving the symptoms of BPH. Men usually have a strong urine flow soon after the surgery. This procedure requires a lighted scope to be inserted into your urethra. The surgeon will remove most of the prostate except the outer part. After TURP, you will need a catheter to drain your bladder for some time.

Some of the risks that are associated with TURP are retrograde ejaculation & urinary incontinence. The common complications of TURP are:

Bleeding

Urethral stricture

Bladder neck contracture

5. Transurethral incision of the prostate (TUIP)

A surgeon will insert a lighted scope into your urethra and create one or two minor cuts in the prostate gland. This will make it easier for urine to pass through the urethra. This surgery is usually recommended for men who have a small or moderate-sized prostate gland and for men with health problems that may make other surgeries too risky.

TUIP has relatively lower incidence of complications and hence might be a better option for patients with smaller gland size. Consult your doctor regarding the choice of surgical procedure as it may vary from case to case basis.

6. Transurethral microwave thermotherapy

A particular electrode will be inserted through your urethra to reach the prostate. The electrode will release microwave energies that will destroy the inner part of the enlarged prostate gland. This will result in prostate shrinking, allowing easy outflow of the urine. This surgery may only partially relieve your symptoms and may take some time before its full effect is seen. It is usually recommended for men who have a small prostate, and this procedure might require re-treatment, if needed.

7. Transurethral needle ablation

Your doctor will pass a scope into your urethra and with a needle into the prostate gland. The needles will release radio waves that will heat and destroy the excess prostate tissue that's been blocking urine flow.

8. Ablative laser therapy

This procedure uses a high energy laser to vaporize the prostate tissue that's been obstructing urine flow. These procedures can cause irritative symptoms for some time after the surgery.

9. Enucleation procedure

These procedures generally remove all of the prostate tissue blocking urinary flow and preventing regrowth of the tissue. The tissue that has been removed can later be examined for signs of prostate cancer and other disorders.

10. Prostatic urethral lift

Doctors use special tags to compress the sides of the enlarged prostate. This allows the urinary flow to increase and is recommended to men who have lower urinary tract symptoms. This procedure also produces less effect on ejaculation and sexual function than procedures such as TURP.

Consult India's best doctors here from the comfort of your home.

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Home-care For Benign Prostatic Hyperplasia

1. Take medicine as recommended

If you have been prescribed BPH medications, make sure to take those medications as and when directed. Different BPH medications take an additional amount of time to show their effects. Some medicines can take six months to work, so it's essential to continue your medication as directed by your doctor.

To remember to take the drugs on time, you can put the pill in labelled medicine boxes and set the alarm for the time you are supposed to take your medications.

2. Follow-up without fail

Usually, doctors recommend their patients actively monitor the progress of BPH. This means that you and your doctor will watch for any symptoms that may worsen but not actively treat the BPH. You will need to make regular visits to your urologist.

If your symptoms don't improve in some time, your doctor may change your dosage and recommend some other tests to check your prognosis. If you have undergone surgery to manage your enlarged prostate gland, make sure to get all the follow-up instructions from your doctor. The specific follow up care would depend on the type of surgery you opted for.

Yearly visits are recommended beacuse your doctor look for any new or old symptoms that have worsened since the last visit, before recommending a treatment plan. Active surveillance is the best course of treatment for men with mild symptoms of BPH or for patients who are not bothered by their symptoms.

3. Exercise to strengthen pelvic muscles

You will be recommended some basic Kegel exercises that strengthen the pelvic floor. These exercises include holding your pelvic floor muscles for five seconds and releasing them. You should practise 10 to 20 repetitions of kegel exercises for three to four times a day. Kegel exercises are beneficial for men with prostate problems.

It strengthens the pelvic floor and trains the pelvic floor muscles to help in controlling urine. Apart from kegel exercises, you can also commit to daily walking, jogging, swimming, or playing sports. Obesity is a risk factor for developing BPH; hence, maintaining a healthy weight is essential to treat BPH.

Your doctor may advise against heavy lifting and excessive training for a week after your laser ablation or transurethral needle ablation. Other surgeries may require restricted activities for nearly six weeks after the procedure.

4. Manage your stress

You can meditate or practise yoga that encourages mindfulness. Stress and nervousness usually increase the urge to urinate, which can worsen your symptoms of BPH. Practising meditation in the morning and before sleeping can help you manage your stress levels, reducing your urge to urinate during the night.

Here are all your queries on stress and its role in the body answered.

Read Now!

Complications Of Benign Prostate Hyperplasia

Untreated benign prostatic hyperplasia can cause several complications that affect your urinary bladder and kidney. These include:

Urinary tract infections

Untreated benign prostate hyperplasia can lead to the accumulation of stagnant urine since patients cannot completely empty their bladder. The stagnant urine acts as a growth medium for bacteria that cause urinary tract infections. Some infections can be asymptomatic, whereas others can cause mild dysuria (painful or difficult urination), increased frequency and urgency to urinate, severe systemic infection, and frank hematuria (presence of blood cells in urine).

Blood in urine

The presence of blood in urine is called hematuria. It is usually a result of friable hypervascularity, a condition in which superficial vessels of the enlarged prostate easily get damaged by any physical activity. It can also result in the formation of a clot and retention of the clot.

Generally, the condition presents as initial hematuria while the rest of the urine stream is clear. Finasteride has proven to be effective in treating BPH related hematuria since it lowers the density of microvessels.

Urinary stones

Stones or calculi in the bladder make for 5% of all urinary tract calculi. The formation of stones is a known risk factor in cases with chronic urinary infections due to a microorganism that splits urea.

Recurrent UTI and a residual volume of urine in the bladder usually precede the formation of bladder stones. Patients who have large residual volume in the bladder are more at risk of developing multiple bladder stones. The symptoms of urinary stones include abdominal pain, visible blood in urine, recurrent UTI and signs of sepsis (severe infection) in extreme cases.

Kidney damage

Untreated BPH can lead to chronic urinary retention that can further lead to the development of chronic kidney disease in patients. This leads to a decline in the rate at which the kidney filters toxins and other substances. A patient suffering from recurrent urinary tract infections who already have chronic urinary retention due to BPH are more at risk of developing renal failure in BPH patients.

Did you know?

Prostate cancer is a disease that primarily affects the elderly. It is relatively common in people above 65 years of age, although people in their 50s may also suffer from the condition. It has become a major health concern around the world during the last few decades. It is reported to be the second most common cause of cancer in men worldwide and the fifth most common cancer overall. Here’s more causes and risk factors of prostate cancer.

Click To Read!

Alternative Therapies For Benign Prostate Hyperplasia

Always consult your doctor before using any herbal remedy, and do not stop taking your regular medications without consulting your healthcare provider.

Saw palmetto and stinging nettle have shown some benefits when used together to manage BPH symptoms in men.

African plum tree and lycopene are other herbal remedies that have shown some benefits in improving the signs associated with BPH.

You can include pumpkin seeds into your diet. A study revealed that men with BPH who took pumpkin seed extracts once a day for 12 days experienced a better quality of life, and they also had a decrease in the urgency to urinate.

Flaxseed has also shown some promising results. A report suggested that people who took flaxseed hull extract for eight weeks saw improved obstructive and irritable symptoms seen with BPH.

Here are 7 superfoods good for maintaining prostate health.

Read The Article!

Living With Benign Prostate Hyperplasia

Being diagnosed with benign prostate hyperplasia can cause stress and anxiety in men. This medical condition directly affects the quality of life, and patients struggle with the urge to urinate in difficult situations. Some men also face incontinence (inability to control the evacuation of urine), leading to embarrassment. However, timely diagnosis and treatment can help you in managing the signs and symptoms linked with BPH.

1. Avoid certain medications

Talk to your doctor, if you take medications such as diuretics or water pills which are used to treat high blood pressure, liver disease, and heart failure. Diuretics remove excess fluid from your body and increase urination which can worsen your BPH symptoms. Tricyclic antidepressants are an older generation of antidepressant drugs that reduce bladder muscle contractions, increasing your risk of urinary retention.

2. Avoid taking antihistamines and decongestants

Antihistamines are anti-allergic drugs that prevent the bladder muscles from contracting. This can slow or inhibit the urine flow and worsen BPH. Medications used to treat colds such as decongestants aggravate BPH since they tighten the prostate and bladder muscles. This makes it difficult for urine to leave the bladder.

3. Monitor your fluids

It is essential to be aware of how much fluid you are taking in. The more fluid you drink, the more you will feel the urge to urinate. You can stop or limit drinking water a few hours before you go to bed. This will reduce your chances of awakening during the night to urinate. Drinks such as alcohol, soda, coffee or other caffeinated beverages also cause your body to release more urine.

4. Eat a healthy diet

Avoid eating red meat and dairy. Reports suggest that going free from red meat can significantly improve your prostate health. Eating meat daily can triple your risk of prostate enlargement. Eating dairy products too has been linked with an increased risk of developing benign prostatic hyperplasia. Instead of that, include tomatoes, berries, salmon, and broccoli in your diet. These foods have been shown to improve your signs and symptoms linked with BPH.

Frequently Asked Questions

Should I reduce my sodium intake if I have benign prostatic hyperplasia?

What is catheterization?

How much does the prostate weigh on average?

How common is benign prostatic hyperplasia?

What is the link between benign prostate hyperplasia and prostate cancer?

How can prostate cancer be detected?

What are minimally invasive treatments?

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Nail infections

Also known as Paronychia, Onychomycosis

Overview

Nail infection, as the name suggests, is an infection affecting the fingernails or toenails. It can be caused by the growth of bacteria, fungus or virus in these areas. Fungal nail infection is more commonly seen to affect toenails, while bacterial nail infection is more likely to occur following an injury to the surrounding skin.

Nail infection, particularly fungal nail infection or onychomycosis, is commonly seen. It is estimated that about 10% of the general population, 20% of the population older than 60 years, and 50% of the population older than 70 years suffer from nail infection of any one or the other type.

Nail infection is common in the elderly population and those who suffer from immunocompromised conditions such as HIV (human immunodeficiency virus)infection. The risk of nail infection increases if the feet or hands are constantly exposed to moisture and proper hygiene is not maintained.

The symptoms of nail infection range from whitish spots or patchy discoloration of the nails to changes in the shape of the nail and the nails turning brittle or crumbly. Treatment consists of oral and topical antibacterial or antifungal agents. Surgery may be required in severe cases.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Fingernails

Toenails

Nail bed

Skin surrounding the nails

Prevalence

Worldwide: 10% (2016)

Mimicking Conditions

Psoriasis

Lichen planus

Nail Trauma

Ingrown toenails

Contact Dermatitis

Pachonychia Congenita

Necessary health tests/imaging

Complete Blood Count (CBC)

Erythrocyte Sedimentation Rate

KOH Testing

PCR Testing

Treatment

Oral Antibiotics: Ampicillin, Doxycycline & Clindamycin

Oral Antifungals: Itraconazole, Fluconazole & Terbinafine

Topical Antibiotics: Mupirocin, Fusidic acid & Retapamulin

Topical Antifungals: Ciclopirox, Amorolfine & Antifungal dusting powder

Topical Antiseptics: Povidone Iodine & Chlorhexidine

Topical steroids

Surgery

Laser therapy

See All

Symptoms Of Nail Infection

Nail infection should be suspected if the following changes are seen in the nails:

Occurrence of white or yellow spots on the nail

Whitish or yellowish discoloration of the nail

Thickening of the nail

Brittle, crumbly, and easily breakable nails

The shape of the nail is distorted

Foul smelling nails

Pain, redness, swelling in the nails and surrounding area in cases of acute bacterial nail infection

Yellow pus formation and discharge from the nail in paronychia

Accompanying fever in acute bacterial nail infection

Your body has an art of letting you know when something is wrong somewhere. Your nails are no exception. Here’s what your nails can reveal about your health.

Know More!

Causes Of Nail Infection

Nail infections are commonly caused by bacteria like Staphylococcus aureus, Streptococcus pyogenes, Pseudomonas, or fungi like Trichophyton, Microsporum, Epidermophyton, and Candida Albicans.

Types Of Nail Infection

Nail infections can be caused by microorganisms like bacteria, fungi and viruses as described below:

Bacterial nail infection

If the infection is caused by bacteria like Staphylococcus aureus, Streptococcus pyogenes, Pseudomonas, it is called a bacterial nail infection or Paronychia. Based on the duration for which the nail infection persists, bacterial nail infections are divided into the following types -

Acute bacterial nail infection: This type of infection is caused by bacteria that cause inflammation in the surrounding areas. It may last for less than six weeks, causing pain around the area.

Chronic bacterial nail infection: This type of infection is also caused by bacteria that cause inflammation in the surrounding areas. It lasts for more than six weeks, causing periodic, painful flare ups.

Fungal nail infection

If the infection is caused by fungi like Trichophyton, Microsporum, Epidermophyton, Candida Albicans, it is called a fungal nail infection or Onychomycosis. Based on the area involved or the causative agent, fungal nail infections are further divided into the following subtypes -

Distal subungual onychomycosis: This is the most common type of onychomycosis where the fungal infection starts from the nail bed and spreads across the edges.

Proximal subungual onychomycosis: It is a rare type of onychomycosis which is usually seen in patients who suffer from immunocompromised states. The infection begins as white spots in the center of the nail and moves outward as the nail grows.

White superficial onychomycosis: This type of infection affects only the surface of the nail. It may cause white spots on the surface of the nail that turns powdery and can make the nail crumble.

Candida onychomycosis: This is caused by a fungus called Candida albicans. It is more commonly seen in nails that have been previously affected by injury or infection.

Viral nail infection

Viral warts can cause changes in the shape and thickness of the nails leading to a viral nail infection. It is usually caused by Human Papillomavirus (HPV). In some cases, viruses can also lead to skin growth under the nail, known as Periungual warts. It may also lead to a condition known as Onychomadesis in which the nails begin to shed at the proximal end.

Did you know?

‘Covid Nails’ are nail changes that have been seen in some patients after a few days or weeks of COVID-19 infection. These can occur in the form of Paronychia in association with chilblain-like lesions and nail changes like red half-moon patterns, a transverse orange discoloration and diffuse red-white nail bed discoloration. Other nail changes like Beau lines(dents or ridges that run horizontally across the nail), Mee’s lines(smooth white lines that run horizontally across the nail) and Onychomadesis(nail loosened from the base) have also been observed after Covid 19 infection though they can be seen in other viral infections as well, and are most likely the consequence of high fever and/or severe illness.

Read More!

Risk Factors For Nail Infection

Chances of getting a nail infection are higher if

Age is more than 60 years.

Living and sharing toiletries with someone who has a nail infection.

You have diabetes or suffer from immunocompromised conditions, such as HIV or cancer or undergoing chemotherapy.

Nail infections occur if the nail is constantly exposed to moisture or trauma or both in conditions such as:

Wearing tight-fitting shoes or moist, dirty socks that allow no space for breathing.

Spending too much time in the water every day.

Wearing plastic gloves for a prolonged period.

Walking for a long time in hot and humid places, such as public showers.

An injury to the nail or surrounding area.

The chances of fungal infections increase during the summer season, owing to hot and humid weather conditions and excessive sweating. Here are a few ways to help you deal with fungal infections during the summer season.

Read More!

Diagnosis Of Nail Infection

Doctors can usually determine the type of nail infection based on the presenting symptoms and history. The symptoms of nail infection may appear as patchy discoloration or flaking of the nail, brittle nails, alteration in the shape of the nail, pus formation, swelling, etc. Certain laboratory tests may be suggested to confirm the exact cause of nail infection, such as:

Suspected bacterial nail infection

Complete blood count (CBC), Erythrocyte sedimentation rate in cases of fever accompanying acute bacterial nail infection.

Pus culture to identify the causative microorganism in the pus.

Nail clippings for culture and direct microscopic examination.

Suspected fungal nail infection

Nail clippings for culture and direct microscopic examination.

Fungal susceptibility testing to test the response of antifungal drugs.

KOH testing: Also called potassium hydroxide test, is used for the diagnosis of fungal infection in the skin, hair, and nails.

PCR testing: Polymerase Chain Reaction (PCR) testing is used to improve sensitivity in detecting the causative fungi in nail specimens from patients with suspected Onychomycosis (a fungal infection that occurs in the edge of the nail).

Celebs affected

Paula Abdul

Paula Abdul is a famous American Singer and Reality TV Show American Idol judge. She contracted nail fungus after a pedicure in a salon, leading her to urge the CA Senate Committee to pass legislation regarding hygiene in salons.

Prevention Of Nail Infection

The chances of getting a nail infection increase with age and due to certain habits. The following measures can be taken to minimize the risk of nail infections -

Maintain good hand and feet hygiene. Wash your hands and feet daily with soap and water. Ensure that all dirt is cleared, especially the dirt stuck between the fingers or under the nails.

Wear comfortable footwear that offers ample room for the toes to move.

Trim your nails at least once every week with a clean nail trimmer.

Wear dri-fit socks that help wick away moisture from the feet. If your feet get too sweaty, change the socks twice a day or more if needed.

Use gumboots while working in wet areas, such as farms or fields.

Moisturize your hands and feet daily.

Dust your hands and feet with antifungal absorbent powder daily.

Always insist on sterilized pieces of equipment for manicures and pedicures in salons.

Specialist To Visit

For cases of acute bacterial, fungal and viral nail infection, immediate medical care must be sought. Acute nail infection develops with a break in the skin and is usually seen at the side of the nail. This type of nail infection is often caused by a bacterial infection but may also be caused by herpes, a type of viral infection. Symptoms of acute bacterial nail infection may include fever, swelling, pus formation around nails, or red streaks around nails.

For chronic infections, treatment must be started as soon as symptoms like discoloration or patchy nails are observed. Chronic nail infection occurs most often in people whose hands are constantly or often exposed to moisture. This disorder often results from contact dermatitis, a type of skin inflammation caused by exposure to chemicals that are irritating to the skin, and worsened due to fungus or bacteria.

Doctors who can help you to diagnose and treat the condition are:

General physician

Dermatologist

Treatment Of Nail Infection

Treatment for nail infection broadly comprises -

Oral antibiotics: Usually, simple bacterial nail infections can be managed at home with topical antibiotic creams. Oral antibiotics are prescribed in more severe stages of infection. Available medicines are:

Ampicillin

Doxycycline

Clindamycin

Oral antifungals: Antifungals are given as oral medications to treat fungal nail infections. Available medicines are:

Itraconazole

Fluconazole

Terbinafine

Topical antibiotics:

Mupirocin: It is an antibiotic medicine used to treat bacterial infection. It kills the bacteria that cause skin infections by preventing the synthesis of essential proteins necessary for the survival of bacteria. Thus, it prevents the infection from spreading.

Fusidic acid: It is an antibiotic that works by preventing synthesis of essential proteins required by bacteria to carry out vital functions. Thus, it stops the bacteria from growing, and prevents the infection from spreading.

Retapamulin: This antibiotic is helpful in treating bacterial infection by inhibiting the bacteria from growing, and prevents the infection from spreading.

Topical antifungals:These are available as creams, absorbent powders, or solutions for dressing to be applied directly to the infected nail:

Ciclopirox: These are available in a cream form or lacquer form that can be applied like a nail polish over the infected nail. They work by inhibiting protein synthesis in the fungal cells, thereby preventing further growth of the fungi.

Amorolfine: These are to be applied directly to the nails. They work by inhibiting the enzymes necessary for growth of fungal infection.

Antifungal dusting powder to prevent moisture in the affected area.

Topical antiseptics: In acute bacterial nail infection, the affected part may be soaked in a diluted antiseptic solution and can then be covered with antibiotic ointments. A few examples of antiseptics are:

Povidone Iodine: Povidone Iodine is an antiseptic. It kills harmful infections causing microorganisms to prevent and treat infections.

Chlorhexidine: It is a disinfectant and antiseptic that is used for skin disinfection. It is also used for cleaning wounds, preventing dental plaque, and treating yeast infections.

Topical steroids: This class of drugs are the most powerful medicines used to lower inflammation in the body. When applied topically, it relieves the redness, swelling, itching and irritation of the skin that is caused due to nail infection. Methylprednisolone aceponate cream is the most common medicine used.

Surgery: In cases of severe nail infection, like collection of pus around the nail or the formation of abscess (pus), surgery may be required to drain the pus or abscess and remove the nail in extreme cases of disfigurement.

Laser therapy (Phototherapy): This is a treatment for fungal nail infection (onychomycosis). The laser devices emit a pulse of energy that penetrates through the toenail to the nail bed where the fungal growth is present. Fungal infections of the nails usually require several laser treatment sessions before they completely resolve.

Home Care For Nail Infection

If you suffer from a nail infection, you can do the following things to care for yourself at home -

Always keep the infected part clean and dry.

Before applying medications, wash hands thoroughly with soap and water.

Do not wear dirty socks or gloves.

Do not allow dirt to accumulate under the nail.

Trim your nails regularly with a sterile nail trimmer.

Do not share toiletries, such as towels or napkins, with anyone who has an infection.

Do not regularly cover nails with nail polish.

1mg ProTip

Dry your feet well, especially between the toes, to prevent fungal infections

Wash your feet with warm water. You can even add a few drops of an antiseptic liquid to clean the feet. Do not use harsh soap or excess of antiseptic liquid as it can cause the skin to become dry. Dry your feet well, especially in the area between the toes. These places are often neglected which in the long run can act as the ideal ground for fungal infections. You can also use antifungal powder to prevent infection as it helps to keep your toes dry and thus lower the risk of infection.Know more about this by taking advice from our doctors.

Consult Now!

Happy Feet=Happy You.

Whatever may be the cause of smelly feet, it still creates an embarrassing and awkward situation for a person whose feet are the source of the odor. Here are a few home remedies to tackle foot odor.

Read To Know More!

Complications Of Nail Infection

A severe case of nail infection can spread to adjoining areas, such as the skin, and may cause serious infection of the skin known as cellulitis. Diabetic patients and immunocompromised patients are more prone to complications resulting from nail infections.

It may also cause permanent damage to the affected and surrounding nails. Along with that, severe cases of nail infections may increase the risk of foot damage.

Alternative Therapies Of Nail Infection

Treatment with non-prescription agents

Non-pharmacologic agents such as Vicks Vaporub, tea-tree oil, and snakeroot extract have been found to be effective in treating fungal nail infections. Applying either of these agents directly over the affected toenail regularly may start showing the beneficial effects.

Ayurveda

An ayurvedic treatment known as Shaman Chikitsa is found to be effective in treating fungal nail infections. Medicinal preparations containing Terminella have considerable antimicrobial activity and are effective against nail infections.

Living With Nail Infection

If you are suffering from a nail infection, do not ignore it, even if it isn't painful yet. At any time if you see your nails becoming yellow or disfigured, or spots start appearing on your nail, you must consult a doctor to prevent the condition from getting worse.

Chronic nail infections tend to take a long time to heal and also require prolonged medications. You must complete your prescribed course and regularly consult your doctor on follow up visits to ensure that the infection is resolved completely.

As there is a possibility of nail infection due to poor hygiene, you must follow good hand and foot hygiene, especially if you are a diabetic. If you experience recurrent nail infections, this may indicate the case of some immunocompromised underlying condition. Please consult your doctor for appropriate treatment.

Frequently Asked Questions

Are nail infections painful?

Do nail infections spread from one person to another?

If I have diabetes, what care should I take to prevent nail infection?

Can I continue to work normally if I have a nail infection?

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Narcolepsy (Uncontrollable daytime sleepiness)

Also known as Gelineau's Syndrome, Hypnolepsy, Narcoleptic Syndrome, and Paroxysmal Sleep

Overview

Narcolepsy is a rare neurological disorder that causes a sudden attack of sleep. It affects your brain’s ability to wake and fall asleep at inappropriate times. People with narcolepsy often find it difficult to stay awake during the day, causing excessive daytime sleepiness.

The exact cause of narcolepsy is unknown. However defienyOther symptoms may include frequent uncontrollable sleep attacks, sudden and temporary loss of muscle tone (cataplexy), vivid dream-like images (hallucination), and temporary inability to move or speak while falling asleep (sleep paralysis). It is difficult to perform daily routine work with narcolepsy.

Narcolepsy can be diagnosed and confirmed by the polysomnogram (PSG) and the multiple sleep latency tests (MSLT). However, a combination of lifestyle approaches and medicine can help you to live better with narcolepsy.

Key Facts

Usually seen in

Individuals between 10 to 50 years of age

Gender affected

Both men and women

Body part(s) involved

Brain

Prevalence

Global: 1 in 2,000 (2017)

Mimicking Conditions

Obstructive sleep apnea (OSA)

Sleep apnea

Depression

Restless legs syndrome

Post-traumatic stress disorder (PTSD)

Anxiety disorder

Alcoholism

Hyperthyroidism

Syncope

Idiopathic hypersomnia

Chronic fatigue syndrome

Menstrually associated hypersomnia

Necessary health tests/imaging

Blood tests: Thyroid profile test and Complete blood count (CBC).

Imaging tests: Computerized tomography scan (CT) andMagnetic resonance imaging (MRI)

Sleep record tests

Wrist actigraphy

Polysomnography

Multiple sleep latency test

Treatment

Stimulants: Modafinil, Pitolisant, Methylphenidate, and Sodium oxybate

Antidepressants: Imipramine, Clomipramine, Protriptyline, Venlafaxine, Fluoxetine, and Atomoxetine

Orexin-based therapy: ORX-A replacement

Immune-based therapy: Natalizumab, Fingolimod, Abatacept, and Monoclonal antibodies

See All

Symptoms of Narcolepsy

There are 5 signs and symptoms of narcolepsy, often represented by the acronym CHESS (cataplexy, hallucinations- usually visual, excessive daytime sleepiness, sleep paralysis, and sleep disruption). While all patients with narcolepsy may not experience all 5 symptoms except excessive daytime sleepiness (EDS). Symptoms of narcolepsy may develop suddenly over the course of a few weeks, or slowly over a number of years that may include:

1. Cataplexy

Cataplexy is sudden, temporary muscle weakness or loss of muscle tone. It can cause problems ranging from drooping eyelids to total body collapse, depending on the muscles involved. It also includes symptoms like:

Jaw-dropping

Head slumping down

Legs collapsing uncontrollably

Slurred speech

Note: These symptoms are often triggered by strong emotions such as fear, laughter, excitement, or anger. After the onset of EDS, symptoms of cataplexy may appear for weeks or even for years.

2. Hallucinations

When going to sleep or waking up, a person with narcolepsy may see or hear things that are not real. These delusional experiences are often vivid and frightening. If these delusions happen as you’re falling asleep are called hypnagogic hallucinations. If this happens when you’re waking up, then it is called hypnopompic hallucination.

3. Excessive daytime sleepiness (EDS)

Most patients with narcolepsy have this symptom. EDS would interfere with everyday activities, even if you get enough sleep at night. The lack of energy, and concentration, memory lapses, and feeling depressed and exhausted makes it very difficult to perform daily activities.

4. Sleep attacks

In general, people with narcolepsy will experience sudden intervals of falling asleep, without warning. They may happen at any time. The length of these sleep attacks varies from person to person. It can last from seconds to several minutes. These sleep attacks may happen several times a day if narcolepsy is not well controlled or treated.

5. Sleep paralysis

People with narcolepsy may experience episodes of sleep paralysis. Which means a temporary inability to move or speak while falling asleep or waking up. These episodes may last a few seconds to several minutes. Being unable to move can be frightening, although sleep paralysis does not cause any harm.

Other symptoms

Narcolepsy can also cause a number of other symptoms that include:

Memory problems

Depression

Headache

Automatic behavior- performing any task and suddenly falling asleep without consciously realizing they’re doing it.

Over 50% of narcolepsy cases remain undiagnosed because people feel embarrassed by the experience. Do not hesitate to take expert advice if you are facing any of the above-mentioned symptoms.

Consult now

Types Of Narcolepsy

Narcolepsy can be classified into the following:

Type 1: Narcolepsy with cataplexy

This type comes without warning. It is characterized by a loss of muscle tone that causes weakness and makes you unable to control your muscles (cataplexy). People with this condition have high levels of hypocretin (and also muscle weakness triggered by emotions

Type 2: Narcolepsy without cataplexy

Individuals with type 2 narcolepsy have excessive sleepiness during the daytime but do not have cataplexy (sudden muscle weakness). They usually have fewer chronic symptoms and normal brain hormone hypocretin levels.

Secondary narcolepsy

This type is the rarest one. It may result from an injury to a deep part of the brain called the hypothalamus that regulates sleep. It may also be caused by a brain tumor or brain inflammation called encephalitis. Apart from narcolepsy’s usual symptoms, individuals may also have severe neurological problems and long periods of sleep (more than 10 hours) each night.

Do you feel drowsy mostly in the daytime? Do you feel any changes in your sleeping pattern? Read and find out the common cause of excessive sleep.

Tap here

Causes Of Narcolepsy

The exact cause of narcolepsy is unknown. However, many people with narcolepsy have less amount of a brain chemical known as hypocretin (orexin). It helps in regulating your sleep-wake cycles. Some experts believe that the deficiency of hypocretin levels and an immune system that attacks healthy cells (i.e an autoimmune issue), contributes to narcolepsy. But that is not the cause in all cases.

Causes of secondary narcolepsy

Sometimes narcolepsy can occur as a result of underlying conditions that alter the production of hypocretin levels in the brain. For example, narcolepsy can develop after the following:

Head injury: Including trauma to the cranium and intracranial structures (Brain, Cranial nerves, meninges, and other structures)

Hypothalamic lesions: Abnormal growth in the hypothalamus gland, which is located in the brain that helps to maintain the stability and balance in our bodies.

Brain tumor: Narcolepsy due to brain tumors is usually seen in kids.

Encephalitis: Inflammation of the brain, mostly due to infection.

Multiple sclerosis: It is an autoimmune disease that damages the central nervous system.

Demyelinating disorders: A neurological condition that causes damage to the protective covering (myelin sheath) that surrounds nerve fibers in the brain, eyes (optic nerves), and the spinal cord.

Encephalomyelitis: It refers to the inflammation in the brain and spinal cord that damages (myelin sheath )the protective covering of nerve fibers.

Inherited disorders: Disorders like Niemann–Pick disease type C can also cause narcolepsy.

Did you know?

Many patients with narcolepsy also have fragmented sleep, other sleep disorders, and obesity, probably as a consequence of orexin deficiency. Depression, anxiety, and other psychiatric problems are also common in these patients.

Risk Factors For Narcolepsy

Certain factors can increase the chance of narcolepsy such as the following:

Family history: Your risk of getting narcolepsy is 20 to 40 times higher if you have a family history of it. However, narcolepsy is not a genetic condition.

Previous brain trauma: In rare cases, narcolepsy can occur after severe trauma to areas of the brain that regulates sleep-wake cycles. In a few cases, it is reported that brain tumors may also cause narcolepsy.

Possible triggers: Recent studies found that Infectious diseases such as streptococcal infection or HIN1 infection, as well as vaccination, may trigger an autoimmune response with selective destruction of the hypocretin that can lead to narcolepsy.

Environmental toxins: Studies have shown that exposure to insecticides, heavy metals, and weed killers may cause narcolepsy.

Did you know?

Narcolepsy can occur as early as five years of age. Type 1 (narcolepsy with cataplexy) affects 50 per 100,000 people. It usually begins in the teens and early twenties, but occasionally occurs as early as five years of age or after 40 years.

Diagnosis Of Narcolepsy

Diagnosis of narcolepsy can be quite tricky as it mimics other health conditions like depression, encephalitis, etc. Daytime sleepiness can also be a common side effect of certain medicines. TDiagnosis of narcolepsy includes:

1. History taking

The diagnosis of narcolepsy includes taking an extensive history of the patient that includes questions like:

Duration of sleep during the nighttime

Frequency of having difficulty sleeping

Daytime napping

Any stressful event in the recent past

Medical condition if any

2. Blood tests

These tests are recommended to rule out any underlying health problems. They include:

Thyroid profile test

Complete blood count (CBC)

3. Imaging tests

This helps to determine if there are any problems with the brain or nerves that may be responsible for problems with sleep. Imaging tests that are generally advised include:

Computerized tomography scan (CT)

Magnetic resonance imaging (MRI)

4. Sleep record tests (sleep log)

Your doctor will ask you to keep a journal of your sleep pattern for about a week. In that, you need to record the time at which you fall asleep, and the duration of sleep during the daytime as well as nighttime.

5. Wrist actigraphy

It is a device used to detect movements during sleep. An actigraph is worn on the wrist during sleeping to keep track of your sleeping pattern. It also records body movements and can help distinguish wakefulness from sleep.

6. Polysomnography

The polysomnography (PSG) test requires you to spend a night in a sleep center or medical facility. It is used to record a set of parameters like brain waves, breathing, oxygen levels, heart rate, and eye and leg movements during sleep. This test reveals how quickly you fall asleep, how often you wake up during the night, and how often your sleep is disturbed (a common finding in people with narcolepsy). This is one of the essential tests to confirm narcolepsy.

7. Multiple sleep latency test (MSLT)

MSLT measures how quickly and easily it takes you to fall asleep during the day. You may have this test after polysomnography. You’ll need to take several naps throughout the day, and an expert will analyze how quickly you enter into a sleep cycle.

8. Measuring hypocretin levels

Experts believe that in many cases, narcolepsy is linked to a deficiency of hypocretin, also known as orexin, which regulates sleep-wake cycles. Measuring your level of orexin can be useful in diagnosing narcolepsy. A sample of cerebrospinal fluid (CSF) is removed using a needle during a procedure called a lumbar puncture and then tested for hypocretin levels.

Not sure where to get all these tests done? Well, don't worry. Get your tests done with Tata 1mg for accurate results.

Book your tests now

Celebs affected

Nastassja Kinski

She is a German-born American-based actress who has appeared in more than 60 films. In 2001, she talked about her medical condition with narcolepsy. However, she manages to live with it and simultaneously gives hit films.

Prevention Of Narcolepsy

Since the actual cause of narcolepsy is unknown, it is difficult to prevent it. However, here are a few effective habits that you can adopt to ensure that you get a good night’s sleep.

Avoid daytime naps

Fix your time for sleep. This includes sleeping and waking up at the same time every day. It keeps your biological clock in order.

Practicing a relaxing pre-bedtime ritual such as taking bath, reading, or listening to soft music helps to reduce your stress and improve sleep at night.

Sleep in a completely dark room as it will help in secreting melatonin hormone (it regulates the sleep-wake cycle) and promotes sound sleep.

Avoid using cell phones and watching TV prior to sleep time. The light from the screen interferes with the release of the melatonin hormone.

Avoid caffeine, nicotine, and alcohol at night or late evening as they can make you feel active and disturb your sleep cycle.

Avoid large meals and beverages before bedtime as it will stop your urge of using the washroom at night during sleep.

Avoid a sedentary lifestyle and stay active during the daytime, as it can improve your sleep cycle.

Trying to get a good night’s sleep, but, are unable to do so? We are here to help. Check out our exclusive sleep aid products.

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Specialist To Visit

Your general physician is the first doctor you may need to consult, other specialists who can help in the diagnosis and treatment of narcolepsy and its related health complications are:

General physician

Sleep specialist

Neurologist

Psychiatrist

Psychologist

A sleep specialist is a doctor who diagnoses and treats sleep disorders. A neurologist treats disorders that affect the brain, spinal cord, and nerves. A psychiatrist is a doctor who is trained to treat people with mental illness. A psychologist is a person who specializes in the study of mind and behavior.

There is no shame in asking for help. Individuals with narcolepsy are too conscious to talk about their symptoms. Take advice from an experienced medical professional to understand your condition and manage it better.

Talk to an expert now

Treatment Of Narcolepsy

Narcolepsy is a chronic neurological condition. Although there is no permanent cure for it, following treatment options can help you manage your symptoms. The treatment includes;

Medications

There are several classes of medications used to treat narcolepsy, such as

Stimulants: These medicines stimulate your central nervous system, which can help keep you awake during the day. Drugs include:

Modafinil

Pitolisant

Methylphenidate

Sodium oxybate

Solriamfetol

Antidepressants: Tricyclic antidepressants and Selective serotonin and noradrenergic reuptake inhibitors are two classes of antidepressant drugs that have proven effective in controlling symptoms of narcolepsy in many individuals. Drugs include:

Imipramine

Clomipramine

Protriptyline

Venlafaxine

Fluoxetine

Atomoxetine

Order medicines online from India’s largest and most trusted online pharmacy.

Tap here

Newer advancements

These are drugs that are still in development, but have shown some good results in animal models.

Orexin-based therapy: It is used to treat narcolepsy type 1 due to orexin deficiency. ORX-A replacements are given intravenously or intranasal (in monkeys) to reduce the effects of sleep deprivation on cognitive performances.

Immune-based therapy: Immunotherapy is considered a promising future therapeutic option. Drugs like natalizumab, fingolimod, abatacept, monoclonal antibodies, can be used to treat narcolepsy.

Home-Care For Narcolepsy

Medications should accompany various lifestyle changes. Consider the strategies mentioned below to help manage the condition better:

Take short naps: You can take frequent, brief naps, regularly scheduled naps at times when you tend to feel sleepiest.

Follow a strict bedtime routine: Going to bed and waking up at almost the same time every day can help people sleep better.

Keep your bedroom only for sleep: Try to use your bed only for sleep, do not use cell phones, or laptops in bed as your brain becomes habitual and you don't feel asleep when you see your bed.

Avoid caffeine before bed: Avoid using beverages such as colas, coffee, teas, energy drinks, and chocolate shakes for several hours before bedtime.

Avoid alcohol and smoking: Especially in the late evening as it can act as It prevents people from getting a deep sleep.

Stay active: Exercise every day for at least 20 minutes and do not exercise before bedtime.

Don’t eat heavy meals close to bedtime:It can make you less comfortable while sleeping at night.

Relax before bedtime: You can take a warm bath, meditate, read or listen to soft music.

Did you know?

Exposure to indoor air pollutants can affect your sleep. Research shows that pollution in the sleep microenvironment can affect the quality of sleep. Explore our extensive range of air purifiers to have a dust free environment that can help you sleep better.

Check them out now

Complications of Narcolepsy

Narcolepsy is associated with long-term effects on health and well-being. The immediate effects include poor performance, daytime sleepiness, inability to perform daily household tasks, and fatigue. The long-term complications include:

1. Accidents

Fatal road accidents are caused due to excessive sleepiness and cataplexy.

2. Heart disease

Narcolepsy has also been linked to higher rates of hypertension. Moreover, excessive sleepiness can affect inflammatory markers, which in turn can increase the risk of heart disease.

3. Obesity

People with narcolepsy usually become overweight because of lower activity levels and orexin deficiency. In the long term, their slower metabolism can cause obesity.

4. Stress & anxiety

Narcolepsy may lead to mental disorders such as stress and anxiety. However, depression is also common in people with narcolepsy. Uncontrolled sleep attacks can impair decision-making, damage relationships, and decline the overall quality of life.

5. Poor performance

The ability to concentrate is essential to learning and academic achievement. However, sleep attacks and other symptoms of narcolepsy can reduce attention and focus leading to poor performance.

Did you know?

COVID-19 infections can be linked to narcolepsy. Studies suggest that SARS-CoV2 infection is more likely to affect susceptible individuals with Parkinson’s disease, multiple sclerosis, and narcolepsy.

Know more on COVID-19

Alternative Therapies Of Narcolepsy

Narcolepsy needs both medical and lifestyle management. Along with those there are a few alternative therapies that may help you to manage the symptoms of narcolepsy. They include:

1. MR therapy (meditation and relaxation)

One of the easy and effective remedies is meditation and relaxation therapy. MR therapy, especially mindfulness-based meditation helps ease psychological stress including anxiety, depression, and symptoms of narcolepsy. Steps for mindfulness meditation include:

Sit or lie in a comfortable position.

Focus on your natural breathing- inhale and exhale.

Allow your thoughts (positive or negative) to come and go without judgment.

Keep your body calm and relaxed.

2. Sleep-inducing teas

In a few cases, people with narcolepsy have seen a disturbance in night sleep, or are unable to sleep at night. Teas like chamomile (babunah ke phul) tea, passion flower tea, red ginseng, peppermint (pudina) tea, and lavender tea can promote good sleep at night.

3. Acupuncture and acupressure

These therapies are ancient healing arts based on components of traditional Chinese medicine. Acupressure helps to release tension in the muscles and pressure points and to encourage blood circulation by pressing certain areas of your body. In acupuncture therapy, thin needles are inserted into the body to ease the symptoms of narcolepsy including stress, and anxiety.

Living With Narcolepsy

Narcolepsy can take a toll on mental health, and with the embarrassment surrounding it individuals do not really open up and tell their symptoms. Social life can be impacted when sleepiness and other symptoms interfere with conversations, social events, and relationships.

If you notice your loved ones having bouts of sleep try talking to them or taking them to a doctor for the correct diagnosis and treatment.

Tips for caregivers:

These are certain simple ways you can assist a loved one suffering from narcolepsy:

Learn everything you can about narcolepsy.

Inquire if they need assistance and provide it, but don't hover.

Offer to assist in the organizing of duties such as bill payment and domestic chores.

Stick sticky notes around the house and keep a calendar of essential appointments.

Deliver a tasty meal every now and then, along with some nutritious snacks.

Enjoy a movie together at home or do something that will offer joy to their and your lives.

Give your loved one a pat on the back, even for minor accomplishments.

Remember to make mindcare your priority with our range of mind care products to help you stay calm and relaxed.

Try them now

Frequently Asked Questions

What can narcolepsy be mistaken for?

Can I drive if I have narcolepsy?

Who is most affected by narcolepsy?

How long do narcoleptic episodes last?

Do narcoleptics know when they fall asleep?

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Nausea

Also known as feeling sick, feeling of vomiting

Overview

Nausea, or the feeling of getting sick, is a feeling of uneasiness that comes before vomiting. It is not a disease but a symptom that often occurs with various health conditions.

Nausea can be acute or chronic, physical or psychological and caused by conditions, such as food poisoning, peptic ulcers, motion sickness, pregnancy and brain disorders. It is extremely common in the first trimester of pregnancy. It could also be seen as a side effect of certain medications, or due to chemotherapy and radiation therapy.

Nausea is found to be three times more common in females than males. A mild or occasional episode of nausea and vomiting can be safely treated at home and does not require any medical attention. However, if nausea is chronic in nature and/or multiple episodes of nausea and vomiting occur within a short span, medical care is essential.

The treatment of nausea includes controlling the symptom with antiemetic drugs, treating the underlying cause, and providing supportive care.

Key Facts

Usually seen in

All age groups

Pregnant women

Gender affected

Both men and women, but more common in women.

Body part(s) involved

Brain

Stomach

Esophagus

Mimicking Conditions

Giddiness (dizziness)

Anxiety

Necessary health tests/imaging

Complete Blood Count (CBC)

Serum Electrolyte

Protein Total, Serum

Pregnancy Urine Test

Liver Function Test

X-Ray Abdomen

Dual Phase CT Abdomen

USG Abdomen

MRI Brain

CT Scan (Head)

Treatment

Antiemetic drugs: Domperidone, Ondansetron & Prochlorperazine

Antiemetics for morning sickness: Doxylamine + Vitamin B6 (Pyridoxine)

Antihistamines: Promethazine & Meclizine

Anticholinergic medications

Prokinetic drugs: Metoclopramide & Itopride

Supportive care: Oral Rehydrating Solutions (ORS)

Specialists to consult

General physician

Gastroenterologist

Neurologist

Obstetrician and gynecologist

Causes Of Nausea

Nausea is not a disease in itself. It occurs as a symptom of various diseases. Disturbances in the gastrointestinal tract, inner ear, or chemoreceptors (which are cells sensitive to chemicals) generate signals of being sick in the brain. The feeling of nausea is then produced as a response to these disturbances.

Some of the common causes of nausea include:

Gastrointestinal conditions: Any issue that interferes with the normal functioning of the stomach and the gastrointestinal tract can lead to nausea. These issues are:

Stomach infection or gastroenteritis

Food poisoning

Gastric ulcers

Appendicitis

Hyperacidity

Intestinal obstruction

Cholecystitis

Crohn’s disease

Gallstones

Gastroesophageal Reflux Disease (GERD)

Irritable bowel syndrome

Allergy to certain foods, like milk

Indigestion (or excessive food intake)

Ear and balance disorders:

Motion sickness

Meniere’s disease

Ear infection or otitis media

Vestibular neuritis

Pregnancy: Morning sickness or the feeling of nausea is a common occurrence in pregnancy especially during the first trimester.

Side effects of medications or therapies: Nausea can occur as a side effect of certain medications, such as chemotherapy drugs, NSAID painkillers, anesthetic drugs, and radiation therapy.

Self-inflicted: Sometimes, nausea and vomiting can be self-inflicted in severe eating disorders like anorexia or bulimia.

Other illnesses: The feeling of nausea is also seen with other health conditions, such as:

Allergy or anaphylaxis

Hyperthyroidism

Meningitis

Encephalitis

Hydrocephalus

Hepatitis

Migraine

Anxiety and depression

Claustrophobia

Excessive alcohol consumption

Heart attack

Cancer

Acute severe trauma

Nausea and vomiting in children

Vomiting in infants in the first few months can occur after feeding, known as spitting up. If the vomiting is projectile, meaning it occurs with a force and travels across a distance, it may suggest an abnormality in the stomach. Often gastrointestinal infections are also responsible for nausea and vomiting in children.

Here’s more on things to keep in mind if your child experiences vomiting.

Click Here To Read!

Diagnosis Of Nausea

A single episode of nausea does not require any immediate diagnosis, as it is often self-limiting and can be easily cared for at home. A detailed evaluation of nausea is necessary when symptoms of nausea are recurring or chronic. A detailed history and clinical examination (including the eye and/ ear) with some specific investigations listed below help in identifying the underlying cause of nausea:

Lab Tests: Laboratory tests include-

Complete Blood Count (CBC) to check for causes like anemia or active infections.

Serum Electrolyte to evaluate the balance of electrolytes, such as sodium and potassium in the body.

Protein Total, Serum checks the levels of human proteins, such as albumin, globulin, and the overall nutritional status.

Pregnancy Urine Test in females of reproductive age to check for suspected pregnancy.

Liver Function Test to check for the health of the liver and other possible causes of dysfunction of the liver.

Tuning fork test: It is a screening test that uses a tuning fork to assess hearing loss which could be the cause of nausea.

Nystagmus: It is a condition where a person cannot control eye movement.This can lead to dizziness or nausea, and also vision problems, as the person is unable to hold a steady gaze.

Uremia test: It is a clinical condition which is characterised by high levels of urea in the blood. Nausea and vomiting may be caused by encephalopathic (damage or disease that affects the brain) or neurologic disorders (diseases of the brain, spine and the nerves that connect them) associated with uremia.

Kidney function test (KFT): As the kidney health declines, some non-specific symptoms develop such as vomiting, nausea, weakness and tiredness.

These tests are performed to evaluate the overall health of a patient and diagnose the cause of nausea.

Imaging studies: If the cause of nausea is not established with physical evaluation and laboratory testing, certain imaging studies such as X-Ray abdomen, Dual phase CT abdomen, USG abdomen, and endoscopy, may be helpful in diagnosing gastrointestinal causes.

If nausea is suspected to result from problems in the central nervous system, an MRI of brain or CT scan (head) may be performed.

Celebs affected

Manisha Koirala

Bollywood actress Manisha Koirala has overcome ovarian cancer successfully. She battled severe nausea both before diagnosis and during her treatment.

Kate Middleton

HRH the Duchess of Cambridge Kate Middleton suffered from severe morning sickness while she was pregnant with prince George and princess Charlotte. She was recommended bed rest because of severe and debilitating nausea.

Did you know emetophobia = fear of throwing up?

Emetophobia is a condition in which people tend to have fear of vomiting, including fear of feeling nausea, seeing or hearing another person vomit, or seeing vomitus itself. They may experience paralyzing anxiety when around other people who may be ill or when in vicinity to germs in general. In such cases, it is wise to consult a doctor.

Consult Now!

Prevention Of Nausea

Not all types of nausea can be prevented, especially those originating from causes related to the central nervous system. Certain types of nausea, especially those originating from gastrointestinal causes can be prevented by:

Eating fresh food, which is not spicy and oily.

Eating smaller portions throughout the day instead of larger meals.

Drinking liquids between two meals.

Avoiding activities that trigger motion sickness, such as joyrides, traveling long distances via road, etc.

Resting in a sitting position or elevated position after meals.

Avoiding pain killers like NSAIDs above the prescribed dosage.

Avoiding strong smells, such as deodorants, perfumes, or cooking odors, if they trigger nausea during pregnancy.

Specialist To Visit

A mild or occasional episode of nausea and vomiting can safely be treated at home and does not require medical attention. However, if nausea is a chronic occurrence and/or multiple episodes of nausea and vomiting occur within a short span, it is essential to seek medical care. If your nausea lasts for more than 24 hours straight and is accompanied with severe pain in the abdomen, blood in the vomit, fever, and diarrhea, immediately consult your physician. Also, it is advisable to consult a doctor if you feel confused, lethargic, and dehydrated.

The doctors who diagnose and treat nausea are:

General physician

Gastroenterologist

Neurologist

Obstetrician and Gynecologist

Vomiting is also a common symptom that should not be ignored. Read about what causes vomiting and when to go to a doctor.

Click To Know More!

Treatment Of Nausea

Mild episodes of Nausea and vomiting do not require medical treatments as they often resolve on their own. For chronic or severe nausea, the following treatment options are available.

1. Symptomatic relief for nausea

Antiemetic medicines: Antiemetic medicines help to control nausea and prevent vomiting. These are the first choice of treatment suggested to provide relief from the symptoms of nausea. They work by blocking the action of the neurotransmitter receptors involved in causing vomiting. Some of the common examples of antiemetic medicines include:

Domperidone

Ondansetron

Prochlorperazine

Aprepitant

Antiemetics for morning sickness: To treat morning sickness, which is a common symptom seen in early stages of pregnancy, a combination of anti-nausea medicines are recommended. For example, doxylamine + Vitamin B6 (Pyridoxine), a combination drug which is used to treat and prevent nausea and vomiting during pregnancy. Doxylamine is an antihistamine that blocks the action of certain natural substances in the body that may contribute to nausea and vomiting. Vitamin B6 is also known to have anti-nausea action. Your doctor may recommend the dose based on the severity of your symptom.

Antihistamines: This class of medicines reduces or blocks the chemical histamine which is associated with allergy. These are helpful in treating nausea caused due to motion sickness or vertigo. Examples include:

Promethazine

Meclizine

Anticholinergic medications: This class of medicines acts by blocking the action of the neurotransmitter acetylcholine. This chemical is known to play a key role in managing numerous body functions. It also helps to control nausea and vomiting.

Prokinetic drugs: This class of medicines comes under prescription medicines. They promote normal contraction of the intestine and help in the emptying of the stomach. These are commonly recommended for people with GERD and given mostly in combination with medications that lower acid production in the body such as PPIs and H2 receptor blockers. Examples include:

Metoclopramide

Itopride

2. Treatment of underlying cause

This includes treating the underlying cause of nausea such as:

Stomach infections with antibiotics

Vertigo with antivertigo drugs

Hyperacidity with antacids

Migraine with triptans

Chemotherapy side effects with anti-nausea drugs

3. Supportive Care

This includes supportive care with fluids and Oral Rehydrating Solutions (ORS) to replenish the loss of electrolytes in the body. These help in cases where the patient has lost excessive fluids due to vomiting and shows signs of dehydration.

Did you know?

Vomiting is not as bad as you may think. It is basically your body’s way to get rid of toxic substances and bacteria. Whenever a foreign agent like bacteria enters your body, your defense mechanism tags it harmful, and your whole body gets agitated to throw it out – in the form of vomiting. Interesting process right? But in some cases, it can be a symptom of an underlying disease.

Click Here To Read More!

Home Care For Nausea

Homecare for Nausea depends on whether it is a one-time episode or a chronic occurrence.

Home remedies for acute nausea

The following care can be taken when a person starts feeling nauseous:

Sucking on ice chips or candies may help suppress nausea.

Ensuring appropriate hydration by consuming fluids and electrolytes to prevent dehydration.

Lying down in a propped-up position to settle the feeling of retching.

Avoiding heavy or spicy foods for at least 24 hours following an episode of nausea.

When vomiting cannot be averted, do not vomit while lying down. Vomit with your head positioned forward to prevent the risk of possible aspiration of vomit. Vomit aspiration in the lungs can cause serious health complications such as pneumonia.

Homecare for chronic nausea

The following care measures can be taken if a person suffers from chronic nausea in pregnancy, post-chemotherapy, vertigo, or other brain-related conditions:

Pregnant women should avoid strong smells or foods that trigger nausea.

For procedures like chemotherapy or radiation, take prescribed antiemetic medications on time as advised.

Patients with vertigo and motion sickness must avoid activities that worsen the symptoms, like joy rides or road travel.

Individuals suffering from gastrointestinal conditions that cause nausea should avoid consuming spicy, oily, or processed food.

Feeling nauseated? 6 foods that you can try for instant relief!

Click Here To Read More!

Alternative Therapies For Nausea

Relaxation techniques and breathing exercises: Exercises that promote overall body relaxation, such as breathing exercises, can help overcome feelings of nausea. Taking slow and deep breaths and holding breath for a short time after each breath is a simple breathing exercise to help you feel calm and may help ease nausea.

Aromatherapy: Aromatherapy can help reduce the feelings of nausea. It involves inhaling pleasant fragrances, such as peppermint oil fragrances or citrus fragrances which calm the sensation of nausea.

Acupressure and acupuncture: Acupressure and acupuncture techniques can help block the noxious stimuli that cause nausea by applying intense pressure to the peripheral trigger points. Applying pressure on the pressure point called Neiguan or P-6, which is on the inner arm, near the wrist helps reduce nausea.

Natural remedies: Sucking on small portions of certain natural foods, such as ginger candy or a piece of ginger with rock salt sprinkled on it, cumin seeds or powder, a piece of lemon, cinnamon stick, fennel seeds, etc., help overcome the feeling of nausea. These herbs and spices are known for their digestive properties, they help improve the taste sensation in the mouth and thus help suppress the sensation of nausea.

Complications Of Nausea

Worsening of acute episodes of nausea can lead to excessive vomiting, which can cause dehydration. In severe cases, it can lead to hypotension, shock, or loss of consciousness. It may result in poor nutrition as patients cannot consume or keep down solid food.

Vomit aspiration in the lungs is another serious complication of nausea. The aspirated fluid may collect in the lungs and cause pneumonia, which may be severe in some cases.

Malnutrition and weight loss is another complication seen in patients with chronic nausea, as they often avoid consuming full meals out of fear.

Consult India’s best doctors from the comfort of your home.

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Living With Nausea

Nausea can be exhausting for people who experience chronic nausea, such as cancer patients undergoing chemotherapy. With constant nausea, the person may lose interest in eating meals regularly, contributing to malnutrition and other health problems. Nausea in the first trimester of pregnancy is particularly troublesome for some women, and if left untreated, may cause health concerns for the mother and the baby. In such cases, do take precautions and medicines to prevent the condition.

Chemotherapy and Nausea: Antiemetics are usually advised prior to chemotherapy as nausea is one of the common side effects of cancer treatments such as chemotherapy or radiation therapy. In addition to taking these medicines, it is wise to keep a control on your diet and lead a stress-free lifestyle to improve your condition.

Migraine and Nausea: In some cases, people suffering from migraine can cause symptoms like nausea and vomiting. However, if you experience it on a regular basis or if nausea is worsened during a migraine attack, do consult a doctor and get the right treatment.

Acidity and Nausea: Several gastrointestinal problems are also associated with nausea and vomiting. It is advised to take medications such as prokinetic drugs and follow dietary modifications to help improve the symptoms.

Medications and Nausea: Nausea can occur as a side effect of many nonprescription and prescription medicines. These include antibiotics, NSAIDs such as aspirin and ibuprofen, antidepressants, chemotherapy drugs, opioid pain relievers and vitamins and mineral supplements such as iron. If you think that your nausea or vomiting may be caused by a medicine, call your doctor to know if you should stop taking the medication or need to take a different medication.

Do NOT overeat as it can cause nausea

When you overeat, your body tries to deal with the extra food by triggering nausea. In severe cases, the body may respond to this trigger by forcibly emptying the stomach through vomiting. Hence, it is important to keep a tab on what and how much you eat. Here are a few simple ways to control overeating.

Click To Know!

Frequently Asked Questions

What is the difference between nausea and vomiting?

How to relieve nausea post-chemotherapy?

How to overcome morning sickness in pregnancy?

Can constant nausea be a sign of something serious?

How to prevent motion sickness?

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Neck pain

Also known as Cervicalgia and Cervical pain

Overview

Neck pain is an extremely uncomfortable condition that impairs mobility and can interfere with daily activities. With the modern sedentary lifestyle and long hours of working on laptops and scrolling through social media, people seem to ignore sitting in the correct posture. This causes excessive strain on the neck leading to neck pain.

It can also be caused by conditions such as osteoarthritis, cervical spondylosis, degenerative disc disease, a herniated disc, a pinched nerve or neck injury. Neck pain can also be experienced during common infections, such as viral throat infection.

Neck pain can be largely prevented by maintaining a good posture, healthy weight, adequate hydration as well as neck strengthening exercises and neck bracing.

Mild neck pain can be managed at home by alternate use of ice packs and heat, gentle stretching, massage, topical anesthetic creams and over the counter pain relief medications. However, pain that persists even after 1 week should be medically evaluated.

Key Facts

Usually seen in

Adults above 18 years of age

Gender affected

Both men and women

Body part(s) involved

Neck

Spinal Cord

Shoulders

Arms

Back

Jaw

Head

Prevalence

Worldwide: 0.4% to 86.8% (2010)

Mimicking Conditions

Cervical sprain and strain

Cervical myofascial pain

Cervical disc disease

Cervical fracture

Chronic pain syndrome

Fibromyalgia

Adhesive capsulitis

Brachial plexopathy

Thoracic outlet syndrome

Carpal tunnel syndrome

Cubital tunnel syndrome

Parsonage-Turner syndrome

Multiple sclerosis

Vitamin B12 deficiency

Amyotrophic lateral sclerosis

Guillain-Barre syndrome

Vertebral metastasis

Discitis/osteomyelitis

Necessary health tests/imaging

Imaging tests: X-rays, CT scan, Ultrasound, MRI, and Discography

Laboratory tests: Electromyography (EMG), Nerve conduction studies (NCS) & Myelogram

Treatment

Medications: Acetaminophen, Antidepressants, Ibuprofen & Naproxen

Injections: Facet joint injections & Cervical epidural steroid injection

Surgery: Discectomy

Physical therapy

See All

Symptoms Of Neck Pain

A few of the symptoms associated with neck pain include:

1. Dizziness and unsteadiness

Dizziness and unsteadiness can be caused by inflammation or compression of the nerves in the neck. The most common cause of this is an injury after an accident, but it could also be due to repeated stress on the neck muscles.

2. Movement barrier

If you notice that you are unable to move your neck as per your normal requirement and there is a distinct stiffness, this is a movement barrier, a symptom of painful issues with your neck.

3. Frequent headaches

In the neck, issues of muscle tightness can cause increased tension and lead to headaches on a regular basis.

Read about ways to manage headaches without medications.

Read Now!

4. Pain in other areas

Any imbalance that puts additional strain on the network of nerves in the neck region, may result in shoulder, chest, arm, wrist, and hand discomfort.

What is text neck?

Text neck, also known as Turtle Neck syndrome is caused by continuous strain on the neck due to repeated stress from looking down at mobile screens or tablets for a long time. Know more about it.

Read To Know!

Causes Of Neck Pain

Neck pain is common for individuals who have a bad posture with their shoulders slouched forward and upper back rounded. This puts tremendous pressure on the vertebrae of the neck and can lead to conditions such as cervical spondylosis (wear-and-tear injuries of the spine) and cervical compression fractures (injuries resulting from compression of the spinal cord). Some primary causes of neck pain are as follows:

Muscle strain: Excessive use of the muscles in the neck, such as spending too much time crouched over a computer or smartphone, often results in muscular strains. Even activities, such as reading on the bed or grinding teeth, may cause the neck muscles to get strained.

Worn joints: As with the rest of the body’s joints, even the neck joints deteriorate with age. Osteoarthritis deteriorates the cushioning (cartilage) between the bones (vertebrae). Following that, the body creates bone spurs that impair joint mobility, leading to discomfort, even in the neck.

Compression of the nerves: Herniated discs or bone spurs in the neck vertebrae might compress the nerves that branch from the spinal cord.

Injuries: Whiplash damage is often the outcome of rear-end vehicle crashes. Whiplash occurs when the head is jerked backward and then forward, straining the neck’s soft tissues.

Other diseases: Neck discomfort may be caused by numerous conditions including rheumatoid arthritis, meningitis, and cancer.

Did you know?

Prolonged use of tight belts can cause tension in the neck area. It has also been associated with creating both abdominal and neck pressure which turns into uncomfortable individual experiences. In addition, it hurts spinal care. Prolonged sitting and standing led to this type of disease. Long-term usage of phones and laptops must be avoided. Thus, cervical spondylosis, cervical pain, neck pain, neck stiffness, neck muscle, neck sprain, back neck pain, and shoulder abnormalities can be reduced. Read more about spondylosis.

Click To Read!

Risk Factors For Neck Pain

There are a number of factors that increase the risk of neck pain like a sedentary lifestyle, sitting in front of a computer for prolonged periods of time, and carrying heavy bags around.

One risk factor that many people don't think about is the number of times they sleep on their stomachs. This increases the likelihood of experiencing neck pain due to poor posture and muscle imbalance between your head and torso.

Other risk factors include:

1. Age: The risk for neck pain increases with age. As you get older, your neck muscles tend to weaken. This makes it more difficult to support the head during rapid changes in posture or movement.

2. Gender: Females are thought to be at a higher risk for getting neck pain.

3. Excessive weight: Obesity is an important risk factor for developing neck pain because excess weight puts pressure on the spine and interferes with its normal function.

Know more about healthy diet plans and weight loss tips that can work for you.

Read This!

4. Height: Taller people are more likely to suffer from neck pain than shorter people.

5. History of lower back pain: Neck and back pain can also be related because a problem in one area of the body can lead to changes in posture and movement that negatively affect the other area.

6. Accidents: Any injuries during contact sports, motor-vehicle accidents, horse riding, etc. are a risk factor for neck pain.

7. Occupation: People with desk jobs or manual labor jobs (construction workers, carpenters, etc. have a higher risk of developing neck pain. Studies show that dentists, nurses, office workers, and crane operators have been shown to have a higher prevalence of neck pain.

Do you stare at computers all day? Using laptops, tablets, and smartphones for many hours at a stretch, can cause the weakening of neck muscles over a period of time. Read about ways to manage neck pain naturally.

Read Now!

8. Stress and anxiety: Stress is related to pain and disability and perceived as a risk factor for neck pain. Also, neck pain has been found to be comorbid with anxiety.

9. Depression: Mood disorders, especially depression, have been found to be related to chronic neck pain and disabilities.

Diagnosis Of Neck Pain

There are a lot of ways to diagnose issues affecting the neck. These include:

1. Complete medical history

A thorough medical history is the first step in diagnosing the specific cause of neck pain. It requires the doctor to ask about current symptoms, the patient’s occupation, and lifestyle.

2. Physical examination

A key component of the clinical evaluation of neck pain is to identify serious pathology and non-musculoskeletal diseases that may be the source of pain and related symptoms. It consists of examining the patient’s posture, particularly the neck and shoulders, feeling along the neck’s soft tissue for signs of muscle spasms, tightness, or tenderness, checking the range of motion reflexes, muscle power, and any unusual sensations along the extremities.

3. Imaging tests

These tests may include:

X-rays: X-rays are used to detect places where bone spurs or other degenerative changes might affect nerves or spinal cord.

CT scan: CT scan combines X-ray images taken from many different angles to make a detailed cross-sectional view of the inside of the neck.

MRI: This technique uses a strong magnetic field and radio waves to make detailed images of bones and soft tissues, such as the spinal cord and the nerves that come from the spinal cord.

Discography: A discogram might help the doctor to determine if a specific abnormal disk in the spine is causing back pain or neck pain.

4. Other tests

In addition there are certain other tests that can help determine the cause of your neck pain and they include:

Electromyography (EMG): Electrodes are inserted into the muscle, or placed on the skin overlying a muscle or muscle group, and electrical activity and muscle response are recorded for pain.

Nerve conduction studies (NCS): These measure how fast an electrical impulse moves through your nerve and can identify nerve damage.

Myelogram: This test uses a contrast dye and X-rays or computed tomography (CT) to look for problems in the spinal canal.

Selective nerve root block (SNRB): It is an injection used to identify the source of nerve pain in the neck and sometimes to also provide longer-term pain relief.

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Prevention Of Neck Pain

Neck pain is a common problem. One of the most common causes of neck pain is poor posture. This leads to improper use of muscles in the neck and spine, which leads to chronic pain.

Below are some preventive measures that can be taken to ensure proper posture in order to relieve neck pain:

1) Exercise regularly

It is advisable to exercise regularly so that your body doesn’t stiffen up when you are inactive. Aim for a 30-minute cardio workout 5 times a week.

Too lazy to sweat? To understand 7 simple tricks to help you exercise daily.

Read Now!

2) Perform stretching exercises for the neck

Keep your neck muscles fit by performing short sets of stretching and strengthening exercises throughout the day.

3) Maintain a healthy weight

Obesity or being overweight can predispose to neck pain. Hence, it is important to maintain the body mass index (BMI) between 19 and 24.

What is BMI? Read more.

Read Now!

4) Stay hydrated

Drink an adequate amount of water during the day. It helps to hydrate the discs between the vertebrae in the neck. These discs are mostly made up of water, so staying well hydrated will help keep your discs supple and strong. It is recommended to drink at least 8 large glasses of water per day unless advised otherwise by your doctor.

5) Maintain a good posture

Incorrect posture can cause neck pain by straining the muscles and ligaments that support the neck.

The head-and-shoulders-forward posture in which the neck slants forward, placing the head in front of the shoulders is the most common example of poor posture which adds to neck pain. This posture causes the upper back to slump forward as well, putting a strain on the entire spine.

6) Avoid straining the neck

Do not try to lift by bending your back. Squat down and reach your load by bending your hips and knees and then straighten your legs. Keep your load near your body and then straighten your legs to lift.

People tend to carry their bags on one side resulting in uneven load. This leads to pain in the neck and shoulder area. Whenever you have to carry a bag, make sure that the shoulders are at the same level or else you can use a backpack which will distribute the load evenly.

7) Use electronic gadgets correctly

Make sure that your mobile device is at your eye level while working. Avoid texting or looking down at your mobile device for a long duration of time.

Use any type of hands-free device, such as a headset or earpiece in case you spend a lot of time on the phone.

Put your phone out of reach when you sleep.

Adjust the monitor/laptop height. Your vision should be directly in the top-third of your computer screen. If you find you have to look down, raise your monitor up.

Laptops most often require you to angle your head downward to see the screen, so connecting your laptop to a separate monitor, or screen, can be beneficial.

8) Make safety a priority

Always wear a seat belt while traveling in the car to prevent whiplash injury.

Use proper sports equipment to protect the neck while playing sports, that can easily lead to neck injuries eg, football, basketball.

9) Wear a neck brace

Neck brace can provide support to the neck and help to prevent any neck injury or pain.

Want to get the right neck brace? Shop from our extensive collection of neck and shoulder support.

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Did you know?

For every inch the head shifts forwards, an extra 4.5 kgs of load is added to the muscles of the upper back and neck. A 5-inch forward shift results in 23 extra kgs of force. Keep your chin tucked inward to avoid this.

Specialist To Visit

Doctors that can help in the diagnosis and treatment of neck pain include:

General physicians

Otolaryngologists

Orthopaedists

Neurologists

When to call your doctor?

Call your doctor immediately if your neck pain is accompanied by:

Neck pain after having an accident.

Numbness or tingling in the arms, shoulders, or legs.

Weakness in legs or loss of coordination in arms or legs.

Headache, dizziness, nausea, or vomiting.

Loss of bowel or bladder control.

Chills, fever, or unexplained weight loss.

Pain does not come down with over-the-counter medications.

Pain persists for more than a week.

Make sure that you and your loved ones get the right treatment, you need a reliable and expert doctor. Find the best doctors near you online.

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Treatment Of Neck Pain

There are different treatments which are as follows:

1. Pain relief medications

Various pain relief medications like nonsteroidal anti-inflammatory drugs (NSAIDs), are prescribed for management of neck pain. They should be used under medical supervision as self medicating is never a good idea. Some egs include:

Paracetamol/ Acetaminophen

Paracetamol/Acetaminophen + Tramadol

Ibuprofen

Naproxen

2. Physical therapy

Physical therapy is one of the most common treatments for managing long term neck pain. It can help in reducing stiffness as well as improving head and neck range of motion. It aids in strengthening the neck and its supporting musculature along with preventing pain from recurring.

3. Injections

In case of severe neck pain, a physician may inject a small amount of local anesthetic and/or medication to numb a joint and provide pain relief.

Injection of anti-inflammatory medicine like a corticosteroid might also be used around the nerves in the neck.

4. Surgery

Surgery is usually not indicated for neck pain, though it might be considered for alleviating nerves or spinal cord compression. Along with surgery, drugs like non-steroidal anti-inflammatory drugs [NSAIDs], opioids, benzodiazepines, gabapentin, neurontin, and cortisone injections are also used to boost the recovery process.

Home-Care For Neck Pain

Neck pain can be disturbing and might interfere with daily activities. Home care, a break from sports, gyming, or any other physical activity is recommended. At the early stage of any neck injury, a doctor must be consulted and heavy lifting must be avoided. Other tips that you can follow include:

1. Gently massage the affected areas

You can lower your shoulders and identify the sore spot and then gently massage your neck with essential oils for immediate relief. Essential oils like peppermint or lavender oil are known to be beneficial.

2. Exercise daily

Stretching is a great form of exercise that can be very helpful if you have a stiff neck. Moving your head gently will increase the blood flow in a particular area and reduce inflammation.

3. Adjust your sleep positions

Sleeping on your back is the best position for your neck. You can also sleep on your side, but never on your stomach. Choose a rounded pillow to support the natural curve of your neck, with a flatter pillow cushioning your head.

4. Apply hot or cold compresses

A hot or cold compression can help you to get quick relief from a stiff neck. It is recommended to use ice for the first 24 to 48 hours to reduce swelling, followed by heat to loosen muscles and improve stiffness.

5. Take hot showers

Warm water bath can help you relax and soothe the tightened muscles, and nothing is better than adding a little Epsom salt. The salt helps to reduce inflammation and improve blood flow.

6. Try apple cider vinegar

Apple cider vinegar is an excellent home remedy to treat a stiff neck as it is loaded with antioxidants and anti-inflammatory agents. Just soak a napkin in some apple cider vinegar and apply it on your neck.

Take A Break! Read more on 6 small steps toward the painless neck and back.

Click Here!

Complications Of Neck Pain

Neck pain can cause a lot of discomfort and reduces mobility affecting the quality of life. Most common complications of neck pain are discussed below:

Loss of productivity: Studies show that most workers with neck/shoulder symptoms or hand/arm symptoms experience productivity loss from a decreased performance at work and not from sickness absence.

Nerve damage: Cervical radiculopathy, commonly called a "pinched nerve," occurs when a nerve in the neck is compressed or irritated where it branches away from the spinal cord.

Depression: Living with chronic back or neck pain can lead to depression, feelings of stress, anxiety, sadness, and other mental health-related symptoms.

Weight gain: Having excessive weight gain can also lead to a bad posture where your head is slightly pushed forward and your back is curved. This puts more weight on the neck and shoulders, causing them to strain.

Can COVID cause neck pain? Some people with COVID-19 experience neck pain, soreness, and stiffness. In some cases, neck pain can be a persistent symptom of long COVID. Read more on COVID.

Read Now!

Alternative Therapies For Neck Pain

1. Ayurveda

This contributes significantly to the management of neck discomfort by combining a corrected Ahar (diet), Vihar (exercise), and Aushadhi (medicines) program. Pranayama or breathing exercises are recommended. Ayurvedic concoctions made with Rasnairandadikashaya, YogarajaGuggulu, and Sahacharadi Kashaya are highly recommended.

2. Homeopathic medicine

Homeopathy has also been regarded as a safe approach to treating neck pain and muscle stiffness. It is devoid of extreme side effects while effectively treating the affected area. Medications such as Bryonia, Causticum, Cimicifuga, and Chelidonium Majus effectively treat stiff neck muscle pain and alleviate sore points.

3. Yoga

For ages, yoga has been known to provide effective and long-term relief to critical ailments, and therefore, the same stands true for neck pain. The following yoga poses can be tried.

Ear-to-shoulder neck rolls

Seated forward bend

Crossbody shoulder stretch

Two-footed pose, however, the poses are to be done as per expert guidance.

The word 'Yoga' is derived from Sanskrit and means 'to unite, symbolizing the union of body and mind. Read more about simple yoga postures to relieve neck pain.

Click Now!

4. Gua sha

Gua sha typically involves having a trained practitioner use a spoon to apply short strokes down the skin of the painful area. It is from Chinese Traditional Medicine, and it’s applied to areas of the body where blood circulation is believed to be stagnant and blocking energy (called “qi”). While there is no scientific evidence for qi, people have reported neck pain relief from gua sha.

Living With Neck Pain

Neck pain can cause serious problems like disability, challenges to daily movement and lack of balance in the body. It is often associated with headaches and shoulder pain, which can be challenging to deal with on a daily basis.

Here are some of the tips to manage living with neck pain:

Maintain a good posture by choosing the right support chair for the neck

Try water pillows, as they can adjust the firmness by increasing or reducing the amount of water inside

Start physical therapy to understand how to reduce the risk of injury, learn exercises targeting the affected area, and identify incorrect postures

Start swimming after consulting your doctor. It is a great low-impact exercise for many people who have neck or back pain

Maintain a journal to record the intensity and duration of pain so that you can identify your triggers

Be careful on how and how much of screen time you are indulging in

Manage your stress by using relaxation techniques including yoga, meditation, exercise and running. Start with one and engage for at least half an hour every day in the morning.

Did you know?

Neck pain is a common symptom caused by persistent stress, and many people have experienced neck pain as a result. The pain can center in our necks as stress and worries build. The most common cause of neck pain is muscle tension. Read more about stress.

Read Now!

Frequently Asked Questions

Who is most affected by neck pain?

When should I call the doctor if I have neck pain?

What is the most common reason for neck pain?

Can neck pain cause headaches?

Who is a chiropractor and how can they help with neck pain?

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Neonatal Jaundice

Also known as Icterus Neonatorum, Physiological jaundice of the newborn and Neonatal hyperbilirubinemia

Overview

Neonatal jaundice or neonatal hyperbilirubinemia occurs as a result of elevated total serum bilirubin (TSB) and clinically manifests as yellowish discoloration of the skin, sclera (the white layer that covers the inner surface of the eye) and mucous membrane. This is a very common condition and is seen in about 2/3 of all healthy newborns. However, sometimes it may be a sign of feeding habits, level of hydration, or the lifespan of red blood cells (RBCs). Other rare causes can include metabolic disorders, malfunctioning of the glands, or liver disease.

In most cases, jaundice is a mild, transient, and self-limiting condition and is referred to as "physiological jaundice." If it becomes more severe due to an underlying cause then it is called "pathological jaundice." Failure to diagnose and treat pathological jaundice may lead to the deposition of bilirubin in the brain tissues, known as kernicterus.

The treatment of choice depends on the severity of jaundice, the cause for the increase in bilirubin, or the type of bilirubin. It can vary from something as simple as increasing water intake and modifying the feeding to a very complex treatment depending on the cause.

Key Facts

Usually seen in

Newborns within 1st week of their life

Gender affected

Both men and women

Body part(s) involved

Sclera of the eyes

Palms of hands

Soles of feet

Prevalence

Worldwide: 75% (2022)

Necessary health tests/imaging

Van den Bergh reaction

Bilimeter assessing total bilirubin

Transcutaneous bilirubinometer

Treatment

Phototherapy

Exchange transfusion

Intravenous immunoglobulins

Kasai’s operation

Specialists to consult

Pediatrician

Types Of Neonatal Jaundice

Jaundice can be classified into a few different types in newborns. They are as follows:

Physiological jaundice: This is the most common type and is normal. Physiological jaundice develops in most newborns by the 2nd or 3rd day. It occurs after the development of the liver and it starts to get rid of excess bilirubin. Physiological jaundice usually isn’t serious and goes away on its own within two weeks.

Pathological jaundice: Jaundice is considered pathologic if it presents within the first 24 hours after birth, with a rise in the total serum bilirubin level more than 5 mg per dL per day or is higher than 17 mg per dL. It can present itself in infants who have signs and symptoms suggestive of serious illness.

Breastfeeding jaundice: this type of jaundice is more common in babies that are breastfed and it is the baby’s first week of life. It happens due to a lack of breast milk due to nursing difficulties or because your milk hasn’t come in yet. Breastfeeding jaundice may take longer to go away.

Breast milk jaundice: Substances in breast milk can affect how the baby’s liver breaks down bilirubin leading to bilirubin buildup. Breast milk jaundice may appear after your baby’s first week of life and may take a month or more to disappear.

Are you a new mom or mom to be? Then, you might have a lot of apprehensions about breastfeeding. Read about 7 things that you must be aware of breastfeeding.

Click Here!

Symptoms Of Neonatal Jaundice

Babies who are born premature (too early) are more likely to develop jaundice than full-term babies. The main sign is yellowing of the skin and the whites of the eyes which usually appears between the second and fourth day after birth. Bilirubin levels typically peak between the third and seven days after birth.

To check for jaundice in the newborn, press gently on your baby's forehead or nose. The sign of jaundice is the skin looks yellow in the area that was pressed, in case of mild jaundice. If the baby doesn't have jaundice, the skin color should simply look slightly lighter than its normal color for a moment.

Along with the skin becoming yellow, other symptoms that are quite rare include:

Very light yellow or very dark brown urine.

Yellow mustard color (normal) to light beige stool.

Always examine the baby in good lighting conditions, most preferably the natural daylight. Read more about 5 essential tips to keep your baby healthy.

Tap To Read!

Causes Of Neonatal Jaundice

The causes of neonatal hyperbilirubinemia can be divided into two distinct categories namely:

Unconjugated hyperbilirubinemia: Also called direct hyperbilirubinemia usually results from increased production, impaired uptake by the liver, and decreased conjugation of bilirubin.

Conjugated hyperbilirubinemia: Pathologic elevation of conjugated or direct bilirubin concentration higher than 2 mg/dL or more than 20% of total bilirubin.

Unconjugated hyperbilirubinemia(UHB) or indirect hyperbilirubinemia

Based on the mechanism of bilirubin elevation, the etiology of unconjugated hyperbilirubinemia can be subdivided into the following three categories:

1. Increased bilirubin production: This is due to the following causes:

Immune-mediated hemolysis - Which includes blood group incompatibilities such as ABO and Rhesus (RH) incompatibility. If the mother's blood has antibodies that do not work with the blood type of a baby, the newborn will experience blood incompatibility and ABO and RH are the two most common types of incompatibilities.

Blood group testing is done to determine a person's blood group (A, B, AB, or O) and Rh type. Understand better about blood grouping and how it is done.

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Non-immune mediated hemolysis: That includes :

RBC membrane defects like hereditary spherocytosis and elliptocytosis (changes in the shapes of RBCs)

RBC enzyme defects like glucose-6-phosphate dehydrogenase (G6PD) and pyruvate kinases deficiency

Sequestration like a blood clot or bleeding between the skull and scalp, intracranial hemorrhage; polycythemia (type of blood cancer), and sepsis.

2. Decreased bilirubin clearance: It is due to the following syndromes:

Crigler Najjar syndrome: Is a severe condition characterized by hyperbilirubinemia.

Gilbert’s syndrome: A common, harmless liver condition in which the liver doesn't properly process bilirubin.

3. Miscellaneous causes: Other miscellaneous causes include:

Congenital hypothyroidism

Drugs like sulfa drugs, ceftriaxone, and penicillins

Intestinal obstruction

Pyloric stenosis (blockage of food from entering the small intestine)

Breast milk jaundice

Breastfeeding jaundice

Diabetes in the mother of the infant

Gestational diabetes mellitus (GDM), defined as diabetes diagnosed during pregnancy, affects a significant proportion of women worldwide. Read more about gestational diabetes: causes, risk factors, and symptoms.

Click Here!

Conjugated hyperbilirubinemia(CHB) or direct hyperbilirubinemia

The causes of neonatal CHB are extensive and can be classified into the following categories:

1. Obstruction of biliary flow

Biliary atresia (blockage of the bile duct)

Choledochal cysts (congenital bile duct anomaly)

Neonatal sclerosing cholangitis (obstructive fibrosis of the bile ducts)

Neonatal cholelithiasis (gallbladder stones in infants)

2. Infections

Cytomegalovirus (CMV)

Human immunodeficiency virus (HIV)

Rubella

Herpes virus

Syphilis,

Toxoplasmosis

Urinary tract infection (UTI)

Septicemia

3. Genetic causes

Alagille syndrome: An inherited condition in which bile builds up in the liver because there are too few bile ducts to drain the bile.

Alpha-1 antitrypsin deficiency: An inherited condition that raises your risk for lung and liver disease. Alpha-1 antitrypsin (AAT) is a protein that protects the lungs.

Galactosemia: A disorder that affects how the body processes a sugar called galactose.

Fructosemia: Also called hereditary fructose intolerance is one of the more common errors in metabolism of the newborns.

Tyrosinemia type 1: A genetic disorder characterized by elevated blood levels of the amino acid tyrosine.

Cystic fibrosis: An inherited disorder that causes severe damage to the lungs, digestive system, and other organs in the body.

Progressive familial intrahepatic cholestasis (PFIC): A disorder that causes progressive liver disease, which typically leads to liver failure.

Aagenaes syndrome: A form of idiopathic familial intrahepatic cholestasis associated with lymphedema of the lower extremities.

Dubin-Johnson syndrome: A condition characterized by jaundice, which is a yellowing of the skin and whites of the eyes.

Bile acid synthesis disorders (BSAD): Are a group of rare metabolic disorders characterized by defects in the creation (synthesis) of bile acids.

4. Miscellaneous

Idiopathic neonatal hepatitis: An uncommon syndrome of prolonged obstructive jaundice associated with giant cell transformation in the liver and patent bile ducts.

Parenteral nutrition-induced cholestasis: is a progressive rise in alkaline phosphatase and/or conjugated bilirubin and is diagnosed in patients who receive nutrition through the veins (IV) to develop cholestasis (reduced flow of bile from the liver).

Gestational alloimmune liver disease/neonatal hemochromatosis: Is a clinical condition in which severe liver disease in the newborn is accompanied by extrahepatic siderosis (deposition of excessive iron)

Hypotension: Low blood pressure under 90/60 mm/Hg.

Risk Factors For Neonatal Jaundice

ABO incompatibility, Rh incompatibility, and G6PD deficiency are the most common risk factors for the development of neonatal jaundice. Other risk factors include:

Maternal diabetes

Race of the mother

Premature birth

Height of the mother

Polycythemia ( a type of blood cancer)

Male sex of the newborn

Cephalohematoma (blood clot between the skull and the scalp)

Medications like sulfa drugs, penicillin and ceftriaxone.

Trisomy 21 ( also known as down’s syndrome)

Weight loss during pregnancy

Breastfeeding

Did you know?

Some factors may also contribute to neonatal jaundice, are congenital infections like syphilis, CMV, rubella, toxoplasmosis, and age of the mother being more than 25 years. Here are 10 things you should ask your pediatrician to take care of yourself and the baby.

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Diagnosis Of Neonatal Jaundice

Jaundice is mainly diagnosed based on the baby's appearance. However, it's still necessary to measure the level of bilirubin to determine the severity of jaundice to decide the course of treatment. Tests to detect jaundice and measure bilirubin levels include:

Clinical physical examination

Dermal staining of bilirubin may be used as a clinical guide to the level of jaundice. Dermal staining in newborns progresses in a cephalo-caudal (head to toe) direction. The doctor should follow these to do the physical examination of the newborn:

The newborn should be examined in good daylight.

The doctor should apply pressure on the skin with the fingers to peel the skin and the underlying color of the skin and subcutaneous tissue should be noted.

Newborns who are detected with yellow skin beyond the thighs should have an urgent laboratory confirmation for bilirubin levels.

Note: Clinical assessment is unreliable if a newborn has been receiving phototherapy and has dark skin.

Laboratory tests

Bilirubin levels can be checked through the following:

Biochemical: The gold standard method for bilirubin estimation is the total and conjugated bilirubin assessment based on the van den Bergh reaction. It is a chemical used to measure the levels of bilirubin.

Bilimeter: Spectrophotometry is the base of the bilimeter and it assesses total bilirubin in the serum. Spectrophotometry is a method to measure how much a chemical substance absorbs light by measuring the intensity of light as a beam of light passes through a sample solution. Because of the predominant unconjugated form of bilirubin, this method has been found to be a useful method in neonates.

Transcutaneous bilirubinometer: This method is non-invasive and uses the bilirubin staining in the skin. The accuracy of the instrument depends on the variation of skin pigmentation and thickness.

Clinical approach

The first step in the evaluation of any newborn with jaundice is to differentiate between physiological and pathological jaundice. It consists of checking for the following:

Dependency on preterm: Babies who are born before their term needs to be evaluated in a different manner based on the degree of prematurity and birth weight.

A baby born before the 37th week of pregnancy is considered to be a preemie or premature baby. Here are a few tips to take care of a premature baby at home.

Tap To Know!

Evidence of hemolysis: Hemolytic jaundice should be considered if there is:

Onset of jaundice within 24 hrs

Presence of pallor( pale appearance) and hydrops (swelling)

Presence of hepatosplenomegaly (enlargement of spleen and liver)

Presence of hemolysis (destruction of RBCs) on the smear of peripheral blood

Increased count of reticulocyte (>8%)

Rapid rise of bilirubin (>5 mg/dl in 24 h or >0.5 mg/dl/hr)

Family history.

Prevention Of Neonatal Jaundice

There’s no real way to prevent neonatal jaundice. But certain measures can be taken to create awareness like:

Government and public health organizations should arrange seminars, workshops and train mothers regarding neonatal jaundice.

Medical scientists should develop new treatments and preventive measures having little or no side effects and capable of recovering babies more effectively.

Partners should screen their ABO blood groups as well as Rh factor before marriage.

Marriages between closely related individuals should be avoided.

After birth, the baby should be tested for blood incompatibilities.If the baby does have jaundice, there are ways to prevent it from becoming more severe. They are:

Making sure the baby is getting enough nutrition through breast milk.

Feeding the baby 8 to 12 times a day for the first several days. This ensures bilirubin passes through their body more quickly.

Giving 1 to 2 ounces of formula every 2 to 3 hours for the first week in case the baby is not on breast milk.

Monitoring the baby for the first five days of life for the symptoms of jaundice, such as yellowing of the skin and eyes.

Did you know?

Breast milk is considered the gold standard for infant feeding. Know more about why breastfeeding is important.

Click Here!

Specialist To Visit

Most cases of neonatal jaundice are normal, but sometimes it can be an indicator of an underlying medical condition. The doctor to consult in this case is a pediatrician. Contact the doctor if:

The spread of jaundice is more severe and rapid.

The baby’s yellow coloring gets darker.

The baby develops a fever over 38°C (100°F).

The baby is not taking milk, appears restless or lethargic, and cries at a high pitch.

If your baby is experiencing any such symptoms, seek help from world class doctors at 1mg.

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Treatment Of Neonatal Jaundice

Treatment is usually only needed in babies with high levels of bilirubin in the blood. Usually, the condition gets better within 10 to 14 days and will not cause any harm to the baby.

The treatments are recommended to reduce the risk of a rare but serious complication of newborn jaundice and kernicterus, which can cause brain damage. If the baby's jaundice does not improve over time, or tests show high levels of bilirubin in their blood, they may be treated with the following:

Phototherapy

Phototherapy is treatment with a special type of light (not sunlight). It's sometimes used to treat newborn jaundice by making it easier for your baby's liver to break down and remove the bilirubin from your baby's blood.

Phototherapy aims to expose your baby's skin to as much light as possible. This procedure consists of:

Placing the baby under a light either in a cot or incubator with their eyes covered.

A break is given after 30 minutes to feed the baby, change their nappy and cuddle them.

Intensified phototherapy may be offered if the baby's jaundice does not improve.

This involves increasing the amount of light used or using another source of light, such as a light blanket, at the same time.

Treatment cannot be stopped for breaks during intensified phototherapy.

During phototherapy, the baby's temperature is regularly monitored to make sure they're not getting too hot, and look for signs of dehydration. Intravenous fluids may be needed if the baby is becoming dehydrated and not able to drink enough.

The bilirubin levels will be tested every 4 to 6 hours, in the beginning, to check if the treatment is working and once the bilirubin levels stabilize or start to fall, they will be checked every 6 to 12 hours.

Phototherapy will be stopped once the bilirubin levels fall to a safe level, (which usually takes 2 days). It is generally very effective for neonatal jaundice and has few side effects.

Note: As long as the level of bilirubin is not very high, the phototherapy treatment can be done at home with a special blanket called a “bili” blanket.

Exchange transfusion

If the baby has a very high bilirubin level in their blood or phototherapy has not been effective, they may need a complete blood transfusion, known as an exchange transfusion.

During an exchange transfusion, a thin plastic tube will be placed in blood vessels in the umbilical cord, arms, or legs to remove the blood. The blood is replaced with blood from someone with the same blood group. As the new blood will not contain bilirubin, the overall level of bilirubin in the baby's blood will fall quickly.

The baby will be closely monitored throughout the transfusion process to treat any problems that may arise, such as bleeding. Post the transfusion the baby's blood will be tested within 2 hours of treatment to check if the process was successful.

The procedure may need to be repeated if the level of bilirubin in your baby's blood remains high.

Intravenous immunoglobulin (IVIG)

If the jaundice is caused by RH incompatibility intravenous immunoglobulin (IVIG) may be used. IVIG is usually only used if phototherapy alone has not worked and the level of bilirubin in the blood is continuing to rise.

Kasai operation (hepatic portoenterostomy)

Newborns diagnosed with biliary atresia or Type IVb choledochal cyst require a Kasai operation (hepatic portoenterostomy) to allow for bile drainage. This procedure should preferably be done within two months of life for the best outcomes.

Other treatments

Treatment of conjugated hyperbilirubinemia depends on the cause such as:

If jaundice is caused by an underlying health problem, such as an infection, this usually needs to be treated.

Metabolic causes of cholestasis respond well when there is an improvement in the primary disorder and liver functions.

Parenteral nutrition (PN)-induced cholestasis is managed with cyclic PN, reducing the duration of exposure and starting initial feeds as early as possible. Manganese and copper content of PN should be reduced to minimize liver injury.

Home-care For Neonatal Jaundice

Neonatal jaundice is quite common here are a few tips to take care of newborns at home:

Keep the pediatrician updated about any changes in the baby’s condition and call immediately if the yellowing of the baby’s skin becomes darker than before.

Make sure that the baby is well-fed.

Even the cause of jaundice may be breastfeeding, continuing to feed the infant in accordance with the doctor’s guidelines.

Breastfeeding should be done at least 8 to 12 times a day, whereas bottle-fed infants should be given at least 6 to 10 feedings in a day.

Expose the newborn to direct sunlight for prolonged periods.

Monitor the baby carefully to see if there is any rise in the temperature, loss of appetite, or restlessness.

Ensure that the baby is hydrated sufficiently.

Feed the baby frequently with supplementation to prevent weight loss.

Complications Of Neonatal Jaundice

Newborns with severe hyperbilirubinemia are at a higher risk of developing the following complications:

1. Bilirubin-induced neurologic dysfunction (BIND)

It refers to the clinical signs associated with bilirubin toxicity such as hypotonia (decreased muscle tone) followed by hypertonia (increased muscle tone) and/or opisthotonus (muscle spasm) or retrocollis (repetitive muscle contraction in the neck) and is typically divided into acute and chronic phases. It occurs as bilirubin binds different parts of the brain causing neurotoxicity.

2. Acute bilirubin encephalopathy (ABE)

Potentially devastating conditions that can lead to death or life-long neurodevelopmental handicaps. It is characterized by lethargy, hypotonia, and decreased suck. At this stage, the disease is reversible.

3. Chronic bilirubin encephalopathy (kernicterus)

If ABE progresses, then the infants can develop kernicterus, which is then irreversible. It occurs due to brain damage as a result of high serum bilirubin levels. It manifests as involuntary twitching, cerebral paralysis, seizures, arching, posturing, gaze abnormality, and hearing loss.

4. Neonatal cholestasis

Patients with neonatal cholestasis are at risk of developing liver failure, cirrhosis, and even hepatocellular carcinoma (liver cancer) in a few cases. Long-standing cholestasis may also lead to failure in gaining weight and fat-soluble vitamin deficiencies.

Alternative Therapies For Neonatal Jaundice

The common option for treating neonatal hyperbilirubinemia and preventing any neurologic damage is the use of phototherapy and/or exchange transfusion. Some of the alternatives in the treatment of neonatal jaundice are:

Metalloporphyrins

Metalloporphyrins (synthetic heme analogs) are competitive inhibitors of heme oxygenase, the rate-limiting enzyme in bilirubin production. Their use has been proposed as an attractive alternative strategy for preventing or treating severe hyperbilirubinemia.

Specifically, tin-protoporphyrin (SnPP) and tin-mesoporphyrin (SnMP) are being used experimentally to prevent and treat neonatal hyperbilirubinemia.

Natural remedies

1. Magnesium: A study showed that pregnant women who took 250 mg of magnesium daily for 6 weeks can reduce the risk of excess bilirubin production.

Try adding magnesium-rich foods to your diet if you’re pregnant or breastfeeding. Read more about tests to detect magnesium deficiency.

Click Here!

2. Probiotics: Probiotic supplementation in newborns can help significantly improve jaundice symptoms by decreasing bilirubin levels that cause jaundice and helping the body clear out excess bilirubin.

3. Barely seed flour: Researchers have found that barley seed flour sifted over a baby’s skin along with light exposure improved jaundice in newborn babies. The barley flour acts as an antioxidant and helps decrease indirect bilirubin levels. This is a traditional Iranian remedy.

Living With Neonatal Jaundice

Though it may look scary, neonatal jaundice generally clears on its own and is very common in newborns. The way to manage it would be to be aware of it and follow simple steps like:

Keep an eye on the newborn to look for yellowing of the skin

Make sure that the baby is well-fed and has enough nutrition

Expose the baby to direct sunlight (preferably between 7-9 am)

Breastfeed the baby adequately

Look out for sings like lethargy, restlessness or high pitched cries

Keep the baby comfortable

Be in constant touch with the pediatrician to monitor baby’s symptoms

Frequently Asked Questions

How long does neonatal jaundice last?

What is the prognosis for jaundice in newborns?

How to check for jaundice in neonates?

Is neonatal jaundice fatal?

When should one see their pediatrician?

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Nose bleeding

Also known as Epistaxis

Overview

Nose bleeding is characterized by blood flow from one or both nostrils lasting for a few seconds to 15 minutes. It is quite common and many people experience it now and again. But it is most frequently seen in children between 2 to 10 years of age, elderly people, pregnant women, and people taking blood thinning medication.

The common causes of nosebleeds include picking the nose, blowing the nose very hard, a minor injury to the nose, and changes in humidity or temperature causing the inside of the nose to become dry and cracked.

Nose bleeding can be prevented by avoiding picking the nose and keeping the fingernails short, blowing the nose as little as possible, and wearing a head guard during activities in which the nose or head could get injured

It is usually not serious and can be controlled at home. However, recurrent heavy nose bleeding should be medically evaluated for timely diagnosis and treatment.

Key Facts

Usually seen in

Children aged 2-10 years and adults aged 50-80 years

Gender affected

Both men and women

Body part(s) involved

Nose

Mimicking Conditions

Nasal tumor

DIC (Disseminated Intravascular Coagulation (DIC)

Hemophilia

Von Willebrand disease

Rhinitis

Foreign body in the nose

Drug toxicity (Warfarin, NSAIDs)

Necessary health tests/imaging

Lab tests

Complete blood count (CBC)

Coagulation studies -prothrombin time & partial thromboplastin time (PPT)

Imaging tests

Computed Tomography (CT)

Magnetic Resonance Imaging (MRI)

Treatment

Medications

Oxymetazoline and phenylephrine hydrochloride tranexamic acid

Nasal packing

Cauterization

Embolization

Septal surgery

Ligation

Specialists to consult

ENT specialist

Symptoms Of Nose bleeding

The signs and symptoms of nose bleeding include:

Bleeding from either or both nostrils

Sensation of flowing liquid at the back of the throat

Excess blood loss from the nose may lead to dizziness, fainting, and confusion

Causes Of Nose bleeding

The inside of the nose consists of tiny, delicate blood vessels that can become damaged and bleed relatively easily. Some of the common causes of nosebleeds include:

Dry air can be caused by hot, low-humidity climates or heated indoor air. The environment causes the nasal membrane to dry out and become crusty or cracked and more likely to bleed when rubbed

Blowing the nose with force

Nose picking

A minor injury to the nose

Inserting objects into the nose

Cold or allergies

Blood thinning drugs (aspirin and warfarin) reduce the blood's ability to clot and hence prolong bleeding

Repeated use of nasal sprays to treat allergies can dry out the nasal membrane

Inhaling chemical irritants such as ammonia can begin to burn away the lining of the nose if inhaled for a longer time

Snorting cocaine can cause nasal problems like permanent physical damage or nose bleeds

The deviated septum can block one side of the nose and reduce airflow, leading to crusting or nose bleeding in certain people

Some of the other less common causes of nosebleeds include:

High Blood Pressure (Hypertension): Although there is no direct link between nosebleeds being a signs of high blood pressure, a hypertensive crisis consisting of a sudden, severe increase in blood pressure can cause increased pressure in the blood vessels and lead to nosebleeds.

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Nasal tumors: These tumors can cause blockage in the nose and lead to a decreased sense of smell and nosebleeds

Inflammatory conditions: Various types of inflammatory or granulomatous disease within the nasal cavity can cause bleeding. Some of the common examples include

Bacterial sinusitis- A bacterial infection of the sinuses, the hollow spaces in the bones of the face around the nose.

Allergic rhinitis- It is inflammation of the inside of the nose caused by allergens, such as pollen, dust, and mold.

Nasal polyposis- It is noncancerous growth on the lining of your nasal passages or sinuses.

Wegner granulomatosis- Inflammation of the blood vessels of the nose.

Tuberculosis- It is an infectious disease that usually affects the lungs.

Hereditary hemorrhagic telangiectasia (HHT): It is a genetic vascular disorder, which leads to the development of small lesions called telangiectasia, which can burst and bleed.

Pregnancy: Nosebleeds can be experienced during pregnancy on account of hormonal changes.

Types Of Nose bleeding

Nose bleeding is described by the site of the bleeding. The two main types of nose bleeding are:

Anterior nose bleeding

It originates towards the front of the nose and causes blood to flow out through the nostrils. Capillaries and small blood vessels in this area of the nose are fragile and can easily break and bleed. This is the most common nosebleed found in children and is usually not serious.

Posterior nose bleeding

It originates toward the back of the nasal passage, near the throat. Posterior nosebleeds are considered to be more serious than anterior nosebleeds. It causes heavy bleeding, which may flow down the back of the throat and is more common in adults.

Risk Factors For Nose bleeding

Atmospheric changes

Conditions like high altitudes, dry climatic conditions, and cold weather are known to dry out the nasal membrane and cause nose bleeding.

Habits

Certain habits like putting a finger in the nose or aggressively picking the nose can lead to tearing of the nasal mucous membrane leading to epistaxis.

History of bleeding disorders

Individuals having a history of blood clotting disorders can have heavy bleeding in the case of any nasal injury.

Inflammatory conditions

Individuals with various inflammatory conditions like the common cold, sinusitis, allergies, and nasal polyps are known to have nose bleeding as a common symptom.

Blood thinning medications

Individuals with prolonged use of anticoagulants (blood-thinning drugs) like aspirin, and warfarin are known to bleed easily as these drugs have blood-thinning properties.

Stress

Stress and anxiety are risk factors for nose bleeding. Research has shown that individuals having psychological issues are at a higher risk for chronic, recurring, or unexpected nosebleeds.

If a person is feeling anxious then he tends to pick his nose which could also trigger bleeding.

Is stress affecting your overall well-being? Try some relaxation techniques to manage stress.

Tap to explore

Smoking and excessive alcohol intake

Nicotine is a dangerous substance in cigarettes that can act as an irritant in the nasal mucosa and cause nose bleeding. Excessive alcohol intake can also lead to epistaxis as alcohol inhibits blood clotting and dilates the blood vessels.

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Diagnosis Of Nose bleeding

History

If an individual is experiencing nose bleeding the doctor would ask questions like:

Duration of the nosebleed

How often do you experience nose bleeding

Amount of blood lost during the incident

Drug history to point out the use of drugs that may promote bleeding, including aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs), other antiplatelet drugs heparin, and warfarin.

History of smoking or alcohol intake

History of bleeding disorders (including family history) and conditions associated with defects in platelets or coagulation, particularly cancer, cirrhosis, HIV, and pregnancy.

Physical Examination

Vitals are evaluated. With active bleeding, treatment usually takes place simultaneously with evaluation.

Examination of the nose is done to determine the source of the bleeding and what may have caused it. Equipment like a small speculum is used to hold the nostril open. Various light sources like a headlamp or an endoscope (lighted scope) are used to check the inside of the nasal passages.

A topical spray with anesthetic and epinephrine is helpful for vasoconstriction to help in controlling the bleeding and to aid in the visualization of the source.

Lab tests

Lab tests are rarely required to diagnose nosebleeding. In certain severe conditions following tests are done:

Complete blood count (CBC): For individuals having nose bleeding, a CBC is done to map the reduced hemoglobin level for bleeding management in patients with heavy and recurrent nosebleeds.

Coagulation studies: Patients with symptoms or signs of a bleeding disorder and those with severe or recurrent epistaxis are evaluated for prothrombin time (measures the time it takes for a clot to form in a blood sample), and partial thromboplastin time (a blood test that looks at how long it takes for blood to clot).

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Imaging studies

Tests like Computed Tomography (CT) scans and Magnetic Resonance Imaging (MRI) may be rarely indicated in cases where a malignancy or growth is suspected.

Prevention Of Nose bleeding

The following pointers can help in preventing nose bleeding:

General measures

Avoid blowing your nose too forcefully

Use a saline nasal spray or drops 2-3 times a day in each nostril to keep your nasal passages moist

Avoid picking your nose and keep the fingernails short

At night keep the air moist by using room humidifiers

Wear protective headgear if involved in activities that could result in an injury to the face and nose

Consider changing medications that increase bleeding

Blood thinning medications such as aspirin and ibuprofen can increase bleeding. Consult your doctor for their replacement.

Avoid drinking and smoking

Overconsumption of alcohol and smoking can act as an irritant in the nasal mucosa and can cause nose bleeding. Quitting smoking and drinking is always a good idea.

Looking to quit smoking, but finding it very difficult? Read about some practical ways that will help you get rid of this unhealthy habit.

Check out

Consume vitamin K-rich foods

Vitamin K-rich foods like spinach, mustard greens, kale broccoli, and cabbage, are involved in the formation of collagen that helps in creating a moist lining inside the nose. Vitamin K helps keep the blood vessels in good condition preventing them from rupturing easily and green leafy vegetables also facilitate blood clotting.

Load your diet with Vitamin C-rich foods

Vitamin C-containing foods or supplements on a daily basis may help make the blood vessels become stronger and thus less vulnerable to rupture and cause nose bleeding.

Fill any gaps in your Vitamin C levels with dietary supplements. Check out our wide range of supplements.

Explore now

Stay hydrated

Not drinking an adequate amount of water in a day can also dry the mucous membranes causing nose bleeds. Therefore, it is recommended to have enough water throughout the day.

Understand how drinking water can be beneficial for your overall health.

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Specialist To Visit

Doctors that can help you diagnose and treat nose bleeding include:

ENT specialist

An ENT specialist, also called an otolaryngologist, is a doctor who has special training in diagnosing and treating diseases of the ear, nose, and throat. An ENT specialist can diagnose the condition and, if needed, can also look deep inside the nose using a special camera or endoscope to both treat the problem and ensure there isn't a more serious condition like a tumor or malignancy causing it.

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Treatment Of Nose bleeding

The doctor will attempt to stop the bleeding as the first course of action. The doctor may also assess the person’s blood pressure and pulse.

Treatment depends on the cause and could include:

Medications

Nasal sprays can be used at the time of bleeding. Oxymetazoline and phenylephrine hydrochloride (Neofrin) can be used short-term to help with congestion and minor bleeding if a person is not having high blood pressure.

Oral or topical tranexamic acid is effective in stopping bleeding for a 10-day period after a single application.

Nasal packing

A doctor may insert ribbon gauze, nasal sponges, foam, or an inflatable latex balloon into the nose to create pressure at the site of the bleeding. The material is often kept in the nasal cavity for 24 to 48 hours.

Cauterization

In this procedure heat energy (electrocautery), and a chemical substance (silver nitrate) are used to seal the bleeding blood vessel

Embolization

It is a procedure in which tiny particles such as gelatin sponges or beads, are used to block a blood vessel. This procedure will stop the bleeding from the nose. However, doctors rarely recommend this for nosebleeds.

Septal surgery

If a deviated septum is causing frequent nosebleeds, a doctor may straighten it during surgery.

Ligation

This is a surgical procedure that involves tying the ends of the identified blood vessels or arteries causing the bleeding. Doctors often use this procedure if other treatment options have not worked.

Home Care For Nose bleeding

If you find yourself in a situation where blood is bleeding from your nose. Follow the following steps:

Relax and make yourself calm

Sit upright and lean your body and your head slightly forward

Breathe through your nose

Pinch together the soft part of the nose to stop bleeding

If your nose is still bleeding, continue squeezing the nose for another 5 minutes

You can also apply cold compression to the bridge of your nose for a few minutes. This will help constrict blood vessels and stop bleeding.

After the bleeding stops, do not bend over, strain, or lift any heavy objects

Here are a few home remedies that can help relieve nose bleeding. It is always better to take consent from your doctor before trying these:

Saline water

Dryness during the winter season in the nasal membrane is one of the most common causes of nose bleeding. To solve this problem, soothe and moisturize the nasal membranes with saline water. Saline water can be made by adding some water in a bowl and in this adding a few drops of saline solution, and mixing them well. Put a few drops of this solution in your nose to moisten the inner lining of the nasal passages.

Apple cider vinegar (ACV)

The acid present in the ACV helps constrict the blood vessels, thus stopping the bleeding. Dip a cotton ball in vinegar and place it in the affected nostril for about 5 to 10 minutes, this usually stops bleeding in one go.

Nettle leaf

Nettle leaves work as a natural astringent and a hemostatic agent. Nettle's solution helps keep allergy-related nosebleeds in control. The leaves can be brewed and tea is made. Once the solution cools down, dip the cotton pad in the solution and place it on the nose, for 5-10 minutes until the bleeding stops.

Complications Of Nose bleeding

Frequent nosebleeds can lead to various complications like

Sinusitis: During sinusitis, there is inflammation and swelling in the nose. It leads to damage to the nasal blood vessels resulting in nosebleeds.

External nasal deformity: Nasal deformities are abnormalities in the shape or structure of the nose. In some cases, the deformity can be a result of trauma or nose bleeding.

Hemorrhage: Sudden nose bleeding if severe with excessive bleeding can lead to hemorrhage.

Cardio-vascular compromise: In certain life-threatening cases, especially following surgery, nose bleeding can lead to cardio-vascular shock which can prove to be fatal.

Anemia: Episodes of chronic nose bleeding for a long duration can lead to anemia from blood loss.

Frequently Asked Questions

How long does nose bleeding usually last?

What to avoid in the case of nose bleeding?

What is the main cause of nose bleeding?

Can nose bleeding cause weakness?

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Bipolar disorder

Also known as Manic-depression, Bipolar affective disorder, and Bipolar illness

Overview

Bipolar disorder is a mental illness that causes unusual shifts in mood, energy, activity levels, concentration, and the ability to carry out everyday tasks. These moods can range from periods of extremely up, delighted, annoyed, or energized behavior (known as manic episodes) to very down, sad, disinterested, or hopeless periods (known as depressive episodes).

People with bipolar disorder experience periods of unusually intense emotions, changes in sleep patterns and activity levels, and uncharacteristic behaviors. The exact cause of bipolar disorder is not known, but a combination of environment, genetics, altered brain structure, and chemistry may play a role in the development of the disorder.

The most common medicines prescribed by the doctor include mood stabilizers and atypical antipsychotics, antidepressants, and anti-anxiety. Bipolar disorder is a lifelong illness, but long-term, ongoing treatment can help control symptoms and enable you to live a healthy life. You can take care of your condition by making certain lifestyle changes and practicing vigorous exercises like swimming, running, and jogging, which can help with depression and anxiety.

Key Facts

Usually seen in

Individuals before 30 years of age.

Gender affected

Both men and women, but more common in women

Body part(s) involved

Brain

Prevalence

World: 40 million (2019)

India: 7.6 million (2017)

Mimicking Conditions

Borderline personality disorder

Schizoaffective disorder

Unipolar depression

Premenstrual dysphoric disorder

Attention-deficit/hyperactivity disorders (ADHD)

Personality disorders

Thyroid disease

Lupus

Syphilis

Necessary health tests/imaging

Lab tests: Serum alcohol levels, Urinalysis, and Thyroid panel

Treatment

1. Medications:

Anticonvulsant medicines: Valproate, Lamotrigine, and Carbamazepine.

Antipsychotic medicines: Haloperidol, Olanzapine, Quetiapine, and Risperidone

Antidepressants: Citalopram, Fluoxetine, Fluvoxamine, and Paroxetine

2. Cognitive treatment

3. Electroconvulsive therapy

See All

Symptoms of Bipolar Disorder

Bipolar disorder is characterized by mood swings. The episodes of mania and depression can last from a few to several days. The intensity of symptoms can range from extreme highs (mania) to extreme lows (depression). They include:

1. Extreme low (depression)

While dealing with a period of depression, the symptoms include:

Feelings of guilt and despair

Lack of energy

Difficulty in concentrating and remembering things

Feeling hopeless, sad, or irritable most of the time

Loss of interest in everyday activities

Difficulty in sleeping

Lack of appetite

Suicidal or self-harming thoughts

Waking up early

Depression is a mood disorder that causes a feeling of extreme sadness, that differentiates it from bipolar disorder, which has its highs and lows. Learn How To Cope With Depression.

Tap Here

2. Extreme high (mania)

The mania phase of bipolar disorder may include:

Feeling very happy or overjoyed

Being more active than usual ‘

Excessive appetite for food, and drinks

Talking very quickly

Easily irritated or agitated

Disturbed or illogical thinking

Insomnia (hard to fall asleep)

Easily distracted

Note: A person may experience episodes of depression more regularly than mania in bipolar disorder. Individuals may sometimes experience a normal mood, in between these episodes.

Types Of Bipolar Disorder

Bipolar disorder is a condition that affects your brain and your mental health. It leads to erratic mood changes that can affect your daily energy and activity levels. The different forms of bipolar disorders include:

1. Bipolar 1

This type of bipolar disorder is characterized by manic episodes, with or without depression symptoms. The manic episode will last longer than a week and the episodes are so bad that the person might require hospitalization to ease the symptoms.

2. Bipolar 2

It is characterized by having both manic and depressive episodes. The mania that occurs in bipolar 2 is less severe than in bipolar 1, hence it is often named hypomania. In bipolar disorder 2 a major depressive episode occurs either before or after a manic attack.

3. Cyclothymic disorder

With this type, a person experiences both manic and depressive episodes for two years or longer. The mania and depressive episodes are usually less severe than that of bipolar 1 or bipolar 2. This disorder causes periods of normalcy mixed with mania and depression.

4. Rapid cycling bipolar

In the case of rapid cycling, a person experiences episodes of mania or hypomania, followed by episodes of depression. A person may cycle between manic episodes and stable periods that can last months, weeks, or days.

5. Bipolar with mixed features

Sometimes people experience both manic and depressive symptoms in the same episode, and this is called an episode with mixed features. A person experiencing bipolar disorder with mixed features may feel very sad, empty, or hopeless while at the same time feeling extremely energized.

6. Other types

A person may be considered into other types if he/she experiences symptoms that do not fit into the other bipolar categories. This type of bipolar may be caused by factors in your life that can include drugs, alcohol, or underlying medical conditions. \

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Causes Of Bipolar Disorder

The exact cause of bipolar disorder is unknown. But experts believe that there are a number of factors that work together to make a person more likely to develop it. The factors are a complex combination of physical, environmental, and social factors.

Risk Factors For Bipolar Disorder

Researchers are trying to find the possible risk factors of bipolar disorder. Most of them agree that there is no single cause and it is likely that many factors contribute to a person’s chance of having the illness. Some of the major risk factors include:

1. Genetics

Research suggests that bipolar disorder is linked to genetics, as it runs in families. The family members of a person with the disorder have an increased risk of developing it too. A single gene is not responsible for bipolar disorder, instead, a number of genetic and environmental factors act as triggers.

2. Chemical imbalance in the brain

The chemical hormones which are responsible for controlling the functioning of the brain are called neurotransmitters and bipolar disorder may be associated with chemical imbalances in the brain.

Note: An episode of mania may occur when levels of noradrenaline( neurotransmitter) are too high, and episodes of depression may occur when the level of noradrenaline becomes too low.

3. Triggering agents

A stressful condition or situation can trigger the symptoms of bipolar disorder. A few examples of stressful triggers include the death of a close family member, the breakdown of a relationship, and physical and emotional abuse.

4. Childhood trauma

Studies demonstrate that childhood traumatic events are risk factors for developing bipolar disorders. There is a relationship between the development of bipolar disorder with prior physical, sexual, and emotional abuse.

5. Brain structure

Some studies indicate that the brains of people with bipolar disorder may differ from the brains of people who do not have bipolar disorder or any other mental disorder.

6. Substance misuse

Bipolar is frequently co-existing with misuse of substances, including cannabis, opioids, cocaine, sedatives, and alcohol.

7. Hormonal imbalance

Hormones may play a role in the development and severity of bipolar disorder. Studies suggest that late-onset bipolar disorder may be linked with menopause.

8. Medical illness

Bipolar is known to be coexisting with several medical and psychiatric conditions. Conditions like asthma, obesity, anxiety disorder, migraine, and head injury are associated with bipolar disorder.

Anxiety can lead to the development of feelings like hopelessness, fear, and several other emotions on the other side bipolar disorder, refer to the development of feelings like both hopelessness and encouragement. Learn more about relaxation techniques to manage stress and anxiety.

Click to Know More

Diagnosis Of Bipolar Disorder

To diagnose bipolar disorder, a doctor may perform a physical examination, conduct an interview, and order lab tests. The diagnosis is based on the following aspects:

1. History and physical examination

A general practitioner will assess the individual at the time of appointment with the following things:

General appearance: A patient with mania is often unpredictable, and erratic. Unnatural happiness can be seen on their face however, irritability is also observed.

Mood: The mood is often elevated or euphoric in mania. While in a depressive state, the patient will appear sad or in an elegiac mood.

Thought process: Patients with mania demonstrate easy distractibility, lack of concentration, and absurd behavior. A depressed patient usually has negative thoughts.

Speech: A depressive patient would talk slowly and softly. In the case of manic, the patient will demonstrate pressured speech that is difficult to interrupt.

2. Lab tests

Bipolar disorder cannot be seen on a blood test or body scan, these tests can help rule out other illnesses that can resemble the disorder. But, certain blood tests may be required to rule out drug toxicity and other medical conditions. They include:

Serum alcohol levels

Urinalysis

Thyroid panel

Note: Diagnosis of children and teenagers with bipolar disorder includes the same criteria that are used for adults. However, children who have bipolar disorder are frequently also diagnosed with other mental health conditions such as attention-deficit/hyperactivity disorder (ADHD) or behavior problems.

Book your tests from the comfort of your home now

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Celebs affected

Honey Singh

The popular RAP singer recently confessed that he slipped into social isolation following bipolar disorder. He summarized his one-year journey as scary and is now working every day to manage the condition.

Prevention Of Bipolar Disorder

There is no way to prevent bipolar disorder. However, getting early treatment is the first sign of preventing bipolar disorder or other mental health conditions from worsening. Some of the things to keep in mind include:

1. Be vigilant about the warning signs

Handling the symptoms early can prevent the episodes from getting worse. Involve a doctor if any significant changes are noted in the behavior of a person and seek early intervention.

2. Practice recreational activities

Engaging in sports and physical activity can help in improving and managing the symptoms of bipolar disorder. Outdoor activities like hiking, camping, gardening, meditation, and yoga help in effectively controlling mood swings and stress reduction.

3. Avoid alcohol, drugs, and smoking

Drug abuse and addiction can cause changes in the brain that lead to bipolar disorder. Alcohol has been known to intensify bipolar disorder due to its sedating effects. Moreover, these substances increase the risk of mood swings, depression, violence, and suicide.

Did you know?

Every year October 2 is observed as National Anti-Drug Addiction Day. The aim is to make India free from drug abuse and addiction.

Know More About Drug addiction

Doctor To Visit

The doctors that can be your best option to treat and manage bipolar disorder are:

Psychiatric

Primary care physicians

A psychiatrist specializes in assessing and treating patients with mental health problems. They help in managing the mental well-being of an individual. A primary care physician plays a vital role in attending to the medical needs of patients with bipolar disorder in addition to providing medical care, by educating and supporting patients and their families.

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Treatment Of Bipolar Disorder

The primary step in the treatment of bipolar disorder is to confirm the diagnosis of mania or hypomania. Most people with bipolar disorder can be treated using a combination of different treatments involving:

A. Medication

1. Lithium: This drug is the gold standard for the treatment of the bipolar disorder, as long-term use has demonstrated a reduction in suicide risk.

Note: Regular blood tests at least every 3 months while taking lithium is mandatory to make sure the lithium levels are not too high or too low.

2. Anticonvulsant medicines: Some anticonvulsant medicines include:

Valproate

Lamotrigine

Carbamazepine

3. Antipsychotic medicines: These classes of drugs are sometimes prescribed to treat episodes of mania. These include:

Haloperidol

Olanzapine

Quetiapine

Risperidone

4. Antidepressants: Traditional antidepressants are considered experimental for treating bipolar depression. The class of antidepressants includes;

Citalopram

Escitalopram

Fluoxetine

Fluvoxamine

Paroxetine

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B. Cognitive treatment

It can be helpful when used alongside medicines to treat bipolar disorder. This may include

Psychoeducation: It is health psychology combined with behavioral counseling and even psychotherapy. This therapy is also important to teach patients some stress management techniques to cope with stressful situations more effectively.

Cognitive behavioral therapy (CBT): It is a talking therapy that helps in managing problems by changing the way you think and behave. It is based on the concept that a person's thoughts, feelings, physical sensations, and actions are interconnected.

Family Focussed therapy (FFT): FFT therapists work to identify difficulties and conflicts within the family that may contribute to patient and family stress. It also educates all family members about the nature of bipolar disorder, its treatment, and ways that family members can best support their affected members.

C. Electroconvulsive Therapy (ECT)

Electroconvulsive therapy is also known as ECT or electroshock therapy. This is a short-term treatment for severe manic or depressive episodes, particularly in the case of severe psychotic symptoms or when medicines seem to be effective.

Complications Of Bipolar Disorder

If bipolar disorder is left untreated, it can lead to longer and more severe mood changes. Someone living with bipolar disorder can also have a higher risk of the following complications:

Anxiety: A person with bipolar disorder will face the symptoms of anxiety at some point in time.

Heart disease: It is a leading cause of death among people with severe mental health disorders, including bipolar disorder.

Suicidal thoughts: Bipolar disorder has the highest rate of suicide among psychiatric conditions.

Obesity: It is common among people with bipolar disorder. Bipolar disorder individuals are more frequently overweight or obese.

Migraine: It is a usual complication of bipolar disorder, with close to one-third of people with bipolar disorder experiencing migraine headaches.

COVID-19 took a toll on everyone's mental health. Individuals with existing mental health conditions like bipolar disorder were affected the most due to the uncertainty of the situation.

Enlighten Yourself On COVID-19

Alternative Therapies For Bipolar Disorder

Every mental health disorder needs comprehensive care. s. Several alternative treatments aim to reduce anxiety and stress. They include:

1. Meditation

It helps in alleviating depressed mood, and helplessness.. For people with bipolar disorder, meditation, and mindfulness may help in lightening the mood, emotional regulation, and stress management over time.

Meditation is amazing for your soul and body. Read how meditation can improve your life

Click Here

2. Interpersonal and Social Rhythm Therapy (IPSRT)

IPSRT is a common adjunctive therapy for people with mood disorders. Its primary focus is on stabilizing the circadian rhythm (a natural, internal process that regulates the sleep-wake cycle).

Acupuncture

This therapy is believed to stimulate the central nervous system. It involves inserting very thin needles into the body at different locations and depths. This, in turn, leads to the release of chemicals into the muscles, spinal cord, and brain. This can promote physical and emotional well-being.

Light therapy

Also known as phototherapy, is the use of light to treat disorders. It has been to treat seasonal depression and may also be effective for people with bipolar disorder. It amplifies circadian rhythms, reversing the symptoms of depression and anxiety.

Relaxation techniques can refresh your soul and mind.

Click To Know More

Living With Bipolar Disorder

There is always a taboo and stigma around mental health and communicating your thoughts to your loved ones can be a great relief. Some tips that can help caregivers and individuals suffering from bipolar disorder include:

1. Tips to help yourself

Bipolar disorder can exert control over your thoughts, and interfere with relationships if not treated. Here are a few ways that can help in managing your illness:

a. Establish a routine: If a person has been dealing with bipolar disorder, committing to a routine can help in controlling depression and mania.

Always keep the energy changes caused by depression and mania under check

Have a sound sleep of eight hours every day

Indulge in aerobic exercise and walking to keep the stress levels under control

Have a sound sleep of eight hours every day

Learn more about six foods that will help you to fall asleep.

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b. Pinpoint your stressors: Try to find out the times or the events that cause stress or triggers. Addressing the symptoms of mania and depression early can help in preventing a serious episode.

c. Learn from previous episodes: Pattern recognition is essential to spot the early symptoms of an impending manic episode. Taking advice and help from family members who can recognize the early symptoms is very important.

d. Avoid drugs and alcohol: Both these substances cause addiction and can cause emotional imbalance and interact with medications.

2. Helping your loved ones

Recognize the early symptoms: The family member should recognize the early signals such as lack of sleep and babbling that can pinpoint mania. This helps in preventing a serious episode of the illness before it happens.

React calmly: Even in situations where the person having an episode of mania or depression may go off, ranting at you or others, it’s important to remain calm. Try to make the person calm by listening to them and making them feel understood.

Communicate well: Make time to talk about problems a person having an episode is facing. Be considerate, sound to them, and try to listen to their feelings, and challenges with empathy.

Remember you are not alone!

Understand ways to manage the stress and anxiety that come along with the bipolar disorder.

Watch this video now

Did you know?

You may have problems falling asleep due to frequent episodes of mania and depression. Learn more about six foods that will help you to fall asleep.

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Frequently Asked Questions

How does bipolar affect you daily?

Who does bipolar affect the most?

Can bipolar be seasonal?

Is bipolar disorder temporary or permanent?

When should I see a doctor?

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Obesity

Also known as Adiposity and Overweight

Overview

The word obesity comes from the Latin word “obesitas” which means excess of unhealthy fat. In medical terms, obesity is a condition resulting in excess body fat that can have an adverse effect on health. The worldwide prevalence of obesity is reaching pandemic proportions.

There is no single cause of obesity. It is believed to be multifaceted and involves many factors such as genetics, environment, physical inactivity, dietary habits, lifestyle choices, certain health conditions, and use of certain drugs.

Obesity is not just an esthetic concern. It has been linked to a higher risk of diabetes, high blood pressure, heart diseases, osteoarthritis, and a number of cancers.

The goal of obesity treatment is to achieve and maintain a healthier weight and not necessarily an ideal weight. Even though medications and certain surgeries can help, the treatment is a lifelong commitment to healthier eating habits, increased physical activity, and regular exercise.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but more common in women

Body part(s) involved

Entire body, but more common around the waistline

Prevalence

Worldwide: 39% (2020)

India: 40.3% (2020)

Mimicking Conditions

Multiple benign symmetric lipomatosis

Necessary health tests/imaging

Liver function test

Fasting lipid

Thyroid test

Treatment

Anti-obesity drugs: Orlistat, Rimonabant & Lorcaserin

Surgery: Bariatric surgery

See All

Symptoms Of Obesity

The symptoms of obesity can vary from person to person. Some of the most common symptoms include:

A history of weight gain

Excess body fat, particularly around the waistline

Shortness of breath or chest pain

Snoring while sleeping

Insomina or trouble sleeping

Sleep apnea (breathing is irregular and periodically stops during sleep)

Excessive sweating

Tiredness or fatigue ranging from mild to severe

Inability to perform simple physical tasks that one could easily perform before weight gain

Osteoarthritis in weight-bearing joints, especially the knees

Pain in joints, especially in the back and knees

Swelling and varicose veins in legs

Skin infections from moisture accumulating in the folds of skin

Stretch marks

Psychological issues such as low self-esteem, depression, and social isolation

Did you know?

According to the American National Heart, Lung and Blood Institute, there are no specific symptoms of obesity as well as overweight. However, a high body mass index (BMI) and an unhealthy distribution of fat across the body are certain signs which are taken into consideration to diagnose obesity. Here's more about BMI and how to calculate it.

Click Here!

Causes Of Obesity

The root cause of obesity is not restricted to a single cause but many different factors. The leading factors that contribute to obesity are lack of exercise, excessive calorie intake, genetics, emotional stress, and sedentary lifestyle.

Obesity is also caused by energy imbalance (between energy intake and expenditure). This means that there is more food energy coming in than going out. If this continues, the person will gain weight until they are obese or overweight.

Many factors may contribute to obesity such as:

1. Genetic factors

Obesity tends to run in families. A child with a single obese parent has a 3-fold risk to become obese while a child with obese parents has a 10-times higher risk of obesity in future.

Genes can affect appetite and thus, how much food you consume. They also control how quickly the body burns calories at rest and during exercise. Genes also influence fat regulation and places of body fat accumulation, particularly fat in the abdomen and around the waist.

Very rarely, mutations in the following genes can cause obesity:

The ob gene: This gene controls the production of leptin, a hormone made by fat cells and placenta. Leptin controls weight by signaling the brain to eat less when body fat stores are very high. A mutation in the ob gene prevents leptin production and results in severe obesity in a very small number of children.

The gene for the melanocortin 4 receptor: Melanocortin 4 receptors are located mainly in the brain and play a key role in the regulation of energy. A mutation in this gene may account for obesity in 1 to 4% of children.

However, it should be noted that families not only share genes but also environment, and separating the two factors is quite difficult. In other words, you could be genetically predisposed to being overweight, but your genes may not get activated if you have the right environment and lifestyle.

2. Aging

Obesity can occur at any age, even in children and teenagers. However, obesity becomes more common with age as the amount of muscle tissue decreases as you age. The result is a higher percentage of body fat and a lower basal metabolic rate (because muscle burns more calories). These changes also reduce the need for calories. So, if you don't consciously control what you eat and become more physically inactive as you age, you are most likely to gain weight.

3. Physical inactivity

A major factor that contributes to obesity is inactivity or lack of physical activity. Technological advances such as elevators, cars, remote controls, and online shopping have reduced the amount of calories burnt. More time is spent doing sedentary activities such as watching television, using the computer, smartphones, and playing video games.

Also, many people have desk jobs where they sit for hours without any breaks. This can lead to obesity in some people because their bodies are not burning enough calories when they are sitting at stretch for hours.

4. Unhealthy diet

Modern day diet has significantly shifted to energy-dense foods, which have a large number of calories in a relatively small amount. Most of these foods contain more processed carbohydrates, and trans fat, and less fiber.

Fats, by nature, are energy dense. Carbohydrates increase blood glucose levels, which in turn stimulate the pancreas to release insulin. Insulin promotes the growth of fat tissue and can cause weight gain.

More food advertisements promote high-fat, high-sugar, junk foods like biscuits, namkeen, candy, fizzy drinks, soda, and packaged foods than healthier options like whole grains, vegetables, and fruits. Advertised products are designed to be cheap, have a long shelf-life and are specifically engineered to be addictive and irresistible. These convenience foods significantly contribute to obesity.

5. Frequency of eating

It has been observed that people who eat small meals four or five times daily, have lower cholesterol levels and lower weight and/or more stable blood sugar levels than people who eat big two or three large meals daily. Hence, large and fewer meals can predispose you to gain weight.

6. Eating disorders

The following eating disorders are associated with obesity:

Binge eating disorder is characterized by binging i.e.; eating large amounts of food during a short amount of time and usually by feeling guilty or out of control.

Night-eating syndrome involves not eating enough during the day and consuming a lot of food or calories in the evening. It also involves awakening in the middle of the night to eat.

7. Medical conditions

Certain medical conditions can lead to weight gain and eventually might lead to obesity. These include:

Cushing syndrome is caused by excessive levels of cortisol in the body. It mostly causes fat to accumulate in the face (called moon face), and behind the neck (called a buffalo hump).

Polycystic ovary syndrome (PCOS) causes obesity in affected women. Levels of testosterone and other male hormones are increased, which causes fat to accumulate in the waist and abdomen.

Hypothyroidism makes the body use less of the energy that one eats as food. The extra energy is more likely to be stored in the body as fat leading to obesity.

Insulin resistance is a condition which acts as a precursor for developing type 2 diabetes and can also predispose to obesity.

Osteoarthritis causes joint pain that may lead to reduced physical activity and thereby cause obesity.

Prader-Willi syndrome, a rare condition, present at birth that causes uncontrolled hunger.

8. Certain drugs

Many drugs used to treat certain diseases increase the risk of weight gain. These include:

Antidepressants

Antiseizure drugs, such as carbamazepine

Antihypertensives such as beta-blockers

Corticosteroids

Some anti-diabetics

Oral contraceptives

If this issue concerns you, you should discuss your medications with your doctor rather than discontinuing them, as this could have serious side-effects.

9. Pregnancy and menopause

Gaining weight during pregnancy is normal and necessary. However, some women find this weight difficult to lose after the baby is born. This weight gain may predispose to the development of obesity. Having several children close together may compound the problem.

If a pregnant woman is obese or smokes, weight regulation in the child can be disturbed, leading to weight gain during childhood and later.

Many women tend to gain weight after menopause. This weight gain may result from reduced activity and hormonal changes may cause fat to be redistributed and accumulated around the waist.

10. Gut microbiota

Normally, the gut bacteria or gut flora help in digestion of food among other functions. However, an altered gut microenvironment such as long term use of antibiotics, may increase the risk of obesity. Changes in the number and types of bacteria in the digestive system may change how the body processes food.

11. Exposure to chemicals

Obesogens are chemicals that disrupt normal development and metabolism. Being exposed to obesogens early in life can increase the risk of developing obesity. These include cigarette smoke, bisphenol A, air pollution, flame retardants, phthalates, and polychlorinated biphenyls.

12. Psychological factors

Many people eat excessively in response to emotions such as boredom, sadness, stress, anxiety or anger. Adverse childhood events or a childhood history of verbal, physical, or sexual abuse are also associated with a higher risk of obesity.

13. Lifestyle factors

Sleep deprivation or lack of the right amount of sleep can result in weight gain. Sleeplessness results in hormonal changes that increase appetite and cravings for energy-dense foods.

Cessation of smoking usually results in weight gain. When nicotine is stopped, people tend to eat more food, and their metabolic rate decreases, so that fewer calories are burned. As a result, body weight may increase, sometimes leading to obesity.

14. Socioeconomic factors

Obesity and socioeconomic issues are also related. Lack of money to buy healthy foods or familiarity with healthy ways of cooking can increase the risk of obesity. So does lack of safe places to walk or exercise.

Diagnosis Of Obesity

Obesity is a disease that is diagnosed by a physician who will measure the patient's height, weight, and body mass index. The physician may also do a physical examination, a laboratory test for thyroid function, and other tests to diagnose the cause of obesity.

There are different methods for diagnosing obesity.

Body mass index (BMI)

The most common way to diagnose obesity is body mass index (BMI). It is calculated by dividing weight in kilograms by height in meters squared. If your BMI is greater than 30 kg/m2, you are considered obese. Being overweight or obese increases the chance of various diseases and chronic conditions.

The BMI categorizes people as underweight, normal weight, overweight, and obese.

Underweight: < 18.5 kg/m2

Normal weight: 18.5-24.9 kg/m2

Overweight: 25-29.9 kg/m2

Obese: 30-34.9 kg/m2

Morbidly obese: 35-39.9 kg/m2

But, BMI is considered as an old way of diagnosing obesity because this doesn’t give accurate results for tall people or individuals with a lot of muscle mass.

Waist circumference

The new way to diagnose obesity is by measuring waist size (waist circumference) instead of BMI. This method is more accurate than BMI because it doesn’t rely on height or muscle mass. Waist circumference greater than 40 inches (102 centimeters) in men and 35 inches (89 centimeters) in women is diagnosed as being obese. People with a larger waistline are at higher risk for cardiovascular disease, diabetes, stroke, and cancer.

Obesity is not the same as being overweight. If someone has a body mass index (BMI) of 30 or more they are classified as obese, whereas someone with a BMI of 27-29.9 will be classified as overweight.

Read more about overweight, obese, morbidly obese: know the difference.

Click To Read!

Lab tests

Many lab tests can be done to diagnose obesity. In most cases, you will need to go through an examination from your doctor or have blood work done. You may also have to take some steps before going through the testing process so that you are prepared for the results of the test. Some of these tests for obesity are:

Fasting lipid tests: These are done to understand the build-up of fats in your body.

Liver function tests: This test is done to determine whether the liver is functioning properly and to know that obesity is not caused due to liver disease.

Thyroid function tests: These tests are done to check whether the person has hyperthyroidism or not.

Celebs affected

Arjun Kapoor

Bollywood actor Arjun Kapoor has emerged victorious twice in his battle against obesity. He has candidly shared about how he has worked doubly hard to achieve a magnificent physical transformation.

Sara Ali Khan

Sara used to weigh a shocking 96 kgs during her university days. It took a lot of determination and efforts to achieve her current weight that she is now proud of and works hard to maintain.

Sonakshi Sinha

Sonakshi Sinha has managed to shed those extra kilos by making healthier food choices. She makes sure to have moderate portions and avoid bread, sugar and fried items in her regular diet. Her snacking options include nuts, seeds or a fruit like a banana.

Sonam Kapoor

Sonam Kapoor has always been open about the struggles she has faced with excessive weight. She managed to get in shape by eating healthier diet, avoiding junk food, and following intensive workout regimen.

Prevention Of Obesity

In the past few years, there has been a rise in obesity rates all around the world. That's why it's so important to be educated on how we can prevent this from happening and lower the rates of obesity. The question of how to prevent obesity is a difficult one in this modern day. Many factors contribute to the onset and progression of obesity. It’s not an easy problem to solve, but there are ways we can prevent or at least lessen it.

1. Dietary changes

Healthier food choices

Safe and practical long-term weight reduction and maintenance diet needs to include balanced, nutritious foods to avoid vitamin deficiencies and other diseases of malnutrition.

Eat the rainbow diet which is rich in fruits, vegetables, whole grains, nuts, seeds, lean proteins like fish, chicken breast or vegetable protein like soy. Low-fat or fat-free dairy, which is rich in Vitamin D, should also be included in the diet.

Eat ‘low energy density' foods which contain relatively few calories per unit weight. For example, you can consume a large amount of cucumbers or carrots without taking in many calories. These foods reduce hunger pangs and make you full on less.

Eat foods with a low glycemic index to keep insulin spikes in check.

Switch to healthy fats such as monounsaturated fats (olive and canola oil) and polyunsaturated fats (deep-sea fish and vegetable oil)

Cutting down calories

The first step is to review and record how many calories you normally consume. Usually 1,200 to 1,500 calories for women and 1,500 to 1,800 for men are recommended for every day.

Your doctor/dietician/nutritionist can help you in guiding your daily calorie intake. It is also important to educate yourself in reading food labels and estimating calories and serving sizes.

Restricting certain foods

Avoid or limit sugar intake. Sugar in any form like table sugar, sweets, cookies, pastries, doughnuts, cakes, muffins, sugar sweetened beverages like fizzy drinks, packaged juices, and packaged flavored milk is detrimental for health.

Limit ‘energy dense foods'. These food items generally have a high calorie value in a small amount. They are high in saturated or trans fats and simple sugars. Examples include red meat, deep fried foods, packaged foods, sweets, cookies, cakes, pastries, butter, and high-fat salad dressings.

Avoid empty calories which are foods that provide calories but almost no nutrition such as alcohol, soft drinks, soda and many packaged high-calorie snack foods like biscuits and namkeen.

Avoid food items containing harmful fats such as saturated and trans fats.

Healthier lifestyle habits

Eat small, regular meals and limit or carefully choose snacks.

Never skip breakfast as it can lead to consuming too many calories later in the day.

Be wary of quick fixes. Do not get tempted by crash, fad or popular diets that promise fast and easy weight loss. They might help in the short term, but you're likely to regain the lost weight when you stop the diet.

Consistency is the key. To lose weight and keep it off, one must adopt healthier habits that can be maintained for a long term.

2. Increased physical activity

Exercising can help people lose weight in a healthy way and keep it off. People who do not exercise while dieting are more likely to regain the weight they lose. Compared to those who are inactive, physically active people have stronger muscles and better cardiovascular fitness. They also usually have lower body fat and stronger bones. A few exercise recommendations are as follows:

Indulge in 20 to 30 minutes of moderate exercise five to seven days a week, and if possible, daily. These include stationary bicycling, walking briskly, jogging, swimming, biking, tennis, skating, and skiing.

Exercise can be phased out over small sessions of 10 minutes.

Start slowly and progress gradually to avoid any injury or excessive fatigue. Over time, build up to 30-60 minutes of moderate to vigorous exercise every day.

Daily activitie such as taking the stairs instead of the elevator and walking instead of driving can burn a considerable number of calories.

It is never too late to start exercising. Even elderly individuals can improve their strength and balance by exercising regularly. However, it is always wise to consult your healthcare provider for evaluation of any risks associated with exercising.

Parents should also get their children involved in low-intensity physical exercise that will last 20 to 30 minutes per day. This might help children to maintain a healthy weight throughout childhood and adulthood.

3. Get enough sleep

You need to make sure that you are getting enough sleep each night because if you’re not sleeping enough, it can affect your metabolism and appetite control, which can lead to weight gain or obesity over time.

4. Reduce screen time

Adults and children spend over 7 hours a day on screen time. This includes sitting or laying down with a smartphone, tablet, watching TV, playing video games and even doing office work on the laptops.

Too much screen time is a strong obesity risk factor. It's associated with low physical activity and poor sleep which predisposes to weight gain. Television also exposes one to incessant marketing of unhealthy packaged foods and sugary drinks.

PARENTS!

Here are a few valuable tips to manage your children’s dietary habits and avoid common traps:

Don't reward your children for good behavior or try to stop bad behavior with candies, chocolates or treats. Junk food used as positive or negative reinforcer can make the child value it more than healthier options.

Don't talk about ‘bad foods’ or completely ban all sweets and junk food. Children might rebel and overeat forbidden foods outside the home or sneak them in on their own. Idea is to serve healthy foods most of the time and offer treats once in a while.

Don't have an empty-plate policy. If children feel full, don't force them to keep eating. Reinforce the idea that they should eat only when they're hungry and stop when they're full.

To know more about simple tips for prevention of obesity in kids.

Read Here!

1mg Pro-Tip

Opt for a sugar-free day once a week. Take one or two days a week as a "sugar-free" day, where you don't eat anything with added sugar. The goal is to cut back on added sugar and lose the desire for sweets without feeling deprived all the time. Read more about 10 reasons why you should quit sugar.

Click To Read!

Specialist To Visit

Most patients will visit their primary care physician first. The primary care physician will rule out any underlying health conditions and provide a diagnosis or refer you to a specialist depending on the severity of your obesity.

If you're overweight and want to get back to a healthy weight, you must talk to a physician. He/she can diagnose the cause of your obesity and help you develop a customized treatment plan.

If your weight gain is due to an underlying hormonal issue, then you must visit an endocrinologist.

If you suffer from excessive weight due to overeating or eating unhealthy food, then the doctor that will be most helpful for you is a psychiatrist or a health coach.

If it is that your body does not properly use the calories from food, then the doctor who will be most helpful for you is a dietitian.

Some doctors may only treat severe or mild forms of obesity. For example, bariatric surgeons will only perform surgeries for people with extreme obesity.

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Treatment Of Obesity

Obesity is a chronic and complex disease with significant health consequences. In case, lifestyle changes don't work, then consult your healthcare provider to evaluate the need of the next level of treatment -- medications and surgery.

Medications

The drugs that are used to treat obesity are called anti-obesity drugs. These drugs work by decreasing appetite, increasing the rate at which the person burns calories, or decreasing how much food is absorbed from one’s diet. The following drugs are prescribed for obesity:

1) Orlistat

Orlistat works by reducing the absorption of fats from food in the gut. It also reduces appetite and promotes feeling of fullness leading to weight loss. It is a prescription medication that can be taken for a long time.

2) Rimonabant

Rimonabant is a cannabinoid receptor agonist. It has been found to reduce appetite and body weight and to cause a reduction in the body mass index (BMI).

3) Phentermine

Phentermine is a drug that slows down the activity of your brain to reduce your appetite. It also increases the amount of energy that you expend during physical activity, which means that you will burn more calories than you usually would.

4) Lorcaserin

Lorcaserin, on the other hand, helps suppress appetite and increase weight loss through serotonin activity in the brain.

These drugs are used in combination with behavioral therapy and other lifestyle changes to reduce weight gain or improve weight loss. One problem with these drugs is that they may lead to side effects like nausea, vomiting, dizziness, dry mouth, etc.

Bariatric surgery

This surgery reduces the size of the stomach so that it can’t hold as much food as before. Surgery for obesity may be suggested in the following obese patients:

Patients with a BMI more than 40

Patients with a BMI more than 35 who have serious medical conditions like sleep apnea that would improve with weight loss

Currently, the following types of bariatric surgeries are advised:

Restrictive surgeries: These surgeries restrict the size of the stomach and slow down digestion.

Malabsorptive/restrictive surgeries: These surgeries restrict the size of the stomach and also bypass or remove some part of the digestive system to reduce absorption of food.

1mg Pro Tip

Exercise and eat nutritious food to reduce obesity. If you want to reduce obesity, you should start by reducing the number of calories that you consume. The next step would be to exercise. In the long term, healthy eating and exercise can help protect against diabetes and heart disease. Read about 5 weight loss tips that can work for you.

Click here!

Home-care For Obesity

Here are some tips that can help you take care of obese people at home:

Monitor their diet and exercise habits by maintaining a diet journal.

Educate them on the risks posed by obesity.

Take steps to promote healthy living.

Improve their self-esteem.

Encourage them to eat healthily.

Plan the meals together.

Exercise together by going on a walk or doing some other physical activity you both enjoy.

Give them enough time to rest and sleep every day.

Stop their unhealthy habits like smoking or drinking alcohol.

Keep them hydrated by drinking plenty of water throughout the day.

1mg Pro Tip

Get your proteins to lose weight. Protein is the building block of muscle and overall health. Protein helps keep us feeling full, satisfied, and energized throughout the day. Here is why proteins are good for weight loss!

Click To Know!

Complications Of Obesity

The complications of obesity are many and varied. The risks range from several serious medical conditions to a poor quality of life. It also has negative effects on the person’s social, physical, mental, and emotional health.

There are many complications of being obese. These include:

Hypertension (high blood pressure)

Abnormal levels of cholesterol and other fats (lipids), called dyslipidemia

Coronary artery disease

Heart failure

Diabetes or prediabetes

Metabolic syndrome, which includes insulin resistance, abnormal levels of cholesterol and other fats in the blood, and high blood pressure

Cancer of the breast, uterus, ovaries, colon, prostate, kidneys, or pancreas

Gallstones and other gallbladder disorders

Gastroesophageal reflux (GERD)

Obstructive sleep apnea

Skin infections

Varicose veins

Fatty liver and liver cirrhosis

Blood clots (deep vein thrombosis and pulmonary embolism)

Osteoarthritis, gout, low back pain, and other joint disorders

Low testosterone levels, erectile dysfunction, and reduced fertility in men

Menstrual disorders, infertility, and increased risk of miscarriage in women

Depression and anxiety

Obesity predisposes the body to a wide range of diseases. Read about 6 health risks of obesity.

Click Here!

Alternative Therapies For Obesity

Ayurvedic treatment for obesity

Many medicinal plants that aid in weight loss include triphala, brahmi, and Garcinia cambogia. Fresh curry leaves, turmeric, mint, and spices like ginger, cinnamon, and black pepper (kalimirch) are all readily available and healthful.

Guggul, a gum resin derived from the Commiphora mukul tree, is a well-known natural ingredient that, once refined and processed properly, can be used to treat fat metabolic issues. It has been demonstrated in studies to break down fat cells.

Other well-known herbs used in Ayurvedic weight loss treatments include kalonji (black cumin) and vijaysar (Kino tree).

Homeopathic treatment for obesity

Homeopathic remedies for the treatment of overweight and obesity can be divided into two categories: those that can be used in both adults and children, and those that are only for children.

Ammonium bromatum, calcarea arsenicosa, fucus vesiculosus, phytolacca decandra, and thyroidinum are some of the treatments used to treat overweight and obesity in adults, whereas baryta carbonica, calcarea carbonica, and kalium bichchromicum are useful in youngsters.

Before prescribing a treatment, a homeopathic doctor evaluates a patient's physical and mental features, as well as his or her symptoms and miasms (tendency to suffer from an illness).

Yoga for obesity

Because every asana in yoga aims to work deeply on the core and the entire body, the positions listed below are some of the easier ones, especially for beginners. These will aid in the elimination of stomach-related ailments such as constipation, indigestion, and bloating, as well as strengthen the abdomen in order to minimize fat.

Some of the yoga asanas to help reduce fat in the body are:

Bhujangasana (Cobra pose)

Dhanurasana (Bow pose)

Kumbhakasana (Plank pose)

Naukasana (Boat pose)

Ustrasana (Camel pose)

Adho mukha svanasana (Downward-facing dog pose)

The word ‘Yoga’ is derived from Sanskrit and means to unite, symbolizing the union of body and mind. Read about 6 benefits of yoga even doctors swear by.

Click Now!

Living With Obesity

Weight is frequently a very personal and sensitive subject because of our attitudes around body image. As a result, dealing with the issue of weight might be difficult. Overweight people typically have low self-esteem, so telling them they need to lose weight is the last thing they need. Instead, you may encourage them to join you in making healthier lifestyle choices.

Obesity, especially in women, can have a major impact on sexual quality of life. Obesity management that can improve self-esteem, sexuality, and overall quality of life includes:

Lifestyle modifications

Nutrition

Medicines

Behavioral therapy

Weight loss surgery

The key to managing obesity is being committed to making lifestyle changes. These changes can be difficult at first but they will eventually become second nature. It's important not to let the difficulties get in the way of your success because you are worth it!

Regular exercise can help people lose weight, as well as maintain a healthy weight. Exercise releases endorphins which make us feel good and eat less. Find an exercise that you enjoy doing or that you don’t mind doing. Some forms of exercise that are effective in reducing weight include aerobic exercises, strength training exercises, and high-intensity interval training (HIIT).

Here is a quick look at some key aspects of obesity that every person should be aware of and why ending the weight stigma is the key to fight obesity.

Tap To Read!

Frequently Asked Questions

How does a person get obese?

What are the negative impacts of obesity?

What causes obesity?

Is there a cure for obesity?

How does obesity affect pregnancy?

What are the consequences of obesity?

How do you treat obesity?

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Obsessive-compulsive disorder

Also known as Neurotic and Psychoneurotic

Overview

Obsessive-compulsive disorder (OCD) is a mental health condition in which a person gets caught in a cycle of obsessions and compulsions. Obsessions are unwanted, intrusive thoughts, images, or urges that can lead to distressing feelings. Compulsions are behaviors in response to obsessions to decrease distress.

Symptoms vary from person to person and may include the continuous need to keep everything in the right manner, fear of contamination, repeated body movements, and a constant urge to correct things.

OCD can affect people of all ages and walks of life. Though the exact cause of OCD is unknown, risk factors like childhood trauma, genetic changes, family history, and certain changes in the brain structure are linked to the development of OCD.

Treatment of OCD requires being mindful of one's thoughts and behavior. Cognitive behavioral therapy and medications can help manage the symptoms of OCD.

Key Facts

Usually seen in

Adults from 19 to 35 years of age

Gender affected

Both males and females

Body part(s) involved

Brain

Prevalence

India: 2-3% (2016)

Mimicking Conditions

Autism

Tourette syndrome

Social anxiety

Schizophrenia

Hoarding disorder

Body Dysmorphic Disorder

Trichotillomania (Hair-Pulling Disorder)

Excoriation (Skin-Picking) Disorder

Necessary health tests/imaging

Screening: NICE guidelines and Yale-Brown Obsessive-Compulsive Scale (Y-BOCS)

Psychological evaluation: Diagnostic and Statistical Manual of Mental Disorders (DSM-5)

Lab tests: Complete blood count (CBC), Thyroid function test, and Screening for alcohol

Treatment

Cognitive behavioral therapy (CBT): Exposure and response prevention (ERP)

Medications: Clomipramine, Fluoxetine, Fluvoxamine, Paroxetine, and Sertraline

Neurological surgery: Gamma ventral capsulotomy

Immunological therapies: Celecoxib

Psychotherapy: Rational emotive therapy and Third-wave therapies

See All

Symptoms Of Obsessive-Compulsive Disorder (OCD)

Individuals with OCD may have symptoms of obsessions, compulsions, or both. Obsessions are repeated thoughts, urges, or mental images that cause anxiety. Compulsions are repetitive behaviors in response to obsessive thoughts. Some of the symptoms of OCD are discussed below:

Symptoms of obsession

Fear of contamination or germs

Unnatural need to be clean and tidy

Forbidden thoughts involving sex, religion, etc

Aggressive thoughts toward others or oneself

Wanting to have everything aligned and in perfect symmetry

Impulsive behavior

A need to know or remember everything

Not able to throw something out because of fear of losing or forgetting something important

Excessive concern about one’s partner, the partner’s flaws, and qualities.

Symptoms of compulsions

Excessive desire to be clean with excessive showering, bathing, tooth-brushing, etc

Washing hands excessively or in a certain way

Repeating body movements like tapping, touching, or blinking, biting nails, rhythmic neck movements

Wanting things in a particular, precise way

Repeatedly checking on things, for example, if the door is locked or if the oven is off

Compulsive counting

OCD is not just about keeping things clean and tidy. Listen to our experts talk about how OCD can affect your life.

Watch this video now

Causes Of Obsessive-Compulsive Disorder (OCD)

OCD is multifactorial, and an inability to cope with uncertainty, an increased sense of responsibility along with overthinking can predispose those to obsessive-compulsive habits. Though the exact cause of OCD remains unknown, certain risk factors can increase your chances of developing OCD.

Risk Factors For Obsessive-Compulsive Disorder (OCD)

There is an array of factors that can lead to obsessive-compulsive disorder. OCD is characterized by obsessive and compulsive thoughts, and the risk factors can include:

1. Genetic mutations

Research shows that there is a genetic predisposition to the development of OCD. Mutations (changes) in certain genes have been linked to OCD.

2. Family history

Children with parents or siblings who have OCD are at a higher risk for developing OCD themselves. Research has shown the risk is as high as 45% to 65% in children and 27% to 45% in adults.

3. Environmental factors

Childhood trauma and obsessive-compulsive symptoms are interlinked. Studies show that the development of OCD symptoms can be due to trauma during childhood, however, more research is needed to understand this relationship better.

Children get stressed too! Know more about its triggers, symptoms, and what you should do as parents. Enlighten yourself on childhood stress.

Tap here

4. Brain structure

There is some connection between OCD symptoms and abnormalities in certain areas of the brain, but it is not clear. It is hypothesized that problems in communication between the front part of the brain and deeper structures of the brain are attributed to OCD.

5. Streptococcal infections

Certain studies have shown that earlier onset of OCD is seen after a Streptococcal infection known as PANDAS (pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections).

Diagnosis Of Obsessive-Compulsive Disorder (OCD)

Diagnosis of any mental health condition can be tricky, it mainly relies on physical examination and psychological evaluation. Steps to help diagnose OCD may include:

1. Screening for OCD

A. NICE guidelines: According to studies, the recently launched NICE guideline recommends six screening questions, that include:

Do you wash or clean a lot?

Do you check things a lot?

Is there any thought that keeps bothering you that you would like to get rid of but can’t?

Do your daily activities take a long time to finish?

Are you concerned about orderliness or symmetry?

Do these problems trouble you?

B. Yale-Brown Obsessive-Compulsive Scale (Y-BOCS): It is the most widely accepted tool to screen for OCD.The Y-BOCS rates on a scale from 0 to 40 (40 being the most severe of symptomatology). It ranks the individual, based on severity:

The time occupied by obsessive thoughts and compulsions

The interference of obsessive thoughts

The distress of obsessive thoughts

Resistance against obsessions

Degree of control over obsessive thoughts

The time occupied by compulsive behavior

The interference of compulsive behavior

The distress associated with compulsive behavior

Resistance against compulsive behavior

Degree of control over compulsive behaviors.

2. Physical exam

It is done to help rule out other problems that could be causing the symptoms and to check for any related complications.

3. Psychological evaluation

This includes discussing your thoughts, feelings, symptoms, and behavior patterns. Recognition of obsessive-compulsive disorder may require direct questions. Also, your doctor may use criteria in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), published by the American Psychiatric Association.

4. Lab tests

These are done to check for co-morbidities and other conditions and may include:

Complete blood count (CBC)

Thyroid function test

Screening for alcohol and drugs

Finding it difficult to get all tests under one roof? Don’t worry we have got that covered. Book your lab tests with Tata 1mg.

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Celebs affected

Deepika Padukone

Deepika Padukone, a Hindi film industry superstar is reported to be obsessive about organizing her surroundings. Even a little mess gets on her nerves.

David Beckham

World-renowned soccer player David Beckham has opened up about his struggle with OCD on a few occasions. In an interview, he said, “I’ve got this obsessive-compulsive disorder where I have to have everything in a straight line or everything has to be in pairs”.

Leonardo DiCaprio

Oscar Award-winning actor Leonardo DiCaprio struggles with OCD. Though not severe, he’s admitted that he fights different compulsions, like walking through doors several times as well as the urge to step on chewing gum stains.

Prevention Of Obsessive-Compulsive Disorder (OCD)

There is no way to predict or prevent OCD as the exact cause is unknown. However, OCD might be linked to problems during pregnancy, so it is important to take care of yourself while pregnant. Even though OCD can not be prevented, early diagnosis and treatment is the key to managing the effect of symptoms on quality of life.

Specialist To Visit

OCD is a behavioral disorder that needs the right diagnosis and treatment. Doctors that can help with this include:

Psychiatrist

Psychologist

Internal medicine specialist

A psychiatrist is a medical practitioner specializing in the diagnosis and treatment of mental illness. A psychologist is a medical professional who treats mental disorders primarily with talk therapy. An internal medicine specialist diagnoses and treats conditions related to the internal organs of the body.

Take medical advice from our trusted experts to get the right diagnosis and treatment.

Consult now

Treatment Of Obsessive-Compulsive Disorder (OCD)

The treatment for OCD mainly focuses on improving the quality of life and taming the symptoms to manage daily activities. It mainly consists of the following:

Cognitive behavioral therapy (CBT)

CBT is a type of talk therapy. The most used form of CBT in the management of obsessive-compulsive disorder is exposure and response prevention (ERP). During this, the individuals are exposed to feared situations or images that focus on their obsessions. However, it can evoke anxiety in some cases.

Medications

A class of medications used to treat OCD is known as selective serotonin reuptake inhibitors (SSRIs), typically used to treat depression. Research suggests that SSRIs and SRI like clomipramine are recommended as first-line agents for drug treatment. The best treatment for severe symptoms of OCD is a combination of CBT and SSRIs. The U.S. Food and Drug Administration (FDA)-approved SSRIs for the management of OCD include:

Fluoxetine

Fluvoxamine

Paroxetine

Sertraline

Get guaranteed delivery of all your medications from India’s largest online pharmacy.

Fill your prescription now

Neurosurgical treatment

Surgical procedures like gamma ventral capsulotomy can be very effective for patients who do not respond to typical treatments. Deep brain stimulation, which involves an implanted device in the brain, has data to support its efficacy. However, it is still highly invasive and complex to manage.

Newer advancements

A. Immunological therapies: Immunomodulatory therapy represents a new field, however, more research is required on this front. Some drugs used are:

Celecoxib

Nonspecific nonsteroidal anti-inflammatory drugs

B. Pharmacogenetics: It studies how a person's genes respond to medications. Currently, several pharmacogenetic approaches have been conducted on the association between candidate genes with OCD and drug response.

C. Psychotherapy: Recent advances have been made that focus on positive reinforcement, rather than asking the patient to face their fears, as in CBT, they include:

Rational emotive therapy: This therapy uses developed danger ideation reduction therapy (DIRT). It focuses on not undergoing exposure for patients with contamination fears.

Third-wave therapies: This therapy uses mindfulness in OCD, which teaches individuals to focus on the world around them rather than their internal dialogue.

Home care For Obsessive-Compulsive Disorder (OCD)

Management of OCD is not a one-time thing but a daily effort. Maintaining a healthy lifestyle can help tackle OCD symptoms better. Apart from this, there are certain supplements and herbs that can provide some relief from the symptoms of OCD. They include:

Add the essential supplements

Vitamin D: Studies suggest that Vitamin D has a neuroprotective effect and vitamin D deficiency is associated with numerous neuropsychiatric diseases that include autism, major depressive disorder, schizophrenia, and OCD.

Vitamin B12, folic acid, and homocysteine: Studies have investigated the association between OCD and vitamin B12, folic acid, and homocysteine levels in adult and child-adolescent patients.

Selenium: It is an antioxidant, research shows that decreased selenium levels are found in individuals with OCD.

Zinc: it is an antioxidant trace element that is required for many processes such as gene expression, protein synthesis, and enzymatic catalysis. Zinc is essential for the normal functioning of the nervous system.

N-acetyl cysteine (NAC): Studies show that a patient with SSRI-refractory OCD showed there was a significant improvement in their symptoms by taking NAC.

Glycine: Glycine is an amino acid that is associated with learning and memory. Glycine has the potential to make OCD symptoms better.

Myoinositol (MI): It is used in the treatment of psychiatric disorders. High amounts of MI have been found in fruits, grains, nuts, and beans.

Up your nutrition game with our widest range of multivitamin and mineral supplements.

Explore now

Try herbal remedies

A few herbal remedies are known for their effectiveness in managing OCDs. However, it is important to consult your health care provider before trying any of these:

St John’s wort (SJW): It is derived from a plant and has been used for centuries as a traditional medicine to treat depression. SJW can be used for OCD due to its antidepressant effects.

Milk thistle: It is a medicinal plant, which is grown in the Mediterranean and Persian regions. Studies suggest that it has a positive effect on OCD symptoms.

Valerian root: It is a perennial plant, which was used as a perfume. The research found that valerian extract was effective in OCD treatment.

Curcumin: It is an active constituent of turmeric. It has multiple benefits, along with a positive effect on neuropsychiatric disorders. Although no human studies examine the benefits of curcumin in OCD treatment.

Buy turmeric products online

Tap now

Borage: It is a traditional Persian plant, which has anxiolytic and sedative effects comparable to diazepam and also antidepressant effects. It can have a placebo effect in OCD treatment.

Complications Of Obsessive-Compulsive Disorder (OCD)

OCD goes undetected for a long time, due to the stigma and taboo around mental health conditions. It is generally neglected thinking it’s just behavioral. This can lead to complications like:

Poor quality of life: Studies show that the quality of life in OCD patients is significantly impaired compared to that in the general population as OCD hampers an individual’s ability to enjoy life.

Skin problems: Excessive hand washing can make the skin dry and cause dermatitis (inflammation of the skin).

Is the excessive washing of your hands making them dry? Try our widest range of moisturizers.

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Social isolation: OCD often leads to self-isolation. Managing obsessions and compulsions can be tiring, which often leads to avoiding other people and potential triggers. Studies show that self-isolation, due to OCD can lead to depression, anxiety, and loneliness.

Difficulty in maintaining relationships: Individuals with OCD are possessive and insecure around romantic relationships leading to doubts, and discomfort. They eventually end up hurting the relationship.

Problems with daily activities: Individuals spend way too much time trying to make or do things right, due to their repetitive nature. This makes it difficult for them to concentrate on work or school.

Suicidal tendency: Studies have shown that individuals with OCD have other co-morbid disorders like depression and anxiety, which can lead to suicidal thoughts and behavior.

Did you know?

Fear of COVID infections can aggravate OCD symptoms. Individuals with OCD are generally germaphobes (fear of germs). Studies believe that COVID is affecting people mentally with obsessive-compulsive disorder (OCD), especially those with washing compulsions.

Learn more about COVID

Alternative Therapies For Obsessive-Compulsive Disorder (OCD)

Management of OCD requires continuous efforts. Along with CBT and medications, there are a few alternative therapies that have shown promising results. They include:

1. Mindfulness

It involves making a special effort to give your full attention to what is happening in the present moment, to what’s happening in your body, your mind, or your surroundings. Studies show that practicing mindfulness along with CBT and medications can help manage mild to moderate cases of OCD.

2. Hypnotherapy

Hypnotherapy is a type of complementary therapy that uses hypnosis, which is an altered state of consciousness. Hypnosis is widely promoted as a treatment for anxiety, however, it may not be the best option for the treatment of OCD.

3. Cognitive analytic therapy (CAT)

CAT focuses on an individual's relationships. It is used in individuals living with depression, anxiety, or eating problems, who tend to self-harm, and with personal or relationship problems. CAT may help someone with OCD, but only to a certain extent.

4. Eye movement desensitization

This is a newer form of therapy that specifically focuses to help people with difficult traumatic memories. EMDR combines talking to a therapist about traumatic experiences with a technique where you make rapid rhythmic eye movements while recalling traumatic events to help you process them. Individuals with OCD can be considered for this therapy if they do not respond to CBT.

5. Interpersonal therapy (IPT)

This therapy focuses on relationships with other people and how your thoughts, feelings, and behavior are affected by your relationships. However, there is little evidence that this therapy can work for individuals with OCD.

6. Dialectical behavior therapy (DBT)

This therapy is an extension of CBT, that helps individuals experiencing borderline personality disorder. At this time there is little evidence to suggest it can help treat OCD any more than CBT.

7. Emotional freedom technique (EFT)

This therapy is commonly known as psychological acupressure, which aims to release emotional blockages within the body’s energy system.

Living With Obsessive-Compulsive Disorder (OCD)

Having OCD or dealing with a family member or a friend can be challenging. It takes constant effort to keep a check on the symptoms, behaviors, and emotions. Here are a few tips that can help:

Things to do if you have OCD

Living with OCD can be quite a task as you are trapped in your thoughts and emotions. Maintaining a healthy lifestyle by getting good quality sleep, eating healthy food, exercising, and spending time with others can help with overall mental health. Other important things include:

Learning as much as you can about obsessive-compulsive disorder

Knowing what triggers you and avoiding them

Focusing on your recovery goals

Joining support groups to understand how others with OCD are dealing with it

Finding outlets to release all the tension and energy healthily

Constantly reminding and motivating yourself

Keeping yourself busy

Things to do if your loved ones have OCD

Taking care of someone with OCD is a daily chore. They need daily affirmations and motivation. Other ways by which you can help someone with OCD inside:

Constantly communicating with them

Creating a supportive environment

Recognizing and appreciating their efforts

Helping them with their medications and therapies

Keeping their daily routine normal

sensitively setting limits for them

Avoiding comparisons

OCD in children: Tips for parents

Parents generally keep on following the rituals to help their children feel less distressed. Unfortunately, this can unintentionally reinforce a child's symptoms of obsessive-compulsive disorder (OCD). Things to do if your child has OCD:

Not performing a specific routine demanded by their child

Not changing your behavior to accommodate your child's demands

Trying not to excessively reassure your child

Taking a consistent approach to help your child with OCD

Not comparing them with other children

Giving your child rewards and brief praise provide on their achievements

Note: If you have OCD symptoms, seek your treatment and be open about it with your child.

Take care of your mind like you do for any other part of your body.

Check out our mind care range

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Frequently Asked Questions

Is OCD a brain disease?

When should I contact my doctor for OCD?

Is there a cure for OCD?

Is there a difference between OCD and OCPD?

Is OCD fatal?

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Oral cancer

Also known as Oral Squamous cell carcinoma, Oral cavity cancer and Oropharyngeal cancer

Overview

Oral cancer is abnormal growth of body cells in any part of the mouth that includes lips, inner parts of the cheeks, sinuses, tongue, roof of the mouth, the floor of the mouth, and the part of the throat behind the mouth.

Globally, oral cancer is the sixth most common type of cancer with India contributing to almost one-third of the total burden and the second country having the highest number of oral cancer cases. Oral cancer is typically seen in men over the age of 45 years.

Tobacco consumption including smokeless tobacco, betel-quid chewing, excessive alcohol consumption, unhygienic oral condition, and sustained viral infections that include the human papillomavirus are some of the risk factors for oral cancer.

The symptoms usually include a sore that doesn’t heal, difficulty in eating or swallowing, unexplained weight loss, and pain in the mouth and jaws. The treatment options are based on the extent of the cancer and may include surgery, chemotherapy, radiation therapy, or a combination of these.

Key Facts

Usually seen in

Adults above 45 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Lips

Gums

Cheeks

Tongue

Floor of your mouth

Roof of your mouth

Behind wisdom teeth

Prevalence

Worldwide: 4 cases per 100 000 people (2022)

India: 64.8% (2018)

Mimicking Conditions

Erythroplakia

Leukoplakia

Geographic tongue

Median rhomboid glossitis

Necrotizing sialometaplasia

Hairy tongue

Oral hairy leukoplakia

Oral candidiasis

Herpetic gingivostomatitis

Aphthous ulcers

Traumatic ulcers

Herpes labialis

Papilloma

Lipoma

Lingual thyroid

Mucocele

Ranula

Neurofibroma

Haemangioma

Oral keratoacanthoma

Odontogenic tumors

Necessary health tests/imaging

Histopathological examination: Vital staining techniques, Biopsy & Brush biopsy

Imaging techniques: Magnetic resonance imaging (MRI), Computed tomography (CT), Positron emission tomography (PET) & Orthopantomogram (OPG)

Biomarker detection

Treatment

Surgery: For primary tumor & Neck dissection

Radiation: Internal beam & Brachytherapy

Chemotherapy: Cisplatin, Carboplatin, 5-fluorouracil & Paclitaxel

See All

Symptoms Of Oral Cancer

Oral cancer presents itself with the following symptoms:

Sore on the lip or in the mouth that doesn't heal

Pain in the mouth

Lump or thickening in the lips, mouth, or cheek

White or red patch on the gums, tongue, tonsil, or lining of the mouth

Sore throat

Difficulty in chewing or swallowing

Trouble moving the jaw or tongue

Numbness of the tongue, lip, or other areas of the mouth

Swelling or pain in the jaw

Poor fitting of the dentures

Loosening of the teeth

Pain around the teeth and gums

Changes in the voice

Lump or mass in the neck or back of the throat

Loss of weight

Ear pain

Oral cancer if caught early has a high probability of survival. Know more about the early warning signs.

Read This

Types Of Oral Cancer

There are multiple types of oral cancer and are generally categorized by the type of cell cancer (carcinoma) starts to grow in. They include:

1. Squamous cell carcinoma

This is the most common type of mouth cancer. The earliest form of squamous cell cancer is called carcinoma in situ. This means that the cancer cells are only in the top layer of cells lining cells.

2. Adenocarcinoma

Is a cancer that develops inside the tissue of the salivary gland, which grows from abnormalities in bone, cartilage, muscle, or other tissue cancer that starts in the cells that produce skin pigment or color (melanocytes).

3. HPV-related cancers

Infection with certain high-risk types of the human papillomavirus (HPV) causes most of the squamous cell cancers of the oropharynx (called HPV-positive cancer). HPV is rarely associated with oral cavity cancer.

4. Verrucous carcinoma

This is a rare type of squamous cell cancer that is most often found in the gums and cheeks. It's slow-growing cancer that hardly ever spreads to other parts of the body.

5. Other types of oral cavity cancers

Minor salivary gland cancers: These can start in the glands in the mouth and throat lining.

Lymphomas: The tonsils and base of the tongue contain immune system (lymphoid) tissue, where cancers called lymphomas can start.

Leukoplakia and erythroplakia: These are possible precancerous conditions where certain types of tissue changes can be seen in the mouth or throat.

6. Benign (not cancer) tumors

Many types of benign tumors and tumor-like changes can start in the mouth or throat, such as these:

Peripheral giant cell granuloma: Is the most common oral giant cell lesion appearing as a soft tissue purplish-red nodule.

Fibroma: These are tumors made up of fibrous tissue that can occur almost anywhere in and on the body.

Granular cell tumor: A rare type of soft tissue tumor that usually begins in the cells that hold nerve cells in place.

Schwannoma: A rare type of tumor that forms in the nervous system.

Neurofibroma: A type of nerve tumor that forms soft bumps on or under the skin.

Pyogenic granuloma: It is a noncancerous, raised tumor on your skin or mucous membranes.

Oral hemangioma: These are benign tumors that develop due to the proliferation of the inner layers of cells around the oral cavity.

Did you know?

Head and neck cancers account for 6% of all cases of cancer in the world and are the sixth most common cancer. Know more about cancers of the head and neck.

Click Now

Causes Of Oral Cancer

Oral cancer occurs when abnormal cells begin to grow within the oral cavity. These abnormal cells develop because of changes (mutations) in their DNA. This mutated DNA dictates the cells to grow uncontrollably and to continue living after normal cells die. These masses of cells can form a tumor and when left untreated, these cells continue to grow out of control and spread to other parts of the body.

Numerous risk factors or possible causative agents for the development of oral cancer.

Risk Factors For Oral Cancer

Oral cancer is one of the most common types of cancer and is associated with several risk factors. They include:

A. Modifiable factors

Tobacco: Using tobacco, including cigarettes, cigars, pipes, chewing tobacco, and snuff, is the single largest risk factor for head and neck cancer and is associated with 85% of head and neck cancers.

Betel quid: Studies have demonstrated that chewing is not only to be a risk factor for cancers of the oral cavity and pharynx and oral potentially malignant disorders (OPMD) but also can cause other cancers and adverse health effects.

Alcohol: Alcohol has been implicated in the development of oral cancer. Alcoholic beverages have been considered carcinogenic to humans causing, in particular, tumors of the oral cavity, pharynx, larynx, esophagus, and liver.

Diet and nutrition: The relationship between diet and nutrition to the risk of cancer development has been established by several epidemiological and laboratory studies.

Mouthwash: The use of mouthwash has also been implicated to cause oral cancer. Mouthwashes usually contain alcohol as a solvent for other ingredients or as a preservative that increases the risk of causing oral cancer.

Maté: It is a tea‑like beverage and has been shown to be an independent cause of the development of oral and pharyngeal cancers.

Poor dental status: Like sharp/fractured teeth due to caries/trauma, and chronic ulceration from an ill‑fitting denture have been suggested to promote cancer in the presence of other risk factors like smoking and alcohol consumption.

B. Non- modifiable factors

Family history: Genetic predisposition has been shown to be an important risk factor in the development of oral cancer.

Gender: Men are more likely to develop oral and oropharyngeal cancers than women.

Fair skin: Fair skin is linked to a higher risk of lip cancer.

Age: This type of cancer can develop in people of any age, but is seen more in individuals older than 45 years who have an increased risk for oral cancer.

Want to find out if you are at risk of developing cancer? Well, there is a test for that called geneCORE predict – hereditary cancer risk test. This test predicts your risk of up to 22 major cancers.

Know More

C. Environmental factors

Viral infections: Studies have shown that Human Papilloma Virus (HPV) has been associated as a risk factor in oral cancer, especially HPV type 16. Other oncogenic virus species i.e., Epstein-Barr Virus and Herpes Simplex Virus Type 1 have been proposed to be involved in oral cancers.

Fungal infections: Fungal infections caused by Candida species, in particular, Candida albicans have been implicated in the pathogenesis of oral precancerous lesions that have higher chances of developing into cancer.

Prolonged sun exposure: High exposure to the sun, without sun protection measures, is linked with cancer in the lip area.

Syphilis: Tertiary syphilis has been known to predispose to the development of oral cancer along with other risk factors such as tobacco and alcohol.

Radiation: Studies have shown a relationship between exposure to ionizing radiation and the later development of salivary gland tumors.

Immunosuppression: Individuals whose immune system is compromised due to human immunodeficiency virus (HIV), transplant, and other disorders are more prone to develop oral cancers.

Did you know?

Individuals suffering from cancer are at a higher risk of contracting the COVID- 19 infection. Strong immunity is needed to fight against the coronavirus infection. Read about how to stay healthy during the COVID-19 outbreak.

Click Here

Diagnosis Of Oral Cancer

Diagnosing oral cancer at an early stage is the key to a better prognosis. TNM stands for tumor, node, and metastases. It is one of the staging systems doctors use for mouth cancer. It includes:

Primary tumor (T)

TX: Tumor cannot be assessed

T0: No evidence of primary tumor

Tis: Carcinoma in situ (CIS)- a group of abnormal cells that are found only in the place where they first formed in the body

T1: Tumor 2 cm or less in greatest dimension

T2: Tumor more than 2 cm but not more than 4 cm in greatest dimension

T3: Tumor more than 4 cm in greatest dimension

T4a: A moderately advanced local disease.

T4b: Very advanced local disease.

Regional lymph nodes (N)

NX: Cannot be assessed

N0: No regional lymph node metastasis ( spread of cancer)

N1: Metastasis in a single lymph node on one side (ipsilateral), 3 cm or less in greatest dimension

N2: Metastasis as specified in:

N2a: Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension.

N2b: Metastasis in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension

N2c: Metastasis in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension.

N3: Metastasis in a lymph node more than 6 cm in greatest dimension.

Distant metastasis (M)

MX: Distant metastasis cannot be assessed

M0: No distant metastasis.

Early detection is the key to a good outcome for any cancer. Read about 8 common signs of cancer that you should look out for.

Click Now

The diagnosis consists of the following:

A. Physical examination

The primary and the most crucial assessment for oral cancer is the physical examination, which usually consists of two steps – systematic visual examination and palpation. Primarily, the external parts such as lymph nodes, salivary glands, lips, etc. are inspected, and subsequently, an internal examination of the mouth is performed to look for irregularities, swelling, and thickening.

B. Histopathological examination

Histopathology is used to assess the aggressiveness of tumors with high invasive potential. It includes:

Vital staining techniques: Visual tissue staining is an adjunct technique used in the diagnosis of cancer. Tolonium chloride (also known as toluidine blue) staining is used to detect mucosal abnormalities in the oral cavity.

Biopsy: A tissue sample is removed surgically from the suspected region and sent to the pathological laboratory for a detailed microscopic examination.

Brush biopsy: In brush biopsy, cells from the oral lesion are obtained by scraping the surface mucosa.

Exfoliative cytology: Exfoliative cytology is a simple and noninvasive diagnostic technique for the early detection of oral cancer.

Incisional biopsy: In this type of biopsy, a representative sample of the tissue is carefully chosen for selective diagnosis.

C. Imaging techniques

Several advanced imaging techniques are used for the diagnosis of oral cancer.

Magnetic resonance imaging (MRI): MRI provides the details of the structures in the oral cavity along with adjacent parts. The soft-tissue discrimination by MRI aids in assessing the extent of local and regional spread of the tumor, invasion depth, and extent of involvement of lymph nodes.

Computed tomography (CT): The CT scan uses x-ray radiations and a computer to create pictures of the body to locate the cancerous lesion and determine its spread to the other parts of the body.

Positron emission tomography (PET): The PET scan is used to determine the spread of tumor cells to the lymph nodes or other parts of the body.

Radiological techniques: X-ray is used to determine the spread of cancer to the other organs outside of the mouth and oropharynx. The x-ray done for oral cancer is known as an orthopantomogram (OPG).

Optical imaging techniques: These include optical coherence tomography and tissue fluorescence imaging that can effectively differentiate between cancerous and non-cancerous lesions.

D. Biomarker detection

Biomarkers are used for the early detection of oral cancer. Biomarkers in general are components of the cells present in body fluid or tumor cells that are overexpressed during the onset of the disease.

E. Other methods

In recent years, significant advancements have been reported in diagnostic techniques that are rapid and specific for the detection of cancer biomarkers. They include:

Raman spectroscopy: It is a non-destructive chemical analysis technique that provides detailed information about the chemical structure.

Confocal microscopy: This is another light-based technique that provides images of many important cellular and architectural features of squamous cell carcinoma (SCC).

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Celebs affected

Rakesh Roshan

Filmmaker Rakesh Roshan has shared about his tongue cancer and how he fought the disease. In an interview, Rakesh said, “It all began with a blister which refused to go despite using several applications of prescriptions from my family doctor. It was a small one - no pain, no itching”.

Prevention Of Oral Cancer

The exact cause of oral cancer is unknown and there can be multifactorial causes. The best way of preventing any kind of cancer is to lead a healthy lifestyle. Other things to keep in mind include:

1. Get cancer screening for early detection

Cancers detected at early stages can be treated more successfully. Delay in diagnosis has an effect on cancer-related morbidity and mortality. Therefore, screening and early clinical diagnosis help to provide more safe and cheap treatments.

2. Always self-examine yourself

It is another way to detect oral cancer at an early stage. You can do this by:

Looking at the inside of both of your cheeks with your flashlight

Feeling those areas with your fingers

Checking floor of your mouth (beneath your tongue) with your flashlight

Examining the floor of your mouth with your finger

Sticking out your tongue, examine the top, both sides, and under the surface using your flashlight.

3. Visit your dentist regularly

Seeing your dentist regularly is key to maintaining good oral health. As part of your examination, your dentist can look and feel in and around your mouth and any unusual lumps or sores can be detected early.

4. Stay away from all forms of tobacco

Chewing, smokeless, and snuff tobacco, which is placed directly in the mouth, can create gray-white ulcers called leukoplakia in the mouth that can become cancerous. Smokeless tobacco also contains chemicals known to damage a gene that protects against cancer.

Want to quit smoking? Try our smoking cessation range.

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5. Limit your alcohol intake

Moderate to heavy alcohol consumption is associated with higher risks of certain head and neck cancers, and reducing the intake can be very beneficial.

Note: Avoid the combination of alcohol and tobacco. Research shows that people who use both alcohol and tobacco have much greater risks of developing oral cancer than people who use either alcohol or tobacco alone. Know more about other cancer-related myths and facts.

Watch Now

6. Get vaccinated for HPV

Human papillomavirus (HPV), particularly HPV16, is strongly associated with oropharyngeal cancers, especially those at the back of the mouth. The best way to prevent HPV is to get vaccinated before you become sexually active, and also practice safe sex.

Know more about HPV vaccinations, and their types.

Click Here

7. Protect your lips from the sun

If you have a history of severe sunburns, take extra care with your lips. Just as skin can burn easily, the lips are also sensitive to the sun. Some of the tips include:

Limiting sun exposure during the peak hours of 10 a.m. and 2 p.m

Wearing a protective lip balm with SPF when stepping out

Reapplying lip balms after you eat or drink

Using hats that shield your face from the sun.

Protect your lips and skin from all the harmful rays of the sun using our extensive range of sunscreens.

Fill Your Carts Now

8. Maintain a healthy lifestyle

There are a lot of cancer prevention clinical trials that aim to find out whether actions people take can prevent cancer. These may include eating fruits and vegetables, exercising, quitting smoking, or taking certain medicines, vitamins, minerals, or food supplements.

9. Understand chemoprevention

This is a promising plan to inhibit, suppress, or control the growth of cancer cells. Chemoprevention is the use of certain drugs or other substances to help lower a person's risk of developing cancer or keep it from coming back.

10. Add probiotics to the diet

Recently published studies assessed microbial compositions in patients with OSCC. Probiotics are live microorganisms that provide a health benefit to the host. Recent data on probiotic products show a protective effect against cancer cell activity.

11. Take supplements

There are some natural products to prevent oral cancer such as:

Vitamin C

Vitamin E

Vitamin A

Omega-3 fatty acids

Carotenoids

Fill the gap in your diet with our range of vitamin and mineral supplements.

Explore Now

Specialist To Visit

Cancer is not a single disease but a group of related diseases. Hence, it requires comprehensive care. Doctors that take care of patients with oral cancer and help in diagnosing and formulating a treatment plan are:

Dentists

Otolaryngologists

Oncologists

Radiation oncologists

Medical oncologists

Otolaryngologist is a doctor who specializes in diseases that affect the ears, nose, and throat. An oncologist is a doctor who treats cancer and provides medical care for a person diagnosed with cancer. A radiation oncologist is a doctor who uses radiation to treat cancer whereas a medical oncologist uses chemotherapy and other medicines to treat cancer.

Speak to an expert doctor to find out how you can reduce these risks of developing oral cancer.

Book Consultation Here

Treatment Of Oral Cancer

Any kind of cancer requires multidisciplinary treatment that includes surgery, chemotherapy, and radiation, alone or in combination. Oral cancer treatment includes:

A. Surgical management

Surgery for primary tumors: Surgery is recommended for patients with early-stage tumors and surgery or definitive concurrent chemoradiotherapy for those with advanced-staged tumors. Approaches to the removal of the tumor and the surrounding structures are dictated by the location and extent of invasion.

Surgery for neck dissection: Neck dissection detects any spread of cancer in the early stage and removes the majority of affected lymph nodes. In patients with early-stage tumors, the decision to proceed to elective neck dissection (END) is based on a greater than 20% probability of the presence of cancer cells in the lymph nodes. Alternatives to END include

Observation

Elective radiation

Sentinel lymph node biopsy

Other surgeries:

Glossectomy (partial or total removal of your tongue)

Mandibulectomy (surgery for oral cancer in your jawbone)

Maxillectomy (removal of a part or all of the bony roof of your mouth).

Surgery in case of recurrence

Recurrence rates in the oral cavity is 30%, and Salvage (or 'rescue') surgery is used to refer to surgical treatment after failure of initial treatment in various scenarios including treatment of delayed neck metastasis, recurrent primary tumors, or even spread of cancer to the lungs.

Reconstruction

The oral cavity is a complex site made up of several structures critical for speech, swallowing, and appearance. To be deemed successful, reconstruction should attempt to address all three, and it must be tailored to the site of the defect.

Radiation

Radiation therapy uses X-rays to destroy or damage cancer cells, making them unable to proliferate. Radiotherapy is mainly used in patients with locally advanced oral cancer.

Although definitive radiation therapy can be used for oral cancer, it is not routinely used because of elevated rates of Osteoradionecrosis (bone death due to necrosis) associated with the higher therapeutic doses required compared with doses for postoperative adjuvant therapy. Types of radiation therapy include:

External-beam radiation therapy: The most common type of radiation in which the radiation is given from a machine outside the body.

Internal-beam radiation therapy: When radiation treatment is given using implants, it is called internal radiation therapy or brachytherapy. Brachytherapy involves the application of a radioactive source in close proximity to the tumor.

Chemotherapy

Chemotherapy (chemo) is treatment with anti-cancer drugs that are injected into a vein or taken by mouth, which allows them to enter the blood and reach most parts of the body. Drugs used for chemotherapy include:

Cisplatin

Carboplatin

5-fluorouracil (5-FU)

Paclitaxel (Taxol)

Docetaxel (Taxotere)

Hydroxyurea

Other less often used drugs include:

Methotrexate

Capecitabine

Types of chemotherapy include:

Adjuvant chemotherapy: It is given after surgery and is sometimes combined with radiation therapy. The goal is to kill cancer cells that might have been left behind at surgery because of the smaller size and also prevents recurrence.

Neoadjuvant or induction chemotherapy: This is given before surgery with or without radiation to shrink some larger cancers to make surgery easier and remove less tissue. This can lead to fewer serious side effects and problems from surgery.

Note: For advanced cancer, chemo (with or without radiation therapy) can be used to treat cancers that are too large or have spread too far to be removed by surgery. The goal is to slow the growth of cancer.

Chemoradiation

Chemoradiation is chemotherapy given at the same time as radiation. It has been shown to shrink oral cavity and oropharyngeal tumors that are not widespread but are too advanced for surgery. Generally, this approach is hard to tolerate, especially for people in poor health.

Targeted therapy

It is the use of medicines that target or are directed at proteins in cancer cells by destroying cancer cells or slowing their growth. Some targeted drugs, for example, monoclonal antibodies, work in more than one way to control cancer cells and may also be considered immunotherapy because they boost the immune system. Cetuximab is the most commonly used drug for this therapy.

Immunotherapy

This therapy uses medicines to help boost a person’s own immune system to find and destroy cancer cells more effectively. It typically works on specific proteins involved in the immune system to enhance the immune response.

B. Non-surgical management

This type of management is used to preserve the organs, although surgery is the mainstay of therapy for advanced-stage oral cancer.

Understand better the treatment options of cancer from a well-renowned doctor.

Home-care For Oral Cancer

The news of oral cancer can be devastating. Cancer not only affects the body but has a serious effect on the mind as well. General treatment guidelines include an early diagnosis, correction of predisposing factors, and maintaining good oral hygiene. Apart from these, some of the things that the patients can do at home that can help manage the symptoms of treatment include:

Quit smoking

Stay away from alcohol

Take enough rest post any surgical procedure

Be physically active

Talk to a counselor

Adopt a healthy behavior

Getting emotional support from loved ones

Follow all the instructions given by doctors

Eat a well balanced and nutritious diet

Find hobbies that make you happy

Add nutritional supplements to the diet

Always indulge in safe sex

Buy condoms and all your sexual wellness products online.

Shop Now

Tips for caregivers

There are numerous resources available for the patient and their families, battling with oral cancer. Tips that the caregivers can follow to help the patient in difficult times include:

Encouraging and providing mental support to the patient

Understanding the course of treatment

Talking with empathy and positive attitude to the patient

Helping the patients with household chores

Handling insurance and billing issues for them

Helping the patient manage their symptoms and side effects

Coordinating their medical appointments and giving medications on time

Assisting the patient in maintaining personal care and hygiene

Taking care of patients' needs.

Diagnosed with cancer? Read about things you need to know if you are planning on taking a second opinion.

Click Now

Complications Of Oral Cancer

Complications occur either due to untreated disease and subsequent spread of the tumor or commonly due to side effects of treatment. These include:

Complications from surgery

Surgery involving tumor excision, neck dissection, and free flap reconstruction carries the risk of the following:

Failure of the flap

Damage to local motor and sensory nerves

Paralysis of the vocal cords

Restriction of the range of motion of the jaws

Difficulty in speaking

Improper wound healing

Potential long-term requirement of feeding tubes

Patients may require an extended stay in intensive care.

Complications from chemo or radiotherapy

Chemotherapy and radiation can result in a wide range of debilitating, chronic symptoms. Specifically, in the oral cavity, patients may experience the following:

Pain

Bleeding

Osteoradionecrosis

Inflammation of the mucosa

Dry mouth is also known as xerostomia

Difficulty in swallowing and speaking

Reduced oral intake and malnutrition

Increased infections due to decreased immunity.

Worried if there is any connection between COVID-19 and cancer?

Alternative Therapies For Oral Cancer

When considering alternative and complementary treatments for any kind of cancer, it is very important to communicate with your medical teams as some of the alternative therapies may be contraindicated from the treatment plan. Alternative therapies, that can prove beneficial in managing or preventing early-stage of oral cancer include:

Herbal therapy

Herbal medicines are plant-based products used as traditional and domestic medicines and food additives. Some of the herbs with anti-cancer effects include:

Curcumin or Turmeric (Haldi): It suppresses the tumor activity and consequently reduces tumor growth and metastasis.

Ginger (Adrak): It can be used as a therapeutic agent in UV-induced skin diseases, including cancer of lips.

Saffron (Kesar): Studies have reported the antioxidant, anti-cancer, anti-inflammatory, antidepressant, antihistamine, and memory-enhancer effects of saffron in animal models.

Cinnamon (Chakla): It has numerous biological functions such as antioxidant, antibacterial, anti-inflammation, anti-diabetes, and anti-tumor activity.

There are certain food items that can help fight cancer. Including them in 4-5 servings can work wonders. Read about 5 superfoods that fight cancer and give you a healthy life.

Click Here

Photodynamic therapy (PDT)

Photodynamic therapy uses a drug that is activated by light, called a photosensitizer or photosensitizing agent, to kill cancer cells. Studies suggest PDT, for superficial tumors (2mm)and for tumors with a depth of more than 10 mm, interstitial PDT (iPDT) can be an alternative.

Living With Oral Cancer

Living with oral cancer may seem very difficult, but a good support system along with a positive attitude can help the patients cope with the diagnosis and treatment. Some of the things that can prove to be beneficial include:

Getting all the emotional support

It is normal to feel depressed, anxious, or worried when you get to know that cancer is a part of your life. Some people are affected more than others, but everyone can benefit from help and support from other people like:

Friends and family

Religious groups

Support groups

Professional counselors

Take post-treatment follow-up very seriously

Patients with oral cancer are at risk for recurrences and cancer in the other parts of the body. After completion of the treatment, patients should be followed up at regular intervals to detect any signs of recurrence. Regular dental visits and endoscopies can help detect any early signs.

Endoscopy and other tests are generally done:

Every 1 to 3 months during the first year

Every 2 to 6 months during the second year

Every 4 to 8 months during the 3rd to 5th years

Every year after the 5th year

Give importance to palliative care

Oral cancer causes severe physical, psychosocial and spiritual pain to patients and their families. Palliative care focuses on improving how you feel during treatment by managing symptoms. Palliative care along with treatment for cancer has shown greater results with less severe symptoms, a better quality of life, and more satisfaction with treatment. Palliative treatments vary widely and often include:

Medication to relieve the symptoms

Nutritional changes

Relaxation techniques

Emotional and spiritual support

Encouraging the patient to do things they love.

Quit smoking

Smoking is the leading cause of death due to oral cancer and if you had trouble quitting smoking before treatment, your doctor may recommend counseling as well as medication to help you. It is very important to quit smoking because even people with early-stage oral cavity or oropharyngeal cancer are at risk of a new smoking-related cancer if they continue to smoke.

Want to stop smoking? Read about 7practical tips that can help you get rid of this deadly habit.

Click Here

Get proper rehabilitation

Radiation, surgery, and certain chemo drugs can lead to problems with speech, swallowing, and hearing. Speech, hearing, and swallowing rehabilitation are required to maintain the quality of life.

Therapists that can help you include:

Speech therapists: Who are knowledgeable about speech and swallowing problems and can help you learn to manage them.

Audiologist (a specialist in hearing): Who can help you with devices to improve your hearing if the treatment has affected your hearing capacity.

Keep health insurance and copies of your medical records

Even after treatment, it’s crucial to keep health insurance, as tests and doctor visits cost a lot, and even though no one wants to think of their cancer coming back, this could happen.

Also if you see a new doctor at some point of the treatment who doesn’t know about your medical history, your medical records can give the new doctor the details of your diagnosis and treatment.

Did you know?

Walking for 30 mins can improve the quality of life for people living with cancer. Tap to read more

Tap To Read More

Frequently Asked Questions

What is the prognosis of oral cancer?

Is oral cancer treatable?

What are the side effects of oral cancer treatment?

What is the duration of these side effects?

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Oral thrush

Also known as Oral candidiasis and Oropharyngeal candidiasis

Overview

Oral thrush is an infection of the mouth caused by yeast-like fungus called Candida Albicans. It causes creamy white lesions, usually on your tongue or inner cheeks. Sometimes oral thrush may spread to the roof of your mouth, your gums or tonsils, or the back of your throat.

The symptoms of this condition include burning in the mouth, loss of taste, cracking at the corners of the mouth, pain or difficulty swallowing, a feeling of food getting stuck in the throat, and fever.

It can affect anyone, but it's more likely to occur in babies, older adults, and people with suppressed immune systems. Thrush in newborns and infants is common and usually not harmful and the outlook for mild cases of thrush is good. The prognosis for severe cases depends on the underlying cause and the status of the patient's immune system.

The best way to prevent this is by maintaining immaculate oral hygiene, maintenance of dentures in older patients, and regular visits to the dentist.

The treatment mainly consists of topical or systemic antifungal medications and milder can be managed with home remedies and over-the-counter antifungal mouthwashes and ointments. It is always necessary to diagnose the predisposing factors and treat the cause in case of recurrence.

Key Facts

Usually seen in

Infants below 6 months of age and older people

Gender affected

Both men and women

Body part(s) involved

Tongue

Inner cheeks

Roof of the mouth

Gums

Tonsils

Throat

Esophagus

Prevalence

India: 20% (2018)

Mimicking Conditions

Erythematous form

Oral mucositis

Erythroplakia

Thermal burns

Erythema migrans

Anemia

Chronic hyperplastic form

Leukoplakia

Lichen planus

Pemphigoid

Pemphigus,

Oral squamous cell carcinoma (OSCC)

Other forms

Oral hairy leukoplakia

Angioedema

Aphthous stomatitis

Herpes gingivostomatitis

Herpes labialis

Measles (Koplik spots)

Perioral dermatitis

Steven-Johnsons syndrome

Histiocytosis

Blastomycosis,

Lymphohistiocytosis

Diphtheria

Esophagitis

Syphilis

Streptococcal pharyngitis

Necessary health tests/imaging

Blood tests: Serum iron and vitamin B12

Lab tests: Biopsy and Paper point test.

Imaging tests: Endoscopy

Treatment

Topical antifungal drugs: Nystatin, Amphotericin b, Fluconazole & Miconazole.

Systemic antifungal drugs: Itraconazole, Voriconazole, Ketoconazole & Posaconazole

See All

Symptoms Of Oral Thrush

Oral thrush can have many symptoms in the mouth, throat, and food pipe. These include:

In adults

Thick white or cream-colored deposits on inner cheeks, tongue, the roof of the mouth, and throat

Redness or soreness of the mouth

Cracking and redness at the corners of the mouth

Cotton-like feeling in the mouth

Loss of taste

Pain while eating or swallowing (if candidiasis is in the food pipe)

In children

Cottage cheese is like white coating which cannot be rubbed off easily.

Difficulty in feeding

Rashes on the nappy

Did you know?

Dandruff, diaper rash, and athlete’s foot are types of fungal infections. Read more on fungal infections of the skin.

Tap Now

Types of Oral Thrush

Oral thrush can be classified into the following:

Primary oral candidiasis (Group I)

Acute

Pseudomembranous: It is the most common type and is in newborns and immunocompromised patients, and elderly people.

Erythematous: It manifests as a painful localized red area. This type is seen more commonly in HIV patients.

Chronic

Erythematous: Also known as “denture stomatitis”, is a chronic inflammation of the mouth underlying a partial or total denture.

Pseudomembranous: This is characterized by extensive white patches that occur on the mouth, tongue, and throat.

Angular cheilitis: This a variant of oral candidiasis that classically presents as a white patch on the corners of the mouth and has the potential to evolve into cancer.

Median rhomboid glossitis: It is a very rare type of oral candidiasis that presents as a rhomboid-shaped erythematous patch in the center of the tongue.

Linear gingival erythema: Typically seen in HIV patients and clinically presents as an erythematous (red) line or band over the gums of one or more teeth.

Secondary oral candidiasis (Group II)

Candidiasis due to diseases such as

Thymic aplasia: It is genetic with decreased T-cell receptors compromising immunity.

Candidiasis endocrinopathy syndrome: It is a group of disorders characterized by recurrent or persistent superficial infections of the skin, tissue layers, and nails.

Causes Of Oral Thrush

A species of yeast like fungus called Candida causes oral thrush. The most common is Candida albicans, isolated from more than 80% of lesions.

Candida normally resides in the skin, mouth, throat, gastrointestinal tract, and vagina, of healthy individuals without creating any issues. It only attacks the body when the opportunity strikes and the immunity is compromised.

Know more about fungal infections of the private parts.

Risk Factors For Oral Thrush

Though oral thrush is not a life-threatening condition, it is quite common and can have an effect on general well-being. Various risk factors of oral thrush include:

Local factors

1. Saliva: Salivary gland dysfunction predisposes to oral candidiasis. Conditions affecting the quantity (like xerostomia) and quality of salivary secretions may lead to an increased risk of oral thrush.

2. Dentures: They create a favorable environment for candida organisms to thrive. The majority of the people wearing complete dentures are predisposed to candida infection.

3. Topical medications: The use of topical or inhalational corticosteroids and overzealous use of antimicrobial mouthwashes can temporarily suppress local immunity and cause alterations in the oral flora, thereby increasing the risk of candidiasis.

4. Smoking: Studies suggest that smoking alone or in combination with other factors, significantly affects the oral candida environment in the mouth.

Want to quit smoking? Try our smoking cessation range to help you get rid of this unhealthy habit.

Shop Now

5. Poor oral hygiene: The presence of deposits and tartar on the teeth and adjoining gums increases the risk of developing oral thrush. It was found that most patients with oral thrush maintain their oral hygiene unsatisfactorily.

Up your oral hygiene game from all new oral care products for all your dental needs.

Explore Now

6. Diet: Excessive intake of refined sugars, carbohydrates, and dairy products can enhance the growth of candida organisms by reducing the pH levels.

Want to know more about healthy eating habits?

Systemic factors

1. Age: Extremes of age, like infancy or old age, may predispose to oral thrush due to immature or weakened immunity.

2. Malnutrition: The deficiency of iron, essential fatty acids, folic acid, vitamins A and B6, magnesium, selenium, and zinc can help in the overgrowth of the candida species.

3. Medications: Prolonged use of drugs like broad-spectrum antibiotics and immunosuppressants that cause dry mouth (xerostomia) create a favorable environment for candida to grow.

4. Endocrine disorders: A more aggressive form of oral thrush is more prevalent in patients with endocrine dysfunctions such as diabetes and Cushing’s syndrome (a noncancerous benign tumor of the pituitary gland).

5. Immunodeficiency: Conditions such as Acquired Immunodeficiency Syndrome (AIDS) and Severe Combined Immunodeficiency Syndrome (SCID) that severely affect immunity are significant predisposing factors for candidiasis.

6. Cancer: The host defense mechanisms are compromised by chemotherapy and radiotherapy administered for the treatment of cancer. This significantly reduces immunity and leads to oral thrush.

7. Congenital conditions: Individuals affected by congenital conditions associated with the defective immune system are commonly predisposed to candida infections.

Did you know?

Candidiasis and COVID-19 infections are interlinked. Research has shown that candidiasis is significantly associated with an increased risk for COVID-19 and COVID-19 may be a risk factor for candidiasis. Read more on COVID-19.

Read Now

Diagnosis Of Oral thrush

Oral thrush is easily noticeable as a white patch in and around the mouth. To confirm the diagnosis or to rule out any other underlying health conditions your doctor will include:

Physical examination

To diagnose oral thrush, your doctor or dentist may examine your mouth to look at the lesions, where they are located, and if they are scrapable or not.

Blood tests

Your doctor may sometimes suggest a blood test to look for certain conditions that may make you more likely to develop an oral thrush such as a deficiency of iron, vitamin B12, or folic acid.

Laboratory tests

1. Histopathology examination: This consists of taking a small scraping of the active lesions to examine under a microscope.

2. Biopsy: Biopsy specimens should in addition be sent for histopathological examination when chronic hyperplastic candidosis is suspected.

3. Impression culture technique: Taking an impression of both the upper and lower jaw, to estimate the growth of the candida organisms.

4. Saliva collection: This simple technique involves taking the saliva of patients who show clinical signs of oral thrush.

5. Paper points test: An absorbable sterile point is inserted to the depth of the pocket and kept there for 10 sec. It is then treated with a solution to check for any growth.

Imaging test

In some rare cases endoscopy can be done to check for lesions deeper into the throat and food pipe.

Get your lab tests done with us, where patient comfort and safety are the utmost priority.

Book Now

Prevention Of Oral Thrush

A healthy mouth is one of the keys to a healthy body. Fungal infections can be quite troublesome, but they can be prevented with certain simple practices. These include:

Maintaining proper oral hygiene

Good oral hygiene practices may help to prevent oral thrush in people with weakened immune systems. Careful mechanical cleaning of teeth and dentures with a toothbrush is the cornerstone of the prevention of candida infections.

Using medicated mouthwash

Chlorhexidine digluconate and cetylpyridinium chloride are antiseptic mouthwashes that can be used as prophylaxis for patients undergoing both chemotherapy and radiotherapy.

Shop from our extensive range of mouthwashes.

Browse Now

Rinsing the mouth after using the inhaler

People who use inhaled corticosteroids may be able to reduce the risk of developing thrush by rinsing their mouth with water or mouthwash after using an inhaler.

Keeping your dentures clean

For susceptible denture wearers, it is advisable to remove the denture at night and soak in 0.2% chlorhexidine solution or 15–30 min in white vinegar.

Quit smoking

Smoking is associated with a variety of changes in the mouth that cause oral thrush, the most common opportunistic fungal infection. So, quitting smoking can help prevent recurrent oral thrush.

According to WHO, smoking is one the leading cause of death in India, causing 1.3 million deaths every year. Know the tips that can help you quit smoking.

Read This

Visit your dentist regularly

Regular oral and dental checkups by your dentist can help in the diagnosis of any early signs of oral thrush. Professional cleaning of the teeth and reiterating oral hygiene tips by the dental professional can help maintain oral health and limit the chances of developing any infection.

Know your doctors. There are different types of dentists for different oral health issues.

Know More

Specialist To Visit

Oral thrush can be easily managed by an over-the-counter antifungal gel. But, if you leave oral thrush untreated, the infection can spread to other parts of the body. Doctors that can help in the diagnosis and treatment include:

Dentist

General physician

Pediatrician

Severe oral thrush infections may require consultation with:

Immunologist

Infectious-disease specialist

Internal medicine specialist

When to visit your doctor without delay?

If your baby ( under 4 months) shows signs of oral thrush

If there is no improvement after using an antifungal mouth gel for 1 week

If you have difficulty or pain while swallowing.

If you are facing any such issue, seek advice from our professionals.

Consult Now

Treatment Of Oral Thrush

Candida infections today are highly prevalent, especially with the increase in people wearing removable dentures and an overall increase in poor oral hygiene habits. The drugs of choice are antifungal agents which can be classified into:

Topical antifungal agents

Topical antifungals are usually the drug of choice for uncomplicated, localized forms of oral thrush in patients with normal immune function. They include:

Nystatin

Amphotericin b

Fluconazole

Miconazole

Systemic antifungal agents

Systemic antifungals are usually indicated in cases where there is a wide speed of the disease or in patients with a compromised immune system. These drugs include:

Fluconazole

Itraconazole

Voriconazole

Ketoconazole

Posaconazole

Home-care For Oral Thrush

General treatment guidelines include an early diagnosis, correction of predisposing factors or underlying diseases, and maintaining good oral hygiene. Apart from these, there are certain home remedies that you can try to relieve the oral thrush symptoms. They include:

Lukewarm salt water rinses

Salt is believed to have antifungal properties, hence, some believe an at-home lukewarm salt water rinse can be soothing for oral thrush symptoms and other oral problems.

Probiotics

These are nothing but the “good” bacteria that provide many amazing health benefits. Studies show that probiotics restore the balance of flora in your mouth so that Candida Albicans don’t overgrow.

Unsweetened yogurt should be consumed while taking antibiotics. Lactobacillus acidophilus supplements can also help in maintaining a healthy level of Candida.

Apple cider vinegar

This is essentially fermented apple juice that has natural antifungal properties and may fight the growth of candida. However, the role of apple cider vinegar is unclear in the prevention and treatment of oral thrush.

Always dilute the apple cider vinegar, as it is acidic and can damage the outer layer of the teeth. Try to consume it with a metal straw to minimize exposure to teeth. Check out our range of apple cider vinegar.

Buy Now

Lemon (Nimbu)

Lemon juice is considered a natural antifungal. You can also use a mixture of lemon juice and a cup of water as a mouth rinse. While more research is necessary on this, lemon juice can be beneficial for people with HIV-related oral thrush.

Gentian violet (1%)

It is an over the counter antiseptic dye used to fight bacteria, fungi, and parasites. Studies have shown effectiveness against candida Albicans due to its antifungal properties. To use it, apply it on a cotton swab and gently dab the white patch. However, it is advised to consult your doctor before using gentian violet.

Baking soda

It can kill the candida albicans and maintain a healthy pH in the mouth. You can mix 1-2 tablespoons of baking soda with water to form a paste. Apply this paste with a cotton ball on the affected areas. Let it sit for a few minutes and then rinse with warm water. Repeat this three times a day for several days.

You can also mix ½ teaspoon baking soda into a glass of water and use it as a mouth rinse twice daily.

Essential oils

Using essential oils may be a potential remedy for oral thrush. Some of them with maximum benefits include:

Clove oil: It is a natural painkiller and using it as a mouth rinse can prove to be beneficial.

Lemongrass oil: This oil has antimicrobial properties, and can inhibit the growth of candida Albicans.

Tea tree oil: Rinsing the mouth with 1 tablespoon tea tree oil solution four times daily effectively treats oral thrush in AIDS patients.

Coconut oil (Nariyal ka tel)

Raw virgin coconut oil is known to inhibit the growth of candida. An ayurvedic practice called oil pulling may be helpful in fighting oral fungus.

Nursing mothers can apply it on their nipples and the baby’s mouth to prevent the spread of this condition.

Pomegranate (Anar)

Studies have shown that pomegranate peel is a good source of antifungal activity against Candida albicans.

Here are 7 more benefits of pomegranate.

Click Now

Complications Of Oral Thrush

Oral thrush is not a very serious condition and it may be managed easily in healthy individuals. But, a main cause of concern is for immunocompromised patients, who are at a greater risk of a widespread disease leading to complications. These include:

Dysphagia: This means difficulty in swallowing. The throat develops multiple white patches leading to pain while swallowing, burning or itching in the throat or back of the mouth.

Respiratory distress: Thrush can easily spread to other parts of your body, including the lungs which may lead to difficulty in breathing and distress.

Candidal esophagitis: Candidiasis in the esophagus (food pipe) is called esophageal candidiasis or candida esophagitis. This is a prevalent complication of oral thrush in those with HIV/AIDS.

Did you know?

Oral candidiasis is seen in many patients between 1 to 30 days after the emergence of COVID-19 symptoms. Get all your FAQs answered on COVID-19.

Click now

Alternative Therapies For Oral Thrush

Oral thrush can be irritating, but mild ones do not generally cause a lot of problems. Apart from following certain rigorous oral hygiene and antifungal medications, certain alternate therapies have shown promising results with recurrent infections. Some of them include:

Traditional Chinese medicine

The use of Chinese herbs is a time-honored approach to strengthen the body and treat disease. In a study, it was discovered that a Chinese herbal formula (Cao Huang Gui Xiang-CHGX) showed potent antifungal activities against the major human fungal pathogen Candida albicans and other clinical Candida species.

Homeopathy

Although few studies have examined the effectiveness of specific homeopathic therapies, professional homeopathic doctors may consider remedies based on their knowledge and experience in treating candidiasis.

Read about 6 homeopathy facts that everyone should know.

Click Now

Frequently Asked Questions

Is oral thrush contagious?

Can oral thrush spread through breastfeeding?

Does oral thrush go away on its own?

How long does it take oral thrush to spread?

What is the duration of oral thrush?

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Osteoarthritis

Also known as Degenerative Joint Disease, Wear and Tear Arthritis

Overview

Osteoarthritis is the most common joint disease that occurs due to age-related degenerative changes in the joints. Although it can affect any joints, the knees, spine, hips, and hands are the most affected.

It is the fourth leading cause of disability globally that affects 10-15% of all adults above the age of 60 years. It is the most common joint disease in India with a prevalence of 22-39%. Before the age of 45, osteoarthritis is more common in men, and as age advances, women are more predisposed to the condition.

It is characterized by breakdown of the cartilage (the tissue that cushions the ends of the bones between joints), bony changes of the joints, deterioration of tendons and ligaments, and various degrees of inflammation of the joint lining (called the synovium). Progressive pain, stiffness, and joint deformities are the primary symptoms of the disease.

Although there is no cure for the disease, medications, surgery, and alternative therapies can slow down disease progression and help patients lead comfortable and productive lives. Staying active, maintaining a healthy weight also helps in slowing the progression of the disease.

Key Facts

Usually seen in

Adults above 50 years of age

Gender affected

Both men and women, but more common in women

Body part(s) involved

Knee joint

Hip Joint

Spine

Hands

Prevalence

Worldwide: 16⋅0% in individuals aged 15 and above and 22⋅9% in individuals aged 40 and above (2020)

India: 21% (2020)

Mimicking Conditions

Avascular Necrosis of Hip

Bursitis

Synovitis

Rheumatoid arthritis

Gout

Ankylosing spondylitis

Necessary health tests/imaging

X-Ray Both Knee Standing AP & Lateral Views

MRI Both Knee Joints

X-Ray Hip Joint AP View

MRI Both Hip Joint

X-Ray Cervical Spine AP & Lateral

X-Ray Lumbar Spine AP & Lateral

MRI Screening of Whole Spine

CT Scan Head

Bone Densitometry Whole Body

Calcium

Vitamin D (25 - OH)

Treatment

NSAID analgesics: Ibuprofen, Diclofenac & Paracetamol

Narcotics

Muscle relaxants: Cyclobenzaprine

Corticosteroids: Prednisolone

Topical analgesics & sprays

Medications for nerve pain

Supplements

Surgical management and other invasive procedures: Intra-articular injections, Alignment correction surgery & Joint replacement surgery

See All

Symptoms Of Osteoarthritis

Osteoarthritis is common as age advances. Individuals above the age of 60 have significant wear and tear in their joints, leading to the development of osteoarthritis. The following symptoms are commonly seen with osteoarthritis -

Knee Osteoarthritis

Chronic pain, tenderness, swelling in the knee joint

Reduced range of motion, stiffness in the knee joint

Crepitus or abnormal grinding sounds heard on joint movement

Bone spurs, which are extra bits of bone, which feel like hard lumps, can form around the affected joint.

Bone deformity

Hip Osteoarthritis

Chronic pain, tenderness, swelling in the hip joint

Reduced range of motion, stiffness in the hip joint

Crepitus or abnormal grinding sounds heard on joint movement

Joint deformity

Cervical Spondylosis (Osteoarthritis)

Pain and stiffness of the neck

Radiating or sharp shooting pain in the upper limbs

Tingling and/or numbness in the upper limbs

Dizziness

Vertigo

Grinding noise in the neck when the neck is turned sideways

Lumbar Spondylosis (Osteoarthritis)

Pain and stiffness of the lower back

Radiating or sharp shooting pain in the lower limbs and buttocks

Tingling and/or numbness in the lower limbs

Inability to stand or walk for longer durations

Balance problems

Causes Of Osteoarthritis

A lot of factors are responsible for osteoarthritis, such as:

Age-related degenerative changes

With increasing age, there is normal wear and tear of the joints, cartilages, ligaments, and other soft tissues in the body. These degenerative changes occur in various joints making them stiff. Degeneration of the joints also leads to formation of osteophytes which are extra bony protrusions and are characteristic to osteoarthritic joints. These can lead to immense pain and stiffness. In advanced stages, joint deformities occur that can severely impact function and mobility.

Heredity

Genetic factors likely influence the formation of osteophytes and degeneration of joints. This is likely attributed to polymorphism in genes regulating the inflammatory pathways. For example, Ehlers-Danlos syndrome, which is characterized by joint hypermobility, can contribute to osteoarthritis.

Environmental factors

A poor posture, lack of exercise, obesity, occupational hazards, such as lifting heavy weights, previous trauma to the joints cause faster wear and tear of the joints, leading to osteoarthritis.

Post menopause

Decreased estrogen as experienced by post-menopausal women increases the risk of knee osteoarthritis as estrogen is protective of bone health specifically reducing oxidative stress to the cartilage.

Risk Factors For Osteoarthritis

Certain risk factors may predispose an individual to develop osteoarthritis:

Age more than 50 years

Obesity/overweight

Diabetes

Elevated cholesterol levels

Hypothyroidism

Hyperparathyroidism

Acromegaly

Paget’s disease

Wilson disease

History of trauma to the joints

Faulty alignment of the joints

Occupational overuse of a joint. eg. athletes or people using hand drills

Improper weight-bearing

History of heavy weight lifting

Poor posture

Lack of exercise

Diagnosis Of Osteoarthritis

The following evaluations are performed by the doctor to confirm the diagnosis of osteoarthritis:

History and physical examination

The doctor will take a detailed history of the onset of symptoms, perform a thorough physical examination, and check for joint stiffness, muscle spasms, muscle strength, and neurological examination to evaluate the affected joints.

Imaging studies

X-Ray Both Knee Standing AP & Lateral Views - to study the bony changes in the knee joints.

MRI Both Knee Joints - to evaluate soft tissue changes around the knee joint.

X-Ray Hip Joint AP View - to study the bony changes in the hip joints.

MRI Both Hip Joint - to evaluate soft tissue changes around the hip joint.

X-Ray Cervical Spine AP & Lateral - to study the bony changes in the neck.

X-Ray Lumbar Spine AP & Lateral - to study the bony changes in the lower back.

MRI Screening of Whole Spine - to evaluate in detail the soft tissue and bony changes of the entire spine, such as disc desiccation, disc protrusion, ligament thickening, etc.

Bone Densitometry Whole Body - to check for concomitant osteoporosis, a condition where the bones lack calcium and become brittle and weak.

Other tests

Serum Calcium is advised to check for calcium deficiency that plays an important role in bone and joint pains.

Vitamin D (25 - OH) is to check for calcium deficiency that plays an important role in absorbing calcium in the body.

Although there's no blood test for osteoarthritis, certain tests can help rule out other causes of joint pain, such as rheumatoid arthritis.

Joint fluid analysis is a test in which your doctor might use a needle to draw fluid from an affected joint. The fluid is then tested for inflammation and to determine whether your pain is caused by gout or an infection other than osteoarthritis.

Celebs affected

Tiger Woods

Tiger Woods, a celebrated golf player, has arthritis in his knee.

Patrick Stewart

Famous actor Patric Stewart, known for his role as Professor Charles Xavier in the hit franchise X-Men, suffers from severe osteoarthritis in both his hands.

Prevention Of Osteoarthritis

Osteoarthritis is an age-related condition that occurs due to unavoidable degenerative changes and wears and tears of the joints. A few things that can help prevent the occurrence of serious symptoms of osteoarthritis include:

Following a healthy diet rich in calcium and other minerals

Enough exposure to the morning sunlight to ensure a sufficient level of vitamin D in the body

Regular exercise to maintain strength and mobility in the joints

Following correct ergonomics while weight lifting and exercising

Avoiding sudden jerky and twisting movements of the joints

Avoiding squatting position and sitting cross-legged

Specialist To Visit

When symptoms of joint pain start to become bothersome, it is essential to visit an orthopedic doctor who will diagnose and treat the condition. Other doctors, such as neurologists, physiotherapists, help with the management of troublesome symptoms of osteoarthritis. The doctors to visit for osteoarthritis are -

Orthopedician - specialises in the diagnosis and treatment of disorders of the musculoskeletal system

Physiotherapist - for corrective exercises to increase strength and mobility in the joints and reduce pain

Neurologist - to manage the complications arising from osteoarthritis of the spine, such as tingling, numbness in the upper or lower limbs, weakness of upper or lower limbs, vertigo, headaches

Rheumatologist - for diagnosis and treatment of arthritis and other diseases of the joints, muscles, and bones

Treatment Of Osteoarthritis

The treatment of osteoarthritis mainly involves medical management & surgical management.

Medical Management

1. NSAID Analgesics: These include medicines like Ibuprofen, Diclofenac, and Paracetamol that help relieve pain and inflammation. These medicines must always be consumed with meals as taking them on an empty stomach can irritate the gastric lining.

2. Narcotics: This class of drugs may be required for more severe intensity pain, which is not relieved by the first line of medications. These tablets must be used only as prescribed by the physician as they are potentially habit-forming.

In 2010, the government (FDA) approved the use of duloxetine (Cymbalta) for chronic (long-term) musculoskeletal pain including from OA. This oral drug is not new. It also is in use for other health concerns, such as mood disorders, nerve pain and fibromyalgia.

3. Muscle relaxants: These drugs help relieve the painful spasms and stiffness associated with osteoarthritis of the spine. One of the most commonly used drugs in this category is Cyclobenzaprine.

4. Corticosteroids: This class includes medicine like Prednisolone which may be prescribed for a short duration or even as an injection to help resist pain. Joint injections with corticosteroids (sometimes called cortisone shots) or with a form of lubricant called hyaluronic acid can give months of pain relief from OA. This lubricant is given in the knee, and these shots may help delay the need for a knee replacement by a few years in some patients.

5. Topical analgesics & sprays: Topical application of analgesic ointments and sprays can help with symptomatic pain relief.

6. Medications for nerve pain: These are useful in providing relief from complications of osteoarthritis of the spine, such as radiating pain, tingling, numbness in the upper and lower limbs.

7. Supplements: Many over-the-counter nutrition supplements have been used for osteoarthritis treatment. Most lack good research data to support their effectiveness and safety. Among the most widely used are calcium, vitamin D and omega-3 fatty acids. Fish oils are also known to have anti- inflammatory properties. However, their use has been established mainly in rheumatoid arthritis. To ensure safety and avoid drug interactions, consult your doctor or pharmacist before using any of these supplements

Surgical Management and Other Invasive Procedures

Intra-articular Injections

In cases of severe pain that does not respond to medications, a Hydrocortisone injection may be given in the joint to offer quick relief. Hyaluronic Acid Injections are given in the joint to help with joint lubrication.

Alignment correction surgery

Corrective surgeries like osteotomy, laminectomy, spinal fusion are performed in severe joint deformities that cause limitation of function and pain.

Joint Replacement Surgery:

For severely damaged knees and hips, a prosthesis may be fitted, and the worn-out joints are completely replaced by mechanical joints. Though some of the joint changes are irreversible, most patients will not need joint replacement surgery.

At present, there is no treatment that can reverse the damage of OA in the joints. However, research is going on to find ways to slow or reverse this joint damage.

Transcutaneous electrical nerve stimulation (TENS):

This uses a low-voltage electrical current to relieve pain. It provides short-term relief for some people with knee and hip osteoarthritis.

Home Care For Osteoarthritis

Along with the medications, following home care tips can help manage symptoms and lead to the best possible disease outcomes:

Take a wholesome, balanced diet rich in calcium and other minerals.

Follow the exercise routine suggested by the doctor or physiotherapist.

Hot fomentation and application of topical analgesic preparations help relieve pain and stiffness.

Intermittent hot and cold treatments may provide temporary relief of pain and stiffness. Such treatments include a hot shower or bath and the careful application of heating or cooling pads or packs.

Gentle massage performed by a massage therapist can provide relaxation and promote pain relief.

Use joint supports, such as knee caps, cervical collar, lumbosacral belt to help support the spine.

Walking aids, such as a cane or walker, may help offload the diseased joints and promote safer walking and offer pain relief.

Avoid lifting heavyweights, and if done as a part of an exercise program, it must be done with extreme caution and correct ergonomic posture.

Change the mattress and sleeping pillow if not proper, and use the ones that offer good support and stabilize the spine.

Properly position and support your neck and back while sitting or sleeping.

Adjust furniture such as raising a chair or adjust your toilet seat to prevent pressure on the joints.

Avoid repeated motions of the joint, especially frequent bending.

Complications Of Osteoarthritis

Osteoarthritis is a disease that progresses with age. If enough care is not taken during the early stages of osteoarthritis, the following complications can occur:

A complete loss of mobility and extreme stiffness in the joints, rendering a patient bedridden or with severe walking issues.

Chronic debilitating pain that may interfere with sleep and be a source of anxiety or depression.

Neurological complications, such as paralysis, nerve pain, may occur as a result of advanced spondylosis.

Alternative Therapies Of Osteoarthritis

Along with medicines and topical analgesic preparations, various other treatment options help in the management of osteoarthritis:

Exercise and Yoga

Regular exercises and yoga focused on strengthening the joints and surrounding musculature and improving mobility are very helpful in managing the pain and stiffness caused by osteoarthritis.

Massage

A gentle massage improves blood flow in the affected parts, promotes relaxation, and helps with pain relief. Massages must be performed only by a qualified massage therapist.

Physiotherapy

Physiotherapeutic modalities, such as Interferential Therapy (IFT) and Transcutaneous Electrical Nerve Stimulation (TENS), are very useful in offering pain relief even from nerve pain. The rehabilitation exercises focus on strengthening and correcting weight-bearing of the joint and surrounding muscles, improving the overall strength and mobility of the affected joints.

Acupressure and Acupuncture

Chronic joint pain may respond to acupuncture or acupressure therapy, an alternative form of therapy that works by applying pressure or noxious stimuli on the peripheral trigger points.

Ayurveda

There are various Ayurvedic preparations in the form of oils and liniments. These are usually applied locally at the site of pain. They provide good relief from symptoms and promote joint health. Click here to know more about Ayurvedic remedies for knee pain.

Homeopathy

Homeopathic preparations in the form of injections or oral drops/pills, such as Rhus Toxicodendron, Arnica Montana, Solanum Dulcamara, etc., are known to improve pain and other troublesome symptoms of patients with osteoarthritis.

External Orthoses Support

Using knee caps, cervical collars, lumbosacral belts, and walking aids like a stick or walker offer much-needed support to the degenerative joints and are useful in alleviating pain due to osteoarthritis.

Living With Osteoarthritis

Osteoarthritis has a great impact on an individual’s quality of life. Severe, chronic, and debilitating pain may interfere with basic activities, such as walking, leading to restrictions in movements and travel. Often, chronic pain is a source of anxiety and depression in osteoarthritic patients, and they find themselves withdrawn from society and the community at large. Joining knee care and spine care clubs may help these patients deal with the degenerative changes and bond with others suffering similar pain.

Here are a few lifestyle changes one can incorporate into their routine life to ease off joint pains, especially during winter.

1. Supplement bone & joint healthy foods

Stock up dairy products and spend at least 15 minutes in sunlight daily to increase the intake of vitamin D.

Include foods rich in omega-3 fats such as salmon, nuts, fish oil in your diet as these ease inflammation.

Foods rich in vitamin K are helpful because of its pain-soothing properties. Include greens in your meal such as spinach, fenugreek (methi), cabbage, kale, etc.

Foods rich in vitamin C halt cartilage loss associated with arthritis. Add juicy oranges, sweet red peppers, tomatoes, amla and other vitamin C-rich foods in your diet.

2. Exercise regularly

Go for a 30-minute walk daily. If cold weather makes you lazy to go out in the mornings, go for an afternoon walk. Also, stretch your muscles as it helps maintain your mobility.

3. Stay hydrated

Drink plenty of water in winters as dehydration reduces flexibility and increases stiffness.

4. Get a massage

Massage therapy by a professional helps in relaxing the muscles around the painful joints, thereby reducing pain and making you more mobile.

5. Cover Up

Try to keep painful joints covered with a sleeve or wrap. Keeping them warm helps reduce pain and increases mobility. Using a muscle relaxant gel on the aching joints and then covering up has been seen to be very helpful.

6. Use hot packs/ice packs

Hot packs/hot baths/steam helps to soothe the painful joints. Heat stimulates blood flow, which brings healing nutrients to the affected area and inhibits the pain messages being sent to the brain.

7. Take medication on time

Do not forget to take your medications as advised by your doctor. If you suffer from chronic joint pain, consult your doctor for painkillers. Do not self-medicate. Also, go for regular doctor consultation, especially if your symptoms recur/worsen.

Looking for some simple yet effective exercises for knee pain? If yes, then watch this video to know expert-approved exercises and tips.

Frequently Asked Questions

Is osteoarthritis reversible?

How can I quickly relieve joint pain due to osteoarthritis?

Should I use a heat pack or ice pack for my painful joints?

How to select the correct size of a knee or spine brace?

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Osteomalacia

Also known as Soft bones, Hypovitaminosis D osteopathy and Rickets in children

Overview

The word ‘osteomalacia’ comes from the Greek words ‘osteon’ and ‘malakia’ which mean ‘bone’ and ‘soft’ respectively. It refers to a condition which causes marked softening of the bones due to a decreased ability to harden or mineralize.

Bones are made up of various minerals, including calcium and phosphorus, that give structure and integrity to the bones. Vitamin D controls levels of calcium and phosphorus in the body. An imbalance of these minerals which usually occurs due to deficiency of Vitamin D can interfere with bone health and can cause an individual to develop osteomalacia.

Osteomalacia can cause bone pain, muscle weakness, difficulty in walking, and an increased susceptibility to bone fractures. This condition is mostly seen in adults. In children, it is referred to as rickets, which causes impaired mineralization at the bone growth plate. This results in softening and deformation of bones in children and limits their growth. Osteomalacia is different from osteoporosis. Though both can cause bones to fracture, osteomalacia is a problem with bones not hardening, while osteoporosis is the weakening of living bone caused when balance between bone loss and bone formation is disrupted.

Treatment for osteomalacia involves providing adequate Vitamin D and calcium, both of which are required to harden and strengthen bones, and treating the causing disorders.

Key Facts

Usually seen in

Adults above 18 years of age

Gender affected

Both men and women

Body part(s) involved

Long bones

Ribs

Spine

Mimicking Conditions

Primary hyperparathyroidism

Renal osteodystrophy

Osteoblastic bone metastases

Osteoporosis

Necessary health tests/imaging

Blood tests : Serum calcium and phosphorus, Serum alkaline phosphatase, and Serum Vitamin D.

Bone radiograph

Bone biopsy

Treatment

Maintaining PTH levels: Levels of serum 25OHD at >30 ng/mL and PTH levels in the reference range.

Oral preparations of Vitamin D: 800 to 1200 IU daily oral doses.

Vitamin D with calcium: Higher amounts in the range of 2000 to 3000 mg daily are needed in patients with underlying conditions.

Specialists to consult

General physicians

Orthopedic

Rheumatologist

Endocrinologist

Symptoms Of Osteomalacia

Clinical manifestations of osteomalacia are primarily due to the incomplete mineralization of the bone making it weaker and more flexible, resulting in the bowing of the long bones of the lower extremities. Some of the common symptoms include:

Bone pain

Tenderness

Muscle weakness (commonly of the thigh and knee joints)

Fragile bones

Fractures

Myopathy (diseases affecting the muscles)

Waddling gait

Increased falls

Hypocalcemic seizures or tetany

Myalgias and arthralgias (pain in the muscles)

Muscle spasms

Spinal, limb, or pelvic deformities

Did you know?

The prevalence of Vitamin D deficiency in India ranges from 40% to 99%, which means almost every Indian lacks sufficient Vitamin D. Learn about signs and symptoms of vitamin D deficiency.

Click Here To Know!

Causes Of Osteomalacia

Osteomalacia is a metabolic bone disease characterized by impaired mineralization of the bone matrix. Bone creation occurs by the deposition of hydroxyapatite crystals on the bone matrix. The causes include:

Decreased production of Vitamin D

Vitamin D plays an extremely important role in bone remodeling and is required for strengthening the bone. Some of the causes of decreased Vitamin D production are:

Reduced sun exposure due to cold weather climates leading to low levels of Vitamin D .

Darker skin and increased melanin hinder Vitamin D ultraviolet-B (UVB) light absorption.

Obesity can lead to increased removal of fat, which results in less calcium for activation of Vitamin D.

In the elderly vitamin D production decreases as the storage of Vitamin D declines with age.

Decreased absorption of Vitamin D

Malabsorptive of vitamin D can be due to syndromes such as:

Crohn's disease: It is a type of inflammatory bowel disease (IBD) that causes inflammation of the digestive tract, which can lead to abdominal pain, severe diarrhea, fatigue, weight loss, and malnutrition.

Cystic fibrosis: It is an inherited disorder that causes severe damage to the lungs, digestive system, and other organs in the body.

Celiac disease: It is an immune reaction to eating gluten, a protein found in wheat, barley, and rye.

Cholestasis: It is a liver disease that occurs when the flow of bile from your liver is reduced or blocked. Bile is fluid produced by your liver that aids in the digestion of food, especially fats.

Surgical alteration: Like gastric bypass of the gastrointestinal (GI) tract is associated with deficient absorption of fat-soluble vitamins (A, D, E, and K).

Alterations in the metabolism of Vitamin D

This can be due to the following reasons:

Pregnancy is associated with decreased levels of calcidiol (a form of vitamin D), and a dose of 1000 to 2000 international units (IU) per day is identified as Vitamin D deficiency in pregnant women.

Liver diseases such as cirrhosis, non-alcoholic fatty liver disease, and non-alcoholic steatohepatitis (inflammation of the liver characterized by fat accumulation in the liver) can lead to deficient production of calcidiol.

Chronic kidney disease leads to structural damage and loss of 1-alpha-hydroxylase, an enzyme required for the activation of Vitamin D.

Nephrotic syndrome (a kidney disorder that causes your body to pass too much protein in your urine) leads to pathologic excretion of Vitamin D binding protein (DBP), which binds to serum calcidiol.

Low levels of phosphorous (hypophosphatemia) or calcium (hypocalcemia) in blood

It is seen in the following diseases:

Renal tubular acidosis such as seen in Fanconi syndrome alter calcium and other ion absorption and excretion.

Tumor-induced osteomalacia (TIO), also known as oncogenic osteomalacia, is a rare acquired paraneoplastic disease (cancer caused due to auto-immune activity) characterized by hypophosphatemia and renal phosphate wasting.

Medications

Drugs that can cause Vitamin D deficiency leading to osteomalacia are:

Phenobarbitone

Phenytoin

Carbamazepine

Isoniazid

Rifampicin

Theophylline

Ketoconazole

Long-term steroid

Etidronate

Fluoride

Risk Factors For Osteomalacia

Anyone who has Vitamin D deficiency is at risk of developing osteomalacia. These risks vary across the world and are contingent on geographic location, cultural preferences, and ethnicity. Individuals who are commonly affected in this way include people who:

Are too frail or ill to go outside

Live in climatic conditions with less exposure to sunlight

Usually stay or work indoors during the daylight hours

Wear clothing that covers a lot of their skin

Have dark skin which processes less Vitamin D from sunlight. This can include people from South Asian, Middle Eastern and Afro-Caribbean races.

Use very strong sunscreen

Are from low socio-economic status and have poor nutrition

Are pregnant and breastfeeding their children

Some of the rare risk factors of osteomalacia include:

Kidney failure

Liver diseases

Medications, such as antiepileptics, antifungals, or steroids.

Untreated coeliac disease

Surgery on the gastrointestinal tract.

Vitamin D, commonly known as the sunshine vitamin, is needed not just for the absorption of calcium but also for the proper function of the muscles and nerves. Understand the right way to take it.

Click Now!

Diagnosis Of Osteomalacia

Osteomalacia is difficult to diagnose and no single laboratory finding is specific to it. However, the diagnosis of osteomalacia consists of:

History and physical examination

When evaluating for osteomalacia, a clinical history should include an understanding of a patient's family and surgical (like gastric bypass) history. Other relevant questions should focus on activity level, hobbies, diet, and assessment of socioeconomic status.

Blood tests

Serum calcium and phosphorous: Patients with osteomalacia will usually have hypophosphatemia or hypocalcemia.

Serum alkaline phosphatase: An Increased alkaline phosphatase activity is typically characteristic of diseases with impaired osteoid mineralization. In fact, some sources believe that either hypophosphatemia or hypocalcemia and increased bone alkaline phosphatase level are necessary even to suspect osteomalacia.

Serum Vitamin D: The serum level of 25(OH)D (vitamin D)is currently regarded as the best marker of vitamin D status and is usually severely low (<10 ng/mL) in patients with nutritional osteomalacia.

Other sensitive biomarkers of early calcium deprivation include increased serum intact PTH (parathyroid hormone) and decreased urinary calcium.

The lack of exposure to the sun is causing a major impact on our body, especially on the Vitamin D levels. Read more about the causes of vitamin D deficiency and when to get yourself tested.

Tap Now!

Bone radiograph

Some of the significant radiographic findings suggestive of osteomalacia include:

Low bone mineral density (BMD) and focal uptake at Looser zones (pseudofractures) that can appear on bone scintigraphy (bone x-ray)

Poorly repaired insufficiency fractures are visible as transverse lucencies perpendicular to the osseous cortex. They typically occur bilaterally and symmetrically at the femoral necks, shafts, and pubic and ischial rami.

Decreased distinctness of vertebral body trabeculae (bone network) due to the inadequate mineralization of osteoid.

Although not required for diagnosis, studies have demonstrated reduced bone mineral density in the spine, hip, and forearm.

Bone biopsy

Iliac crest bone biopsy is considered the gold standard for establishing the diagnosis but should not be advised when the diagnosis is in doubt, or the cause of osteomalacia can be determined by other noninvasive methods.

Here are some of the definite or possible findings of osteomalacia, that would require further validation:

Hypophosphatemia or hypocalcemia

High bone alkaline phosphatase

Muscle weakness or bone pain

Less than 80% BMD of the young-adult-mean

Multiple uptake zones by bone scintigraphy or radiographic evidence of looser zones.

Prevention Of Osteomalacia

Osteomalacia is generally caused by a deficiency of Vitamin D due to inadequate sun exposure or a diet low in Vitamin D. it can be prevented to a larger extent by:

Eating foods high in Vitamin D

Adding naturally rich Vitamin D foods like salmon and egg yolks.

Maintaining a well-balanced diet that contains fortified items with Vitamin D and calcium, such as cereal, bread, milk, and yogurt.

Taking supplements, if needed

Getting enough sun exposure

Understanding the underlying cause if there is a family history.

Did you know?

About 83% females and 85% males in India are reported to have low Vitamin D levels. Read more about how to get enough Vitamin D.

Click Here!

Specialist To Visit

Osteomalacia develops most commonly due to a Vitamin D deficiency often as a result of not getting enough sunlight and sometimes due to a digestive or kidney disorder. The doctors that are required to diagnose and treat osteomalacia are:

General physicians

Orthopedic

Rheumatologist

Endocrinologist

If you are having pain in the joints or bones or suspect vitamin deficiency seek help from our professionals.

Consult Now!

Treatment Of Osteomalacia

The goals of therapy for vitamin D‐deficiency osteomalacia are to alleviate symptoms, promote fracture healing, restore bone strength, and improve quality of life while correcting the abnormalities. The treatment should focus on the healing of osteomalacia and the resolution of secondary hyperparathyroidism. It consists of:

1. Maintaining PTH levels

There are no well‐established guidelines for this therapy. Most regimens targeted to maintain levels of serum 25OHD at >30 ng/mL and PTH levels within the reference range. With effective therapy, clinical symptoms begin to improve within a few weeks; however, complete resolution of symptoms may take several months.

Following treatment, certain common findings are observed, like:

Increase of serum alkaline phosphatase that gradually decreases; in patients with prolonged Vitamin D deficiency

Hyperparathyroidism may persist for a long time

In rare cases it may progress to hypercalcemic tertiary hyperparathyroidism

Furthermore, depending on the amount of osteoid accumulation, a striking increase in BMD is observed, as seen after curing of osteomalacia.

2. Oral preparations of Vitamin D

Therapy consists of vitamin D in the range following range:

800 to 1200 IU daily oral doses

50 000 IU of native vitamin D weekly for 8 to 12 weeks, followed by a maintenance dose of 1000 to 2000 IU daily

10,000 − 50,000 IU may be necessary in cases of impaired GI absorption.

Because these regimens may take a long time to reach vitamin D sufficiency, higher loading doses should not exceed 100 000 IU.

3. Vitamin D with calcium:

Treatment with Vitamin D must be always accompanied by adequate calcium supplements. One‐thousand milligrams of elementary calcium divided into two or three doses is sufficient in most cases. Higher amounts in the range of 2000 to 3000 mg daily are needed in patients with:

Malabsorption: After bariatric surgery or gastric bypass surgery, calcifediol (wherever available) can be utilized because it is a more polar metabolite that is absorbed via the portal system.

Hyperparathyroidism: The use of calcitriol along with Vitamin D may be preferred in these cases.

The use of another antiepileptic drug that does not interfere with vitamin D metabolism can be a choice.

Did you know?

The calcium from food can only get absorbed when you have enough vitamin D in the body. Read more about calcium-rich foods and supplements.

Click Here!

Home-care For Osteomalacia

Osteomalacia can cause problems with the bone formation or the bone-building process making the bones weak and susceptible to fractures. Along with the treatment, here are some tips that can help manage the symptoms:

1. Get adequate Vitamin D

The body makes its own Vitamin D when bare skin is exposed to sunlight. This can be enhanced by sun exposure during the morning hours.

While it is very important for bone health to get sunshine like this, you need to be careful not to get sunburned. Read about 5 sunscreen basics that you should know.

Tap To Read!

Certain food items also contain small amounts of vitamin D. They are:

Egg yolk

Oily fish

Red meat

Liver

Butter

Cereals

Fortified spreads

2. Add calcium for bone health

Calcium is needed to make bones strong and a lack of calcium can cause osteomalacia. Good sources of calcium include:

Tofu

Nuts

Soya beans

Fortified bread

Fish like sardines

Milk, cheese and other dairy products

Green leafy vegetables, like broccoli, cabbage, and okra, but not spinach

3. Make lifestyle modifications

There are many things you can do to promote healthy bones, such as:

Moderating the alcohol consumption

Eating a well-balanced diet

Not smoking

Maintaining a healthy weight

Taking proper supplements

4. Exercise regularly

Exercise helps to strengthen bones and muscles, which places some resistance against it making them stronger. This can include walking, running, or lifting weights. One should avoid intensive exercise while any fractures or cracks in the bones are healing.

Complications Of Osteomalacia

Due to poor osteoid mineralization, several complications can occur if osteomalacia is left untreated. Symptoms can return if the deficiency of vitamin D and underlying conditions like kidney failure is not addressed. Here are some of the complications:

Insufficiency fractures, also known as looser zones, can present as bone pain and occur with little or no trauma in the legs.

Reports also exist of looser zones in the ribs, scapulae, and clavicles.

Researchers have also reported kyphoscoliosis (deviation and excessive curvature of the spine)in long-standing osteomalacia

Also, in children, osteomalacia and rickets often occur together, which can lead to bowing of the legs or premature tooth loss.

Spinal compression fractures are less common and are usually associated with osteoporosis.

Osteoporosis is a condition in which bones get thin and weak due to low bone density. This makes bones fragile and increases risk of fractures from slightest trauma. Read more about it.

Click Now!

Alternative Therapies For Osteomalacia

Octreotide therapy for tumor-induced osteomalacia

Tumor-induced osteomalacia (also known as oncogenic osteomalacia) is a rare disorder characterized by phosphaturia (phosphorus in urine), hypophosphatemia (low levels of phosphorus in the blood), and osteomalacia. Tumor-induced osteomalacia develops because of tumors that are predominantly of benign origin4 but that may occasionally be malignant.

Surgical removal of the tumor may relieve all symptoms. Hemangiopericytoma (a type of rare tumor involving blood vessels and soft tissues)is the most common type of tumor-induced osteomalacia. Paraneoplastic secretion by the tumor of an unknown factor or factors termed “phosphatonins” that causes renal tubular phosphate wasting.

Studies have shown that subcutaneous administration of octreotide, a synthetic somatostatin analog, abolished renal tubular phosphate wasting before subsequent surgical removal of the tumor.

Phosphorus supplements

Next to calcium, phosphorus is the most abundant mineral in the body. About 85% of the body's phosphorus is in bones and teeth. Phosphorus is also needed to help balance and use other vitamins and minerals, including Vitamin D, iodine, magnesium, and zinc.

Most people get plenty of phosphorus in their diets. The mineral is found in milk, grains, and protein-rich foods. Some of the inorganic phosphorus supplements include:

Dibasic potassium phosphate

Monobasic potassium phosphate

Dibasic sodium phosphate

Monobasic sodium phosphate

Tribasic sodium phosphate

Phosphatidylcholine

Phosphatidylserine

The recommended dosage is as follows:

Adults, 19 years and older: 700 mg

Pregnant and breastfeeding females: 700 mg

Note: Talk to your doctor before taking any supplements.

Living With Osteomalacia

Osteomalacia is a disease that weakens bones and can cause them to break more easily. It is a disorder of decreased mineralization, which results in the breaking down of bone matrix faster than its re-formation. It may be several months before any bone pain and muscle weakness is relieved. You should continue taking vitamin D supplements regularly to prevent the condition from returning. Osteomalacia can be managed by:

Having a diet rich in Vitamin D and calcium

Getting a healthy amount of sunshine

Eliminating gluten from the diet

Moderating the physical activities

Starting physiotherapy

Applying hot and cold compressions

Avoiding strenuous activities

Limiting the use of alcohol and aerated beverages

Avoiding certain medications like antiepileptics

Maintaining a healthy weight

Quitting smoking

Getting supplements for vitamins and minerals

Did you know?

Only meat, poultry and fish are not the only good sources of calcium but there are namely other options for vegetarians as well. Know more about 7 calcium rich foods for vegetarians.

Click To Read!

Frequently Asked Questions

Which population group is at the highest risk for developing osteomalacia?

Is it advisable to get a bone density scan for young patients suspected to have osteomalacia?

What to expect in the long term if one has been diagnosed with osteomalacia?

What is the difference between osteomalacia and osteoporosis?

Can osteomalacia cause osteoporosis?

Can osteomalacia be reversed?

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Osteoporosis

Also known as Silent disease of bone

Overview

Osteoporosis literally means porous bone. This condition weakens bones and increases the risk of bone fractures.

Individuals with osteoporosis do not have symptoms until bone fractures occur, hence the name, the silent disease of bone. These spontaneous fractures can cause severe back pain, loss of height, or malformations of the spine, like kyphosis (hunched posture).

Osteoporosis is often seen in older women, usually in the menopausal age, due to decreased estrogen (a hormone responsible for female reproduction). Other significant risk factors include family history, lack of exercise, calcium and vitamin D deficiency, smoking, excessive alcohol consumption, and low body weight.

The diagnosis of osteoporosis is done by X-rays and confirmed by tests to measure bone density.

Treatment usually depends on the severity of the condition. Lifestyle modifications like strengthening exercises, Vitamin D and calcium supplements, quitting smoking, etc., are vital. Prescription medications and hormone therapy may be required in severe cases.

Key Facts

Usually seen in

Adults above 50 years of age.

Gender affected

Both men and women but more common in women.

Body part(s) involved

Hips

Wrists

Spine

Prevalence

World: 18.3% (2021)

Mimicking Conditions

Homocystinuria

Hyperparathyroidism

Imaging in osteomalacia and renal osteodystrophy

Mastocytosis

Multiple myeloma

Paget disease

Scurvy

Sickle cell anemia

Necessary health tests/imaging

Bone mineral density (BMD)

Calcium test

Vitamin D test

Treatment

Supplements: Vitamin D and calcium

Medications: Bisphosphonate and Denosumab

Hormonal therapies: Raloxifene, Calcitonin, Teriparatideto, and Testosterone therapy.

See All

Symptoms Of Osteoporosis

Osteoporosis is also called a "silent" disease" because it has no specific clinical signs and symptoms unless there is a fracture. Spine fractures can induce severe back pain, loss of height, or spine deformities such as a stooped or hunched posture, also known as kyphosis. Bones affected by osteoporosis can become so fragile that fractures occur spontaneously or for the following reasons:

Minor falls generally do not cause a fracture in a healthy bone.

Everyday stresses such as bending, lifting, or even coughing.

Are you suffering from bone pain?

It could be osteoporosis. Know more about the risk factors and if you fall under that category.

Read Now

Types Of Osteoporosis

Osteoporosis can be classified into the following categories:

1. Primary osteoporosis: It is the most common form of the disease and is often associated with age and sex hormone deficiency. This type includes:

Postmenopausal osteoporosis (type I): This subtype is associated with a deficiency of estrogen (hormones responsible for normal sexual and reproductive development in women) seen in women after menopause.

Senile osteoporosis (type II): Occurs in both men and women aged above 70 yrs due to the progressively negative balance between bone formation and resorption.

2. Secondary osteoporosis: It is characterized by a low bone mass due to alterations in bone, leading to fragility fractures in the presence of an underlying disease or medication.

Did You Know?

Osteoporosis affects men as well. Studies show that men experience 42% of their total lifetime bone loss before age 50. Hypogonadism (when sex glands produce little or no hormones) is men's primary cause of osteoporosis.

Click To Know More

Causes Of Osteoporosis

Normal bone turnover involves a balance between bone resorption and bone formation processes. In postmenopausal women, the rate of bone turnover increases dramatically and remains elevated after cessation of ovarian function, leading to continuous bone loss.

Bones are strongest in early adulthood, and you slowly start losing bone from around the age of 35 years. This is a common phenomenon and happens to everyone. However, certain risk factors may increase the risk of the development of osteoporosis or can increase the likelihood that you will develop the disease.

Risk Factors For Osteoporosis

Osteoporosis is a multifactorial disease, where no single factor can completely account for its occurrence. The most common risk factors include:

Non-modifiable risk factors

Family history: Studies have shown that family history is a significant risk factor for fracture, along with low bone density.

Race: Osteoporosis is a chronic health condition affecting primarily white women.

Advanced age: Research has shown that age is a high-risk factor for osteoporosis, as Vitamin D insufficiency and reduced calcium absorption are common in the elderly.

Female sex: Studies suggest osteoporosis is commonly encountered in older women with no underlying risk factors. Women tend to have a younger onset of bone loss compared with men.

Amenorrhea: It is the absence of menstruation. This happens to die to low estrogen levels, which can cause osteoporosis.

Early menopause: Menopause in less than 45 years of age, surgical removal of both ovaries, and prolonged perimenopausal absence of periods can lead to osteoporosis.

Hormone-related disorders: Diseases that can trigger osteoporosis due to overproduction or underproduction of certain hormones include:

Overactive thyroid gland

Reduced amounts of sex hormones (estrogen and testosterone)

Disorders of the pituitary gland

Overactivity of the parathyroid glands (hyperparathyroidism).

Primary and secondary hypogonadism (when sex glands produce little or no hormones) in men.

Diabetes: It can increase bone cell destruction and decrease bone formation, leading to accelerated bone loss.

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Malabsorption: This can be due to problems, as in Coeliac disease (an autoimmune disease in which the immune system attacks your tissues when you eat gluten) and Crohn's disease (an inflammatory bowel disease that causes swelling of your digestive tract).

Chronic kidney disease: Studies suggest that chronic kidney disease (CKD) is associated with the development of osteoporosis and fragility fractures.

Blood disorders: Studies show that hematological diseases like thalassemia (when the body doesn't make enough of a protein called hemoglobin) and pernicious anemia (a decreased production of red blood cells due to lack of vitamin B12) represent a frequent cause of secondary osteoporosis.

Rheumatoid arthritis (RA): It is an inflammatory disease associated with osteoporosis due to active inflammation and glucocorticoids.

Dementia: It is a group of symptoms affecting memory, thinking, and social abilities. Dementia can lead the patients to have decreased activity levels and lower sunlight exposure, predisposing them to osteoporosis.

Depression: Research shows that depression is a risk factor for low bone mineral density (BMD) and fractures. This has been shown in middle-aged women and elderly subjects of both genders.

Cancer: Bone metastases (spread of cancer) are a common consequence of cancer, leading to decreased bone density and pathologic fractures.

Did you know?

Walking can improve the quality of life of individuals who have cancer.

Know More

Long-term bed rest: Studies have concluded that bone loss is more evident in elderly patients advised with prolonged bed rest.

Spaceflight: Astronauts who travel in outer space tend to lose bone mass density due to microgravity, which can lead to osteoporosis.

Modifiable risk factors

Smoking: Studies have shown a direct relationship between tobacco use and decreased bone density and hence, as a risk factor for osteoporosis and bone fracture.

Get rid of this deadly habit with our smoking cessation range.

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Low BMI: Body mass index (BMI) estimates body fat based on height and weight. A low BMI is an important and modifiable risk factor for osteoporosis and osteoporotic fracture development.

Inadequate physical activity: This is because a sedentary lifestyle encourages the loss of bone mass, leading to osteoporosis.

Low dietary calcium intake: Osteoporosis is more likely to occur in people with low calcium intake, and a lifelong lack of calcium plays a role in the development of osteoporosis.

Do not let low calcium in your diet make your bones weak! Learn about various rich sources of calcium.

Click Here

Vitamin D deficiency: Vitamin D plays a crucial role in the absorption of calcium and phosphorus from the food you eat, and a lack can lead to osteoporosis.

Why let Vitamin D deficiency stop you from leading a quality life?

Explore Vitamin D supplements

Alcoholism: Alcohol consumption compromises bone health and increases the risk of osteoporosis as excessive alcohol interferes with calcium balance in the body.

Medications: Many drugs can affect bone metabolism. Medications that can cause bone loss include

Heparin

Warfarin

Cyclosporine

Glucocorticoids

Medroxyprogesterone acetate

Cancer drugs

Thyroid medications

Did you know?

Women can get predisposed to a number of health conditions with advancing age.

Watch this video to know about tests for women above 35 years of age.

Diagnosis Of Osteoporosis

Osteoporosis may not show definite symptoms, but recurrent falls can indicate it, as osteoporosis may cause muscle weakness. The diagnosis consists of the following:

Screening and history

Older adults at higher risk of osteoporosis must be screened periodically and evaluated for fracture risk. During regular check-ups, a patient's previous history of fractures due to falls, smoking, and alcohol intake details, menopausal status, and medication history must be taken and recorded.

Physical examination

The physical examination must include height, weight, and body mass index to determine any loss of height. BMI less than 21 kg/m² and loss of 5 cm or more are considered risk factors for osteoporosis. The presence of walking disorders, weakness, and postural instability increase the risk of fractures and falls.

Imaging tests

1. Bone mineral density (BMD): This test gives a snapshot of bone health by estimating the amount of calcium and other minerals in bones. This is the gold standard for diagnosing osteoporosis, and it utilizes an x-ray, known as a DXA scan, especially in the hip and spine, to determine bone loss.

T-Scores and WHO diagnostic criteria for osteoporosis include:

Normal: 1.0 and higher

Osteopenia (loss of BMD): 1.0 to −2.5

Osteoporosis: −2.5 and lower

Severe osteoporosis: −2.5 and lower with one or more fragility fractures

Note: FRAX (Fracture Risk Assessment Tool) considers risk factors and BMD measurements to predict the probability of major osteoporotic fractures.

2. QCT: Quantitative computed tomography (QCT) is a test to measure bone mineral density d using computed tomography (CT). It is generally used to measure BMD of the spine or peripheral sites.

Laboratory tests

To determine other causes of osteoporosis, blood tests may be needed. They include:

Calcium tests

Vitamin D tests

Tests for specific hormones(as discussed in risk factors)

Biochemical markers of bone turnover

These have been used widely in clinical research and help determine the bone formation and resorption products released into the circulation. These include various bone-formation markers and bone-resorption markers.

Get your tests done in the comfort and safety of your house with just a click.

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Celebs affected

Sally Field

She is an American actress who has received many awards and nominations. Sally Field is a spokesperson for osteoporosis awareness after being diagnosed with it in 2005. In an interview, she talked about her family history and recommended all women undergo a bone density scan as part of their health regime.

Blythe Danner

She is an American actor who has become a vocal advocate for osteoporosis awareness. "I am so grateful for it because it has made me do something consistently, to do everything I can to make my bones stronger," she told CBS News in 2011.

Specialists To Visit

Doctors that can help detect and treat osteoporosis include:

Rheumatologist

Endocrinologist

Orthopedic surgeon

A rheumatologist is a specialist who treats patients with age-related bone diseases. An endocrinologist sees patients with hormone-related issues, and an orthopedic surgeon fixes fractures.

Do not take your bone health lightly. If you have any risk factors, seek advice from our trusted doctors.

Consult Now

Prevention Of Osteoporosis

Your genes may affect your height, weight, and bone density, but a healthy lifestyle can protect your bones. Here are a few tips to prevent osteoporosis:

Early screening is vital

Early screening can identify the risk factors for osteoporosis, which can help you make the right lifestyle changes to prevent it.

Bask in the sunlight

Insufficient exposure to sunlight may be associated with many disorders, and getting sufficient and healthy sunlight helps strengthen teeth and bones, which in turn helps in preventing osteoporosis.

Optimize calcium and Vitamin D intake

Calcium is essential for maintaining bone health. Vitamin D is vital for healthy bones and teeth as it aids in the absorption of calcium in the body. However, it can be hard to get enough from food alone. So, consider taking vitamin D and calcium supplements.

Here is a comprehensive guide to all Vitamin D sources.

Click To Read

Stop smoking and drink alcohol in moderation

Smoking and alcohol are associated with an increased risk of osteoporosis. So quitting smoking and limiting your alcohol intake can help prevent osteoporosis.

Are you trying to quit smoking?

Know more about tips that can help you with it.

Read This Now

No excuses for not exercising

Exercises like walking, dancing, low-impact aerobics, elliptical training machines, and stair climbing work directly on the bones in your legs, hips, and lower spine and can slow mineral loss.

Learn more about 6 everyday habits that can prevent osteoporosis.

Tap Now

Treatment Of Osteoporosis

Treatment recommendations are often based on the risk of breaking a bone and slowing down the bone loss process. It consists of the following:

Non- pharmacological management

This includes making specific lifestyle changes like increasing calcium and vitamin D intake, weight-bearing exercise, smoking cessation, limiting alcohol/caffeine consumption, and preventing falls.

Pharmacological management

The goal of pharmacological therapy is to reduce the risk of fractures. It includes medications like:

1. Antiresorptive agents: These drugs slow down the resorption of the bone. They include:

Bisphosphonate: These decrease bone resorption by limiting the activity of bone destruction cells.

Note: Oral bisphosphonates should be administered with a full glass of water in the morning on an empty stomach 30 minutes before a meal or other medications.

Denosumab: This drug is used as first-line therapy for patients at high risk of fracture and for patients who are not able to use oral therapy as denosumab is available as an injectable formulation

2. Hormonal therapies: These use synthetic hormones to manage osteoporosis. They include:

Estrogen agonists/antagonists: This class of drugs is also known as selective estrogen receptor modulators (SERMs). It includes:

Raloxifene

Conjugated estrogens/bazedoxifene

Estrogen-progestin therapy: In osteoporotic management, estrogen therapy is FDA-approved only for the prevention of osteoporosis in high-risk postmenopausal women.

Testosterone therapy: This therapy is recommended for those for whom antiosteoporotic treatment is contraindicated, whose testosterone levels are less than 200 mg/dL, or those at borderline high risk for fracture.

Calcitonin: It is a synthetic polypeptide hormone with properties similar to natural calcitonin. It is FDA approved treatment for osteoporosis in women who have been postmenopausal for more than five years when alternative therapies are not feasible.

Parathyroid hormone analogues: These are synthetic forms of parathyroid hormones used to treat osteoporosis. Drugs include;

Teriparatide

Abaloparatide

3. Newer drugs: These include:

Romosozumab

Odanacatib

Lasofoxifene

Order your medications from India's largest online pharmacy.

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Home-care For Osteoporosis

The best home remedies to reduce the risk of osteoporosis and to strengthen the bones is to eat foods rich in calcium and Vitamin D. These include:

1. Milk: It is a rich source of calcium and vitamin D, the two essential nutrients for bone growth and development.

2. Apple cider vinegar: It is abundant in nutrients like calcium, potassium, and magnesium, which can help enhance your bone health.

Check out our range of apple cider vinegar products to keep your gut happy and healthy.

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3. Cheese: Studies suggest that cheese, especially Parmesan is an excellent food for bone health and osteoporosis prevention.

4. Eggs: Research demonstrated that whole eggs could prevent osteoporosis and reduce the risk of fractures in the elderly.

5. Fish: Fatty varieties such as salmon, mackerel, tuna, and sardines are rich in Vitamin D and can help individuals with osteoporosis.

6. Citrus fruits: Fruits rich in Vitamin C, like oranges, can help your body produce what it needs for strong bones.

7. Green leafy vegetables: Dark leafy greens like Chinese cabbage, kale, and turnip greens are rich sources of calcium.

8. Sesame (Til): It contains copper, calcium, manganese, magnesium, and selenium and is ideal for people with calcium deficiencies.

Want to know some amazing health benefits of sesame?

Read This

9. Soy: Soy sprouts contain coumestrol (a potent phytoestrogen), which can decrease the risk of osteoporosis by increasing estrogen levels.

Complications Of Osteoporosis

If osteoporosis is detected early and treated, the outcomes are good. However, if the condition remains untreated, it can lead to chronic pain and fractures. Complications of osteoporosis include:

1. Recurrent falls: Studies show that people with osteoporosis have a higher risk of falls due to muscle weakness, spine kyphosis, or decreased postural control.

2. Pathological fractures: These are the most severe complication of osteoporosis, particularly in the hip or spinal column.

Hip fractures often result from falls and can lead to disability and even increased mortality risk in the first following the injury.

Vertebral fractures: These can cause kyphosis (hunchback), chronic pain, respiratory issues, and a high risk of developing pneumonia.

Our wide range of support and braces help you in dealing with osteoporosis.

Explore Here

Alternative Therapies For Osteoporosis

The main aim of alternative therapies is to work with conventional treatment to provide relief. Always talk to your doctor before starting anything new. Alternative therapies that work best for osteoporosis include:

Massage therapy

Massages can alleviate symptoms of osteoporosis, like pain and swelling, by relaxing your muscles. According to a study, taking a massage, significantly Thai massage can help you to increase your bone formation.

Acupuncture

Acupuncture is a therapy used in traditional Chinese medicine that involves placing very thin needles at strategic points on the body. Studies show that acupuncture could be an effective therapy for treating osteoporosis as it promotes healing.

Is acupuncture effective in managing chronic pain?

To Know More, Read This Now

Tai chi

Tai chi improves muscle strength and coordination and reduces muscle or joint pain and stiffness. This ancient Chinese practice uses a series of body postures that flow smoothly and gently from one to the next. However, there needs to be precise data available on the effectiveness of Tai chi for osteoporosis.

Melatonin therapy

Melatonin is a hormone produced by the brain that is responsible for sleep. Studies have demonstrated that melatonin supplementation can improve perimenopausal- and age-related osteoporosis and avoid bone loss.

Living With Osteoporosis

You can lead an active and fulfilling life even if you have osteoporosis. All you need to do is make specific lifestyle changes. Tips that can help you if you are living with osteoporosis include:

Prevent falls

The major complication of osteoporosis is fracturing due to falls. Things to keep in mind to prevent falls include:

Wear shoes with non-slip bottoms

Make sure there is nothing slippery on the floor

Always grab bars in the bathrooms and railings on stairs

Do not keep throw rugs and loose wires and cords lying around

Always keep the lighting bright so that you can see well

Use hip protectors

This is a different approach to the prevention of hip fractures. Hip protectors are rigid inserts used to prevent direct trauma to the hip. Hip protectors must be helpful in the bedridden elderly population.

Take extra care of broken bones

Fractures usually take 6 to 8 weeks to heal, and osteoporosis does not affect how long this takes. Recovery depends on the type of fracture; while some fractures heal efficiently, others may require more intervention.

Note: You may need a physiotherapist's help to recover as much as possible.

Manage your pain

Pain is subjective and different for every individual. Ways to manage pain include:

Take pain medications

Try warm baths or hot packs and cold packs

Opt for relaxation techniques and hypnosis.

Try our exclusive bone and joint care products to manage your pain.

Explore Now

Frequently Asked Questions

Can osteoporosis be reversed?

Can strength training prevent osteoporosis?

Is there a connection between the endocrine system and osteoporosis?

Is osteoporosis different from osteoarthritis?

Is it okay to run if you have osteoporosis?

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Bloating

Also known as Stomach gas, Belching, Flatulence and Abdominal distension

Overview

A lot of people complain about gas trouble but don't take it seriously because they think it is embarrassing. But there's a lot you need to know about this common digestive physiological process. Gas is produced as a by-product of the normal digestion process which occurs in the body. Excess gas escapes either through the intestine in the form of a ‘flatus’ (farting/flatulence) or through the windpipe in the form of a ‘belch’ (belching/burping). In some cases, it may also be retained in the digestive tract and lead to abnormal bloating.

Usually, intestinal gas causes no medical problems and is a normal occurrence. But occasionally, it can be a symptom of an underlying medical condition such as irritable bowel syndrome, malabsorption syndrome, Crohn’s disease, inflammatory bowel syndrome, intestinal obstruction, etc.

An excess gas formation can be treated with over-the-counter (OTC) medications and certain prescription drugs that help reduce bloating and improve digestion. Lifestyle changes in the form of a healthy diet and mild exercise are also known to reduce the symptoms.

Key Facts

Usually seen in

All age groups

Gender affected

Both men & women

Body part(s) involved

Stomach

Large intestine

Small intestine

Oesophagus

Mimicking Conditions

Acidity

Indigestion

Irritable bowel syndrome (IBS)

Inflammatory bowel disease (IBD)

Gastroesophageal reflux disease (GERD)

Necessary health tests/imaging

X-Ray abdomen

USG abdomen

Dual phase CT abdomen

Barium meal follow through

Barium swallow

Allergy

Individual marker

Gluten

Treatment

Anti-flatulence drugs: Simethicone

Digestive enzymes

Probiotics

Antacids

Prokinetic agents

Lactase

Mesalazine formulations

Specialists to consult

General physician

Gastroenterologist

Causes Of Bloating

The normal digestive process that breaks down the food, mainly starch and cellulose containing food, into soluble easy to digest form, releases gas as a by-product.

However, certain conditions may result in excessive gas formation, which may cause troublesome symptoms. For example:

Consuming higher quantities of certain foods that cannot be easily digested in the small intestine, like beans, cabbage, cauliflower, broccoli, cereal, etc.

Eating stale food or undercooked food which leads to over-fermentation in the intestine, resulting in the release of gases with a foul-smelling odor.

In people with lactose intolerance, consumption of milk and dairy products leads to indigestion and the formation of excess gas.

Swallowing a lot of air while eating food. Air enters the stomach via the mouth and gets mixed with the food, and maybe released by burping.

Consuming aerated beverages causes excessive gas to enter the stomach and can be a cause for belching or burping.

Certain protein and multivitamin supplements and artificial sweeteners also cause excessive gas.

Small intestinal bacterial overgrowth is a condition in which the intestinal microbes increase in number and lead to increased breakdown of food, causing gas, bloating, malabsorption of food, and nutrient malnutrition.

Chronic constipation or intestinal obstruction may also lead to excessive gas formation, as the food stays in the bowels for a longer time causing it to degenerate and release a rotten smell.

Have a stomach ache? There may be numerous causes behind it. Do not just pop a pill on your own. Here’s a quick read on when to see a doctor for stomach ache.

Click Here!

Risk Factors For Bloating

Following things can increase the chances of excessive gas in the gastrointestinal tract.

Increasing age: With age, the body’s digestive system weakens, and chances of flatulence increase, even with the consumption of simpler meals.

Heavy meals: Eating large meals at a time instead of eating smaller portions throughout the day.

Pregnancy: Pregnancy can lead to excessive gas formation as the uterus grows and presses on the intestines.

Sedentary lifestyle: Leading a sedentary lifestyle can also increase the risk of digestive issues and cause increased gas formation.

Usually, intestinal gas causes no medical problems and is a normal occurrence. However, if there is a formation of excessive gas daily along with other gastrointestinal symptoms, such as heartburn, hyperacidity, etc., medical evaluation is necessary. It will help check for the presence of concurrent medical conditions.

Gas is found to be a common presenting symptom in the following medical conditions:

Lactose intolerance: This condition refers to the body’s inability to digest the lactose present in milk and milk products. Consumption of milk and milk products leads to indigestion, bloating, diarrhea, and flatulence.

GERD (gastroesophageal reflux disease): This is a chronic condition where acid from the stomach regurgitates up the digestive tract and irritates the esophageal lining. Chronic belching could be a symptom of GERD.

IBS (irritable bowel syndrome): Symptoms like bloating, diarrhea, and excessive gas are seen in this condition that affects the large intestine.

Celiac Disease: In this condition, the body abnormally reacts to gluten, a protein found in grains such as wheat and barley. Bloating, diarrhea, and excess gas formation are the symptoms of this disease.

Crohn’s Disease: It is a type of inflammatory bowel disease that presents with symptoms like abdominal cramps, diarrhea, increased passing of wind, etc.

Diagnosis Of Bloating

Passing gas daily, as many as 14-21 times a day, is considered normal. It is not a cause for concern and requires no further evaluation. However, if the flatus is accompanied by other troublesome symptoms and interferes with the person’s daily life and activities, lab investigations and imaging studies may be needed to establish the cause of abnormal flatulence.

Stool test to find out disorders like lactose intolerance, malabsorption syndrome and celiac disease

X-Ray Abdomen helps visualize the internal organs of the abdomen and looks for the presence of gas in the stomach or intestines.

USG Abdomen, Dual Phase CT Abdomen to visualize the internal organs of the abdomen in greater detail and diagnose any abnormalities.

Barium Meal Follow Through, Barium Swallow test helps identify any abnormalities or obstruction of the esophagus, stomach, or intestines.

Endoscopy and Colonoscopy are invasive tests in which a probe is inserted via the mouth (endoscopy) or the rectum (colonoscopy) to visualize the inner structures of the digestive tract in real-time.

Laboratory studies have a very limited role in diagnosing conditions that may be associated with flatulence. Certain tests like Allergy, Individual Marker, Gluten can help identify if the patient’s symptoms are due to gluten allergy, also known as celiac disease.

A quick call with a doctor can help you prevent serious health complications. Book your appointment for consultation from India’s best doctors online!

Consult Now!

Prevention Of Bloating

Passing gas every day is not considered abnormal. Gas formation in certain health conditions, such as GERD, IBD, lactose intolerance, gluten allergy, etc., can be limited by certain lifestyle modifications.

You can prevent excessive gas formation and improve your digestion by making the following lifestyle changes:

Eat fresh, home-cooked food, which is simple and easy to digest.

Eat smaller portions throughout the day rather than consuming large meals all at once.

Limit the consumption of aerated beverages.

Quit smoking.

Perform light exercises, such as walking after consuming heavy meals to help with the digestion process.

Drink plenty of water and fluids throughout the day.

Do not consume foods to which you are allergic.

Establish a healthy bowel routine. Go to the loo at the same time every day and try to empty your bowels.

Specialist To Visit

If excessive gas becomes a chronic problem and/or is accompanied by diarrhea, vomiting, blood in the stools, change in the color or frequency of stools, unexplained weight loss, severe abdominal pain, chest pain, etc., medical care must be sought. To seek medical care for excessive gas that causes belching or flatulence, you can visit:

General physician

Gastroenterologist

Consult Now!

Treatment Of Bloating

The treatment aims to relieve symptoms and treat the underlying causative agent.

Symptomatic relief

Simethicone preparations are prescribed for bloating and abdominal distension. They help break down gas bubbles and allow easy passage of gas. Some studies have shown that activated charcoal when used along with simethicone is more effective in reducing bloating.

Digestive enzymes and probiotics help relieve the symptoms of indigestion and improve the body’s digestive system.

Treatment of underlying cause

If symptoms of gas are due to an underlying cause, it is necessary to treat the causative condition to provide complete relief.

Lactase enzyme preparations are used to treat patients with lactose intolerance.

Mesalazine formulations are used to treat Crohn’s Disease and ulcerative colitis.

Antacids and prokinetic agents are used to treat gastroesophageal disease (GERD)

Home-Care For Bloating

Most often, symptoms of excess gas, such as flatulence or belching, can be managed at home with simple home remedies and lifestyle changes. Do the following to reduce bloating and gas.

Take OTC preparations containing simethicone to help with faster relief of symptoms.

Perform mild exercise, such as walking, as it helps with the passing of gas and reduces bloating.

Drink liquids with a straw and limit consumption of aerated beverages and smoking to prevent increased swallowing of air through the mouth.

Gently massage the abdomen to help ease the passing of gas and reduce abdominal cramps and bloating.

Change your diet to include fewer fatty foods and ingestion-causing foods. Increase the consumption of fiber-rich foods, such as fresh fruits and vegetables.

Complications Of Bloating

The average human being can pass gas about 20 times a day. It is an ordinary phenomenon, but it may be embarrassing and occasionally painful. If you have excess gas, you may also experience the following:

Flatus or passing gas through the intestine very frequently. It may have a foul-smelling odor.

Passing gas through the windpipe by either belching or burping. It may be accompanied by an abnormal taste sensation in the mouth.

A feeling of fullness or a sensation of bloating in the abdomen

Abdominal cramps

Pain along the sides of the stomach

Hyperacidity

What if bloating is left ignored?

Symptoms like excessive gas, flatulence, and belching do not cause any major complications on their own. The underlying disease, however, may worsen and cause health complications like:

Ulceration, bleeding in the gastrointestinal tract due to worsening of GERD

Malnutrition due to the inability of the body to absorb nutrients

Increased risk of gastrointestinal cancers

Anal fissures and fistula

Intestinal obstruction

Alternative Therapies Of Bloating

Apart from prescription medications and OTC preparations, there are alternative therapies that may help provide relief from chronic gas, such as:

Diet modifications: Taking a diet rich in fresh fruits and vegetables and limiting the consumption of spicy foods, fatty foods, and foods that cause allergies help improve the overall health of the digestive system and reduce the formation of excessive gas. In patients without a significant improvement despite exclusion of gas-producing foods, doctors suggest a diet low in fermentable oligosaccharides, disaccharides, monosaccharides, and polyols (also known as FODMAPs).

Exercise and Yoga: Light exercises such as walking and yoga asanas like Pawanmuktasana help pass gas with ease, provide relief from symptoms, and improve digestion. Pawanmuktasana can be performed by lying flat on the back and slowly bending your knees and bringing them close to your chest. The position should be held for at least 30-45 seconds and then you can ease back into the starting position. Vajrasana is another yogasana that can be performed post meals and it helps with the digestion process. To perform Vajrasana, you must sit on the floor, on your knees in a kneeling position. Put your hands on the thighs and maintain the position as long as comfortable.

Massage therapy: Gentle abdominal massage may help ease abdominal cramps and aid with the easy passing of gas. It also helps provide relief from constipation.

Ayurveda: Ayurveda suggests that gas is caused due to an imbalance of Vatta and Pitta Doshas. Natural herbs and spices, such as cinnamon (dalchini), carom (ajwain) seeds, cumin (jeera) seeds, ginger (adrak), asafoetida (hing), fenugreek (methi), etc., help build a strong digestive system and provide relief from flatulence and belching.

Frequently Asked Questions

Is passing gas normal?

What foods to avoid in case of flatulence?

Do OTC medicines provide instant relief from gas?

What are some home remedies for gas?

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Palpitations

Also known as Irregular heartbeat

Overview

The sensation or feeling of a pounding or racing heart is known as heart palpitations. These palpitations can be felt in the neck, chest or throat. It can make your heart feel like it's beating too fast or hard. One can also be experiencing a fluttering heartbeat or like the heart is skipping a beat. If you experience palpitations you can feel frightened and it can be bothersome. However, usually, palpitations are not harmful or serious and generally tend to resolve on their own. It’s common for people to experience palpitations due to stress and anxiety or because one has consumed excessive alcohol, nicotine and caffeine. It is also common for pregnant women to experience palpitations.

However, in some cases, palpitations can be caused due to a serious heart condition. If you experience frequent palpitations or have other symptoms that may indicate a heart condition it is advisable to consult a doctor immediately. You should get immediate medical attention in case you experience shortness of breath, chest pain or fainting along with palpitations. Symptoms that can be seen in the case of palpitations include experiencing a heartbeat that seems like it is flip-flopping, pounding or skipping beats.

The treatment for palpitations will depend on the cause of the symptom. Your doctor can suggest relaxation exercises, yoga, aromatherapy and other methods that can help you with staying calm. If the cause behind the palpitations is cardiovascular disease, the treatment will be decided by your doctor after further tests.

Key Facts

Usually seen in

Adults above 30 years of age

Children

Gender affected

Both men and women

Body part(s) involved

Chest

Neck

Heart

Mimicking Conditions

Atrial fibrillation

Hyperthyroidism

Pregnancy

Fever

Anxiety

Phaeochromocytoma

Necessary health tests/imaging

Electrocardiogram

Holter monitoring

Implantable loop recorder

Stress test

Echocardiogram

Treatment

Lifestyle management

Electrical cardioversion

Anti-arrhythmic drugs

Radiofrequency ablation (RFA)

Specialists to consult

General physician

Cardiologist

Symptoms Of Palpitations

It is important to understand that heart palpitations are a symptom of a condition or a state of the body and not a medical disease in itself. Palpitations are sensations that make a person feel like their heart is pounding or racing. One can feel heart palpitations in the throat or neck too. The symptoms of heart palpitations include the following:

Being unpleasantly aware of your own heartbeat

Feeling like your heart has skipped a beat or stopped beats

Heart is fluttering rapidly

Pounding heartbeat

Flip-flopping of heat beat

Aditionally, symptoms that can be associated with palpitations are:

Shortness of breath

Chest pain

Fainting

Dizziness

Headache

Sweating

Palpitation associated with chest pain suggests coronary artery disease, or if the chest pain is relieved by leaning forward, pericardial disease is suspected. Palpitation associated with light-headedness, fainting or near fainting suggest low blood pressure and may signify a life-threatening abnormal heart rhythm. If a benign cause for these concerning symptoms cannot be found at the initial visit, then ambulatory monitoring or prolonged heart monitoring in the hospital might be warranted.

Noncardiac symptoms should also be elicited since the palpitations may be caused by a normal heart responding to a metabolic or inflammatory condition. Weight loss suggests hyperthyroidism. Palpitation can be precipitated by vomiting or diarrhea that leads to electrolyte disorders and hypovolemia. Hyperventilation, hand tingling, and nervousness are common when anxiety or panic disorder is the cause of the palpitations.

Causes Of Palpitations

Some common causes of palpitations include the following:

Experiencing powerful emotional reactions such as stress, anxiety or panic attacks.

A difficult workout

Undergoing mental health conditions such as depression or anxiety disorder

Drinking excessive amounts of food products containing stimulants such as coffee or tea.

Medications that contain nicotine, amphetamines, cold and cough medications containing pseudoephedrine, asthma inhalers and withdrawal from beta blockers.

Experiencing hormonal changes during menstruation or pregnancy

Too much or too little thyroid hormones.

Taking diet pills

Fever

Low level of oxygen in the blood

Blood loss

Low blood sugar

Sometimes, palpitations can be caused because of an abnormal heartbeat that can be caused due to the following medical conditions:

Abnormal heart valve

Conditions such as a mitral valve prolapse affects the flaps or leaflets of the heart that play important roles in the pumping of blood through the heart. The mitral valve is present between the left heart chambers and normally bulges into the hearts upper left chamber when the heart contracts. A defect or a disease that affects the mitral valve can result in an abnormal heartbeat.

Heart arrhythmia

Palpitations can be caused by certain conditions that can cause arrhythmia (problem with the rhythm of the heart). Some common heart arrhythmias include atrial fibrillation, a condition in which the heart beats irregularly and at a faster pace than normal. Atrial flutter causes a fast and irregular heartbeat and Supraventricular tachycardia results in an abnormally fast heart rate.

Abnormal level of potassium

Potassium is a key nutrient that plays an important role in influencing the heart rate. If a person has low levels of potassium they can experience an irregular heartbeat that is known as heart arrhythmia. Excessive levels of potassium can also lead to irregular heartbeat and a person may experience a fluttering sensation in the chest. This results in palpitations and can indicate a serious heart condition that would need professional medical advice.

Heart diseases

Heart conditions such as congenital heart defects (heart problems that develop when a foetus is growing), coronary heart disease (a condition that causes plaque buildup in the arteries responsible for moving oxygenated blood through the body) and cardiomyopathy (a condition that causes the muscle of the heart to grow thick or weak) can cause palpitations.

Congestive heart failure

Congestive heart failure or CHF affects the pumping ability of the heart and is often referred to as heart failure. This condition results in a stage where the fluids within the heart build up and results in inefficient pumping of blood. This condition can result in palpitations and irregular heartbeat.

Other medical conditions

Sleep apnea: A condition that is caused by the continuous repetitive collapse of the upper airway during sleep. It is one of the most common breathing-related disorders.

Anemia: A condition that occurs due to decreased number of healthy red blood cells in the body resulting in an insufficient supply of oxygen to the body. This can result in palpitations, fatigue and shortness of breath.

Metabolic conditions: There are many metabolic conditions that can result in palpitations including, hyperthyroidism, hypoglycemia, hypocalcemia, hypermagnesemia, hypomagnesemia, and pheochromocytoma

Other etiologies also include excess caffeine, or marijuana. Cocaine, amphetamines, 3-4 methylenedioxymethamphetamine (ecstasy or MDMA) can also cause palpitations.

Risk Factors For Palpitations

Some common risk factors of palpitations include the following:

Pregnancy

Stress

An overactive thyroid

Taking medications for cold or asthma

Anxiety or panic disorder

Irregular heartbeats

Previous heart surgery or structural heart changes

Diagnosis Of Palpitations

To diagnose the cause behind palpitations your doctor will firstly conduct a physical exam and listen to your heartbeat using a stethoscope. If your healthcare provider suspects a medical condition behind your palpitations they will recommend further tests to determine the cause behind the same.

Electrocardiogram or EKG

This diagnostic procedure is a test that is quick and painless in nature. It measures the electrical activity of the heart by using sticky patches also known as electrodes. The electrodes are placed on the patient's chest, arms and legs while the wires connect the electrodes to a monitor that displays the results. An electrocardiogram helps in determining whether a person has a rapid or slow heartbeat.

Holter monitoring

This is a portable and easy to use ECG device that can be worn by the patient for a day or more. The device records the heart rhythm and rate while carrying out their daily activities. It helps in determining heart palpitations that aren't found during an EKG exam. Smartwatches often contain remote EKG monitoring and can be advised by a doctor.

Event recording

There might be cases when an irregular heartbeat isn't recorded while wearing a Holter monitor and the event may occur fewer times than in a week. In such cases, your doctor may recommend you to follow event recording. This requires a patient to press a button when they experience the symptoms and is usually recommended to be worn for 30 days or more until you experience heart palpitations.

Implantable loop recorder

An implantable loop recorder is a device that is placed subcutaneously and continuously monitors for cardiac arrhythmias. These are most often used in those with unexplained syncope and can be used for longer periods of time than the continuous loop event recorders. An implantable loop recorder is a device that is placed subcutaneously and continuously monitors for the detection of cardiac arrhythmias. These are most often used in those with unexplained syncope and are used for longer periods of time than the continuous loop event recorders. Electrophysiology testing enables a detailed analysis of the underlying mechanism of the cardiac arrhythmia as well as the site of origin.

Echocardiogram

This noninvasive modality uses sound waves to create pictures of the heart in motion. The test helps in showcasing the blood flow and structural problems on the heart and helps a provider in pinpointing the cause behind a heart symptom.

Blood tests

Your healthcare provider may recommend blood tests to check your hormone levels because palpitations can be caused due to an increase in the levels of hormone seen in cases of pregnancy or menstruation. The blood tests will also help in determining the levels of certain electrolytes in the blood that influence heartbeat such as potassium & calcium.

Complete blood count can assess anemia and infection.

Serum urea, creatinine to assess for renal dysfunction.

Other blood tests, particularly tests of thyroid gland function, are also important baseline investigations (an overactive thyroid gland is a potential cause for palpitations; the treatment, in that case, is to treat the thyroid gland over-activity)

Urine test

A urine test will help in determining the levels of electrolytes, hormones, blood cells and blood sugar levels in the body.

Urine metanephrines testing is used to help detect or rule out the presence of a rare tumor called a pheochromocytoma or a paraganglioma that releases excess metanephrines.

Stress test

A stress test may be recommended by your doctor to determine the cause of your palpitations. This test allows a doctor to study your heart while the heart rate is elevated. This can be done by making the patient walk briskly on a treadmill or while taking a medication that causes an increase in the heart rate.

Coronary angiography

This modality helps in checking how blood flows through the heart. It helps in determining whether you have a blockage in the coronary artery that can result in symptoms such as heart palpitations. In this test, a contrast dye is injected into the arteries while the doctor observes the blood flow through the heart on an X-ray screen.

Celebs affected

Sir Elton John

Sir Elton John is an award-winning musician who suffered from an irregular heartbeat and received a pacemaker for the same.

Sir Roger Moore

The famous James Bond actor received a pacemaker after losing consciousness in 2003.

Prevention Of Palpitations

If your doctor doesn't suspect a medical condition behind the occurrence of palpitations you can be asked to follow certain guidelines that can help in the prevention of palpitations. This includes the following

Trying to identify and avoid triggers that cause palpitations. You can maintain a log of your activities that result in palpitations and try to avoid them. This can include the intake of caffeine or certain medications and foods. You will also be required to keep a note of your emotional state and events that trigger you to feel anxious which results in palpitations.

Adding relaxation exercises in your daily routine that can help you in managing stress and anxiety.

Avoid stimulants such as nicotine and stimulant recreational drugs.

Incorporating regular exercising in your life

If you have low blood sugar, take your medications regularly and ensure that your blood sugar level does not fall below the recommended level.

Managing blood pressure and cholesterol levels.

Following a healthy lifestyle and eating a nutrient-rich diet.

Avoiding smoking and using tobacco products.

Smoking has severe side effects and can result in many health complications. Worldwide, tobacco use causes more than 7 million deaths per year. Learn how you can stop smoking.

Tap To Read!

Specialist To Visit

You should visit a doctor if you are experiencing symptoms such as loss of consciousness, chest pain, unusual sweating, dizziness, lightheadedness, experiencing more heartbeats frequently, pulse more than 100 per minute, shortness of breath and history of cardiac problems or if the palpitations lasts a longer time or gets worsen . These symptoms might indicate the possibility of a medical condition behind the palpitations. You can consult the following doctors for diagnosis:

General physician

Cardiologist

Do not ignore any signs and symptoms. It is best to consult a doctor for the right diagnosis and treatment. Consult India’s best doctors here.

Consult Now!

Treatment Of Palpitations

Generally palpitations that aren't caused by an underlying medical condition tend to resolve on their own. If your doctor doesn't suspect a medical condition behind your palpitations they might recommend the following steps to avoid the triggers that cause palpitations.

Management of stress and anxiety

This will include incorporating relaxation techniques in your daily life that can help you in managing stress and anxiety. You can opt for daily physical activities, breathing exercises, yoga or meditation in your daily life.

Avoiding stimulants

Palpitations are often caused after consuming products that stimulate the heart and cause a rapid heart beat. You can be asked to record the triggers that cause palpitations and try to avoid them. Consuming excessive amounts of caffeine is often the reason behind palpitations. You can limit your caffeine intake or choose a decaffeinated beverage. Drugs such as cocaine and ecstasy are also stimulants that cause palpitations. Talk to your doctor if you are taking any medications since some medicines may contain stimulants that cause heart palpitations.

Eat a healthy diet

Low blood sugar is a leading risk factor for heart palpitations. Eating nutrient-rich food and replacing simple carbs with complex carbohydrates is a great way of maintaining stable blood sugar levels. You will be asked to swap fruit juices, white bread, and sugary drinks with whole grains and vegetables.

If the cause behind your palpitations is a medical condition such as atrial fibrillation, your treatment will be focused on treating the condition.

Medications to treat arrhythmia

Antiarrhythmic medications are used to convert an abnormal heartbeat into a normal rhythm. These medications are also used to prevent the occurrence of arrhythmia.

Some of the common antiarrhythmic drugs are amiodarone, adenosine, beta blockers, ibutilide, flecainide and calcium channel blockers .

Anticoagulant medications such as warfarin or aspirin are used to reduce the risk of blood clot formation.

Electrical cardioversion

People with persistent arrhythmias such as atrial fibrillation may require an invasive procedure such as electrical cardioversion. This procedure is performed after administering short-acting anaesthesia. An electrical impulse is delivered through the chest wall that helps in synchronising the heart and stabilising a normal heart rhythm.

Radiofrequency ablation (RFA)

Radiofrequency energy is used in heart tissue or normal parts to destroy abnormal electrical pathways that are contributing to a cardiac arrhythmia. It is used in recurrent atrial flutter (Afl), atrial fibrillation (AF), supraventricular tachycardia (SVT), atrial tachycardia, multifocal atrial tachycardia (MAT) and some types of ventricular arrhythmia. The energy-emitting probe (electrode) is at the tip of a catheter which is placed into the heart, usually through a vein. This catheter is called the ablator. The practitioner first "maps" an area of the heart to locate the abnormal electrical activity (electrophysiology study) before the responsible tissue is eliminated. Ablation is now the standard treatment for SVT and typical atrial flutter and the technique can also be used in AF, either to block the atrioventricular node after implantation of a pacemaker or to block conduction within the left atrium, especially around the pulmonary veins.

Home-care For Palpitations

Here are a few things that you can follow at home to limit the occurrence or prevent palpitations:

Reduce your caffeine intake and note down the stimulants that result in palpitations.

Practice relaxation techniques such as yoga and meditation that can help you manage stress and stabilise your mood.

Try breathing exercises and deep relaxation techniques such as aromatherapy

Incorporate regular exercise in your life

Cease or limit smoking and avoid using any products that contain nicotine.

Avoid herbal and nutritional supplements that contain stimulants

Consult a mental health specialist if you experience mood disorders such as panic attacks, anxiety disorder or depression

Avoid eating spicy or rich foods that may cause heart palpitations.

Label your drugs and set the alarm to make sure you have the medicines every day at the same time.

Stick to the right treatment plan, as decided by your doctor, and incorporating the necessary lifestyle changes can help you take care of your condition and recover faster.

Did you know?

Yoga comes with significant health benefits and improves flexibility, weight reduction and improves mood and energy. It is one of the oldest physical disciplines in the world and has been practiced for over 5000 years. Understand how yoga can help you.

Tap To Read!

Complications Of Palpitations

Palpitations that do not resolve on their own and are caused by medical conditions can cause certain complications if left untreated. This includes the following:

Fainting

One can experience loss of consciousness if the heart beats too rapidly leading to a drop in the blood pressure. The risk of the same increases in people who are suffering from congenital heart conditions or specific heart valve problems.

Cardiac arrest

Sometimes palpitations can be caused due to life-threatening heartbeat problems that can result in the heart stopping beating effectively.

Stroke

If the palpitations are caused by a condition that affects the upper chambers of the heart resulting in the heart beating to quiver instead of beating regularly, stroke can occur. This is caused due to pooling of blood that causes clots to form, if a clot breaks it can occlude a brain artery and result in a stroke that can be life-threatening.

Heart failure

Specific arrhythmias can effectively reduce a heart's capacity to pump blood through the body. Heart function can be improved by controlling the rate of an arrhythmia that's causing heart failure.

Alternative Therapies For Palpitations

If you have palpitations, these therapies can help you control the condition. They are:

Exercising

Leading a healthy lifestyle and doing light exercises daily such as walking can help in managing your medical condition. Talk to your doctor about what kind of exercises would suit your condition.

Diet changes

Choose a diet that is low on unhealthy carbs and follow protein guidelines given by your doctor. The guidelines of what you are supposed to eat will depend on the severity of the condition and the treatment regimen that you are on. It is important to follow the advice of your doctor since your diet influences your health.

Yoga

Opting for simple exercises such as yoga can help you avoid stress and anxiety that can further help your health.

Living With Palpitations

Experiencing palpitations can be scary and can cause difficulty in carrying out day to day tasks. However, modern science has opened the doors to several possibilities that can allow you to live a healthy life and prevent the occurrence of irregular heart rhythms. Along with your medical treatments, it is important to incorporate lifestyle changes that will help you cope with your condition. Here are a few tips that you can follow:

Follow up with your doctor

Make sure that you stay in touch with your doctor and report any changes in your palpitations or if you keep regularly experiencing heart palpitations. Call your doctor if you experience any sudden change in the nature of your palpitations or feel that you are losing consciousness.

Follow a healthy lifestyle

Incorporate the changes recommended to you by your doctor. You may be advised to exercise regularly and eat a balanced diet that incorporates fruits, vegetables and whole grains.

Take your medications regularly

If you have been given medications to regulate arrhythmia, take the medicines regularly and follow up with your doctor about any change in your condition

Manage stress and anxiety

If you are experiencing stress due to a work situation or a personal relationship, practice relaxation techniques that can help you in managing stress and anxiety.

Did you know?

Stress is a hormonal response of the body and affects women more than men. It can also severely impact your heart health. Learn how stress is affecting your heart.

Click To Read!

Frequently Asked Questions

What are night palpitations?

Is it common to experience palpitations during pregnancy?

Can food or drink cause heart palpitations?

Can panic attacks cause palpitations?

Does bending forward cause palpitations?

Can excessive thyroid hormone cause palpitations?

What other non-cardiac conditions can cause palpitations?

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Premature Labor

Also known as Early labor, Preterm labor, Preterm birth, Premature birth, and Early delivery

Overview

A pregnancy usually lasts for about 40 weeks. However, in some cases labor begins prematurely between the 20th and 37th week of pregnancy when uterine contractions cause the cervix, the mouth of the uterus, or womb, to open earlier than normal.

The signs of premature labor include regular, painful contractions, fluid or blood leaking from the vagina, dull to severe back pain, and pressure in the pelvic region.

In most cases, the causes of premature labor are unknown. However, certain factors like history of preterm labor, less interval between consecutive pregnancies, being pregnant with more than one baby, smoking and certain medical conditions like urinary tract infections(UTIs), diabetes and high blood pressure can increase the risk of preterm labor.

Growth happens throughout the pregnancy including the final months and weeks. For example, the brain, lungs, and liver need the final weeks of pregnancy to develop completely. Hence, doctors usually try to delay or stop preterm labor to let the pregnancy continue.

Prematurely delivered babies have a higher risk of health complications. While some premature babies do well, others, especially those born many weeks before the due date, need medical intervention and intensive care unit (ICU) care.

Key Facts

Usually seen in

Women between 30-34 years of age

Gender affected

Women

Body part(s) involved

Female reproductive organs

Prevalence

World: 13.4 million (2020)

India: 1.7 million (2022)

Mimicking Conditions

Placental abruption

Fetal growth restriction

Multiple pregnancies

Preeclampsia

Premature rupture of membranes

Necessary health tests/imaging

Lab tests and Imaging tests

Ultrasound

Transvaginal ultrasound

Monitor contractions

Fetal Fibronectin Screening

Urine tests

Treatment

Medications

Antibiotics: Azithromycin , Erythromycin, Ceftriaxone, Clarithromycin, Metronidazole

Tocolytic Agents: Atosiban, Magnesium sulfate, Indomethacin, Nifedipine, and Ritodrine:

Corticosteroids: Betamethasone and Dexamethasone

Progesterone therapy

Cervical Cerclage and Pessary

See All

Symptoms Of Premature Labor

If a pregnant woman is facing some of the following signs or symptoms before her 37th week of pregnancy, she may be experiencing premature labor:

Pressure in the pelvis or lower belly, like the baby is pushing down

Menstrual type cramps

Constant or low back pain

Contractions that occur more than 6 times an hour continuously at a gap of ten minutes apart

Painful or hard uterus

Increasing pressure in the vagina

Vaginal secretion, spotting or light bleeding

Blurred or troubled vision

Swelling on the hands, feet, and face

Preterm rupture of water membranes surrounding the baby breaks or tears

Decreased fetal movements

Nausea, vomiting, and diarrhea

What are Braxton Hicks contractions?

Braxton hicks contractions are mild, irregular, and infrequent contractions, also referred to as 'false' or 'practice' contractions. They feel like tightness in the abdomen and are relatively less painful. They usually stop on their own or with a change in position, resting or walking.

In contrast, labor contractions typically occur at regular intervals, increase in duration with time, and are much more painful.

Watch this video to understand what happens during labor pain and how to identify labor pain.

Click Here To Watch

Types Of Premature Labor

Premature labor is defined as babies born alive before 37 weeks of pregnancy are completed. There are sub-categories of premature labor, based on gestational age:

Extremely premature birth (less than 28 weeks)

Very preterm (28 to less than 32 weeks)

Moderate to late premature birth (32 to 37 weeks)

Babies are born early because of spontaneous preterm labor or because there is a medical indication to plan an induction of labor or cesarean birth early.

Causes Of Premature Labor

In cases where labor starts spontaneously before 37 weeks, it’s often hard to tell the exact cause. However, there are several factors discussed in the next section that increase the risk of premature birth.

Risk Factors of Premature Labor

There are several risk factors for premature labor and birth, including ones that researchers have not yet identified. A few of them are discussed below:

Age

Mothers younger than 18 years of age and older than age 35 years of age are at a high risk of having preterm infants.

History of Preterm Labor

Women who have a history of delivering preterm, or who have experienced preterm labor during their previous pregnancies, are considered to be at high risk for preterm labor and birth.

Multiple Pregnancy

A multiple pregnancy is a pregnancy in which you're carrying more than one baby at a time. Being pregnant with twins, triplets, or more, is associated with a higher risk of preterm labor and birth. One of the research studies has shown that more than 50% of twin births occurred preterm, compared with only 10% of deliveries of single infants.

Short Interpregnancy interval

Interpregnancy interval refers to the time between the end of one pregnancy and the conception of another. An interpregnancy interval of less than 6 months increases the risk of preterm birth. The longer the interval between pregnancies, the lesser the risk.

Anomalies of the reproductive organs

Women with certain anomalies like a shorter cervix (the lower part of the uterus) or weak or incompetent cervix that doesn't stay closed the way it's supposed to during pregnancy, increases the risk of preterm labor.

Certain medical conditions

Certain medical conditions that occur during pregnancy and place a woman at higher risk for preterm labor and delivery include:

Sexually Transmitted Diseases (STDs)

Urinary Tract Infections (UTIs)

Bacterial Vaginosis (infection of vagina)

Hypertension (High Blood Pressure)

Being underweight or obese before pregnancy

Diabetes (high blood sugar)

Gestational diabetes (diabetes that occurs during pregnancy)

Blood clotting problems

Certain developmental anomalies in the fetus

Placenta previa (the placenta grows in the lowest part of the uterus and covers all or part of the opening to the cervix)

Polyhydramnios (excessive amniotic fluid surrounding the baby in the womb)

Premature rupture of the fetal membranes (PROM) (The water bag breaks early and there is not enough amniotic fluid surrounding the baby)

Intrahepatic cholestasis of pregnancy (ICP) (a liver disorder during pregnancy)

Placental abruption (the placenta starts to separate from the inside of the womb wall)

Antiphospholipid syndrome (APS) (an immune system blood disorder)

Smoking

Many studies have shown that maternal exposure to smoke during pregnancy is a key modifiable risk factor for premature birth (birth before 37 weeks gestation), stillbirth, as well as miscarriage.

Want to detach yourself from this deadly habit?

Tips to quit smoking

Tap Here

Drinking alcohol

For women who consumed seven or more drinks per week, the relative risk of very premature delivery is increased by many folds as compared to non-drinking women.

Studies have shown that younger mothers may be “At A Higher Risk Of Consuming Alcohol”.

Click To Read About This

Disruption of the internal clock

Research has found that disruption in the 24-hour circadian rhythm (internal clock in the brain that regulates the cycles of alertness and sleepiness) increases the risk of miscarriages, preterm birth, and low birth weights.

Want to fix your dysregulated internal clock?

Important Tips To Follow

Air pollution

Research has found a significant relationship between exposure to air pollution and preterm birth, particularly if the pollutants are sulfur dioxide.

Stress

Stress seems to increase the risk of preterm birth as it leads to high blood pressure during pregnancy. The high blood pressure further puts at risk of preeclampsia, and premature birth.

Is stress affecting your overall well-being? Try some relaxation techniques to manage stress.

Read To Explore

Lack of social support

Lack of social support aggravates mental stress, anxiety, and depression in a female sometimes leading to premature labor.

Domestic violence

Many studies have shown that women facing issues of physical, sexual, or emotional abuse are at a doubled risk of preterm labor and low birth weight infants. This risk was increased further for women who experienced two or more types of domestic violence during their pregnancy.

Did you know?

The bacteria that cause infections and inflammation of the gums and bones that support the teeth can actually get into the bloodstream and target the fetus, potentially leading to premature labor and low-birth-weight babies. Follow these tips to take care of your oral health and avoid gum infections.

Click Here

Diagnosis Of Premature Labor

The doctors monitor the signs and symptoms that indicate that the labor may be taking place before the baby’s due date.

Physical Examination

The doctor will assess the signs and symptoms of whether the woman is entering into labor and decide to watch and wait or allow labor to progress naturally if one is 34 to 37 weeks pregnant.

A pelvic examination might be done to evaluate the firmness and tenderness of the uterus, the baby's size and position, to determine whether the cervix has begun to open, and to check for any uterine bleeding.

Lab and Imaging tests

Ultrasound: This test is also called a sonogram. During this procedure, high-frequency sound waves are used to check for any problems with the baby or placenta, confirm the baby's position, check the level of the amniotic fluid, and estimate the baby's weight.

Transvaginal ultrasound: This imaging scan is performed to check the Cervical-length measurement and is an essential part of assessing the risk of preterm labor and delivery. This test is considered to be the gold standard in women who are considered to be at a high risk of preterm birth.

Monitor contractions: If a woman is facing contractions, the doctor uses an instrument called a tocodynamometer for monitoring and recording uterine contractions before and during labor.

Fetal Fibronectin Screening: This is a protein that helps the amniotic sac (the membrane that cushions the baby during pregnancy) stay attached to the lining of the uterus. This protein begins to break down as the body prepares for birth, and detecting the presence of fetal fibronectin in vaginal discharge in the second and third trimesters of pregnancy signals a high risk of labor. The doctor may swab the cervix and test the secretions for fetal fibronectin protein.

Urine tests: If symptoms of labor are experienced before week 37 of pregnancy, the doctor may ask for a urine sample in order to check for bladder or urinary tract infections which often lead to preterm contractions.

Booking your lab tests just got easier. Get all the tests done in the comfort and safety of your home.

Find All The Tests Here

Celebs affected

Karan Johar

Karan Johar was blessed with twins, Yash and Roohi on February 7, 2017, through surrogacy. They were premature babies. He thanked the great team of doctors that helped in the twin’s recovery in NICU. He also added that he wants to help premature babies get the best chance possible.

Prevention Of Premature Labor

A full-term pregnancy is 40 weeks. The babies' important organs develop towards the end of pregnancy and a full-term baby faces fewer health issues at the time of birth.

While preterm labor cannot be prevented in all cases, its risk can be reduced by following these points:

Lead a healthy lifestyle

Eat a well-balanced, nutritious diet

Keep yourself hydrated

Take all the prescribed supplements on time.

Gain a healthy amount of weight.

Try to stay active every day. Walking is always a good idea.

Don’t do strenuous activities that put pressure on the abdomen and cause you significant fatigue.

Make sure you take adequate rest and allow the body to adjust during pregnancy.

Manage stress levels by engaging in physical and spiritual activities

Maintain a healthy relationship with your partner

Say goodbye to these vices

Don’t drink alcohol while trying to get pregnant and during the full phase of pregnancy

Quit tobacco, smoking, e-cigarettes, and vaping.

Don’t consume any recreational drugs or nonprescribed medications

Seek prenatal care

Seek prenatal care early in the pregnancy, particularly if someone has any risk factors for preterm birth such as having a history of a premature baby in the past, or having issues related to your uterus or cervix

Consult with your doctor immediately if you think you are facing any signs of premature labor

If both the mother and the baby are healthy and fine, it is best to wait until at least 39 weeks and let labor begin on its own.

Know the signs of preterm labor before it becomes too late

Consult your pregnancy care physician immediately if you are facing any issues like

Contractions, cramping, or tightening of your uterus

Abdominal cramps, with or without diarrhea

Pressure in the vagina or pelvic region

Lower backache

Increased vaginal discharge

Prenatal Probiotics- A breakthrough in preventing preterm birth?

Abnormal vaginal microbes and bacterial vaginosis are important risk factors for premature labor.

Various studies have shown that the administration of probiotics containing Lactobacillus rhamnosus GR1 and Lactobacillus reuteri RC14 in pregnant women restores the normal vaginal flora and also maintains optimum vaginal pH.

Probiotics containing these strains have the potential to reduce vaginal infections and therefore the incidence of Preterm births.

They are beneficial and safe for use in pregnancy to prevent preterm birth, if administered at or before 20 weeks of pregnancy.

Did you know?

It is important to empty the bladder when required. Holding urine increases the risk of urinary tract infections, a major risk factor for premature labor.

Read the answers to FAQs of UTIs

Specialist To Visit

Doctors that can help in the prevention and management of preterm labor are:

Obstetrician & Gynecologist

Perinatologist

An obstetrician & gynecologist specializes in diagnosing and treating diseases of the female reproductive system along with delivering babies, and providing medical care during pregnancy and after birth. A Perinatologist is an obstetrician who specializes in high-risk pregnancies. They work with mothers and infants to ensure safety before and after birth.

Seek medical help from our trusted team of doctors.

Book Your Appointment Now

Treatment Of Premature Labor

Management is implemented based on the symptoms and the baby’s gestational age at which the mother presents to the hospital. The doctor might recommend the following medications and procedures to delay or manage early labor:

Medications

Antibiotics: If a urine test during preterm labor reveals a bladder, kidney, or urinary tract infection (UTI) the doctor may prescribe antibiotics. Sometimes, managing the infection stops premature labor. A few examples include:

Azithromycin

Erythromycin

Ceftriaxone

Clarithromycin

Metronidazole

Tocolytic Agents: These are the drugs designed to inhibit contractions of smooth muscles and thus inhibit premature labor If a woman is showing signs of preterm labor and is less than 34 weeks pregnant, the doctor may administer a tocolytic medication to suppress labor and give the baby’s lungs more time to mature. They may be given into the vein (intravenously). A few examples include:

Atosiban

Magnesium sulfate

Indomethacin

Nifedipine

Ritodrine

Note: Tocolytics should not be prescribed to women with certain health conditions, such as severe bleeding, which may be caused by the placental abruption (placenta detaching from the wall of the uterus.

Corticosteroids: If a woman is less than 34 weeks pregnant and experiencing the symptoms of labor, corticosteroid is injected to help promote the baby's lung maturity. A few examples include:

Betamethasone

Dexamethasone

Note: These corticosteroids also benefit patients with PPROM (Preterm premature rupture of the membranes and those with hypertensive syndromes. But the repeated course of corticosteroids is not recommended.

Progesterone Therapy

This therapy reduces the risk of spontaneous preterm labor in women who are at an increased risk based on a history of previous spontaneous preterm labor. Progesterone supplementation is beneficial in women starting at 16 to 24 weeks gestation and continuing through 34 weeks gestation. Eg. Hydroxyprogesterone caproate

Note: Progesterone is not beneficial in multiple gestation pregnancies

Surgical procedure

Cervical Cerclage

This is a surgical procedure that might be recommended in women with a short cervix (less than 25 mm) and a history of early premature birth.

This procedure is performed around 12-14 weeks of pregnancy by closing the cervix with strong sutures that are removed at around 37 weeks.

Cervical Pessary

It is a simple, less invasive procedure that involves closing the cervix with a silicone ring that is removed at around 37 weeks.

This procedure does not require anesthesia and might replace the invasive cervical stitch operation.

Complications Of Premature Labor

A developing baby needs a full term in the uterus to develop. Growth happens throughout the pregnancy including the final months and weeks. For example, the brain, lungs, and liver need the final weeks of pregnancy to develop completely. Hence, premature labor and birth can pose many complications discussed below:

Neonatal Complications

Prematurely born babies tend to have heart, brain, lung, or liver issues.

They are prone to breathing difficulties, pneumonia, infections, anemia, jaundice, bleeding in the brain, sepsis, and vision problems amongst other complications.

However, with improved obstetric and neonatal care facilities, the rate of complications in preterm births has reduced.

Infant Complications

Infants can have breathing problems, feeding difficulties, impaired cognitive abilities, cerebral palsy, learning disabilities, developmental delays, and vision, and hearing problems.

Behavioral issues such as anxiety, depression, autism spectrum disorders, and ADHD (Attention deficit hyperactivity disorder) are also associated with preterm labor.

Maternal Complications

Studies have shown that preterm labor has been associated with an increased risk for cardiac complications, typically years after the delivery.

Women delivering preterm babies can have a great emotional impact leading to anxiety, postpartum depression, and Post-traumatic stress disorder.

Alternative Therapies For Premature Labor

Some of the alternative therapy that has shown some promising results in preventing preterm labor and delivery:

Prenatal yoga

Prenatal yoga focuses on positions that are specifically designed for pregnant women's bodies. These yoga postures should be performed under the guidance of a trainer. This can help improve flexibility and it is great for blood circulation too. This helps in keeping the baby and mother healthy in proper coordination and hence reduces the chances of preterm labor.

Learn about yoga that is safe to practice during pregnancy.

Watch Now

Massage therapy

Massage therapy during pregnancy has been shown to provide many benefits, including a sense of wellness, improved relaxation, and better sleep. This massage helps in reducing stress, anxiety, and emotional disturbance faced by a pregnant woman and hence reduces the risk of preterm labor.

Warm baths

Warm baths help in calming the body and relaxing the muscles. This is a really great way to calm and de-stress.

Living With Premature Labor

If a woman is at risk of premature labor, she may always feel scared or anxious about the pregnancy. This adds on if the woman is having a history of preterm labor. In the above cases, it is advisable to consult your doctor at each step to stay relaxed and calm.

If a woman is feeling anxious or depressed, it is important she is accompanied by a loved one or caretaker while visiting your doctor. This would give her moral support and a sense of protection.

Ask multiple questions from the doctor. Do not hesitate or be fearful about asking anything about your condition.

Premature delivery of a baby also involves high medical expenditure. Hence, it is also important to plan finances accordingly.

Frequently Asked Questions

Is premature labor genetic?

How common is premature Labour?

What are the different types of premature labor?

What are the three warning signs of premature labor?

Can stress cause preterm labor?

Can lack of sleep cause premature labor?

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Premenstrual syndrome (PMS)

Also known as Premenstrual syndrome, Ovarian cycle syndrome, and Premenstrual tension

Overview

Premenstrual syndrome, commonly known as PMS is characterized by a set of physical, emotional, and behavioral symptoms that usually occurs a week or two before the menses.

The physical symptoms of PMS may include breast tenderness, bloating or heaviness in the abdomen, headache, constipation or diarrhea, acne, and muscle pains, while the emotional symptoms may present in the form of restlessness, anxiety, anger, irritability, cravings and mood swings.

While a combination of many factors like hormonal changes, chemical changes in the brain and lifestyle factors are considered to cause PMS, some factors that can increase the risk of PMS symptoms include being overweight or obese, smoking, personal or family history of depression or certain nutritional deficiency of vitamins and minerals.

Lifestyle adjustments can help you reduce or manage the signs and symptoms of PMS. The conservative approaches such as exercise, yoga, and meditation, help in alleviating depressive symptoms. Also, your doctor can help you find ways to relieve your symptoms with the help of certain drugs.

Key Facts

Usually seen in

Women between 20 to 30 years of age

Gender affected

Women

Body part(s) involved

Uterus

Prevalence

Worldwide: 47.8% (2020)

Mimicking Conditions

Depression

Anxiety

Perimenopause

Chronic fatigue syndrome

Irritable bowel syndrome (IBS)

Thyroid disease

Necessary health tests/imaging

Pelvic exam test

Patient record

Treatment

Painkillers: Ibuprofen, Naproxen & Aspirin

Antidepressants: Fluoxetine, Sertraline, Paroxetine & Escitalopram

Birth control pills (oral contraceptives): Drospirenone & Ethinyl estradiol

Gonadotropin-releasing hormone (GnRh) agonists: Leuprolide & Goserelin acetate

Diuretics: Spironolactone

See All

Symptoms Of PMS

There are various physical and emotional symptoms associated with PMS. They can also vary from month to month and are sometimes so severe that they affect the daily lives of women. Symptoms usually peak two days before menstruation and disappear within four days of menstruation. Symptoms might include:

Physical symptoms

Change in appetite

Weight gain

Back pain

Headache

Swelling and tenderness of breasts

Constipation

Tiredness

Pain in the genital area (dyspareunia)

Nausea

Diarrhea

Bloating

Migraine

Drowsiness

Poor concentration

Insomnia

Increased nap-taking

Swelling of the hands and feet

Bodyache

Joint pain

Lower tolerance for noise or light

Abdominal pain

Menstrual cramps

Worried about what’s to come after PMS? Here are 6 effective ways to manage period pain.

Read to know

Emotional symptoms

Crying

Mood swings

Irritability

Anger

Feelings of tension

Disinterest in daily activities

Fatigue

Feeling overwhelmed or out of control

In some women with PMS, severe, debilitating symptoms occur which can affect the daily routine activities of women, known as premenstrual dysphoric disorder (PMDD). It causes extreme mood shifts such as:

Severe depression

Panic attacks

Feelings of hopelessness

Low self-esteem

Anger and irritability

Crying spells

Suicidal thoughts

Did you know?

Symptoms of PMS are very similar to the symptoms of early pregnancy. Listen to our experts explain PMS better.

Watch this video now

Causes Of PMS

The exact cause of PMS is not known. The hormone fluctuations may play a role in developing symptoms of PMS. Some women react more to these fluctuations than others, which can be linked to genetic factors or chemicals released in the brain. The following changes in the hormones that may cause PMS include:

1. Estrogen

The fluctuations in estrogen levels cause mood swings. Studies also suggest that a decreased amount of estrogen stimulates common symptoms of PMS such as insomnia, fatigue, and depression.

2. Progesterone

PMS is also influenced by the hormone progesterone. Low progesterone levels or progesterone levels falling too rapidly during the second half of the menstrual cycle can lead to PMS symptoms.

3. Serotonin

There is an increase in serotonin precursors between days 7 to 11 and 17 to 19 of the menstrual cycle. This rise in serotonin causes mood swings which is a significant symptom of PMS.

4. Prolactin

Women with PMS symptoms have high levels of prolactin, especially in the premenstrual time. Studies suggest that high prolactin levels clubbed with low levels of progesterone can lead to anxiety and depression.

Most of the women have a lot of questions about periods. And one of the most common ones is: Are my periods normal? Have a question about periods?

Get answers here

Risk Factors Of PMS

Though the exact cause of PMS is still unknown, there are an array of risk factors that are associated with PMS. They include:

1. Age

PMS is a disease that is linked with menstrual cycles, so it affects women after menarche (the first occurrence of menstruation) till menopause. It is mostly seen between mid 20s to late 30s.

There are several changes in the woman’s body as she turns 30. So let’s explore what 30s have in store for every woman!

Tap to know

2. Lifestyle factors

There are various lifestyle factors that can increase the chances of PMS.

Diet: Excess intake of sugar, coffee, packaged and processed food is associated with an increased risk of PMS.

Sedentary lifestyle: Some studies also suggest the role of sedentary and inactive lifestyles in PMS.

Poor sleep quality: Inadequate and poor quality sleep predisposes women to PMS.

Trying to get good-quality sleep. Check out our widest range of sleep aid products to help you sleep better.

Buy now

Stress: Stress increases menstrual pain by stimulating the body’s response.

Read to know more about 10 effective tips to manage stress.

Click now

Alcohol consumption: The drinking of alcohol increases the risk of PMS moderately.

Management products to help you in your weight loss journey!

Explore them now

3. Hormonal disorders

Some hormonal disorders such as deficiency of serotonin – a chemical produced by the brain that aids in digestion, sleeping, and stabilization of mood increase the risk of developing PMS.

The increase in another female sex hormone progesterone is also seen in women having PMS symptoms.

4. Family history

Some studies also suggest that women who have a family history of depression are at higher risk of PMS.

5. Medical history

Women who have a personal history of postpartum depression or other mood disorders are at higher risk of PMS.

6. Certain vitamin and mineral deficiencies

Low levels of certain vitamins and minerals particularly magnesium, manganese, Vitamin E and Vitamin D also increases the risk of PMS.

Did you know?

Vitamin deficiency can also affect your hair and nails. There are numerous reasons for brittle hair and nails and one of those is the deficiency of Vitamin B7, commonly known as biotin. Here are some of the common signs of vitamin deficiency you need to be aware of!

Tap to know

Diagnosis Of PMS

PMS cannot be diagnosed by any specific tests and it is determined through symptoms experienced by the individual. Diagnosis of PMS includes the following:

1. Tracking the symptoms: PMS is diagnosed through tracking the duration, onset and severity of symptoms. Patients are asked to maintain a diary for at least 2 to 3 months.

The patient should keep a record of:

Daily symptoms

Details of the menstrual cycle

First and last day of the menstrual period

2. Pelvic exam: It is recommended to check for any other gynecological problems.

Specialist To Visit

Most of the women remain undiagnosed due to lack of knowledge, not reporting, or difficulty in diagnosing the symptoms by the clinician. The specialty of doctor that may help in diagnosing PMS include:

General physician

Gynaecologist

Psychiatrist

Psychologist

A general physician can be the first point of contact for the patient. If required the patient can be referred to a gynecologist who specializes in the disease of the female reproductive system. A psychiatrist and psychologist help in managing the mental aspect of PMS.

When to see a doctor?

The symptoms of PMS should not be ignored. The women should consult the doctor if symptoms :

Starts 5 days before the start of a period for at least three consecutive cycles

End within 4 days after a period starts

Interfere in normal daily activities

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

Consult now

Prevention Of PMS

Emotions are a very basic trait of a human being. So, every mood swing or other emotional symptom may not be associated with PMS. It can be part of your behavior as well. To avoid this confusion, symptoms should be discussed with the doctor.

PMS is not life-threatening but it can impact overall productivity and health. The following Do’s and Don'ts are helpful in preventing PMS:

Do’s

Drink plenty of water and fluids, like coconut water, fruit juices, soups and herbal teas to ease abdominal bloating.

Eat a well-balanced healthy diet containing whole grains, fruits, vegetables, good fats, and protein.

Here’s more on what to have and what to avoid during periods.

Read now

Consume nutrition supplements such as calcium, magnesium, omega 3, 6 fatty acid and Vitamin B complex, if required. Do consult your doctor before taking these supplements.

Bridging gaps in daily diet can help deal with PMS symptoms. Explore our wide range of nutritional supplements.

Fill your cart

Do light, regular exercises, yoga, aerobics, swimming, or jogging for at least 30 minutes a day for physical fitness and overall well-being.

Too lazy to sweat it out?

These tips might help you get your daily dose of physical activity.

Read more

Get sufficient sleep. A sound sleep of around 8 hours, especially during the premenstrual period, can prevent and reduce the symptoms of PMS.

Bask in the morning sun. Try to get sufficient vitamin D via natural sunlight. Diet or supplements can also be taken to cover any deficiency.

Booking your lab tests just got easier. Get your Vitamin D levels checked from the comfort of your home.

Click to book

Learn healthy ways to cope with stress. Take a walk in nature, talk to your friends or write in a journal. Deep breathing exercises, massage, or meditation can come in handy too.

Listen to our specialist about several methods to deal with stress.

Click to watch

Consult a doctor, if general care at home is not relieving the symptoms. Sometimes, your doctor can advise medicines to help you manage the symptoms.

Connect with an expert

Don'ts

Do not smoke. Women who smoke report more and worse PMS symptoms than women who do not smoke.

Looking to quit smoking? Try our range of smoking cessation products.

Explore now

Do not consume excessive alcohol. Too much alcohol can exacerbate PMS symptoms and worsen cramps.

Do not include excessive salt or salty foods in your diet as they can cause bloating and fluid retention.

Do not overindulge in sugar, packaged, ultra-processed foods, and caffeine. They can worsen the symptoms of PMS.

Early to bed, early to rise is not just a proverb!

A few studies have shown that aligning your waking up and sleep time in tune with sunrise and sunset, respectively, holds promise in the management of PMS.

Treatment Of PMS

While mild symptoms can be managed with conservative treatment options including home care remedies, regular exercise, relaxation techniques, vitamin and mineral supplementation, etc, severe symptoms require medical intervention. Various treatment options include:

Medications

Painkillers: They help in easing the pain associated with PMS and periods. The common medications include:

Ibuprofen

Naproxen

Aspirin

Antidepressants: Antidepressants are given to ease emotional symptoms. Selective serotonin reuptake inhibitors, or SSRIs are the most commonly prescribed antidepressants. They include:

Fluoxetine

Sertraline

Paroxetine

Escitalopram

Note: SSRIs are taken for two consecutive months to assess their effect. In case of failure of therapy, alternative medication such as Venlafaxine is recommended.

Birth control pills (oral contraceptives): The hormonal preparations of the birth control pills prevents changes in the hormones. This helps in reducing mood swings. Drugs include:

Drospirenone

Ethinyl estradiol

Gonadotropin-releasing hormone agonists: These medications temporarily stop the menstrual cycle by blocking the synthesis of hormones estrogen and progesterone. This helps in improving physical symptoms such as bloating.The common examples include:

Leuprolide

Goserelin

Diuretics: This class of drug is used to reduce symptoms associated with fluid retention such as bloating and breast tenderness. Spironolactone is a common example diuretic used in PMS.

Not able to get all the medications you need? Don’t worry we have it covered. Order from India’s largest online pharmacy to get guaranteed delivery.

Add your prescription now

Home-care Of PMS

For home care of PMS adhere to all the pointers mentioned in the ‘Prevention’ section. Along with that adding the following to your diet can help in soothing the symptoms of PMS. Do consult your healthcare provider before starting any of the following:

Nutritional supplements such as calcium, magnesium, omega 3, 6 fatty acids, Vitamin B complex, and Vitamin D should be consumed in case of specific deficiencies.

Bridging gaps in daily diet can help deal with PMS symptoms. Explore our wide range of nutritional supplements.

Fill your cart

Turmeric (Haldi): Turmeric helps in alleviating stomach cramps due to its anti-inflammatory effect.

Want to know more about the health benefits of turmeric?

Read this now

Fennel (Saunf): Fennel helps in reducing bloating due to its diuretic effect. It is also found to relieve stomach cramps.

Chamomile: This herb has antispasmodic, analgesic, and anti-inflammatory properties. It’s tea relaxes the muscles of the uterus and helps in relieving cramps.

Chasteberry extract: This herb is used to manage various hormonal disorders. It is used to get relief from PMS symptoms such as breast tenderness and hot flashes. It reduces the release of prolactin which is a contributory factor of PMS.

St. John’s wort: It is a herb that is used to control behavioral symptoms associated with PMS.

Ginkgo biloba: It is a well-known herb that has been used for years in Traditional Chinese Medicine. Some studies suggest its role in reducing the severity of PMS symptoms.

Complications Of PMS

PMS can aggravate several clinical conditions such as migraine, mood disorders, asthma, epilepsy, multiple sclerosis, systemic lupus erythematosus (SLE), inflammatory bowel disease, and irritable bowel syndrome.

Untreated PMS can also disturb sexual life which can lead to relationship issues and psychological distress. Other complications of PMS include:

Premenstrual Dysphoric Disorder (PMDD): It is the most severe form of PMS that is characterized by intense mood swings, anger, irritability, and anxiety.

Depression: The intense symptoms of PMS can also lead to depression.

Substance abuse: It is seen that cravings for substances such as alcohol, drugs, and nicotine increases in PMS.

Did you know?

COVID-19 can have an impact on your menstrual health. Certain studies suggest COVID-19-associated depression, anxiety, and stress and the high prevalence of PMS. Get the latest updates on COVID-19

Tap now

Alternative Therapy For PMS

Along with the general treatment, there are a few complementary therapies that have proven to be beneficial. They include:

Cognitive and behavioral therapy (CBT)

It is helpful to manage moderate to severe physical and emotional symptoms. In this, psychotherapists conduct sessions to normalize the individual's thoughts and behavior. The therapy focuses on memory and judgment to rectify the person’s overall feelings, mood, and behavior.

Acupuncture

It is a very ancient technique that is used in China and Japan. In this, fine metal needles are inserted into the skin at specific points. This helps in alleviating symptoms of PMS. Sometimes, needles are stimulated by electricity which is known as electro-acupuncture.

Acupressure

In this, the specific points of the body are stimulated using fingers or thumbs instead of needles. It can be done by the individual itself.

Relaxation response

This technique is used to reduce stress. It involves methods such as quiet sitting, progressive muscle relaxation, and repetition of a particular word during inhale and exhale. Practicing for 10-20 minutes daily helps in providing emotional stability.

Light therapy

Exposure to light plays a very important role in improving mood-related symptoms. During light therapy, the individual is exposed to artificial light that mimics natural light. It stimulates the release of serotonin which elevates the mood. A reduction in symptoms such as depression is shown in women who are continuously exposed to bright light.

Massage therapy

Massage helps in reducing cramps by relaxing the nervous system. Studies suggest that regular massages help in relieving mood swings and pain.

Biofeedback

The technique records the responses of the individuals such as heart rate, muscle tension, brain activity, etc after stimulation. It helps in alleviating physical and emotional symptoms by analyzing the triggers.

Homeopathy

There are several homeopathic medicines used to calm PMS symptoms. Examples include sepia, Ignatia, pulsatilla, and Lachesis.

Living With PMS

PMS is not a life-threatening condition, but it can take a toll not just on your body but your mind as well. PMS can be managed well with certain conscious lifestyle modifications.

The physical and emotional symptoms experienced by women during PMS have a negative impact on relationships also. Emotional support from family, friends, and colleagues helps to cope with PMS symptoms. The following measures can be taken to manage a good relationship:

Communicate: Effective communication, especially by the partner helps to reduce the stress experienced by the women during this period.

Give space: Sometimes, a woman needs emotional and physical space. This helps the women to tackle the PMS symptoms.

Help: Family members can ease the life of PMS patients by helping them with their routine work such as household chores.

Note: The symptoms of PMS vary from woman to woman. So, it is very important to keep a record of the timings and types of symptoms. This will help to analyze the triggers that may help to lessen the symptoms.

Remember to prioritize your mental health! Explore our mind care range.

Click now

Frequently Asked Questions

Can vitamin and mineral deficiencies lead to PMS?

Can you control emotions during PMS?

What is the difference between PMS and PMDD?

Does PMS affect fertility?

Can PMS have an affect on their health conditions?

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Prostate cancer

Also known as Adenocarcinomas

Overview

The prostate is a small walnut-shaped gland that is a part of the male reproductive system. It facilitates sperm transport and nutrition by producing seminal fluid. The prostate wraps around the male urethra as it exits the bladder.

In prostate cancer, cells in the prostate gland begin to multiply abnormally. The risk of developing it increases with age, with men being affected over 50 years of age. Other main risk factors include family history, ethnicity, genetic mutations and diet.

Poor bladder control, painful urination, weight loss, fatigue and erectile dysfunction are some of the symptoms of prostate cancer. Diagnosis is done using a digital rectal exam, prostate-specific antigen (PSA) test, and prostate biopsy.

Prognosis and treatment of prostate cancer depend on cancer staging. Treatment modalities include observation, active surveillance, surgery (radical prostatectomy), radiation therapy, hormone therapy, chemotherapy, immune/vaccine therapy, and other medical therapies that can treat prostate cancer cell growth.

Key Facts

Usually seen in

Adults above 50 years of age

Gender affected

Men

Body part(s) involved

Prostate gland

Urinary bladder

Urethra

Pelvic organs

Prevalence

Worldwide: 7.1% (2018)

India: 5.0-9.1% (2016)

Mimicking Conditions

Urinary tract infection

Benign prostate hyperplasia

Erectile dysfunction

Cystitis

Necessary health tests/imaging

Ultrasound

MRI scan

DRE

Prostate specific antigen (PSA)

Biopsy

CT scan

Treatment

Surgery: Radical prostatectomy, Pelvic lymphadenectomy & Transurethral resection of the prostate (TURP)

Immunotherapy

Chemotherapy

Hormonal therapy: Abiraterone acetate, Estrogens & Antiandrogens

Radiation therapy: External radiation therapy, Hypofractionated radiation therapy & Internal radiation therapy

Radiopharmaceutical therapy

Biphosphonate therapy

See All

Symptoms Of Prostate Cancer

In the early stages of prostate cancer, there may be or may not be any signs or symptoms. However, as cancer progresses, some of the symptoms may appear.

Here are some common signs and symptoms of prostate cancer:

1. Poor bladder control

A person with early-stage prostate cancer will have a lot of trouble regulating his bladder. He would frequently spill his pants as a result of urine leaking before reaching a bathroom.

Urinary incontinence is a frequent sign of various urinary infections. In case you have this issue, consult a urologist and have your prostate cancer tested.

2. Trouble urinating

Urinary trouble is a common presenting symptom of prostate cancer. Some may even find it painful to empty the bladder.

3. Decreased force in the stream of urine

Due to an enlarged prostate, pressure increases over the urinary bladder, leading to weak flow when you urinate.

You may feel that your bladder is still full and your urine dribbles after you finish urinating.

4. Urge to urinate

Enlarged prostate obstructs easy emptying of the urinary bladder. So you might feel the need to urinate more often than usual. This urge is more especially at night when you may sometimes spill urine before reaching the toilet.

5. Painful urination

Having painful urination regularly is a sign that you must seek medical help because this can be a warning sign of prostate cancer.

6. Blood in the urine and semen

It's a symptom of locally advanced prostate cancer. When cancer spreads to other surrounding organs, blood might leak into urine and semen.

7. Bone pain

Advanced prostate cancer may present with symptoms like back pain. Pain in the pelvic region and hip pain is felt when prostate cancer begins to spread.

8. Losing weight without trying

Like malignancies in other organs, prostate cancer patients have unexplained weight loss. The weight loss could be due to other underlying causes. When it is associated with the other symptoms, it could be a warning sign of prostate carcinoma.

9. Persistent pain in the lower back

Persistent pain in the low back, hips, and pelvis is another warning indication. If this symptom is present with the other symptoms listed above, a detailed examination for prostate cancer could be the next step.

10. Erectile dysfunction

Erectile dysfunction is another common symptom seen in several medical conditions. Several drugs can lead to erectile dysfunction. If a person has erectile dysfunction and painful urination, he should get tests done for prostate cancer.

11. Reduced semen

If an individual notice that the amount of semen ejaculated during sex has decreased, he should get his prostate tested for any signs of malignancy. Reduced semen is especially important if the individual is also experiencing other symptoms that could indicate prostate cancer.

Causes Of Prostate Cancer

The specific cause of prostate cancer is unknown. However, it is generally a result of mutation and uncontrolled division in the normal prostate cell.

Oncogenes are genes that aid in the growth, division, and survival of cells. Tumor suppressor genes are the ones that usually regulate cell growth, repair DNA errors, or induce cells to die at the appropriate moment.

Prostate cancer starts to form when cells in the prostate gland have alterations in their DNA. These abnormal cells group together to create a tumor. This tumor can spread and invade neighboring tissue. Some abnormal cells can break away and move to other parts of the body over time.

Risk Factors For Prostate Cancer

Some of the factors that elevate the risk of prostate cancer are as follows.

1. Old age

After 50 years of age, prostate cancer becomes more common. Old age acts as a risk factor for prostate cancer.

2. Race

African American men, West African ancestry from the Caribbean and South American men have an increased risk of prostate cancer than those of other races. The lowest incidence is typically found in Asian men, associated not only with genetic susceptibility but also with the diet, lifestyle and environmental factors.

3. Family history

If a blood relative has been diagnosed with prostate cancer, such as a parent, brother, or kid, your risk may increase for cancer.

4. Gene changes

Some gene alterations (mutations) appear to increase the risk of prostate cancer.

If you have a gene that increases the risk of breast cancer (BRCA1 or BRCA2), your risk of prostate cancer may increase.

Men with Lynch syndrome (also known as hereditary non-polyposis colorectal cancer or HNPCC), a condition caused by inherited gene mutuations, have an increased risk for prostate cancer.

Other possible risk factors

The following factors are also known to affect the risk of getting prostate cancer. However, more research is necessary to confirm the involvement of these factors.

Obesity: Overweight and obese men people may have a higher risk of prostate cancer. Obesity is also thought to be associated with higher prostate cancer progression and mortality.

Alcohol consumption: Alcohol use, particularly heavy use, can be a risk factor of prostate cancer. Alcohol consumption is generally measured in drinks per day, with a usual drink of alcohol containing about 15 g of ethanol irrespective of the type of beverage consumed (beer, wine and liquor, straight or mixed). More than one drink everyday substantially increases the risk of prostate cancer.

Tobacco: Tobacco and cigarette smoke contains over 4,000 chemicals, among which more than 60 are listed as carcinogens. Male smokers are also found to have elevated levels of circulating androsterone and testosterone, which may increase the risk of prostate cancer or contribute to its progression.

Dietary factors: Some of the dietary factors that can increase the risk of prostrate cancer include:

Saturated animal fat: A high calorie intake of saturated animal fat is often associated with an increased risk of prostate cancer due to increasing testosterone levels.

Meat (red, smoked, and seasoned): High correlation between per capita meat consumption and cancer incidence and mortality has been found.

Calcium, milk and dairy products: Studies have reported that high intake of calcium (above the recommended dietary allowance of ~1000 mg/day) or dairy products are associated with increased risk of developing prostate cancer.

Choline: A positive association is seen between the dietary choline intake or plasma concentration of choline and the risk of prostate cancer. The main dietary sources of choline are eggs, beef and chicken liver and wheat germ. A study published in American Journal Of Clinical Nutrition found that men with the highest choline intake (~500 mg/day) had a 70 % increased risk of lethal prostate cancer compared with men with the lowest intake (~300 mg/day).

Chemical exposure: A few studies have suggested a link between chemical exposure and prostate cancer. These chemicals include which the firefighters are exposed to and herbicides like agent orange.

Prostatitis: Inflammation of the prostate gland has been related to an increased risk of prostate cancer in certain studies. The link between the two is still unclear, and research is ongoing in this area.

Here’s everything you need to know about prostatitis.

Click To Read!

Sexually transmitted infections: Research has been done to see if sexually transmitted infections like gonorrhea or chlamydia might increase the risk of prostate cancer, because they increase inflammation of the prostate. So far, studies have not agreed, and no firm conclusions have been drawn.

Vasectomy: Vasectomy is a type of male contraception. Few studies have associated it with slightly increased risk of prostate cancer, but other studies have not found this. Research on this possible link is still under way.

Diagnosis Of Prostate Cancer

Most doctors advise men in their 50s to talk to their doctors about the benefits and drawbacks of prostate cancer screening. An evaluation of your risk factors and screening preferences should be part of the discussion.

1. Prostate cancer screening tests

Digital rectal exam (DRE): Your doctor uses a glove and lubricated finger to inspect your prostate gland during a digital rectal examination. If your doctor perceives any anomalies in the prostate gland’s consistency, shape, or size, you may need more tests.

Prostate-specific antigen (PSA) test: PSA is a substance produced naturally by your prostate gland. This antigen is measured in a blood sample collected from a vein in your arm. It’s normal to have a trace quantity of PSA in your blood. A higher-than-normal level could suggest prostate infection, inflammation, hypertrophy, or malignancy.

2. Additional testing after screening

If your doctor suspects some abnormality during prostate cancer screening, your doctor may offer additional testing to evaluate whether you have prostate cancer, such as:

Ultrasound: A tiny probe of cigar shape is put into your rectum during transrectal ultrasonography. The probe instrument forms an image of the prostate gland using sound waves.

Magnetic resonance imaging (MRI): Your doctor may recommend an MRI scan of the prostate in some cases to get a more detailed view. Your doctor may use MRI images to plan a procedure to remove prostate tissue samples.

Biopsy: Your doctor may recommend a procedure to obtain a sample of cells from your prostate. A prostate biopsy helps to find if there are cancer cells present. During a prostate biopsy, a tiny needle is inserted into the prostate to collect tissue which is examined for the presence of malignant cells.

3. Tests to determine whether prostate cancer is aggressive

Once a biopsy confirms the presence of cancer cells, the next step is to assess the progress of cancer. A doctor examines a sample of your cancer cells in a lab to see how abnormal they are from healthy ones.

A higher grade indicates cancer that is more aggressive and likely to spread quickly. The following are some of the methods used to determine the grade of cancer:

Gleason score: The Gleason score is the most common scale for determining the grade of prostate cancer cells. Gleason scoring is a numeric system of a scale of 1 to 10. In Gleason, score two means non-aggressive cancer, whereas ten means aggressive cancer.

Genomic testing: Genomic testing examines your prostate cancer cells to see if there are any gene abnormalities. This test can provide you with more information regarding your prognosis. The genomic tests give additional details that help with a treatment plan.

4. Tests to determine whether cancer has spread

Following a prostate cancer diagnosis, your doctor needs to assess the cancer stage. Following imaging tests may be recommended if your doctor feels your cancer has spread beyond your prostate.

Bone scan

Computerized tomography (CT) scan

Ultrasound

Positron emission tomography (PET) scan

Magnetic resonance imaging (MRI)

Your doctor will use the test results to determine the stage of your cancer.

Consult Now!

Celebs affected

Dilip Kumar

A legendary bollywood actor Dilip Kumar had advanced prostate cancer. Prostate cancer had spread to all other parts as well. He was taking regular treatment for it.

Warren Buffet

The famous businessman and one of the most successful investors, Warren Buffet had prostate cancer. He was diagnosed and treated for stage 1 prostate cancer, which doesn't spread to other parts of the body.

Roger Moore

A famous actor who portrayed James Bond, Roger Moore was diagnosed with prostate cancer, and he underwent surgery to remove the prostate.

Prevention Of Prostate Cancer

If you're concerned about the risk of prostate cancer, then prostate cancer prevention may be of interest to you.

1. Switch to a balanced diet

Consume all varieties of fruits, vegetables, and whole grains that are known to reduce the risk of prostate cancer. Essential vitamins and nutrients are abundant in fruits and vegetables, which can benefit your overall health.

The possibility of preventing prostate cancer with nutrition has yet to be proven clearly. However, including the following food items have shown to prevent or lower the risk of prostate cancer:

Soy: Soy has been identified as a dietary component that may play an important role in preventing prostate cancer.

Lycopene: Lycopene is a bright red phytochemical that has potent antioxidant properties. Tomatoes are a rich source of lycopene. Cooking tomatoes and consuming them with oil also increases its absorption.

Besides tomatoes and tomato products, other lycopene-rich foods include watermelon, pink grapefruit, pink guava, papaya, dried apricots and pureed rose hips.

Green tea: The incidence of prostate cancer is very low in East Asian countries where green tea is highly consumed. Green tea is rich in polyphenols such as epigallocatechin-3- gallate (EGCG) that has preventive effects in prostate cancer.

Coffee: Coffee is also rich in polyphenols. Coffee consumption is associated with a reduction in the risk of developing lethal prostate cancer and its recurrence or progression. The results are similar for caffeinated and decaffeinated coffee.

Cruciferous vegetables: Cruciferous vegetables include broccoli, cauliflower, cabbage, brussels sprouts, kale, mustard greens, and chard greens. Studies suggest that metabolites of cruciferous vegetables may detoxify carcinogenic compounds and stop cancer cells from growing and dividing, hence lowering the risk of developing aggressive prostate cancer.

Omega-3 fatty acids: Replacing saturated fat with unsaturated fat is beneficial for overall health. Saturated fat intake is associated with an increased risk of developing prostate cancer, while omega-3 fatty acids are associated with lower risk. Fish such as salmon, sardines, mackerel, and herring are good animal sources of omega-3 fatty acids. Plant sources include walnuts and flax seeds.

Folate (Vitamin B9): It occurs naturally in some foods such as green vegetables, beans and orange juice. The risk of prostate cancer is found to be lower in men who had enough folate through their diets and not by taking folic acid supplements.

Vitamin D: Vitamin D acts as a regulatory hormone for multiple cell activities in the human body. It is concluded that Vitamin D production in the skin reduces the risk of several tumors including prostate cancer.

2. Follow an exercise routine regularly

Exercise benefits your general health. Exercise is one of the modified lifestyle therapies that appear to offer many benefits and relatively few side effects. Lack of exercise has also been linked to increased risk of prostate cancer.

Here are more reasons why elderly people should opt for a fitness regimen.

Tap To Know!

3. Keep a healthy body weight

If your weight is healthy, make an effort to keep it that way by eating well and exercising most days of the week. For ideal weight loss, increase your exercise and cut down your daily calorie consumption. Consult your doctor and dietician for guidance in devising a weight-loss plan that is both healthy and effective.

Design the best weight loss regime for yourself with help from our expert nutritionists.

Consult Now!

4. Talk to your doctor

If you have a high risk of prostate cancer, discuss it with your doctor. Certain health problems can up your risk of prostate cancer. These include a clinical history of diabetes mellitus and hypertension.

Studies have reported that people who have a history of diabetes were four times at a higher risk of cancer as compared to those with normal blood glucose level. Also, the history of hypertension increased the risk of prostate cancer to threefold as compared to those with normal blood pressure readings.

Specialist To Visit

One must see a doctor if he experiences one or more symptoms of prostate cancer. As a thumb rule, men over 40 years of age need to consult a doctor if they experience prostate cancer symptoms.

Symptoms like blood in the urine and extreme pain could be alarming signs which need immediate medical advice. One can initially consult a general physician, who might refer the the following specialists:

Oncologist

Urologist

Oncosurgeon

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Book An Appointment!

Treatment Of Prostate Cancer

Patients with prostatic cancer might get a variety of treatments. Some treatments are standard (already in use). However, watchful waiting and active surveillance are treatments for older men who have no indications or symptoms of prostate cancer.

The term "watchful waiting" refers to the practice of closely observing a patient's status. Here no intervention is done until signs or symptoms arise or change.

Active surveillance is closely monitoring a patient’s status without administering any treatment unless test findings change. It is helpful to detect early indicators that the disease is progressing.

Patients are recommended to have various exams and tests during active surveillance. The tests include DRE, a PSA test, a transrectal ultrasound, and a biopsy to see if cancer is progressing.

When cancer starts to spread, treatment is given to try to cure it. The treatment plan will depend on your age, the stage of cancer, as well as the preferences to side-effects, long term effects and treatment goals.

1. Surgery

Patients in good health who simply have a tumor in their prostate gland may be treated with surgery to remove it. The surgical procedures are:

Radical prostatectomy: The prostate, surrounding tissue, and seminal vesicles are all removed during surgery. It is possible to remove surrounding lymph nodes at the same time. The following are the most common forms of radical prostatectomy:

Open radical prostatectomy

Radical laparoscopic prostatectomy

Laparoscopic radical prostatectomy

Pelvic lymphadenectomy: Under a microscope, a pathologist examines the tissue for cancer cells. If cancer is present in the lymph nodes, the doctor will not remove the prostate gland and advise other treatment.

Transurethral resection of the prostate (TURP): This technique is known to treat benign prostatic hypertrophy. It helps to reduce symptoms caused by a tumor before further cancer treatments. In this, a resectoscope (a thin, illuminated tube with a cutting tool) is placed into the urethra, which helps remove tissue from the prostate.

2. Radiation therapy

Radiation therapy is a cancer treatment that involves high-energy x-rays or other forms of radiation to kill cancer cells from growing. Different types of radiation therapy include:

External radiation therapy: Radiation therapy uses a machine outside the body to send radiation to the cancerous part of the body. This therapy allows a high dose of radiation to reach the tumor while causing minimal damage to healthy tissue in the surrounding area.

Hypofractionated radiation therapy: It is a type of radiation therapy. A higher-than-usual total radiation dose is delivered once a day for a shorter time (fewer days). This therapy may have more side effects than regular radiation therapy.

Internal radiation therapy: Internal radiation therapy uses a radioactive substance filled in needles, seeds, or catheters inserted into cancer tissue. After the radioactive seeds are implanted in the prostate, the needles are removed after the procedure.

3. Radiopharmaceutical therapy

For the treatment of prostate cancer, radioactive material is used. The following are examples of radiopharmaceutical therapy:

Alpha emitter radiation therapy treats prostate cancer that has spread deep to the bones.

Radium-223, a radioactive material, is administered into a vein and circulated through the bloodstream. It gathers in cancerous parts of the bone and destroys the cancer cells.

4. Hormone therapy

Hormone therapy treats cancer by inhibiting cancer cell growth or blocking hormones. They are biological chemicals produced by glands and transmitted through the bloodstream.

Prostate cancer progression is accelerated due to the male sex hormones, and to limit the number of male hormones, drugs, surgery, or other hormones is used. The term for this therapy is androgen deprivation therapy (ADT).

Some of the hormone therapies for prostate cancer are:

Abiraterone acetate, which inhibits the production of androgens in prostate cancer cells.

Orchiectomy, a surgical treatment that involves the removal of one or both testicles, which are the source of male hormones like testosterone, to reduce the quantity of hormone produced.

Estrogens, hormones that promote feminine sex characteristics and can inhibit the production of testosterone in the testicles. Estrogens are unlikely to be used in treating prostate cancer nowadays due to their adverse effects.

Luteinizing hormone-releasing hormone agonists, which inhibit testosterone production in the testicles. Leuprolide, goserelin, and buserelin are among the examples.

Antiandrogens, which can block the activity of androgens. Flutamide, bicalutamide, enzalutamide, apalutamide, and nilutamide are a few examples of these compounds.

5. Chemotherapy

Chemotherapy is a cancer treatment that involves administering drugs to cancer cells to limit their growth, either by killing them or preventing them from growing. Chemotherapy medications enter the blood circulation, reach cancer cells throughout the body, and are administered by mouth or injected into a vein or muscle.

6. Immunotherapy

Immunotherapy is a cancer-fighting treatment that makes use of the patient’s immune system. So, to restore the body’s natural defenses, substances manufactured by the body or in the lab are used.

7. Bisphosphonate therapy

When cancer has spread to the bone, bisphosphonate medications like clodronate or zoledronate are known to prevent bone damage. Bone loss is more common in men treated with antiandrogen treatment or orchiectomy.

Clinical trials to explore new types of treatment include:

Cryosurgery

High-intensity–focused ultrasound therapy

Proton beam radiation therapy

Photodynamic therapy

Home-care For Prostate Cancer

1. Drink pomegranate juice

For almost 3,000 years, pomegranate (Punica granatum) has been used in medicine to treat everything from hypertension to cancer. Pomegranate is known to inhibit various human cancer cell growth in many types of research. The antioxidant properties of pomegranate extract have an anticancer effect on carcinogenic cells.

2. Reduce stress

Prostate health is harmed by stress. When agitated, some men unconsciously tense their pelvic muscles. Chronic tightness of the pelvic floor muscles can produce pelvic floor muscle dysfunction and is one of the reasons for chronic prostatitis.

3. Say no to unhealthy diet

Vegetable oil containing omega-6 fatty acids and a diet high in saturated fats can increase the risk and severity of prostate cancer.

Processed red meat including foods such as salami, bologna, sausage, bacon, and hot dogs should be avoided.

Eating grilled and fried meat or meat cooked at high temperatures may alter DNA. It also increases the risk of cancer.

Sugar and carbohydrates correlate with the risk of prostate cancer.

Increased intake of food rich in choline such as beef and chicken liver, eggs and wheat germ increases risk of lethal prostate cancer.

High intake of dairy/calcium products is also associated with increased risk of prostate cancer.

Note: SELECT (Selenium and Vitamin E Cancer Prevention Trial) was a large clinical trial done to find out whether selenium and/or Vitamin E could help prevent prostate cancer when taken as dietary supplements. Over 35,000 men over the age of 50 years, were randomly assigned to receive one of the following combinations daily for 7 to 12 years:

Vitamin E and a placebo

Selenium and a placebo

Vitamin E and selenium

Two placebos

Several factors may have affected study results, including the dose of Vitamin E and the form of selenium used. The researchers concluded that men should avoid selenium at doses that are higher than the recommended dietary intake.

Complications Of Prostate Cancer

Prostate cancer, if undiagnosed or untreated in early stages, might spread to surrounding tissues. The spread can further complicate the disease. Few complications are:

Spreading of prostate cancer (metastasis)

Prostate cancer can spread to neighboring organs, such as your bladder. It can travel to your bones or other organs through your bloodstream and lymphatic system.

Prostate cancer can still respond to treatment and can be limited even after spreading to other parts of the body. But it is unlikely to be reversed and cured.

Urinary incontinence

Urinary incontinence can be a side effect of prostate cancer and its treatment. Treatment for incontinence varies depending on the kind, severity, and possibility of recovery over time. Medication, catheterization, and surgical intervention are some of the treatment options.

Erectile dysfunction

Erectile dysfunction is a side effect after surgery, radiation therapy, or hormone therapy. Erectile dysfunction is treated with medications. Vacuum devices also aid in the treatment of erectile dysfunction.

Possible complications after prostate cancer surgery include the following:

Sterility

Leakage of urine from the bladder

Leakage of stool from the rectum

Shortening of the penis

Inguinal hernia

Probable complications of hormone therapy include:

Hot flashes

Impaired sexual function

Loss of desire for sex

Weak bones

Diarrhea

Nausea

Itching

Alternative Therapies For Prostate Cancer

It’s important to remember that complementary and alternative cancer treatments cannot replace medical treatment. When you try a supplemental treatment, always tell your doctor.

Yoga

Yoga may help with weariness caused by cancer therapy, according to some scientific research. Men under treatment for prostate cancer who participated in twice-weekly yoga lessons had fewer sexual side effects and urine issues than those who did not.

Meditation

People with cancer can benefit from the calming effects of meditation and other relaxation practices. Mindfulness and meditation effectively relieve anxiety, fear, and depression in men with prostate cancer in a small study.

Acupuncture

Acupuncture, which involves a trained practitioner inserting thin needles into specific points on your body, may help relieve prostate cancer pain. Some cancer patients report that it helps them feel better.

Did you know?

Body massage could be the best alternative therapy in prostate cancer management. Massage may also aid in the relief of pain, anxiety, and exhaustion. However, it is always advisable to choose a trained oncology massage therapist.

Living With Prostate Cancer

Any diagnosis of cancer is not easy physically or mentally. However, a few lifestyle changes can help you sail through the treatment. Here’s how to have a better quality of life even if you have prostate cancer.

Managing the complications

Urinary incontinence

Prostate cancer and its treatment might make your bladder weak. The fear of urine leaking, smelling of urine, bowel accidents and having to use diapers is humiliating to many men. Both supportive psychotherapy and behavioral therapy can assist a man in coping with this change.

In order to help men cope with this symptom, it is important to identify the etiology of incontinence and educate patients and families about this problem, and offer ideas to improve symptoms.

Certain pelvic and kegel exercises can strengthen the muscles in your bladder and learn to control it. Urinary incontinence can also be alleviated with pelvic muscle reeducation, bladder training, anticholinergic medications and even artificial sphincter surgery.

Erectile dysfunction

For men who are bothered by sexual dysfunction, the first step should be a consultation with an urologist who specializes in male sexual dysfunction.

Men also go through the feeling of ‘lack of manliness’, oftentimes increasing their distress or frustration over the loss of erections. Sex therapy with a trained therapist along with psychological help can help a man express and manage the feelings caused by this dysfunction.

Making lifestyle changes

Living with prostate cancer can be challenging. You can live for a long time. You might even be able to cure it if you get treatment in time. It is essential to maintain a healthy lifestyle.

Keep yourself up-to-date. Enquire with your doctor about the chance of cancer returning or worsening. Also, look out for signs and symptoms of cancer.

Keep yourself updated about your health status. Inquire with your doctor about the risk of cancer returning. Look out for signs and symptoms of recurrence of cancer.

Continue to take follow-up care. Take up the tests recommended by your doctor and attend all of your medical appointments.

Exercise regularly. Exercise provides several advantages and is essential for good health.

Get a good night’s sleep and manage stress by meditation and mind relaxing exercises.

Ensuring diet modifications

Consume nutritious foods. Increase frequency and portion sizes of fruits and vegetables.

Eat whole grains and avoid processed grains and white flour. Add more fiber to your diet.

Avoid high-fat dairy products and processed meats like bacon, sausage, and baloney.

Getting emotional support

Cancer is a huge change in anyone’s life. Feelings of worry, anxiety and depression are normal when prostate cancer is a part of your life. Work on adapting to the new normal. Work on your masculine identity conflicts. Accept that you can’t do everything like before. Allow your body to adapt with time. Take the help of a psychologist or counselor to deal with self-esteem issues. Take support from other people, whether friends and family, support groups, or others.

Frequently Asked Questions

When should I test for prostate cancer?

Which doctor will diagnose prostate cancer?

What is the best treatment for prostate cancer?

What are the side effects of cancer treatment?

Is radiation therapy an option for me?

How much will my cancer progress without treatment?

Is drinking alcohol a risk for prostate cancer?

Is prostate cancer curable?

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Prostatitis

Also known as Prostate infection and Prostate inflammation

Overview

Prostatitis is a urological condition which causes inflammation of the prostate gland. The prostate is the part of the male reproductive system which aids in the production of sperm-containing fluid, known as semen. The prostate is located below the urinary bladder and surrounds the most upstream region of the urethra.

Prostatitis includes four categories depending on its origin, namely, acute bacterial infection, chronic bacterial infection, chronic pelvic pain with and without signs of inflammation, and asymptomatic prostatitis.

Prostatitis is considered the most common urological disorder in men younger than 50 years. It has a prevalence of 14.2% and tends to increase with age.

The signs and symptoms of prostatitis and the recommended treatment vary depending on the cause and type of prostatitis. If left untreated, it can lead to complications such as prostatic abscess, pyelonephritis, renal damage, and sepsis.

Key Facts

Usually seen in

Individuals above 50 years of age

Gender affected

Men

Body part(s) involved

Prostate gland

Mimicking Conditions

Prostate cancer

Benign prostatic hyperplasia

Cystitis

Urolithiasis

Necessary health tests/imaging

Urinalysis

Urine culture and sensitivity

STI testing

Complete blood count (CBC)

Digital rectal exam

Prostate-specific antigen

CT scan

2-glass and 4-glass tests

Urine flow studies (urodynamics)

Transrectal ultrasound

Cystoscopy

Treatment

Antibiotics: Tetracycline, Ciprofloxacin & Azithromycin

Alpha-blockers: Tamsulosin & Alfuzosin

Anti-inflammatory agents: Aspirin & Ibuprofen

Other treatments: Prostatic massages, Pelvic floor physical therapy & Mental health therapy

Surgery

Specialists to consult

Urologist

General surgeon

Symptoms Of Prostatitis

The term 'prostatitis' is used to describe four different conditions that affect the prostate gland. Only two of these are related to urinary tract infections (UTIs).

The signs and symptoms of prostatitis vary depending on the cause. Moreover, many symptoms of prostatitis are common to those of other conditions. Based on the type of prostatitis, the symptoms which a person may experience are:

Type 1: Acute bacterial infection or acute bacterial prostatitis (ABP)

Type 1 prostatitis is an acute bacterial infection. Its signs & symptoms have an abrupt onset and it is caused by an ascending urinary tract infection. This means that the bacteria which cause the urinary tract infection travels up the urethra and infect the surrounding areas, including the prostate gland.

The symptoms of type 1 prostatitis include:

Fever

Myalgia (muscle pain)

Malaise (generalized feeling of being unwell)

Lower urinary tract symptoms (LUTS) like urgency, frequency, and dysuria (burning sensation)

Nocturia (frequent urination during periods of sleep)

Nausea and vomiting

Pain, which may be severe, in or around your penis, testicles, anus, lower abdomen or lower back – pooing can be painful

Pain when peeing, needing to pee frequently (particularly at night), problems starting or "stop-start" peeing, an urgent need to pee and, sometimes, blood in your urine

Lower back pain and pain on ejaculation

Type 2: Chronic bacterial infection or chronic bacterial prostatitis (CBP)

The symptoms of type 2 prostatitis or CBP are similar to ABP (type 1), except the symptoms are chronic, recurrent, and less severe. It is caused by a bacterial infection, specifically by recurrent urinary tract infections and previous ABP. Often, if type 1 prostatitis is not appropriately treated, it develops into type 2 prostatitis.

In this condition, the bacteria may form a biofilm that helps them adhere to tissues of the prostate gland. This gelatinous film also protects the bacteria from antibiotics and immune system attacks.

The symptoms of type 2 prostatitis include:

Pain during and after ejaculation

Sexual dysfunction

Infertility

A weak or an interrupted urine stream

Urinary blockage

An enlarged or tender prostate on rectal examination

Sexual problems such as erectile dysfunction or pelvic pain after sex

Type 3: Chronic sterile inflammation/chronic pelvic pain syndrome

Type 3 prostatitis is the most common prostatitis. It is called sterile prostatitis because it is not caused by bacterial infection, and so it does not have type 1 and type 2 symptoms like increased urgency and frequency of urination.

Chronic sterile inflammation is caused by the obstruction of the urinary bladder outlet or by reflux of urine within the prostate gland due to enlarged prostate or some stone in the way.

Symptoms are similar to type 2 prostatitis but also include:

Chronic pelvic pain may affect the penis, scrotum, and perineum areas

Urinary retention

Difficulty in passing urine

A weak or an interrupted urine stream

Type 4: Asymptomatic inflammatory prostatitis

Type 4 prostatitis is asymptomatic, i.e., it has no condition indicating symptoms. There may be some mild inflammation within the prostate gland.

Here are a few common causes of frequent urination and why you should not ignore this symptom.

Read Here!

Causes Of Prostatitis

Prostatitis is more often caused by a bacterial infection resulting from a UTI or procedures like catheter insertion, prostate biopsy, or other urological intervention.

Bacterial prostatitis is generally more difficult to treat than a simple urinary tract infection and often requires a prolonged course of antibiotics.

In certain cases, the underlying cause of prostatitis may not be found, and it may be a reflection of inflammatory changes around the nerves causing pain arising from the pelvis.

In such a situation, treatment often requires a more multidisciplinary approach involving physicians, urologists, and microbiologists, who try to understand the individual’s condition in-depth and ensure that it's adequately treated.

The common cause for bacterial or nonbacterial prostatitis are:

Inflammation of the genitourinary system

Chronic pelvic floor tension

Muscle dysfunction

Autoimmune diseases

Pelvic floor muscle spasms

Stress

Bladder infections or bladder stones

Surgery or biopsy requiring the use of a urinary catheter

Prostate stones

Urinary retention (not emptying the bladder)

Urinary tract infections (UTIs)

Sexually transmitted infection (STI)

Another problem that could occur in the prostate is prostate enlargement, which is:

Most often non-cancerous (also referred to as benign prostatic hyperplasia or BPH)

In some patients, enlargement of the prostate is cancerous (prostate cancer)

Likely related to hormonal changes in testosterone and estrogen levels.

Benign prostatic hyperplasia or BPH is the most common form of an enlarged prostate. The prevalence of BPH increases with:

Increasing age, on an estimate 50 to 60% of male patients in their 60s are affected by BPH, and these rates increase as the patient gets older.

There is an increased risk in individuals with metabolic syndrome and obesity.

BPH is a medical condition that commonly occurs in older men. Read more about its causes, symptoms and treatment.

Click Here!

Risk Factors For Prostatitis

The prostate is around the size of a walnut and is located near the base of the penis. It encircles the urethra (the tube that urine comes from).

For unknown causes, the prostate continues to get larger as a man ages, which is the source of urinary problems that affect half of the men by the age of 60 and practically all men by the age of 80.

The exact cause of prostatitis isn’t confined to one thing, but the following are some more risk factors for the development of prostatitis:

Having experienced prostatitis in the past

Having had a recent bladder infection

Infections of the bladder or the tube that carries sperm and urine to the penis (urethra)

Having pelvic trauma, such as a bike or horseback riding accident

Using the tube inserted into the urethra to empty the bladder (urinary catheter)

Infection with HIV/AIDS

Enlarged prostate gland

Having undergone a prostate biopsy

Eating a lot of spicy, marinated food

Injury to the lower pelvis (often as a result of cycling, lifting weights, etc.)

Did you know?

COVID-19 has been recognised as a risk factor for prostatitis. However, more research is required to prove this relationship. Perhaps in the coming years, the real effect of the coronavirus on prostatitis cases will be evaluated and factors that cause the disease will be expanded. Read more about COVID-19.

Tap To Read!

Diagnosis Of Prostatitis

The symptoms will be examined, and a physical exam will be performed by your healthcare professional to rule out the presence of prostatitis.

Less invasive prostatitis testing may include:

1. Urinalysis: A urinalysis and urine culture are performed to look for bacteria and UTIs.

2. Urine culture and sensitivity: Finds which bacteria is causing the infection and the best medicine to treat it.

3. Sexually transmitted infections testing: Some STIs can be confirmed with a urine sample.

4. Complete blood count (CBC): A blood test detects PSA, a protein produced by the prostate gland. High levels may suggest prostatitis, BPH, or prostate cancer.

5. Digital rectal exam: Your doctor inserts a gloved, lubricated finger into the rectum to assess discomfort and inflammation in the prostate gland. This examination may include a prostate massage to get a sample of seminal fluid.

6. Prostate-specific antigen (PSA): The PSA test determines the level of prostate-specific antigen (PSA) in your blood. PSA is a protein made by the prostate gland. High PSA levels indicate prostatitis.

7. CT imaging to assess prostatic abscesses: If the patient is immunocompromised, the doctor may request a CT scan of the urinary system and prostate and a prostate ultrasonography. CT scan pictures reveal more than standard X-rays. The visual image created by ultrasound is known as a sonogram.

8. 2-glass and 4-glass tests: The 2-glass pre-massage and post-massage test and the Meares-Stamey 4-glass test are done to detect and identify pathogens causing chronic prostatitis/chronic pelvic pain syndrome.

9. Urine flow studies (urodynamics): Your urologist may also order urine flow studies or urodynamics. These help measure the strength of your urine flow. These tests also spot any blockage caused by the prostate, urethra, or pelvic muscles.

10. Transrectal ultrasound: Examine for abnormalities in the rectum and surrounding tissues, particularly the prostate. Also known as endorectal ultrasound (ERUS) and transrectal ultrasound (TRUS). An ultrasound probe is inserted into the rectum to examine the prostate.

11. Cystoscopy: A cystoscopy can detect various urinary tract issues but cannot confirm prostatitis. To examine within the bladder and urethra, your physician will use a cystoscope (a pencil-sized lighted tube with a camera at its end).

Prevention Of Prostatitis

Prostatitis is a harmless condition (not cancerous). It does not raise your chances of developing prostate cancer. However, prostatitis-induced inflammation raises the level of prostate-specific antigens (PSA) in the blood, precisely as prostate cancer does. Additional testing can be used to discover what is causing the increased PSA levels.

Prostatitis is a condition that doctors aren't always clear about. The most common causes vary based on whether the condition is acute or chronic, infectious or inflammatory.

An infection in your urinary tract is sometimes to blame. Sometimes, it's because of an injury or nerve damage. In many situations, doctors are unable to discover the root problem.

As a result, treating prostatitis might be difficult. It might take months, if not years, for some patients to recover.

Maintain good hygiene: To avoid infection, keep your pelvic area and the surrounding around it clean.

Stand up when possible: Extended durations of sitting put pressure on your prostate gland, which can cause inflammation over time.

Move a lot: Make it a habit to exercise at least three times every week. Take regular walks, stretch, or go to the gym for a cardio class to get your blood flowing. Physical exercise can help lower anxiety, which has been related to some kinds of prostatitis.

Stay hydrated: Some kinds of prostatitis are caused by bacteria in the urinary tract that invades and infects the prostate gland. Drink plenty of fluids to keep urine diluted and the bladder flushed. If you have a medical condition such as chronic renal disease or congestive heart failure, consult your doctor to know about additional precautions you should follow.

Eat more fruits and green vegetables: Fruits and vegetables are high in nutrients to maintain health and fight infections and inflammation.

Limit or avoid caffeine and alcohol: Tea, coffee, carbonated drinks, and alcoholic beverages can irritate the urinary system and bladder.

Manage stress: Men who experience high stress levels at work or home are more prone to develop prostatitis. Consult with a doctor to manage your emotions. Meditation and relaxation to release the tension of the body and mind may also help.

Practice safe sex: Prostatitis can be caused by sexually transmitted infections (STIs). Bacterial infection can be caused by oral, vaginal, or anal intercourse with an infected partner without using a condom.

Maintain healthy body weight: Being obese puts pressure on the prostate gland. Try to lose weight by eating a good diet, being athletic, and getting adequate rest.

See your doctor: Consult with your doctor if you notice signs like increased urinary frequency or painful urination, constipation, or painful bowel movements. These are indicators of bad prostate health.

Urinary tract infections (UTIs) should be treated as soon as possible to prevent the infection from spreading to the prostate gland and preventing prostatitis. Consult the doctor if you get discomfort in your perineum (an area extending from behind the scrotum to the anus) when sitting. You can address this issue before it progresses to chronic pelvic pain syndrome.

Here’s more on who is the right expert to consult for male sexual and reproductive health problems.

Click To Know!

Specialist To Visit

The signs and symptoms of an enlarged prostate become increasingly noticeable with age. However, the degree of these symptoms does not always correspond to the severity of the prostate enlargement.

In reality, many men with severe prostate enlargement or prostatitis have relatively minor symptoms and vice versa. A doctor should be consulted as soon as the symptoms start showing.

Throughout prostatitis diagnosis, treatment, and follow-up care, you might deal with many specialists such as:

Urologist

General surgeon

Understanding what these physicians do will help you get the right treatment at the right time for your ailment. A visit to the urologist is perhaps the most usual next step when your general practitioner detects an abnormality. Urologists are the most probable surgeons to undertake prostate surgery in most places, although there may be no urologists accessible in some remote areas. In such cases, general surgeons can perform prostate surgery.

Consult India's best doctors here from the comfort of your home.

Consult Now!

Treatment Of Prostatitis

Treatment for prostatitis varies based on the cause and type. Treatment is not required for asymptomatic inflammatory prostatitis.

Your healthcare practitioner may use a method called UPOINT to categorize symptoms of chronic pelvic pain syndrome (CPPS) and may utilize many treatments at the same time to address only the symptoms you're experiencing.

With the UPOINT method, the condition of over 80% of males with CPPS has improved. The method is focused on these symptoms and treatments:

Urinary: Tamsulosin and alfuzosin are alpha blockers which relax the muscles around the prostate and bladder to increase urine flow.

Psychosocial: Stress/anxiety management can be beneficial. Counseling or medicine for anxiety, depression, and negative thinking can help some men.

Organ-specific: Quercetin may reduce prostate inflammation and may help to ease an inflamed prostate gland or prostatitis.

Infection-related: Antibiotics medicines help kill infection-causing bacteria.

Neurological: Prescription pain relievers such as amitriptyline, pregabalin, and gabapentin help treat neurogenic pain. This pain may involve fibromyalgia or pain that spreads into the legs, arms, or back.

Tenderness: Gentle massage to ease tension on tight pelvic floor muscles. This treatment can help to lessen or eliminate muscular spasms.

To treat acute & chronic bacterial prostatitis

Antibiotics like fluoroquinolones, macrolides & tetracyclines are recommended. The dose and duration of treatment depends on the type of prostatitis.

Surgical drainage of abscesses can also help in case of inflammation and ease the symptoms.

Alpha-blockers are also recommended as they help to relax the muscles around the prostate and the base of the bladder.

Anti-inflammatory agents are non-steroidal drugs to reduce pain from inflammation in the prostate or muscles. These are pain medicines (aspirin, ibuprofen, etc.) and muscle relaxers.

Other treatments

You may also require one of the following therapies at some point:

Urinary catheter: If you cannot urinate, a nurse may help empty your bladder by inserting a flexible tube into your urethra (the tube that takes urine from your body).

Prostate massage: This helps remove fluid from your prostate ducts (tubes). Getting it done twice or three times a week may be beneficial. Frequent ejaculation (the release of semen during orgasm) may help just as much.

Pelvic floor physical therapy: Prostatitis can be linked to problems with your pelvic floor muscles. Pelvic floor physical therapy is a way to learn how to relax certain muscles in your pelvis. It is done with an expert to help you lessen tension in your pelvic floor muscles. These aid with sexual function and support your bladder and intestines.

Mental health therapy: Stress, depression, and a sense of helplessness may all play a role in some kinds of prostatitis. Speak with your mental health professional. They can teach you how to regulate your negative thoughts and therefore feel better. If your prostatitis disturbs your mood and you feel down, sad, or worried, your doctor may recommend antidepressant medication or send you to a counselor. Joining a support group and conversing with other people who have prostatitis might also improve your mood.

Treatments for sexual dysfunction: Speak with your doctor if your prostatitis creates issues in your sex life, such as trouble getting or maintaining an erection. There is help available, as well as ideas to try that may work well. Your doctor may, for example, prescribe sildenafil or tadalafil.

Home-care For Prostatitis

Natural home remedies for prostatitis, in addition to medical therapy, to relieve some of the symptoms of prostatitis at home are:

Soak in a warm bath (sitz bath) or apply a heating pad to your body.

Avoid or limit alcohol, caffeine, spicy or acidic meals, and other items that might upset your bladder.

Prolonged sitting or biking are two activities that might aggravate your prostate.

Consuming a lot of caffeine-free drinks will make you urinate more frequently, which will aid in the removal of germs from your bladder.

Prostate massage has been demonstrated in a few trials to ease the symptoms in certain people with chronic nonbacterial prostatitis.

Here are 7 superfoods good for maintaining prostate health.

Read Now!

Complications Of Prostatitis

Prostatitis complications can include:

Bacterial infection of the blood (bacteremia)

Inflammation of the coiled tube connecting to the back of the testicle (epididymitis)

Prostate cavity filled with pus (prostatic abscess)

Infertility and sperm abnormalities can arise as a result of chronic prostatitis

Pyelonephritis (UTI where one or kidneys get infected)

Renal damage

Sepsis (spread of bacteria through the bloodstream)

Bladder outlet obstruction/urinary retention

There is no concrete evidence that prostatitis can lead to prostate cancer. Whether chronic inflammation of the prostate can lead to cancer is still under research.

Alternative Therapies For Prostatitis

Many men find that complementary treatments help them manage their symptoms and the day-to-day effect of prostatitis, giving them a sense of control. Some men report feeling more comfortable and confident in themselves and their treatment.

Complementary therapies are typically utilized in addition to, rather than in place of, medical treatments. Some complementary remedies have adverse effects, while others may interfere with your therapy for prostatitis. Inform your doctor or urologist about any complementary therapies you are receiving or considering using.

Here are some alternative treatments that have shown some potential in decreasing prostatitis symptoms include:

Biofeedback: A biofeedback professional utilizes signals from monitoring equipment to teach you how to manage specific body functions and responses such as muscular relaxation.

Acupuncture: This procedure entails putting extremely small needles into your skin at varying depths at various places on your body.

Herbal remedies and supplements: Some herbal therapies for prostatitis include ryegrass (cernilton), a substance found in green tea, onions, and other plants (quercetin), and saw palmetto plant extract. However, these lack any scientific backing whether they improve prostatitis or not.

Living With Prostatitis

Prostatitis is accompanied by pain which might make you feel uncomfortable and make you want to do nothing. Some of the following suggestions may be useful to you. They may make you feel more at ease and in control of your pain. Follow these tips to live at ease with prostatitis:

Find methods to relax: Stress or anxiety can trigger a flare-up or worsen symptoms. If this is an issue for you, try these relaxation techniques to help you feel more in control such as deep breathing or meditation, having a warm bath, or listening to music are all options.

Divert your attention: Take a break from the pain by listening to music, reading, watching T.V, or speaking with somebody. This may appear to be a simple solution, yet it may be quite beneficial.

Watch what you consume: Consume plenty of fluids - 6 to 8 glasses of water every day. Reduce your intake of carbonated drinks, artificial sweeteners, alcohol, and caffeine-containing beverages (tea, coffee, and cola), since these might irritate the bladder and aggravate some urinary disorders. There is some evidence that spicy meals might aggravate the symptoms of chronic pelvic pain syndrome (CPPS).

Avoid cycling: Cycling, for example, is a good example of an activity that puts pressure on the region between your back passage and testicles (perineum). But they have the potential to exacerbate symptoms. If you want to keep cycling, you may try a different saddle, such as a gel saddle.

Keep a journal: This might help you identify items that aggravate your symptoms and can be a great approach to show your doctor what you're going through. Keep track of everything you eat and drink, how much you exercise, how stressed you are, and your symptoms.

Frequently Asked Questions

What should you not do with prostatitis?

Can prostatitis cause erectile dysfunction?

How long does it take for prostatitis to clear up?

Is prostatitis serious?

What is the best thing to drink for your prostate?

Can prostatitis be mistaken for cancer?

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Psoriasis

Overview

Psoriasis is a chronic, noncommunicable and debilitating disease. It can occur at any age, but is most common in the age group 50 to 69. The etiology of psoriasis is not clear, though autoimmunity and genetic predisposition are thought to be the main causative factors. Psoriasis can also be provoked by triggers, like trauma, throat infections, sunburn, certain medications, stress etc.

Psoriasis mostly involves the skin and nails. Skin lesions are localized or generalized, raised red plaques which are usually covered with white or silver scales. Lesions can also cause itching and pain. Some patients also develop psoriatic arthritis that leads to joint pain. It can also cause inflammation in the eyes, heart, kidneys, and lungs.

Treatment of psoriasis is based on managing the symptoms. Topical and systemic therapies and phototherapy or a combination of these methods are generally used. The need for treatment is usually lifelong and is aimed at long phases of remission.

Psoriasis causes physical and emotional burden and adversely affects quality of life. Social exclusion and stigma are challenging for people suffering from psoriasis and their families. It is not psoriasis that causes the exclusion, it is largely the people’s wrong perception that the disease is contagious, which needs to change.

Key Facts

Usually seen in

Adults between 50 to 69 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Skin

Joints

Scalp

Nails

Eyes

Heart

Lungs

Kidneys

Prevalence

Worldwide: 100 million (2016)

Mimicking Conditions

Eczema

Seborrhoeic dermatitis

Pityriasis rosea

Mycosis fungoides

Secondary syphilis

Necessary health tests/imaging

Blood tests

Skin biopsy

Treatment

Corticosteroids

Retinoic Acid

Calcineurin inhibitors: Tacrolimus, Pimecrolimus

Salicylic Acid

Light therapy

Methotrexate

Retinoids

Ciclosporin

Steroids: Triamcinolone

Thioguanine

Hydroxyurea

See All

Causes Of Psoriasis

While researchers do not know the exact cause of psoriasis, the immune system and genetics are found to be the key factors. The immune system normally attacks disease causing germs, but in psoriasis, like any other autoimmune disease, it begins to attack healthy cells as well. Normally, the skin cells completely grow and shed in about 30 days, however, in psoriasis, this happens in 3 to 4 days. Instead of falling off the skin cells accumulate on the surface of the skin. Genetic factors are also found to influence the type of psoriasis and its response to treatment.

Types Of Psoriasis

1. Plaque psoriasis

Also called psoriasis vulgaris, plaque psoriasis is the most common type of psoriasis. It causes thick, raised and discolored patches or plaques with a silvery scaly buildup on the skin. These plaques can be itchy and sometimes painful. They sometimes tend to crack and bleed as well. The characteristic feature of this type of psoriasis is smaller plaques joining to become larger plaques. These plaques mostly occur on the elbows, knees, lower back and scalp.

2. Guttate psoriasis

Mostly beginning in childhood or teenage years, guttate psoriasis is the second most common type of psoriasis. The word guttate comes from the Latin word "gutta," meaning drop. The lesions appear as tiny pink colored bumps on the skin that usually appear suddenly. It is mostly linked with a recent streptococcal infection. It can affect the legs, arms and torso and in some cases, can develop on the scalp, face as well as ears. Guttate psoriasis usually clears out in a few weeks or months without any treatment and may never return. Rarely, it may resolve and reappear later as patches of plaque psoriasis.

3. Inverse psoriasis

Inverse psoriasis is also known as intertriginous psoriasis or flexural psoriasis as it mostly appears in the skin folds such as armpits, area under the breasts, genitals and buttocks. It is more common in obese people or those with deep skin folds. Inverse psoriasis is characterised by smooth, raw-looking patches which are sore & painful in nature. It is also possible for people with inverse psoriasis to have another type of psoriasis on other body parts at the same time.

4. Pustular psoriasis

Pustular psoriasis is a rare type of psoriasis characterised by red swollen skin with pus-filled bumps. The pus is made of white blood cells. This type of psoriasis usually appears on the feet and hands. This is the reason why it may also make it difficult or painful for you to walk or do any activities that involve your hands or legs. In rare cases, these pus-filled bumps can become widespread and cover the whole body along with other symptoms like malaise, fever, chills, severe itching, rapid pulse, and bodyache. These bumps appear as brown dots after drying up.

5. Erythrodermic psoriasis

This type of psoriasis leads to burnt skin appearance that causes severe itching along with fever, chills, and muscle weakness. Although this condition is very rare, it can be very serious and life-threatening that requires urgent medical attention.

6. Nail psoriasis

As the name suggests, it affects the nails that include both fingernails and toenails. It causes tiny dents (nails pits) in the nails, discoloration (white/yellow) of the nails,and rough nails. It also causes buildup of skin cells beneath one or more nails, which lifts up the nail.

7. Psoriatic arthritis

When psoriasis affects the joints, it is known as psoriatic arthritis. It may lead to swollen and tender joints (especially in a finger or toe), heel pain, swelling on the back of your legs, and stiffness of the joints (especially in the morning which usually wears off during the course of the day). Disease can be grave enough to permanently damage the affected joints. Psoriatic arthritis is a systemic rheumatic disease that can not only cause inflammation of the skin and joints, but also in the eyes, heart, kidneys, and lungs.

Did you know?

Psoriasis can occur in children as well. Most people are of the view that psoriasis occurs only in adults, but it is not true. According to the American National Psoriasis Foundation, approximately 20,000 children under the age of 10 are diagnosed with the condition every year. Here are a few common myths on psoriasis.

Check Out Now!

Symptoms Of Psoriasis

Some of the common symptoms include:

Small or large raised, inflamed patches of skin that appear pink or red on light skin and brown or purple on dark skin

Presence of flaky skin with whitish-silver or gray scales

Dry skin that may crack, peel or bleed

Burning, itching, or soreness near the patches

Presence of pus filled boils (pustular psoriasis)

The patches may be symmetrical (guttate psoriasis) and are generally seen over large joints

Thickened, pitted or ridged nails

Painful, swollen joints

Rarely, the entire body may have redness and scaling, associated with fever and other symptoms.

Not every patient will experience all of the symptoms. Symptoms usually depend on the type of psoriasis. Many patients with psoriasis go through rhythmic cycles of symptoms. Severe symptoms might be seen for a few days or weeks, and then during the phase of remission the symptoms may disappear for some time. Later, in a few weeks or due to exposure to some trigger, the symptoms may flare up again. However, the duration of both flare ups and remission is difficult to predict.

Risk Factors For Psoriasis

Psoriasis is commonly associated with several risk factors and triggers such as:

Stress

Anxiety and depression

Smoking

Alcoholism

Obesity

An injury, cut, scrape or sunburn on the skin

Infection, such as streptococcal throat infection

Certain medicines, such as interferon, antimalarials, nonsteroidal anti-inflammatories lithium or beta-blockers

Stopping oral corticosteroids or strong topical steroids

Cold weather, where people have less exposure to sunlight and humidity and stay in hot, dry indoor air.

Hormonal changes

Immune response of an individual or immune disorders such as AIDS

Diagnosis Of Psoriasis

The diagnosis of psoriasis includes physical examination, blood tests and skin biopsy.

1. Physical examination

Your doctor may examine your skin, nails, and scalp to check for the presence of lesions and flakes characteristic of psoriasis.

2. Blood tests

There are no blood tests or imaging studies that can aid in the diagnosis of psoriasis. However, if your doctor suspects psoriatic arthritis or if you have symptoms of psoriatic arthritis, such as swollen and painful joints, you might be asked to undergo blood tests such as erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels.

3. Skin biopsy

A skin biopsy, in which a skin lesion is removed from the affected area and sent for microscopic examination, to determine the exact type of psoriasis and to rule out other skin disorders. It is a painless procedure done on an OPD basis.

4. Psoriasis area and severity index (PASI)

Additionally, psoriasis area and severity index (PASI) might be recommended. This is the gold standard for assessing the severity of psoriasis. It combines the assessment of the severity of lesions and the extent of the affected area in a single index score.

Did you know?

Psoriasis is NOT a cosmetic problem. Psoriasis is a chronic autoimmune disease that speeds up the life cycle of skin cells forming raised inflamed patches and scaly lesions, a tell-a-tale symptom of psoriasis. It can affect joints and other body parts as well. It is advised to seek professional help to get the disease diagnosed and treated at the earliest.

Consult Now!

Prevention Of Psoriasis

As the exact cause of psoriasis is not fully known, the prevention of this skin problem is aimed at controlling the risk factors. These include:

Boosting your immunity and lowering your risk of infections

Keeping your skin hydrated by drinking loads of fluids

Keeping skin moisturised especially those who have extremely dry skin

Avoiding sun bathing and extremely cold conditions

Managing stress and anxiety

Quitting smoking and avoiding heavy alcohol consumption

Talk to your doctor when taking lithium, high blood pressure medications, steroids etc.

Specialist To Visit

The symptoms of many skin conditions are similar, which makes it difficult to diagnose the root cause of the disease. This is why if you have the early symptoms of psoriasis such as redness and itching of the skin which are similar to that of eczema or atopic dermatitis, then consult a doctor.

Although most people tend to go to a general practitioner (family doctor) to diagnose and get treated, the specialists who can also help in the diagnosis and treatment include are

Dermatologist

Immunologist

You may also like to read about how to choose your skin specialist.

Read More!

Treatment Of Psoriasis

The treatment is aimed at:

Stopping the skin cells from growing quickly

Removing scales and softening the skin

Creams and ointments are used for mild to moderate psoriasis. In more advanced stages of the disease, topical creams are combined with injectable medicines, oral medicines and light therapy (phototherapy).

1. Topical medications

Corticosteroids are the most frequently prescribed medications for treating mild to moderate psoriasis. Topical medications are available as ointments, creams, lotions, gels, foams, sprays and shampoos. Topical corticosteroids might be applied once a day during flares, and on alternate days or weekends only to maintain remission.

Retinoic acid is available as a gel and cream and applied once or twice daily. The most common side effects are skin irritation and increased sensitivity to light. These are not recommended when you're pregnant or breast-feeding.

Calcineurin inhibitors such as tacrolimus and pimecrolimus reduce inflammation and plaque buildup. They can be helpful in areas of thin skin, such as around the eyes, where steroid creams or retinoids are too irritating or may cause harmful effects.

Other topical medications used are salicylic acid and coal tar. Salicylic acid is used to get rid of dead skin cells while coal tar works by reducing inflammation and scaling.

2. Light therapy

This psoriasis treatment uses natural or artificial ultraviolet light. It involves exposing your skin to controlled amounts of natural sunlight. Other forms of light therapy include the use of artificial ultraviolet A (UVA) or ultraviolet B (UVB) light either alone or in combination with medications. Ultraviolet (UV) light, which is found in sunlight, slows the rapid growth of skin cells.

3. Oral and injectable medications

When psoriasis becomes severe, the doctor may prescribe oral or injected drugs. These include:

Methotrexate: Usually administered weekly as a single oral dose, methotrexate decreases the production of skin cells and suppresses inflammation. People taking methotrexate long term need ongoing testing to monitor their blood counts and liver function. Men and women should stop taking methotrexate at least three months before attempting to conceive. This drug is not recommended when you're breast-feeding.

Retinoids: Retinoids are pills used to reduce the production of skin cells. These are not recommended when you're pregnant or breast-feeding.

Ciclosporin: It treats psoriasis by suppressing the immune system. Cyclosporin increases your risk of infection and cancer. People taking cyclosporine need ongoing monitoring of their blood pressure and kidney function. These drugs are not recommended when you're pregnant or breast-feeding.

Steroids: Injection of steroids such as triamcinolone are given right into the lesions if the psoriatic patches are persistent.

Other medications: Thioguanine and hydroxyurea are medications that can be used when other drugs can't be given.

In severe cases, surgical treatment may also be recommended.

Home-care For Psoriasis

Since psoriasis is a chronic disease, there are various measures that can be taken to keep the disease in control and to improve the quality of life. Here are some simple things that you can do:

1. Take bath daily

Having a bath daily helps to remove scales and also calms inflamed skin. You can add bath oil, colloidal oatmeal, Epsom salts or Dead Sea salts to the water and soak. Avoid hot water and harsh soaps and use lukewarm water and mild soaps.

2. Use a moisturizer

Make sure you apply a heavy, ointment-based moisturizer while your skin is still moist. For very dry skin, oils may be preferable. During cold, dry weather, you may need to apply a moisturizer several times a day.

3. Talk to your doctor about sun exposure

Exposing your skin to a controlled amount of sunlight can significantly improve lesions. But remember that too much of the sun can trigger or worsen outbreaks and increase the risk of skin cancer. Always consult your doctor for advice on sun exposure.

4. Use sunscreen

It is very important that you protect your healthy and unaffected skin from sun damage. Make sure that you apply sunscreen with an SPF of 30 and above and reapply every two hours.

5. Avoid alcohol

Since alcohol intake can worsen the symptoms, it is best to restrict your alcohol intake or give it up altogether.

Complications Of Psoriasis

People who are diagnosed with psoriasis can develop various complications such as psoriatic arthritis. This is a rheumatic disease leading to swollen joints and a loss of function in some joints.

Other complications include

Obesity

High blood pressure

Type 2 diabetes

Heart diseases

Metabolic syndrome

Inflammatory bowel disease

Eye problems like conjunctivitis, blepharitis, and uveitis

Other autoimmune diseases such as celiac disease, sclerosis and Crohn's disease

Cancer like lung and skin cancer

People with psoriasis also go through discrimination, self-image issues and low self confidence. Along with discomfort and pain of psoriasis, these issues can lead to anxiety and depression.

Alternative Therapies For Psoriasis

Home remedies

You can try natural remedies to help in keeping your psoriasis in control. However it is always advisable to consult your doctor before trying any home remedies for psoriasis. Some of the remedies include:

Aloe vera is known to provide relief from the symptoms of psoriasis when applied externally as well as when consumed internally.

Epsom salts/ Dead sea salts have been found to alleviate itching and burning. Add dead sea salt to warm water and soak for about 15 minutes.

Vinegar, a strong disinfectant, helps in relieving scalp itch. Dilute vinegar with water in 1:1 ratio and apply on the affected regions.

Turmeric (in the form of supplement or sprinkled on the food) has been found to be effective in controlling the flare-up of the disease.

Homeopathy

Homeopathy is a safe and reliable method of treatment for Psoriasis. It uses natural medicine, which is free from side-effects, and a majority of cases can be treated with these remedies.

1. Arsenic album

It is indicated for silver scales in people with psoriasis. The chief indicator for using arsenic album is the presence of dry, rough, red papular eruptions with scales on it. The eruptions cover most parts of the body, except face and hands. Arsenic album also works well in cases of guttate psoriasis (a type of psoriasis that shows up on your skin as red, scaly, small, teardrop-shaped spots).

2. Graphites naturalis

Graphites naturalis is useful for scalp psoriasis and cracked skin. In such cases, eruptions with scales appear on the scalp. Cases where graphites naturalis works well tend to have patches of sore, dry, rough skin with scales.

Arsenic iodatum: Arsenic Iodatum is used when there is shedding of large scales from the skin eruptions.

Sulphur: Sulphur helps in cases with severe itching and burning in the psoriatic skin lesions. Sulphur is also a remedy for skin ailments with a history of excessive use of ointments in the past.

Petroleum oleum: Petroleum oleum is a very suitable remedy for psoriasis where deep cracks appear on the skin.

Merc sol: Merc Sol is a medicine for Psoriasis of the scalp.In typical cases, the scalp is covered with abundant white scales. The base underneath the scales is raw.

Sepia succus: Sepia Succus is a beneficial medicine for psoriasis characterised by the presence of big oval lesions on the skin. The lesions are reddish papules, the eruptions are present over the face, chest, back, arms and legs.

Living With Psoriasis

Here are some practical ways of managing psoriasis

1. Nourish your skin

Bathe with care. Do not use hot water or harsh soaps that will deprive your skin of natural oils.

Keep skin moist. Moisturize your skin well with essential oils, moisturizers and creams.

Wear sunscreen if you have to stay in the sun for a longer span. Sunburns may worsen the condition.

2. Eat healthy

Include anti-inflammatory foods in your diet. These include foods rich in omega 3 fatty acids such as fish, flax seeds, walnuts, chia seeds, soy beans.

Add colorful veggies and fruits such as spinach, carrots, bell peppers and blueberries to reduce inflammation.

Avoid foods such as red meat, processed foods, fatty foods, milk products and foods that are a rich source of arachidonic acids.

Here’s more on foods that can be helpful in psoriasis.

Read Here!

3. Talk to your doctor about sun exposure

Exposing your skin to a controlled amount of sunlight can significantly improve lesions.

But remember that too much sun can trigger or worsen outbreaks and increase the risk of skin cancer.

Always consult your doctor for advice on sun exposure.

4. Tackle triggers

Try and figure out your triggers and then take steps to minimize their occurrence. For example if smoking is causing the flare ups, consider quitting it, if sun exposure makes your lesions worse avoid going out during peak hours or wear protective clothing .

Since alcohol intake can worsen the symptoms, it is best to restrict your alcohol intake, or give it up altogether.

5. Stick to your treatment plan

It is important to stick to your medications that have been prescribed by your doctor. These include topical medicines, light therapy (phototherapy) and oral and injectable medications.

6. Manage stress

Psoriasis can take a toll on your mental well being, making you prone to stress, anxiety and even depression.

Take out time each day to practice yoga or meditation for 10-15 minutes.

You could also do some deep breathing exercises to help relieve your stress

You could join yoga classes or practice some simple yoga postures at home.

These therapies have a positive influence on coping with psoriasis.

Myth: Summer is the ONLY season that causes flaring-up of psoriasis.

Fact: The hot and humid climate during summers can worsen the symptoms, however, dry weather in winters can make things worse. The cold winds, low humidity, wet weather, and less sunlight can make the skin dry and itchy, causing the symptoms to flare-up. So take care of your skin irrespective of the season with our skincare range.

Explore Now

Frequently Asked Questions

Is psoriasis contagious?

What's the difference between eczema and psoriasis?

Can psoriasis be cured?

Can psoriasis be prevented?

Is psoriasis an inherited disease?

Does psoriasis only cause skin-related problems?

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Pulmonary embolism

Also known as Lung blood clot, and Embolus

Overview

A pulmonary embolism is a blood clot that blocks and stops blood flow to an artery in the lung. In most cases, the blood clot starts in a deep vein in the leg and travels to the lung. It can damage parts of the lungs due to restricted blood flow and decreased oxygen levels in the blood.

The most common symptoms of PE include chest pain, irregular heartbeat, weak pulse, palpitations (heart racing), sweating, and low blood pressure. It is generally seen in older individuals and men are more commonly affected by men. The risk factors for pulmonary embolism include genetic conditions that increase the risk of blood clot formation, family history, older age, obesity, cigarette smoking, and obesity.

The treatment of PE depends on the size and severity of the symptoms. If the problem is small, the doctor may recommend medication. But, in a few cases, minimally invasive procedures or surgery may be necessary. Following a healthy lifestyle, quitting smoking, and doing daily physical activity can decrease the risk of developing pulmonary embolism.

Key Facts

Usually seen in

Individuals after 60 to 70 years of age.

Gender affected

Both men and women, but more common in women

Body part(s) involved

Lungs

Prevalence

World: 10 million (2019)

Mimicking Conditions

Acute coronary syndrome

Stable angina

Acute pericarditis

Congestive heart failure

Malignancy

Cardiac arrhythmias

Pneumonia

Pneumonitis

Pneumothorax

Vasovagal syncope

Necessary health tests/imaging

Imaging tests: Computed Tomographic Pulmonary Angiography (CTPA), Ventilation-perfusion scan (V/Q scan), Electrocardiogram (EKG, & Pulmonary angiogram

Lab tests: Arterial blood gas (ABG) analysis & Brain natriuretic peptide (BNP).

Treatment

Medications: Heparin and Fondaparinux

Reperfusion strategies: Catheter-directed treatment, Vena cava filter, thrombolytic therapy, and Pulmonary embolectomy

Compression stockings

Supportive treatment

See All

Symptoms Of Pulmonary Embolism

The symptoms may vary depending on the size of the clots, involvement of the lungs, and depending upon underlying medical conditions. The following are the most common symptoms of pulmonary embolism (PE):

Shortness of breath

Chest pain

Rapid or irregular heartbeat

Sweating

Pain or swelling in the leg

Anxiety

Low blood pressure

Coughing blood

Palpitations

Cold clammy and discolored skin (cyanosis)

Lightheadedness

Fainting

Wheezing

Chest pain is the most common symptom of pulmonary embolism. It is a sharp, stabbing, and aching pain that is difficult to manage an individual facing.

Learn about first aid for chest pain.

Click Here

Types Of Pulmonary Embolism

Pulmonary embolism can be classified as follows:

1. Acute pulmonary embolism

An acute pulmonary embolism, or embolus, is a blockage of an artery in the lung. It develops due to the formation of blood clots in the legs or another part of the body (deep vein thrombosis) that travels to the lungs.

2. Chronic pulmonary embolism

This type is characterized by blockage of the pulmonary arteries that occurs when prior clots in the vessels do not dissolve over time. This can also happen despite treatment of an acute PE, or as a result of an undetected acute PE.

Causes Of Pulmonary Embolism

PE occurs when a blood clot gets stuck in an artery in the lungs, blocking blood flow. These blood clots most commonly come from the deep veins of your legs, a condition known as deep vein thrombosis. In most cases, multiple clothes can block a significant portion of the lungs leading to pulmonary infarction (where the portion does not get enough blood and dies). This makes it more difficult for your lungs to provide oxygen to the rest of your body.

Risk Factors For Pulmonary Embolism

Any individual can develop blood clots, which lead to pulmonary embolism. Certain factors that increase the risk of the disease are:

1. Genetics

Individuals having parents or siblings with venous blood clots or pulmonary embolism are at the highest risk of developing this condition.

2. Inactivity

Blood clots are more likely to form during longer than usual periods of inactivity. Sitting at one place for a longer period can lead to slower blood flow in the legs causing blood clots leading to pulmonary embolism.

3. Medical conditions

Some medical conditions often increase the risk of pulmonary embolism. These include:

Cancer: Various types of cancers like brain, ovary, stomach, lung, and kidney cancers, can increase the risk of blood clots. People undergoing cancer treatment (chemotherapy) further increase the risk of forming blood clots.

Surgery: This is a significant cause of blood clot formation. In many surgeries, medicine is prescribed both before and after, to prevent blood clots.

Heart disease: Patients with cardiac disease, such as coronary artery disease, atrial fibrillation (AF), and heart failure (HF), display a higher risk for PE.

COVID-19: Individuals with severe symptoms of coronavirus, often display pulmonary embolism as one of the complications. The condition occurs when a blood clot formed in the legs travels through the bloodstream to the lungs.

Understand COVID-19 better

Click Here

4. Bone fractures

Sometimes in the case of a bone fracture, the fat particles from inside the bone can release into the bloodstream. In a few cases, blockages in the blood vessels are caused by substances other than blood clots, such as fat from the inside of a broken long bone, and air bubbles.

5. Mutations

Factor V Leiden is a genetic mutation that increases a person’s risk of forming blood clots. The most common complications of this mutation include DVT and PE. But, in many cases, people with this mutation may not develop a blood clot.

6. Other factors

Pregnancy: Women are at a higher risk for PE during pregnancy by five times when compared to nonpregnant women.

Smoking: It increases the activation of platelets by a hundred times, which can lead to a significant increase in blood clot formation.

Trying to get rid of this deadly habit?

Buy smoking cessation products now

Buy Now

Obesity: Being overweight or obese can increase the chances of blood clots and deep vein thrombosis. Weight gain changes lead to the thickness of the blood, making it harder to force through the veins and therefore increasing the risk of PE.

Know more about 6 other health risks of obesity.

Read this now

Diagnosis Of Pulmonary Embolism

Timely diagnosis of pulmonary embolism can prevent several major health complications. Diagnosis mainly consists of the following:

1. History and physical examination

A detailed family and medical history can help evaluate the risk factors for pulmonary embolism.

During the examination, patients with PE might have tachycardia (irregular heart rhythms), which is a common but nonspecific finding. Some of the other findings of PE include calf swelling, tenderness, redness, decreased breath sounds, and signs of pulmonary hypertension (which happens when the pressure in the blood vessels l from the heart to the lungs is too high) such as elevated neck veins.

2. Imaging tests

With physical and medical examination, a few imaging tests may be required to confirm pulmonary embolism. They include:

Computed tomographic pulmonary angiography (CTPA):.A CTPA is a CT scan that looks for blood clots in the lungs (mainly PE). A CT pulmonary angiogram takes pictures of the blood vessels that run from the heart to the lungs.

Chest radiograph (chest X-ray): This imaging test is used to assess the lungs and heart.

Ventilation-perfusion scan (V/Q scan): In this test, a small radioactive material is injected into the vein which helps in evaluating the movement of air into and out of the lungs along with the blood flow into the lungs.

Electrocardiogram (EKG): This is one of the simplest tests used for the evaluation of the heart. An EKG is recorded to detect the electrical activity of the heart to diagnose conditions of pulmonary embolism.

Duplex ultrasound (US): The duplex or doppler ultrasound test examines the blood flow in the major arteries and veins in the arms and legs to detect clots.

Magnetic resonance imaging (MRI): This test is a medical imaging technique that uses a magnetic field to create detailed images of the organs and tissues in your body. MRI has better sensitivity and specificity in detecting PE.

Pulmonary angiogram: A pulmonary angiogram is an imaging test to check the blood vessels of the lungs. The procedure is done with a special contrast dye administered into the blood vessels.

3. Lab tests

Arterial blood gas (ABG) analysis: ABG is a blood test that is used to indicate ventilation, gaseous exchange, and acid-base status. It is rarely used to diagnose PE.

Brain natriuretic peptide (BNP): This is a blood test that measures the levels of a protein called BNP that is made by the heart and blood vessels. In a few individuals, there have been elevated plasma BNP levels in acute pulmonary embolism (APE).

Get all the tests done in the comfort and safety of your home.

Book your tests now

Celebs affected

Brian Vickers

He is an American professional stock car and sports car racing driver. He got diagnosed with PE in the year 2010. At a very young age, he was out of breath on a bike ride, and by the next day, he was in pain with every single breath. He recovered and returned to racing in 2014.

Serena Williams

Serena Williams was diagnosed with pulmonary embolism as a result of deep vein thrombosis in 2011. Further complications arose after giving birth to her daughter in 2018 when she was experiencing shortness of breath and encountered another pulmonary embolism. Later after a successful recovery she again participated in the 2018 U.S. Open.

Prevention Of Pulmonary Embolism

Pulmonary embolism is often caused by a blood clot that originally forms in the legs, and it is often difficult to detect a DVT before problems start. Therefore, preventing clots in the deep veins will help prevent pulmonary embolisms. It includes things such as:

1. Manage your weight

Obesity puts additional pressure on the veins in the legs, which can contribute to poor blood flow and the development of blood clots. Eating a balanced diet will help in maintaining a healthy weight, and reduces the risk of blood clot formation.

Here is a list of 7 weight loss foods to lose weight naturally.

Click now to know more

2. Use compression stockings

These stockings fit tightly around your lower legs and encourage the blood to flow more quickly around your body. This is a very safe, simple, and inexpensive way that squeezes or compresses the veins and prevents blood from flowing backward.

Check out our widest range of compression support products to meet all your needs.

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3. Start moving after surgery

There is a misconception that you need to lie in bed post-surgery. But, the main reason why doctors and nurses push you to get up and move is to prevent clots from forming by stimulating blood circulation.

4. Try pneumatic compression devices

Intermittent pneumatic compression (IPC) devices are used to help prevent blood clots in the deep veins of the legs. These are the inflatable sleeves that you wear on your calves (lower legs) that are connected to a machine that provides alternating pressure on the legs to improve blood flow.

5. Say no to tobacco

Toxic chemicals in cigarettes harm red and white blood cells and blood vessels and make you more susceptible to deep vein thrombosis and pulmonary embolism.

Want to quit smoking?

Here are a few tips that can help you achieve your goal.

Know more

Note: Along with these make sure to keep your legs elevated at least for half an hour, twice a day, avoid sitting with crossed legs and wear loose-fitting clothes for better blood flow.

Doctor To Visit

The doctors that can be your best option to treat and manage pulmonary embolism are:

Pulmonologists

Cardiologists

A pulmonologist is a doctor who specializes in treating lung conditions. The doctor diagnoses and treats diseases of the respiratory system. A cardiologist is a doctor who specializes in the study or treatment of heart diseases and heart abnormalities.

Note: The treatment of PE may include medication management by a cardiologist, which may help in prescribing one or more blood thinning or clot-dissolving medications.

Get a consultation from our team of the best and most trusted doctors.

Book your appointment now

Treatment Of Pulmonary Embolism

Treatment choices for pulmonary embolism (PE) include:

1. Anticoagulants

In most cases, the treatment involves administering anticoagulant medications (blood thinners). This medicine decreases the blood’s ability to clot and prevents future blood clots from forming. These include:

Heparin

Fondaparinux

Newer oral anticoagulants (NOACs) and vitamin K antagonists (VKA) have also been used for anticoagulation in PE.

Order medicines now

2. Reperfusion strategies

Reperfusion therapy is used to restore blood flow through a suspected or known blocked coronary artery immediately upon diagnosis. These include:

Catheter-directed treatment: This technique involves the insertion of a catheter into the pulmonary arteries, which is then used for ultrasound-assisted thrombolysis.

Vena cava filter: This treatment is used when a person cannot go for anticoagulation treatment due to medical reasons. It involves placing a small metal device in the vena cava (the large blood vessel that returns blood from the body to the heart) to keep clots from traveling to the lungs.

Thrombolytic therapy: This therapy is called clot busters which use medications or a minimally invasive procedure to break up blood clots and prevent new clots from forming.

Pulmonary embolectomy: This is a rarely used surgery conducted to remove a PE. This surgery is performed in cases, where the embolism is large enough and medicines or thrombolytic therapy cannot be used.

3. Compression stockings

These are designed to apply pressure to the lower legs and help to maintain blood flow and reduce discomfort and swelling. These stockings are usually knee-high in length and squeeze the legs to prevent the blood from pooling.

4. Supportive treatment

The treatment given to the body to cope with the ill effects of PE. These include oxygen support being given to the patient to reduce breathlessness, and in a few cases, intravenous fluids being administered to support circulation. In some cases, close monitoring and care are given to the patient depending upon the state of the patient.

Home Remedies For Pulmonary Embolism

Home remedies might not cure the blood clots permanently, but they can provide relief from the symptoms of PE. These include:

Garlic(Lahsun): Garlic helps in blood thinning and reduces blood clot formation in the arteries. It is advisable to eat garlic bulbs on an empty stomach in the morning.

Neem: A few studies have demonstrated that neem has good or moderate clot-breaking properties. Small leaves of neem can be consumed daily to see the results.

Turmeric (Haldi): Turmeric extract has shown benefits in dissolving blood clots in some studies. Turmeric can be taken by adding it to a glass of warm milk and consumed immediately.

Read more about 5 other benefits of turmeric for a healthy body

Click here

Tulsi: Tulsi extract has shown moderate to good activity in breaking down clots. Tulsi can be taken by chewing fresh tulsi leaves or drinking tulsi tea for its benefits. Tulsi tea can be prepared by boiling fresh or dried tulsi leaves in some water and straining the leaves.

Cayenne pepper: It has a high amount of salicylates. These salicylates have powerful blood-thinning effects and can be used to treat blood clots.

Complications Of Pulmonary Embolism

If left untreated, pulmonary embolism can lead to the following complications:

1. Pulmonary infarction (PI)

Pulmonary, or lung, infarction (PI) refers to the death of lung tissue due to a lack of blood supply. According to research in 2021, it has been noted that 30 percent of individuals having PE show signs of PI.

2. Pleural effusion

PE is one of the most common causes of pleural effusion (water on the lungs). Pleural effusion is a buildup of fluid between the layers of tissue that line the lungs and chest cavity. The symptoms include sharp chest pain, cough, and shortness of breath.

3. Cardiogenic shock

It is a life-threatening condition in which your heart is unable to pump enough blood suddenly. This can ultimately lead to a drop in blood pressure and pulse rate leading to brain injury or organ failure.

4. Bleeding by taking blood thinners

Treatment of PE involves the administration of anticoagulants for resolving blood clots. In cases, where the blood becomes too thin, a minor cut can cause too much bleeding.

5. Cardiac arrest

A PE increases the risk of cardiac arrest by many folds. Cardiac arrest further increases the risk of death by 95%.

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Living With Pulmonary Embolism

Recovery from pulmonary embolism can vary based on the severity of the condition and the treatment. The major treatment takes place in the hospital and after leaving the hospital, a patient may be required to take medicines for six months or longer. Certain tips to keep in mind if you have PE include:

1. Following up regularly

Studies suggest that individuals with pulmonary embolism should visit their doctors every 2 weeks for 3 months post-PE.

The routine follow-up visits scheduled by the doctor should never be missed as this can help the doctor to conduct imaging tests. This helps the doctor to check for signs of new blood clots forming in the legs that can lead to PE.

Taking all the medicines prescribed by the doctor on time.

2. Preventing recurrence

The doctor may recommend combining medication and lifestyle changes simultaneously to manage the long-term risks of a recurrence of deep vein thrombosis which leads to PE. To prevent recurrence the doctor may include:

Staying physically active

Drinking more fluids

Maintaining a healthy weight

Quitting smoking

Avoiding the use of oral contraceptives.

3. Avoiding injuries

Suitable caution must be taken if you are taking anticoagulants as this can lead to serious bleeding risk. Your doctor may suggest avoiding foods rich in vitamin K, alcohol, and over-the-counter medicines (such as aspirin).

Frequently Asked Questions

What are the side effects of the treatment for PE?

What happens if a pulmonary embolism clot doesn't dissolve?

When should one see their doctor?

What questions should one ask their doctor?

Is pulmonary embolism fatal?

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Pancreatic cancer

Also known as Cancer of the pancreas

Overview

The pancreas is a small, spongy, hockey stick-shaped gland located between the stomach and the spine, deep within the abdomen. The major function of the pancreas is to release enzymes that help in digestion and produce hormones, insulin and glucagon, that help control blood sugar levels.

Pancreatic cancer occurs when the body’s normal process of removing old cells and forming new cells, breaks down. The pancreatic cells continue to grow out of control and form tumors. The cancerous cells can also spread to other parts of the body. The most common type of cancer that forms in the pancreas begins in the cells that line the ducts that carry digestive enzymes out of the pancreas, called pancreatic ductal adenocarcinoma.

Pancreatic cancer is typically a disease of the elderly. 90% of newly diagnosed patients are aged over 55 years. It is more common in men than in women. Various risk factors associated with the disease are smoking, obesity, excessive consumption of alcohol, diabetes and hereditary factors amongst others.

It is generally not detected at an early stage, when it is curable, because it often doesn't show any symptoms until it has spread to other organs. The treatment options are based on the extent of the cancer and may include surgery, chemotherapy, radiation therapy, or a combination of these. However, mostly due to late detection, the prognosis or outcome of the disease is generally poor.

Key Facts

Usually seen in

Adults above 55 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Pancreas

Lymph nodes

Liver

Peritoneum

Prevalence

Worldwide: 458,918 new cases (since 2018)

Mimicking Conditions

Acute pancreatitis

Chronic pancreatitis

Cholangitis

Cholecystitis

Choledochal cyst

Peptic ulcer disease

Cholangiocarcinoma

Gastric cancer

Necessary health tests/imaging

Imaging tests: CT scan, PET-CT scan, Ultrasound, and Magnetic resonance imaging (MRI)

Blood tests: Bilirubin total

Biopsy: Fine needle aspiration cytology (FNAC), and core needle biopsy

Treatment

Surgical management: Pancreatectomy, Laparoscopic surgery & Vascular resection.

Adjuvant chemotherapy: Modified Leucovorin, 5-Fluorouracil, Irinotecan & Oxaliplatin.

Radiotherapy: External beam radiation therapy & Brachytherapy

Targeted therapy: Pembrolizumab

See All

Symptoms Of Pancreatic Cancer

Most people don’t experience early signs of pancreatic cancer. The doctor may suspect pancreatic cancer if the patient has recently developed diabetes or pancreatitis (a painful condition due to the inflammation of the pancreas). As the disease progresses, people may notice symptoms like:

Pain in the upper abdomen, radiating to the back

Jaundice (yellowing of the skin and the whites of the eyes)

Tiredness and fatigue

Loss of appetite

Light-colored stools

Dark-colored urine

Loss of weight

Formation of blood clots in the body

Dry and itchy skin

Worsening diabetes or a new diagnosis

Nausea and vomiting

Some symptoms of pancreatic neuroendocrine cancer may be different from the traditional pancreatic cancer symptoms because some PNETs overproduce hormones. These symptoms include:

Zollinger-Ellison syndrome (in which the stomach makes too much acid) causing stomach ulcers

Irritations on the tongue and corners of the mouth

Malnutrition

Shortness of breath

Rashes or blisters on the skin

Excessive thirst

Excessive thirst can be alarming. Frequent thirst or excessive thirst could be a symptom of a serious health condition. Read about 5 common causes of excessive thirst or polydipsia.

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Types Of Pancreatic Cancer

Pancreatic tumors are either exocrine or neuroendocrine (endocrine) tumors based on the type of cell they start in. Every pancreatic cancer patient is different and the treatment is based on the type. Types of pancreatic cancer are:

Exocrine pancreatic cancer

Most of the pancreatic tumors are exocrine tumors (about 93 percent). They start in the exocrine cells (that produce enzymes for digestion) of the pancreas and include:

Adenocarcinoma: The most common type of pancreatic cancer is adenocarcinoma (9 out of 10 cases of pancreatic cancer). It is an exocrine tumor that starts in the cells lining the pancreatic duct, which make enzymes for digestion.

Mucinous cystic neoplasm: This is an invasive adenocarcinoma and is a cyst filled with thick fluid. Mucinous cystic neoplasms can be non-cancerous (benign) if they are not invasive.

Other rare exocrine tumors include:

Squamous cell carcinoma: This extremely and forms in the pancreatic ducts, and is made purely of squamous cells, which are not typically seen in the pancreas.

Adenosquamous carcinoma: This rarest type of pancreatic cancer (1-4 percent). It is a more aggressive tumor with a poorer prognosis.

Colloid carcinoma: These tumors are very rare and tend to develop from a type of benign cyst called an intraductal papillary mucinous neoplasm (IPMN).

Neuroendocrine pancreatic cancer

Neuroendocrine tumors (pancreatic NETs or PNETs) are rare (about 7 percent). They often grow slower than exocrine tumors. PNETs come from the abnormal growth of endocrine cells in the pancreas called islet cells, responsible for controlling blood sugar levels (hence they are also called islet cell tumors).

PNETs are classified by the hormones they make and common types include:

Gastrinoma: A gastrin-producing tumor usually located in the pancreas or the duodenal wall. Gastrin is a peptide hormone that stimulates the secretion of gastric acid.

Glucagonoma: Glucagonoma is a very rare tumor of the islet cells of the pancreas, which leads to an excess of the hormone glucagon in the blood.

Insulinoma: Pancreatic tumor that leads to extra insulin production causing hypoglycemia (low blood sugar).

Somatostatinoma: They start in neuroendocrine cells that make the hormone somatostatin.

VIPoma: A non-beta pancreatic islet cell tumor secreting vasoactive intestinal peptide (VIP), resulting in a syndrome of watery diarrhea, hypokalemia, and achlorhydria (absence of hydrochloric acid in gastric secretions).

Nonfunctional islet cell tumor: Tumor arising from the pancreatic islet cell that is rare and no hormone is involved.

Note: Benign precancerous lesions are cysts and other benign tumors in the pancreas and can be precursors to pancreatic cancer, including intraductal papillary-mucinous neoplasms (IPMNs).

Causes Of Pancreatic Cancer

The exact cause of pancreatic cancer is unknown.

Pancreatic cancer occurs when abnormal cells begin to grow within the pancreas. These abnormal cells develop because of changes (mutations) in their DNA. This mutated DNA dictates the cells to grow uncontrollably and to continue living after normal cells die. These masses of cells can form a tumor. When left untreated, these cells continue to grow out of control and metastasize (spread to other parts of the body).

Anyone can get pancreatic cancer. Though it's not always clear what causes it, research has identified some of the risk factors that can lead to it.

Risk Factors For Pancreatic Cancer

Despite other gastrointestinal tumors, evidence of risk factors for the development of pancreatic cancer is poor and can be classified into environmental factors and genetic factors (10%).

Environmental factors

These can be further classified into modifiable and non-modifiable factors that increase the risk of an individual developing pancreatic cancer. They include:

Modifiable factors

1. Smoking: It is the main modifiable risk factor for the development of pancreatic cancer. Tobacco smoking habits are considered responsible for 20-35% of pancreatic cancer cases.

2. Alcohol consumption: Pancreatic cancer is associated with heavy alcohol consumption of > 30 gm per day. This risk is strongest in heavy male drinkers and heavy drinkers of spirits. Excessive alcohol consumption is also the main cause of chronic pancreatitis, which is a known risk factor for pancreatic cancer.

3. Chronic pancreatitis: Chronic pancreatitis is a progressive inflammatory condition of the pancreas leading to fibrosis and loss of functional cells. Studies investigating chronic pancreatitis have found a significantly 13-fold higher risk of pancreatic cancer.

4. Obesity: Some studies had demonstrated a relative risk increase of 1.12 for each increase in 5 kg/m2 in the BMI. Obesity since childhood has a higher risk relative to pancreatic cancer development.

5. Diet: There is limited evidence that consumption of red and processed meat is associated with pancreas cancer development. These foods lead to DNA damage and the formation of carcinogens such as N-nitroso compounds. Other dietary items that can increase the risk include foods and beverages containing fructose or foods containing saturated fatty acids.

6. Infection: Increased risk has been observed in patients with Helicobacter pylori (H. pylori) or hepatitis C infections. Further research is necessary to strengthen this relationship.

7. Exposure at workplace: Working with certain chemicals, particularly those used in metalworking and pesticides, has been recognised as a potential risk factor for pancreatic cancer.

Non-modifiable factors

1. Age: Pancreatic cancer generally occurs in patients over 55 years old, mostly between 70-80 years. It is extremely rare for patients to be diagnosed before the age of 30. The age at which the incidence peaks also tends to vary from country to country. For example, In India, there is a peak in incidence in patients in their sixth decade of life whereas in the United States this is in the seventh decade of life.

2. Sex: The incidence is lower in women than in men globally. This difference is even more evident in developed nations.

3. Geographic location: The incidences of development of pancreatic cancer varies in different parts of the world. The incidence rate in Africa is the lowest, and higher cases of development of cancer are seen in China.

4. Blood group: The ABO blood group antigen is present on the entire surface of red blood cells. Recent studies have shown that people with type A, AB, or B blood groups have a higher risk of developing pancreatic cancer than those with type O.

5. Diabetes mellitus: Diabetes significantly increases the risk of developing pancreatic cancer. However, it must be noted that although diabetes is a risk factor, pancreatic cancer can also present itself as a new onset of diabetes. This has led to interest in HbA1c as a potential biomarker of early detection in pancreatic cancer.

6. Gut microflora: Studies have also shown that lower levels of Neisseria elongata and Streptococcus mitis, and higher levels of Porphyromonas gingivalis and Granulicatella adiacens are associated with an increased risk of pancreatic cancer. However, further research is needed to validate these studies and also to establish if targeted treatment can be a possibility.

Genetic factors

It is difficult to understand the effect-causing relationship of some risk factors, however, genes and their mutations have a strong role and interconnection with the development of pancreatic cancer. These risk factors include:

1. Hereditary breast cancer and ovarian cancer syndrome (HBOC): The genes BRCA1 and BRCA2 mutations can cause early-onset malignant tumors, most of all breast and ovarian cancer, including pancreatic cancer, especially if in BRCA2 mutation.

2. Hereditary non-polyposic colorectal cancer or Lynch syndrome (HNPCC): People who have Lynch syndrome (MSH2, MSH6, MLH1, PMS2, and EPCAM gene mutations) are predisposed to early-onset colorectal cancer without polyposic lesions and other-site neoplasia, including pancreatic cancer.

3. Familial atypical multiple mole melanoma syndromes (FAMMM): This syndrome is characterized by malignant melanoma in one or more first-degree or second-degree relatives. In 38% of cases, this pathology is caused by a p16INK4a gene mutation.

4. Hereditary pancreatitis (HP): In 80% of cases of hereditary pancreatitis it is possible to identify a PRSS1 gene mutation. This condition is characterized by recurrent acute pancreatitis starting in childhood, that can be evolved into early pancreatic failure.

5. Familial adenomatous polyposis (FAP): This syndrome, caused by a mutation in the APC gene, is characterized by early-onset polyps in the gastrointestinal tract that can develop into cancer.

6. Peutz-Jeghers syndrome (PJS): The STK11/LKB1 gene mutation characterizes hamartomatous polyposis syndrome and this condition can determine gastrointestinal neoplasia (cancer) and other tumors like pancreatic cancer.

7. Cystic fibrosis (CF): This pathology, caused by CFTR gene mutation, has the same pathogenetic mechanisms because recurrent acute pancreatitis can be involved in pancreatic cancer onset.

Did you know?

Individuals suffering from cancer are at a higher risk of contracting the COVID- 19 infection. Strong immunity is needed to fight against the coronavirus infection. Read about how to stay healthy during COVID-19 outbreak.

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Diagnosis Of Pancreatic Cancer

Pancreatic cancer poses a significant diagnostic challenge and the majority of cases present late, with either locally advanced or metastatic disease. The diagnosis of pancreatic cancer depends on the size and location of the tumor and whether or not the cancer has spread. Depending on this the cancer is divided into 5 stages. There are:

Stage 0: Also known as carcinoma in situ and is characterized by abnormal cells in the lining of the pancreas. The cells could become cancerous and spread to nearby tissue.

Stage 1: Presence of tumor (cancerous cells) in the pancreas.

Stage 2: Presence of tumor in the pancreas and has either spread to nearby tissues, organs, or lymph nodes.

Stage 3: Spread of cancer to major blood vessels near the pancreas. It may have also spread to nearby lymph nodes.

Stage 4: In this stage, cancer has spread to distant organs in the body like the liver, lungs, or abdominal cavity along with tissues or lymph nodes near the pancreas.

Cancer is one of the most dreaded diseases and can be difficult to treat if it has progressed to an advanced stage at the time of diagnosis. Read more about 8 common signs of cancer that you should know.

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The diagnosis consists of the following:

Physical examination

The doctor will examine the patient's skin, tongue, and eyes to see if they are yellow, which is a sign of jaundice. An abnormal buildup of fluid in the abdomen, called ascites, may be another sign of cancer.

Blood tests

The doctor may take samples of blood to check for abnormal levels of bilirubin and other substances. Bilirubin is a chemical that may reach high levels in people with pancreatic cancer due to blockage of the common bile duct by a tumor.

Imaging tests

These tests help doctors find out where the cancer is located and whether it has spread from the pancreas to other parts of the body.

1. Computed tomography (CT or CAT) scan: Many cancer centers use pancreatic protocol CT scans that involve taking pictures of the pancreas at specific times after the intravenous (IV) injection of contrast medium to find out exactly where the tumor is in relation to nearby organs and blood vessels.

2. Positron emission tomography (PET) scan or PET-CT scan: A PET scan is usually combined with a CT scan or MRI scan to produce images of the inside of the body. The combination provides a more complete picture of the area being evaluated.

3. Endoscopic retrograde cholangiopancreatography (ERCP): This procedure is performed by a gastroenterologist to o place bile duct stents and not commonly used for diagnosis. The doctor will put a thin, lighted tube called an endoscope through the mouth and stomach into the small intestine.

4. Ultrasound: An ultrasound uses sound waves to create a picture of the internal organs. There are 2 types of ultrasound devices:

A transabdominal ultrasound (ultrasound is to see inside the abdomen).

The endoscopic ultrasound (EUS - ultrasound with the help of an endoscope).

5. Percutaneous transhepatic cholangiography (PTC): This is a x-ray procedure used to detect any blockage in the bile duct due to the tumor. A thin needle is inserted and a dye is injected before taking the x-ray.

6. Magnetic resonance imaging (MRI): An MRI uses magnetic fields to produce detailed images of the body and to measure the tumor’s size. Cholangiopancreatography (MRCP) is a specialized type of MRI using computer software developed specifically to examine pancreatic issues, such as ductal blockages and cysts.

Biopsy

A biopsy is the removal of a small amount of tissue for examination under a microscope. It can make a definite diagnosis for most cancers. There are a couple of different ways to collect a tissue sample:

Fine needle aspiration cytology (FNAC): It is the removal of the tissue sample by aspiration from the needle.

Core needle biopsy: The doctor uses a hollow needle to take out pieces of pancreatic tissue from a suspicious area.

Testing for potential biomarkers

Investigation of potential biomarkers including liquid biopsy, to aid in screening, diagnosis, and treatment of pancreatic cancer has been an area of intense research. These include:

Serum cancer antigen 19-9 (CA 19-9): It is the only marker approved by the United States Food and Drug Administration for use in the routine management of pancreatic cancer.

Volatile organic compounds (VOC): This is a non-invasive method for early detection biomarker research. This compound is present in exhaled air.

DNA mutations:The presence of DNA mutations in pancreatic juice has also been an area of study. Mutant P53 was found in the pancreatic juice of individuals with intermediate and high-grade invasive malignancy.

Prevention Of Pancreatic Cancer

Cancer prevention is an action taken to lower the chance of getting cancer. Many things in our genes, our lifestyle, and the environment around us may increase or decrease our risk of getting cancer. Some of the ways to prevent pancreatic cancer include:

Avoiding or controlling things known to cause cancer

Changing diet and adopting a healthy lifestyle

Finding precancerous conditions at an early stage

Taking medicines to treat a precancerous condition or to keep cancer from starting (chemoprevention)

Planning risk-reducing surgery

Avoiding tobacco smoking

Reducing alcohol consumption

Minimizing risk factors associated with chronic pancreatitis

Individuals with a high-risk genetic background may require:

Counseling

Genetic testing if appropriate (BRCA2 mutation or p16INK4A inactivity)

Secondary screening for pancreatic cancer

Did you know?

You can prevent certain types of cancer with vaccines. Like BCG vaccines, cancer vaccines protect our body from viruses that can cause diseases which can develop into cancer. Read to know more about it.

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Specialist To Visit

Cancer is not a single disease but a group of related diseases. Hence, it requires comprehensive care. Doctors that take care of patients with pancreatic cancer and help in diagnosing and formulating a treatment plan are:

Gastroenterologist

Oncologist

A gastroenterologist is a doctor who treats diseases of the esophagus, stomach, small intestine, colon and rectum, pancreas, and gallbladder. An oncologist is a doctor who treats cancer and provides medical care for a person diagnosed with cancer.

If you are facing such an issue, seek advice from our trusted professionals.

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Treatment Of Pancreatic Cancer

Pancreatic cancer requires multidisciplinary treatment and requires surgery, chemotherapy, and radiation, alone or in combination.

Surgical management

Surgical treatment is considered the best way to cure pancreatic cancer as it can significantly prolong survival. The surgical procedures include:

1. Pancreatectomy

It consists of the Whipple procedure (pancreaticoduodenectomy), which is an operation to remove the head of the pancreas. Along with this, the distal or total pancreatectomy (removal of the pancreas) is the best surgical option for the resection of pancreatic cancer depending on the anatomical location of the tumor or tumors. It requires:

Preoperative biliary drainage: A significant proportion of patients with pancreatic cancer present with jaundice and pre-operative drainage relieves the obstruction and may reverse the pathophysiological dysfunction caused by obstructive jaundice.

Anastomotic technique: A major source of death following Whipple’s procedure is a leak from pancreatic anastomosis and the formation of a pancreatic fistula. It consists of anastomosing (suturing) the pancreatic duct to the jejunum (middle part of the small intestine) or stomach.

2. Laparoscopic surgery

Laparoscopy is a type of surgical procedure that allows a surgeon to access the inside of the abdomen (tummy) and pelvis without having to make large incisions in the skin. This minimally invasive surgery requires laparoscopic distal pancreatectomy for the resection. There was no difference in the rate of positive resection margins and outcomes.

3. Vascular resection

The relationship between any pancreatic tumor and the surrounding vasculature is an important determinant of how much resection needs to be done. Pancreatic cancer resection includes total pancreatectomy, distal pancreatectomy plus splenectomy (removal of the spleen).

Medical management

1. Adjuvant chemotherapy

Chemotherapy is an important part of the comprehensive treatment of pancreatic cancer. The overall survival rate after radical resection and adjuvant chemotherapy improves in most cases. Generally, used chemotherapy regimens after radical resection are:

Modified leucovorin, 5-fluorouracil, irinotecan, and oxaliplatin (MFOLFIRINOX) for 6 months

Gemcitabine and capecitabine combined for 6 months

Folfirinox regimen, gemcitabine, and Pac-Nab in combination with chemotherapy in patients with metastasis (spread of cancer to other organs)

Gemcitabine is the first choice if the patient is not suitable for combination chemotherapy

Gemcitabine (with or without erlotinib) combined with 54 Gy (radiation dose) is used for patients with locally advanced pancreatic cancer

2. Neoadjuvant treatment

It is treatment given as a first step to shrink a tumor before the main treatment, which is usually surgery since a relapse of symptoms is usually seen in 71% and 76% percent of patients within two years. Furthermore, due to complications associated with surgery up to 40% of patients are not suitable for progression to adjuvant therapy. A good success rate with neoadjuvant treatment in several other cancers including rectal, oesophageal, and gastric cancer have led to the exploration of the impact of neoadjuvant treatment in pancreatic cancer as well.

Radiotherapy

Radiation therapy uses X-rays to destroy or damage cancer cells, making them unable to proliferate. Radiotherapy is mainly used in patients with locally advanced pancreatic cancer. It uses:

External beam radiation therapy: This uses external radiation therapy sources that emit X-rays, gamma rays, electrons or heavy particles.

Brachytherapy: It is a type of internal radiation therapy in which seeds, ribbons, or capsules that contain a radiation source are placed inside the body, or near the tumors. It is mainly used for internal radiotherapy by surgery or laparoscopy in the pancreas or adjacent to the pancreas.

Targeted therapy

This is very successful in many types of cancer, though, to date, all other targeted drugs have failed in pancreatic cancer patients, including affrecept, cetuximab, sorafenib, bevacizumab, and axitinib. Recently the Food and Drug Administration (FDA) has approved pembrolizumab as a targeted treatment for pancreatic cancer.

Latest treatment protocols

A lot of research and studies on the latest treatment options are going on. Some of them are:

Gene therapy: Gene therapy is the delivery of specific genes to cancer cells, which are often carried by specially designed viruses.

Cancer stem cells: Research is currently focused on identifying treatments that may specifically target the pancreatic cancer stem cells.

Genetic/molecular studies: Many new research developments are based on identifying damaged genes and proteins and repairing them or changing how they work.

Circulating tumor (ct)DNA: The ctDNA is being studied as a tool for monitoring response to treatment, for observing early signs of disease recurrence, and as a way to determine the disease's resistance to the ongoing treatment.

Other treatment modalities

Patients with pancreatic cancer need palliative care at some point, it is as important as other treatments themselves. Some of the procedures done for the management of patients with gastric outlet obstruction include:

Percutaneous bile duct drainage: A procedure to drain bile to relieve pressure in the bile ducts caused by a blockage.

Surgical gastrojejunostomy: A surgical procedure in which an anastomosis is created between the stomach and the proximal loop of the jejunum.

Endoscopic duodenal stents: A stent is a small metal mesh tube that is placed in the narrowed or blocked area of your duodenum (first part of the small intestine).

Diagnosed with cancer?

Getting diagnosed with cancer can be shocking and it can be a better idea to get a second opinion before starting the treatment. Read about things you need to know if you are planning on taking a second opinion.

Click To Learn!

Home-care For Pancreatic Cancer

A pancreatic cancer diagnosis can be shocking and life-changing. It not only takes a toll on the body but the mind as well. Certain things that the patient can do that will help them cope with the diagnosis and treatment include:

Joining a support group for people with pancreatic cancer

Spending time with others who are going through the same things

Empowering and strengthening their mental and emotional health

Talking to a counselor, therapist or social worker about the feeling

Meditating and keeping the mind calm

Finding hobbies that make them happy

Knowledge is power, and there are several helpful resources available for the patient and their family. Here are a few tips that the caregivers can follow to help the patient in the difficult times:

Provide as much as emotional support and encouragement

Talk with the health-care team and understand the course of treatment

Help the patient manage their symptoms and side effects

Assist the patient in maintaining personal care and hygiene

Coordinate their medical appointments

Stay with them throughout the appointments

Assist their meals and grocery shopping

Help them with household chores

Handle insurance and billing issues for them

Give them medications on time

Always talk with empathy and a positive attitude

Did you know?

Walking may improve the quality of life for people with advanced cancer.

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Complications Of Pancreatic Cancer

Pancreatic cancer progresses unchecked for a long time before symptoms are recognized. Complications of pancreatic cancer include:

Common complications

Upon progression of the tumor, the complications that arise include:

Jaundice: Pancreatic cancer that blocks the liver's bile duct can cause jaundice. Signs include yellow skin and eyes, dark-colored urine, and pale-colored stools. Jaundice usually occurs without abdominal pain.

Weight loss: Many people with pancreatic cancer lose their appetite and lose weight. People in the last few weeks of life will gradually feel less like eating.

Muscle wasting: Cancer cachexia is a highly debilitating condition characterized by weight loss and muscle wasting that contributes significantly to the morbidity and mortality of pancreatic cancer.

Abdominal pain: A common symptom of pancreatic cancer is a dull pain in the upper abdomen (belly) and/or middle or upper back that comes and goes probably caused by the tumor

Diabetes: Diabetes or impaired glucose tolerance is present in 50-80% of patients with pancreatic cancer due to pancreatic insufficiencies.

General complications after resection of the pancreas

Medical complications that require another surgery as a consequence of surgery include:

Cardiac problems like angina (chest pain), infarction (heart attack) and arrhythmias

Cardiovascular accidents like stroke

Cardiorespiratory distress (increase in the number of breaths)

Kidney dysfunction

Pneumonia

Thrombosis (blood clots)

Pulmonary embolism (blood clot gets lodged in an artery in the lung)

Psychological disturbances

Hepatic (liver) and metabolic dysfunction.

Surgical complications following pancreatic resection

Many postoperative complications respond to medical treatment, radiological intervention, and endoscopic intervention without the need for surgical intervention. They are:

Intra-abdominal abscess (collection of pus in the inner lining of the stomach)

Hemorrhage (bleeding)

Fistulae of the pancreatointestinal anastomosis (abnormal connection between pancreas and intestinal sutures)

Alternative Therapies For Pancreatic Cancer

The limitations of current treatment for pancreatic cancer have led to the need for new therapeutic approaches that have promising results. These include:

Microbial therapy

There is now a piece of strong evidence that the human microbiota plays a key role in regulating cancer development and response to cancer treatment. To date, the results of intestinal microflora forming systemic immunity and tumor-specific immunity in pancreatic cancer have been confirmed, but the mechanism remains to be studied.

Immunotherapy

Immune checkpoint blockade (ICB) therapy is now approved for various types of cancer such as melanoma, lung cancer, renal cell carcinoma, and head and neck squamous cell carcinoma. However, pancreatic cancer is considered to be less immunogenic and the microenvironment of pancreatic tumors is thought to create an environment that suppresses immunity. Therefore, there is currently no immunotherapy approved for patients with pancreatic cancer.

There are certain food items that can help fight cancer. Including them in 4-5 servings can work wonders. Read about 5 superfoods that fight cancer and give you a healthy life.

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Living With Pancreatic Cancer

Pancreatic cancer has only a five-year survival rate for pancreatic cancer when compared with many other cancers. This is because most people are diagnosed with stage IV when the disease has metastasized.

Living with pancreatic cancer means different things to different people. Whether you are a patient who has been diagnosed with pancreatic cancer or care for someone who has the disease, it will have a large impact on their lives. Things that the caregiver and the patient should take into consideration include:

Managing the emotions

It may be difficult to cope with a diagnosis of cancer both practically and emotionally. These may include dealing with a variety of emotions such as sadness, anxiety, or anger, or managing the stress level. The following information may provide some help:

Getting all the information needed to go about with the treatment

Talking to the loved ones

Joining support groups

Understanding the physical limitations

Starting palliative care to get relief from other symptoms

Coping with practical issues like financial expenses, childcare, and work issues

Surviving the physical side effects

Changes to the physical health depend on several factors including cancer’s stage, the length and dose of treatment, and the patient’s general health. Things to keep in mind are:

Talk to the doctors and healthcare team regularly about the feelings

Know about any new side effects or changes in existing side effects

Inform the healthcare team about the side effects so that they can potentially keep any side effects from worsening

Keep track of the side effects so it is easier to explain any changes to the healthcare team

Get treatment for long-term side effects and late effects as it is important to survive post the completion of treatment

Supervising the costs of cancer care

Cancer treatment can be expensive. It may be a source of stress and anxiety for people with cancer and their families. In addition to treatment costs, many people find they have extra, unplanned expenses related to their care. This can stop many patients from continuing the treatment. This can be managed by:

Understanding the cost of the treatment

Encouraging the patients and their families to talk about financial concerns with a member of their healthcare team

Knowing about federal healthcare law and how it can be used

Getting support from organizations that help with treatment, housing, travel, and other cancer-related costs

Focusing on diet

Having cancer of the pancreas will affect your eating and drinking habits, whatever your stage of cancer or treatment. Here are things that need to be considered from a dietary aspect.

Sticking to smaller and lighter meals throughout the day

Avoiding very high fiber foods such as cereal and dried fruit in case of diarrhea

Sipping a nutritional supplement between meals to boost the calorie intake

Maintaining blood sugar levels

Taking enzyme supplements

Preparing for the treatment

The diagnosis can leave the patient worried and overwhelmed, but there are things that can be done to help the patients feel more in control of their physical and mental health during this time. This includes:

Understanding prehabilitation (getting ready for cancer treatment in whatever time you have before it starts)

Preparing mentally and physically for the treatment

Eating a wide range of foods in the right proportion

Getting follow-up care

Post the completion of the treatment, the doctors will still want to watch the patient closely. It’s very important to go to all of the follow-up appointments. These visits consist of exams and lab or imaging tests to look for signs of cancer or treatment side effects.

Some side effects might last a long time or may not even show up until years after you have finished treatment. It’s important for all pancreatic cancer survivors to let their health care team know about any new symptoms or problems because they could be caused by cancer coming back or by a new disease or second cancer.

Cancer can drain a person physically and mentally. Gaining knowledge and awareness about cancer and the myths that surround it is necessary to enable timely diagnosis and treatment.

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Frequently Asked Questions

Which is the common location for the spread of pancreatic cancer?

Is there a cure for pancreatic cancer?

What is the life expectancy of any individual with pancreatic cancer?

What is the stage 4 pancreatic cancer survival rate?

When should someone see their doctor about pancreatic cancer?

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Pancreatitis

Also known as Inflammation of pancreas

Overview

The pancreas is a small organ located behind the stomach and below the ribcage. Pancreatitis is a condition that is characterized by irritation or inflammation of the pancreas. It happens when digestive juices or enzymes attack the pancreas. Pancreatitis can be acute or chronic depending on the onset. Either form is serious and can lead to complications.

The main symptom in patients with acute pancreatitis is constant stomach pain. It often spreads to the back, chest, waist, and lower abdomen. It can extend to diabetes, infections, bleeding, and kidney problems The symptoms of chronic pancreatitis can be diarrhea, vomiting, weight loss, and constant stomach pain on the upper side.

Pancreatitis is generally seen in individuals after 30-40 years of age. The risk factors can be gallstones, alcoholism, infections, genetic disorders, injury to the pancreas, and pancreatic cancer.

The strategy for pain management is lifestyle modifications and medications. Avoiding alcohol and smoking, eating small, frequent meals, and eating foods high in antioxidants like folate can also prove to be very beneficial in managing the symptoms. Treatment is generally based on the type and severity of the condition.

Key Facts

Usually seen in

Individuals between 30 to 40 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Pancreas

Prevalence

Worldwide: 3.2% (2022)

Mimicking Conditions

Peptic ulcer disease

Cholangitis

Cholecystitis

Bowel obstruction

Bowel perforation

Mesenteric ischemia

Acute hepatitis

Diabetic ketoacidosis

Basilar pneumonia

Myocardial infarction

Aortic dissection

Renal colic

Necessary health tests/imaging

Laboratory tests: Serum amylase, Complete blood, count, Serum lactate, Serum triglycerides & HbA1c level

Imaging tests: X-rays, Abdominal ultrasound, and Computed tomography (CT) scan

Treatment

Medications: Paracetamol, Morphine, and Corticosteroids.

Surgery: Pancreas resection and Total pancreatectomy.

Supportive care: Fluid resuscitation NG tube (nasogastric tube), and Oxygen administration

See All

Types of Pancreatitis

When digestive juices or enzymes attack the pancreas it causes redness and swelling (inflammation) of the pancreas. Types of pancreatitis include:

1. Acute pancreatitis

Acute pancreatitis is a serious condition where the pancreas becomes inflamed over a short period of time. In acute pancreatitis, inflammation lasts for a short duration (a week). In this condition, the pancreas returns to normal afterward.

Note: Acute pancreatitis is more common in middle-aged and elderly people, but it can affect people of any age.

2. Chronic pancreatitis

This is a condition where the pancreas becomes permanently damaged from inflammation. In chronic pancreatitis, inflammation lasts for a long duration that comes and goes over time. It often causes scarring of pancreatic tissue. It may also cause the pancreas to stop making enzymes and insulin in severe cases.

Try our extensive range of immunity-boosting products to upgrade your immune system to fight infections and inflammation.

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Symptoms Of Pancreatitis

Pancreatitis symptoms vary depending on the type. The main symptom is generally pain due to the upper left side or middle of the stomach that may spread to your back. Symptoms based on the type include:

1. Symptoms of acute pancreatitis

In acute pancreatitis pain begins slowly or suddenly in your upper abdomen, and usually spreads to the back. This pain can be mild or severe and may last for several days. Other symptoms include:

Fever

Nausea and vomiting

Jaundice (yellowing of the skin and the whites of the eyes)

Tenderness or swelling of the stomach (abdomen)

Rapid heartbeats

2. Symptoms of chronic pancreatitis

In chronic pancreatitis pain is present in the upper abdomen that may spread to your back, which is constant and severe. The intensity of pain may become worse after eating. Other symptoms include:

Diarrhea

Nausea

Greasy, foul-smelling stools

Vomiting

Weight loss

Back pain

Do you know that there is an association between covid-19 and pancreatitis?

A study has shown that 17% of patients suffering from severe COVID-19 have a pancreatic injury.

Learn more about Covid 19

Causes Of Pancreatitis

The pancreas is a gland that plays two important roles:

Helps in making enzymes and sends them into your small intestine. These enzymes help break down food.

Makes the hormones insulin and glucagon and releases them into your bloodstream. These hormones control your body’s blood sugar level.

Most of the time, the enzymes are active only after they reach the small intestine.

These enzymes can degrade pancreatic tissue if they start to function inside the organ. This harms the organ's blood arteries and produces swelling, bleeding, and damage.

In acute pancreatitis, the pancreas's digestive enzymes are not effectively secreted, which causes auto-digestion and pancreatic inflammation (swelling). Certain diseases, surgeries, and habits make you more likely to develop this condition.

Did you know?

As per a study, 35% to 40% of cases of acute pancreatitis are linked to gallstones and 30% of cases are linked to alcohol abuse.

Risk Factors For Pancreatitis

The most common causes of both acute and chronic pancreatitis are:

1. Gallstones

Gallstones are the most common cause of pancreatitis. Gallstones obstruct the bile and enzyme drain when they exit the gallbladder and enter the bile ducts. The bile and enzymes "back up" into the pancreas and cause swelling.

Do you suffer from gallstones?

Here is a list of 5 foods that you need to add to your diet if you have gallstones.

Know more

2. Heavy alcohol use

Alcohol is the second most common factor associated with acute pancreatitis after gallstones. Excessive alcohol consumption can initiate an episode of acute pancreatitis and increase the susceptibility to chronic pancreatitis.

3. Genetic disorders of your pancreas

Some people also have a genetic susceptibility to pancreatitis. Mutations (changes) in the number of genes disrupt the normal function of the pancreas and make the pancreas more vulnerable to the harmful effects of alcohol.

4. Infections

Mumps, hepatitis A or B, and certain bacteria or viruses (such as varicella-zoster virus, herpes simplex virus, salmonella, aspergillus, etc.) are also responsible for pancreatitis.

5. Injury to your pancreas

Accidental damage or injury to the pancreas or stomach (for example during a procedure to remove gallstones or examine the pancreas) can lead to pancreatitis.

6. Pancreatic cancer

Cancerous tumors in the pancreas can sometimes block the pancreatic duct, which hinders the entry of pancreatic enzymes to the gut to digest food. This ultimately may lead to chronic pancreatitis.

7. Certain diagnostic procedures

Some of the procedures used to diagnose gallbladder and pancreas problems like endoscopic retrograde cholangiopancreatography (ERCP) or ultrasound-guided biopsy damage the pancreas leading to chronic pancreatitis.

8. Pancreas divisum

This is a birth defect in which parts of the pancreas do not join together. This congenital defect has been associated with chronic pancreatitis.

9. Medications

Specific medications like some antibiotics or chemotherapy medication (especially estrogens, corticosteroids, sulfonamides, thiazides, and azathioprine) have been linked to acute pancreatitis as their side effects.

10. Blockage in pancreatic duct

Blockage of the bile ducts or pancreatic ducts (that form an important part of the digestive system) can cause pain and may lead to chronic pancreatitis.

.

11. High levels of lipids

Elevated level of lipids (body fat) in the blood and may cause harm to the pancreatic cells due to continuous inflammation. This ultimately leads to pancreatitis.

Check your lipid levels with a simple test called the lipid profile test.

Know more about this test

12. High calcium levels

High levels of calcium can cause depositions in the pancreatic duct leading to pancreatitis.

Understand what serum calcium test is and why it is important.

Watch this video now

13. Autoimmunity

People with other autoimmune conditions are at higher risk of getting autoimmune pancreatitis. These are uncommon disorders that cause your immune system to attack healthy cells in your pancreas.

14. Smoking

The number of cigarettes a person smokes and the number of years they have smoked affect a person's chances of incurring pancreatitis. Smoking accelerates disease progression. It is advisable to quit smoking at any age to reduce the risk of developing pancreatitis.

Here are a few practical ways to quit smoking

Click Here

Diagnosis Of Pancreatitis

The detailed evaluation of a patient is required to diagnose pancreatitis. It includes:

1. History

The doctor in charge of your care will ask you about the history of your symptoms. They may also carry out a physical examination. If you have acute pancreatitis, certain areas of your abdomen will be very tender to touch. The doctor may ask about a detailed history of medical conditions such as:

Gallbladder stones

Alcohol abuse

Medication use

History of weight loss

History of diabetes

Previous surgery or trauma

Hypertriglyceridemia or hypercalcemia (high levels of lipids and calcium)

Autoimmune disease

Genetic causes

2. Laboratory evaluation

Blood test: A blood test will be carried out to detect signs of acute pancreatitis which involves the release of pancreatic enzymes. These include:

Elevated amylase level in the blood

Elevated serum blood lipase level (a more specific indicator of pancreatitis than amylase levels)

Increased urine amylase level

Other tests include: Complete blood count, serum lactate, serum triglycerides, c-reactive protein (CRP), blood urea nitrogen (BUN).

Pancreatic function test (PFT): This test measures how your pancreas responds to secretin, a hormone made by the small intestine.

Stool test: This test is done to find out if a person has a problem with the absorption of fats.

HbA1c level: It is a blood test that measures your average blood sugar levels over the past 3 months.

Genetic testing: It is done to know the genetic history or if the patient has any kind of genetic disorder.

Book your tests here

3. Imaging Tests

The following imaging tests that can show swelling of the pancreas may be done, such as-

Ultrasound: This test involves the use of high-frequency ultrasounds to visualize the organs and structures within the pancreas.

Computed tomography (CT) scan: These are the standard non-invasive imaging techniques used to assess people who may have chronic pancreatitis.

Magnetic resonance imaging (MRI) scan: MRI and MR cholangiopancreatography (MRCP) are recommended, especially in patients without specific changes detected on CT scans.

Endoscopic retrograde cholangiopancreatography (ERCP): It is carried out to look for fibrosis (thickened and stiff tissues) in patients with chronic pancreatitis.

Magnetic resonance cholangiopancreatography (MRCP): It involves injecting you with a substance known as a contrast agent that makes your pancreas and surrounding organs show up very clearly on a magnetic resonance imaging (MRI) scanner.

4. Biopsy

A biopsy involves taking a small sample of cells from the pancreas and sending it to a laboratory, so it can be checked under a microscope for the presence of cancerous cells.

Celebs affected

Travis Barker

Musician Travis Barker, most famously known as the drummer for Blink-182, was recently hospitalized with a severe case of acute pancreatitis. It was previously reported that Barker's pancreatitis was the result of a colonoscopy, not an endoscopy."

George Clooney

Oscar-winning actor George Clooney suffered from pancreatitis. Clooney put it down to his severe weight loss and not taking care of himself.

Prevention Of Pancreatitis

A healthy lifestyle can reduce your chances of developing this medical condition. Acute pancreatitis is often caused by gallstones or excessive alcohol consumption. You may lower your risk of new or repeat episodes of pancreatitis by taking the following steps:

1. Eat right

The most effective way of preventing gallstones is eating a healthy balanced diet that includes fresh fruits and vegetables. Try to include wholegrains as they lower the bad cholesterol level in the blood and avoid eating too many fatty foods with a high cholesterol content.

Understand how to reap benefits from your diet.

Click Here

2. Focus on your weight

Try to maintain a healthy weight, otherwise, it may increase the risk of forming gallstones. It is advised to have regular exercise to avoid developing this condition.

Want to know the health risks of being overweight or obese?

Click Here

3. Cut down your alcohol

You can reduce your risk of developing acute pancreatitis by limiting your alcohol intake. This helps to prevent damage to the pancreas and other medical conditions also such as liver cancer.

4. Get the necessary treatment

High cholesterol levels are associated with the development of pancreatitis. Hence. treat medical problems that lead to high blood levels of triglycerides to prevent the condition.

5. Do not neglect vaccinations

Make sure children receive vaccines to protect them against mumps and other childhood illnesses so that the chances of development of pancreatitis are reduced.

6. Say Yes to No smoking

According to studies, smoking is related to increasing the risk of developing gallstones which can cause pancreatitis.

Want to quit this dangerous habit?

Try our widest range of smoking cessation products to help you with it.

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Specialists To Visit

The specialists you can visit to get the diagnosis and treatment include:

General surgeon

Radiologist

Gastroenterologist

Intensivist

Pulmonologist

Endocrinologist

A radiologist is a doctor who uses X-rays or other high-energy radiation, especially a doctor specializing in radiology. A gastroenterologist is a specialist who treats all the organs in your digestive system. An intensivist is a board-certified physician who provides special care for patients who are critically ill. A pulmonologist is a doctor who has special training in diagnosing and treating diseases of the lungs. An endocrinologist is a doctor who has special training in diagnosing and treating disorders of the glands and organs that make hormones.

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

Book an appointment now.

Treatment Of Pancreatitis

Acute pancreatitis is treated in hospital, where you'll be closely monitored for signs of serious problems and given supportive treatment, such as fluids and oxygen. The treatment consists of:

1. Medications

The doctor may prescribe you some medications such as steroids (like corticosteroids), and mild to strong painkillers (like paracetamol, morphine, etc.) to get relief in severe abdominal pain.

Note: You may also need pancreatic enzyme supplements to help digest your food.

Order medicines online in the comfort of your home with just a click!

Buy now

2. Management of alcoholism and tobacco abuse

After recovering from acute pancreatitis, you should completely avoid alcohol if this was the cause of the condition. For this, you can have one-to-one counseling with a doctor or medicine such as acamprosate that helps to hinder alcohol cravings.

For smokers, anti-smoking treatment, such as nicotine replacement therapy (NRT) or bupropion (a medication used to reduce cravings for cigarettes), is recommended.

3. Surgery

Depending on the exact cause of your pain, there are a variety of surgical techniques that may be used to treat chronic pancreatitis, such as-

For gallstone-associated pancreatitis: You may need a procedure called endoscopic retrograde cholangiopancreatography (ERCP), or gallbladder removal surgery (to remove your gallbladder).

Endoscopic surgery: It is done for patients with stones in the pancreatic duct. This treatment is called lithotripsy (it involves using shock waves to break the stone into smaller pieces).

Pancreatic resection: In this procedure, specific parts of the pancreas that are inflamed and causing severe pain are removed surgically. It is used if endoscopic treatment is ineffective.

Total pancreatectomy: In serious cases of chronic pancreatitis, the whole pancreas is damaged, in such a situation the entire pancreas is removed.

4. Supportive care

Fluid resuscitation: Fluid resuscitation or fluid replacement is the medical practice of replenishing bodily fluid lost through sweating, bleeding, or other pathological processes.

NG tube (nasogastric tube): It can be used to remove fluid and air and give your pancreas more time to heal. It can also be used to put liquid food into your stomach as you heal.

Oxygen administration: To ensure your vital organs have enough oxygen, it will usually be supplied through tubes into your nose. The tubes can be removed after a few days, once your condition is improving.

Home-care For Pancreatitis

If you are suffering from pancreatitis pain, natural methods along with your medical treatment can bring you greater comfort and relief. Home care remedies for pancreatitis relief includes:

1. Turmeric (Haldi): It is a powerful antioxidant that reduces inflammation and provides relief from the symptoms of an inflamed pancreas.

2. Ginger (Adrak): It also contains antioxidants that help control swelling and boost the enzymes needed for proper digestion.

Want to know about other health benefits of ginger?

Read this

3. Coconut oil (Nariyal ka tel): It is rich in omega-3 fatty acids. It not only reduces swelling, and repairs damaged tissue but also boosts nutrient absorption.

Know more about Omega 3 supplementation.

Tap Here

4. Spinach (Palak): Apart from being rich in antioxidants, spinach also contains vitamins A, B, C, and E, iron, and selenium, which is very essential for pancreas health.

5. Mushrooms: It has an anti-inflammatory and analgesic effect that helps in relieving the symptoms of pancreatitis.

Read about 6 surprising reasons to add mushrooms to your food more often

Click Here

Complications Of Pancreatitis

Pancreatitis, if left untreated may lead to various complications, such as:

Pseudocysts (fluid that can develop on the surface of the pancreas)

Infected pancreatic necrosis (interruption to the blood supply of your pancreas)

Systemic inflammatory response syndrome (SIRS- inflammation affecting the pancreas spreads throughout the body)

Chronic pancreatitis

Diabetes

Pseudoaneurysms (when a blood vessel wall is injured)

Splenic vein thrombosis (blood clotting within splenic vein)

Recurrent acute pancreatitis

Risk of progression to pancreatic cancer

Acute respiratory distress syndrome (ARDS- fluid collects in the air sacs of the lungs)

Compartment syndrome (pressure builds up within the muscles)

Acute kidney injury (AKI)

Disseminated intravascular coagulation(DIC- blood's inability to clot and stop bleeding)

Alternative Therapies For Pancreatitis

It is suggested that no one should begin an alternative therapy without speaking with their physician. Alternative therapies that can help manage symptoms of chronic pancreatitis include:

1. Yoga

Studies show that practicing yoga at least 3 times a week improves pain, reduces the need for pain medication, and also improves the quality of life.

Want to know the other benefits of yoga that even doctors swear by?

Read this now

2. Therapeutic touch

It is a process of energy exchange, in which the practitioner uses the hands as a focus to help the healing process. It helps in relaxation giving a sense of comfort and well-being that is effective in decreasing anxiety and altering the perception of pain.

3. Massage therapy

It involves part of a body or a full body massage using different techniques of stroking or kneading the muscles of the body. It improves blood circulation, reduces swelling, and helps manage pain.

4. Physical exercise

It improves the overall functioning of the body and quality of life.Reduces stress, pain, nausea, fatigue, and depression, and affects hormonal balance.

5. Acupuncture

It involves the stimulation of points on the body by a variety of techniques to relieve pain from pancreatitis and pancreatic cancer.

Living With Pancreatitis

Pancreatitis symptoms can appear unexpectedly and be painful, uncomfortable, inconvenient, and embarrassing. Eating healthy, exercising regularly, reducing weight, limiting alcohol intake, quitting smoking, etc. can go a long way in managing the condition. Pancreatitis patients may experience a wide range of emotions as a result of their condition.

It can be managed by the following:

Talking to the loved ones

Joining support groups

Understanding the physical limitations

Starting palliative care to get relief from other symptoms

Coping with practical issues like financial expenses, childcare, and work issues

Role of caregivers

Caregivers play a very important role in the overall disease outcome of the patient diagnosed with Pancreatitis. The important role of caregivers is:

Making decisions about disease management options.

Participating in doctor appointments and keeping regular follow up with the doctor.

If the surgery has been carried out, giving the medicines to the patient on time, changing dressings, helping to take bath, and checking the surgery sites.

Helping with meals.

Frequently Asked Questions

What are the causes of pancreatitis attacks?

Does pancreatitis go away on its own?

Will smoking impact pancreatitis?

Can pancreatitis be fatal?

How can pancreatitis be avoided?

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Peptic ulcer disease

Also known as Peptic ulcer, PUD, Stomach ulcer, Gastric ulcer, Duodenal ulcer and Esophageal ulcer

Overview

Peptic ulcer disease (PUD) is a condition in which one or more sores or ulcers develop on the lining of the stomach, beginning of the small intestine (duodenum) or lower part of the food pipe (esophagus). Normally, a thick layer of mucus protects the digestive tract from the erosive effect of digestive acids. But many factors can reduce or damage this protective lining, allowing stomach acid to dissolve this lining, and thereby causing ulcers.

Peptic ulcers are fairly common. Worldwide, it is estimated that up to 10 percent of adults are affected by it at least once in their lifetime. In most cases, PUD occurs due to a bacterial infection (H. pylori) or due to the excessive use of non-steroidal anti-inflammatory drugs (NSAIDs) that damage the digestive system. Symptoms of peptic ulcers include stomach ache, indigestion, nausea, vomiting, loss of appetite and unexplained weight loss.

Treatment of peptic ulcers is focussed on lowering stomach acid levels to aid in healing of ulcer, or eliminating the H. pylori infection. The medications include proton pump inhibitors (PPIs) to help reduce stomach acid and antibiotics to help fight infections.

Key Facts

Usually seen in

Adults between 30 to 50 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Stomach

Intestine

Prevalence

Worldwide: 0.7% (2011)

India: 7.8 % (2012)

Mimicking Conditions

GERD

Acidity

Achalasia

Gastritis

Indigestion (dyspepsia)

Gastroparesis

Gastric tumors

Gallstone disease

Chronic pancreatitis

Necessary health tests/imaging

Urea breath test

Stool antigen test

Blood test

Gastroscopy

Treatment

Antibiotics: Amoxicillin, Clarithromycin, Metronidazole & Tetracycline

Proton pump inhibitors (PPIs): Omeprazole, Pantoprazole & Rabeprazole

H2-receptor antagonists: Famotidine & Nizatidine

Antacids

Surgery: Vagotomy, Antrectomy & Pyloroplasty

See All

Symptoms Of Peptic Ulcer Disease

The symptoms of peptic ulcer disease may vary from person to person, depending on the site of the ulcer and age. Ulcer in the stomach is called a gastric ulcer whereas the ulcer in the duodenum (part of the small intestine) is called a duodenal ulcer.

One of the most common symptoms of peptic ulcer disease is gnawing pain in the abdomen. However, not everyone with this condition experience symptoms. Some people do not notice any signs of the disease until complications such as internal bleeding or abdominal perforation develop.

The tell-a-tale signs and symptoms of peptic ulcer disease include the following:

Pain in the stomach

Peptic ulcer-related pain radiates from the middle of your stomach and travels to the neck region and down to the naval area or your back. It is characterized by a gnawing or burning sensation.

One can differentiate between gastric ulcer and duodenal ulcer based on the timing of the appearance of their symptoms on meal consumption. Pain occurs shortly after meals in case of gastric ulcer and 90-180 minutes after meals in case of duodenal ulcer. People with duodenal ulcers also often experience nocturnal pain (pain during the night).

Bloating

Bloating can make you feel like your stomach is full of air or gas. It can be a very uncomfortable feeling.

Blood in vomit

Also known as hematemesis, it is a severe condition that requires immediate medical attention.

Blood in stool

If your stools are black, it might indicate gastrointestinal bleeding.

Other gastric ulcer symptoms include:

A feeling of fullness in the abdomen

Vomiting and nausea

Weight loss

The warning symptoms that require urgent medical care include:

Unexplained weight loss

Deficiency of iron

Gastrointestinal bleeding

Dysphagia or difficulty swallowing

Excessive vomiting

Here’s more on the common causes of a stomach ache and when to consult a doctor for a stomach ache.

Click To Know!

Causes Of Peptic Ulcer Disease

Peptic ulcers develop when digestive acid works against the defense mechanism of the stomach and eats up the protective lining covering it. The common causes of peptic ulcers are helicobacter pylori (bacteria) infection and excessive consumption of NSAIDs.

H. pylori Infection

H. pylori can affect people of all ages and is one of the most common causes of PUD. The infection can go unnoticed as it doesn’t cause any symptoms in its early course of infection. The bacteria is present in the stomach lining. It generally causes no problems; however, in some cases, it can irritate the lining and make it weak and prone to stomach acid to get through the stomach lining leading to the development of ulcers.

Non-steroidal anti-inflammatory drugs (NSAIDs)

Although doctors prescribe these medications to treat pain, inflammation, and fever; some take them without symptoms. Unnecessary consumption of NSAIDs for a long time or in high doses can lead to side effects such as stomach ulcers.

Lifestyle factors

Some lifestyle factors may also lead to the formation of ulcers in your stomach or duodenum. These include:

Eating spicy food

Drinking alcohol

Stress

Did you know?

A Cushing ulcer, named after Harvey Cushing, is a type of gastrointestinal ulcer associated with stressful medical conditions of the brain like accidents, operations, or strokes.

Risk Factors For Peptic Ulcer Disease

The risk factors of peptic ulcer disease include the following:

H. pylori infection

Advanced age

Frequent and unnecessary intake of NSAIDs

Long term use of glucocorticoids and anticoagulant medications

Health conditions such as lung, kidney, or liver disease

Smoking

Heavy alcohol consumption

Family history of peptic ulcers

Hispanic or African American ethnicity

Diagnosis Of Peptic Ulcer Disease

To begin with, your doctor will ask you about your symptoms and whether you have been taking NSAIDs. They may also test you for H. pylori infection.

Medical examination for H. pylori infection

If your doctor suspects you have an H. pylori infection, they will suggest taking the following tests.

Urea breath test: It is a breath test in which your doctor will ask you to have a special drink containing urea and then analyze your breath for the bacteria based on the amount of carbon dioxide you exhale after drinking the solution.

Stool antigen test: In this test, the doctor will test your stool sample for the bacteria.

Helicobacter pylori IgG test: Your doctor will take your blood sample and test it for antibodies against the H. pylori bacteria.

Gastroscopy

During this procedure, your doctor uses an endoscope (flexible and thin) with a camera fitted on its end. They will administer a mild sedative and spray a local anesthesia and then insert this tube inside your mouth to see the inside pictures of your stomach and intestine. As it is usually an outpatient procedure, you can go home the same day as the test.

In addition to permitting direct visualization of the gastric mucosa, endoscopy facilitates photographic documentation of any mucosal defect and tissue biopsy to rule out malignancy or H. pylori infection.

Did you know?

Two Australian researchers, Barry James Marshall and Robin Warren, discovered the Helicobacter pylori bacterium in 1982. They have also been awarded the Nobel Prize in Physiology or Medicine. Here’s more on why the H. pylori test is recommended and what it might indicate.

Check Out Here!

Prevention Of Peptic Ulcer Disease

Prevention of peptic ulcers can be difficult sometimes. We still don’t completely know the mechanism of how the bacteria spread and how some people develop peptic ulcers without H. pylori infection. Researchers and medical experts from all over the world are working on developing a vaccine to cure peptic ulcer disease. Some preventive measures you may practice include the following:

Avoid irritants

The food you eat goes straight to your stomach. Therefore, make sure to avoid the food items that can irritate it. Especially, stay away from common food items you know can upset your stomach such as spicy foods, oily foods and citrus fruits.

Quit smoking

If you are a heavy smoker, your risk of developing duodenal ulcers is higher compared to a person who does not smoke. Therefore, you should quit smoking. If you are unable to stop smoking even after making deliberate attempts, you may consider consulting a counselor.

Tobacco is injurious to health. Explore our range of smoking cessation products.

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Control alcohol consumption

Heavy intake of alcohol can lead to the development of peptic ulcers and many other health complications. Therefore, you should drink alcohol in moderation. And, if you can stop drinking, there could be nothing better.

Limit intake on painkillers

Many people take pain killers, especially NSAIDs, unnecessarily. Some people take these medications without food, which increases their risk of developing peptic ulcers. To prevent the condition from damaging the protective lining of your stomach, take NSAIDs with food and only when necessary.

Control stress

Practice guided meditation and exercise regularly to relax your mind and body. This will also help you cope with increasing stress levels.

Is stress affecting your work-life balance? Try out our mind care products for a healthy mind and body.

Explore Now!

Also, lifestyle modifications such as eating the right food at the right time, keeping yourself hydrated, and having quality sleep, are some other ways that can prevent peptic ulcers.

Specilaist To Visit

If you experience the signs and symptoms of peptic ulcers, make sure not to ignore them and consult your doctor. If you take acid blockers and over-the-counter (OTC) antacids for relief from the pain, but the pain keeps coming back, seek immediate medical attention.

Specialists you should visit include the following:

General physician

Gastroenterologist

Gastrointestinal surgeon

Pediatrician (in case of children)

Consult India’s best doctors from the comfort of your place.

Consult Now!

Treatment Of Peptic Ulcer Disease

If you are diagnosed with a peptic ulcer disease, your doctor will decide the treatment plan based on the cause of the disease. With the appropriate treatment, it may take around a month or two to heal.

If Helicobacter pylori infection or/and taking NSAIDs is the reason for your ulcer, your doctor is likely to prescribe a course of antibiotics and proton pump inhibitor (PPI)

If the use of NSAIDs is the only cause for your peptic ulcer, your doctor is likely to recommend a course of PPI medicine. Occasionally, the doctor may also prescribe H2-receptor antagonists instead of proton pump inhibitors. For short-term relief from ulcer symptoms, your doctor might prescribe antacids.

Your doctor may also recommend another gastroscopy procedure, 4 to 6 weeks after treatment to check whether your ulcer has healed.

Medicines

Antibiotics

If H. pylori infection has caused the ulcer in your stomach, your doctor will probably prescribe antibiotics. Antibiotics may cause mild side effects, including diarrhea, not feeling well, and a metallic taste in your mouth. These medications kill the bacteria to help you heal faster. Some widely prescribed antibiotics include:

Amoxicillin

Clarithromycin

Metronidazole

Tetracycline

Nitroimidazole

Levofloxacin

Doxycycline

Proton pump inhibitor (PPI)

This class of medication helps reduce the amount of acid production by your stomach to prevent more damage to the ulcer. The course of treatment generally lasts for 4 to 8 weeks.

Some examples of protein pump inhibitors include:

Omeprazole

Pantoprazole

Rabeprazole

Lansoprazole

Although PPIs do not have any severe side effects, they may include the following:

Feeling sick

Diarrhea

Constipation

Headache

Pain in the stomach

Dizziness

Long term intake of PPIs may lead to development of the following potential adverse effects:

Acute kidney disease

Chronic kidney disease

Hypomagnesemia

Clostridium difficile infections

H2-receptor antagonists

H2-receptor antagonists, also known as histamine H2-receptor antagonists and H2 blockers, are a group of medications that help reduce the amount of acid production in the stomach as PPIs do.

Some examples of H2 blockers include:

Famotidine

Nizatidine

Although not very common, some of its side effects that can occur include:

Pain in the stomach

Dizziness

Headaches

Constipation or diarrhea

Rashes

Antacids

As the medications mentioned above generally start their action after several hours of administration, your doctor may recommend antacids to get short-term but immediate relief.

Antacids help neutralize the acid present in your stomach to provide relief from acidity. Some antacids may also contain alginate, a drug that creates a protective coating over your stomach's lining.

You can get these medications as over-the-counter (OTC) drugs. Some side effects of these drugs include the following:

Feeling sick

Flatulence

Constipation (caused by aluminum containing preparations)

Diarrhea (caused by magnesium containing preparations)

Stomach cramps

Note: If taking NSAIDs is the reason for your stomach ulcer, your doctor is likely to review how you use these medicines. They might suggest you take an alternative painkiller like paracetamol, as it is not associated with ulcers. Your doctor may also prescribe another class of NSAIDs known as a COX-2 inhibitor.

If you have been taking a course of low-dose aspirin to minimize the possibility of blood clots, inform your doctor. Your doctor is the right person to tell you if you should keep taking it.

Surgery

If you are unresponsive to the treatment options given above or not compliant, your doctor may prescribe surgery to heal the peptic ulcer. Surgical procedures include:

Vagotomy: It is a surgical procedure which involves cutting off one or more branches of the vagus nerve to reduce the rate of gastric secretion.

Antrectomy: This procedure involves surgical removal of the walls of the gastric or pyloric tantrum in the stomach.

Pyloroplasty: It is a procedure to widen the opening in the lower part of the stomach to allow the food to empty directly in the small intestine.

Artery tying off: If an ulcer in the stomach is bleeding, your doctor may cut off an artery to stop the blood supply to the region.

Did you know?

The Food and Drug Administration (FDA) requested removing all forms of OTC and prescription ranitidine, a widely used drug for treating peptic ulcers. The reason behind this move was the presence of unacceptable amounts of N-nitrosodimethylamine (NDMA) in ranitidine. NDMA is a possible cancer-causing chemical. If you are still taking this medicine, make sure to stop right away and get in touch with your doctor.

Consult Now!

Home-care For Peptic Ulcer Disease

What you eat and how you eat play a crucial role in peptic ulcer management at home. Here are some do's and don'ts for people with peptic ulcer disease.

Do's

Make sure to eat food at regular intervals. For example, eat small meals in small portions every 3 hours.

Have your meal 2 to 3 hours before hitting the bed.

Make sure to chew your fluid slowly and properly.

Eat fresh fruits and vegetables.

Drink lots of water.

Don'ts

Do not eat too much of sour, fried, and spicy foods.

Avoid caffeinated beverages such as tea and coffee, excessively.

Do not drink alcohol, chew tobacco, or smoke.

Never self-medicate.

Avoid painkillers such as NSAIDs.

Complications Of Peptic Ulcer Disease

Usually, peptic ulcer disease do not cause any complications. However, the condition, if not diagnosed and treated on time, can cause severe complications. Following are the possible complications with peptic ulcer disease.

Internal bleeding

It is the most prevalent complication of PUD. It mainly occurs if you have got an ulcer near a blood vessel. Internal bleeding is of two types:

Long-term and slow bleeding: It can lead to many other complications including anemia, pale skin, breathlessness, increased heartbeat, and fatigue.

Rapid bleeding: It can lead to blood in vomit and passing black stools.

Perforation

Although rare, it can be painful. It happens when the protective lining of your stomach perforates and breaks, allowing bacteria to live in your stomach and infect the peritoneum (lining of your abdomen). The condition is known as peritonitis. This health condition, if not treated on time, can spread into the blood and cause sepsis. It can also lead to multiple organ failures.

Gastric outlet obstruction

Sometimes, a scarred or swollen ulcer can block the passage of food in your digestive system leading to gastric outlet obstruction. The symptoms include:

Feeling bloated or full all the time

Bouts of vomiting contain undigested food

Unexplained weight loss

Cancer

Helicobacter pylori as the etiological factor increases the chances of getting stomach cancer from the ulcer.

Alternative Treatments For Peptic Ulcer Disease

Here are some quick home remedies for peptic ulcers:

Fenugreek (Methi): Fenugreek seeds are enriched with antioxidants that help in reducing the severity of gastric ulcers. Boil a cup of fenugreek leaves in water. Add salt to taste. Drink this concoction two times a day. Here are few more health benefits of fenugreek seeds.

Cabbage (Bandha gobi) juice: Cabbage juice strengthens the lining of your stomach and aids in healing the condition. You may drink fresh cabbage juice before going to bed regularly.

Banana (Kela): Bananas are loaded with antibacterial benefits that slow down the progression of the PUD. Eat a banana after breakfast every day.

Honey (Shehed/Madhu): Honey has antimicrobial properties, and it is a natural healer. It keeps inflammation at bay and keeps your stomach healthy. Have one tablespoon of honey before your breakfast, or add it to the food you eat to let it work wonders.

Garlic (Lehsun): Garlic has antibacterial and antimicrobial properties that help fight infections. Have 2 to 3 cloves of garlic every day early in the morning to get the best possible benefits.

Slippery elm (Indian elm): The bark of the slippery elm plant helps calm the mucus membranes lining the stomach and the duodenum. Take the bark of slippery elm and grind it to powder. Add one cup of warm water to the powder, mix, and drink the concoction thrice a day.

Yoga for peptic ulcers

Practicing yoga asanas helps improve blood circulation in your digestive organs. Therefore, these can help you heal properly from stomach ulcers. Some common yoga poses for peptic ulcers include the following:

Mandukasana

Sasakasana

Yoga Mudrasana

Ardhamatyendrasana

Vakrasana

Pawan Muktasan

Gomukhasana

Living With Peptic Ulcer Disease

With adequate treatment and care, PUD heals over time. However, you need to monitor your diet and habits to reduce the chances of relapse.

Determine your personal tolerance

There is no proof that spicy or citrus foods influence ulcer disease. However, some people report worsened symptoms after consuming these kinds of foods. It is critical to discover what works best for you. If you discover that specific foods make your symptoms worse, restrict or avoid them so you can feel your best, but don't remove an entire food category.

Take care of your mental health

Peptic ulcers can be caused indirectly by stress, worry, and depression. Ulcers can be exacerbated by poor eating habits and harmful lifestyle choices that might occur as a result of mental health issues.

Change your diet

In addition to medicines, physicians frequently advise patients with ulcers to make lifestyle and dietary modifications until complete healing occurs. Although patients were previously recommended to eat a bland diet, recent evidence does not support this dietary adjustment to be useful. Although spicy foods might aggravate ulcers in certain people, medical practitioners are increasingly emphasizing a high-fiber diet rich in vegetables and fruits. The following can be added to the diet:

Fiber and Vitamin A: Liver, carrots, broccoli, sweet potatoes, kale, spinach, and collard greens are all high in Vitamin A.

Flavonoid-rich foods and green tea: Garlic, onions, and colorful fruits and vegetables including cranberries, strawberries, blueberries, broccoli, carrots, and snap peas, have high flavonoid content.

Cranberry juice: Only two 250 ml cups of cranberry juice each day may lower the risk of H. pylori proliferation in the stomach. Cranberry aids in preventing inflammation by either not allowing bacteria to adhere to it or disengaging it from the body after it has attached.

Individuals suffering from ulcers should avoid or limit coffee and alcohol.

Coffee: Caffeinated and decaffeinated coffee can both increase acid production and aggravate symptoms in people with peptic ulcers.

Alcoholic beverages: Alcoholic drinks can damage the protective mucosal lining of the gastrointestinal system, resulting in further inflammation and bleeding.

Frequently Asked Questions

How do I know if I have a peptic ulcer?

What is the most frequent peptic ulcer treatment?

How long does it take to cure a stomach ulcer?

What is the distinction between a peptic and a gastric ulcer?

What should I eat for breakfast if I have a stomach ulcer?

Is lemon beneficial in case of ulcers?

Is cheese harmful to stomach-ulcer patients?

Is turmeric capable of curing ulcers?

Is apple cider vinegar beneficial to stomach ulcers?

Is it painful to drink water if you have an ulcer?

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Period pain (menstrual cramps)

Also known as Dysmenorrhea, Menstrual pain, Painful Menstruations and Menstrual cramps

Overview

Painful periods have a poor effect on day to day work or activities of females. It is reflected in regular short-term absences from school, college, or work. Medically known as dysmenorrhea, it impacts performance in terms of concentration, socialization, and achievement. The effects clearly extend beyond an individual woman to society, resulting in an annual loss of productivity.

Symptoms of dysmenorrhea include mild to severe lower abdominal cramps, sometimes associated with nausea, vomiting, diarrhea, low back pain, migraines, dizziness, fatigue, and insomnia.

Dysmenorrhea is classified as primary dysmenorrhea (menstrual pain without any underlying disease) or secondary dysmenorrhea (menstrual pain associated with some pelvic pathology).

Nonsteroidal anti-inflammatory medications are the initial therapy of choice in patients with primary dysmenorrhea. If NSAIDs alone are not sufficient, oral contraceptives might be combined with them. Progestin-only therapies or surgery may also be considered in case of secondary dysmenorrhea depends on the cause.

Home and alternative therapies like the use of topical heat, dietary supplements, including vitamins B1, B6, E, and omega 3 fatty acids, a low-fat vegetarian diet, and acupressure have shown great promise in the management of painful periods.

Key Facts

Usually seen in

Women between the age of 20 and 24 years.

Gender affected

Women

Body part(s) involved

Reproductive organs

Prevalence

Global: Between 28% and 71.7%

India: Between 50 to 87.8%

Mimicking Conditions

Gynecological conditions:

Endometriosis

Obstruction of the reproductive tract such as Imperforate hymen, transverse vaginal septum, vaginal agenesis, and cervical stenosis.

Functional and nonfunctional adnexal cysts such as para ovarian cysts, endometrioma, or malignant tumors (germ cell, granulosa cell, or epithelial tumors).

Adnexal torsion

Adenomyosis

Pelvic inflammatory disease / sexual transmitted infections

Endometrial polyps

Asherman syndrome

Ectopic pregnancy

Chronic pelvic pain

Membranous dysmenorrhea

Non-Gynecological conditions:

Irritable bowel syndrome

Urinary tract Infections

Interstitial cystitis

Musculoskeletal causes such as abdominal wall muscles, the abdominal wall fascia, the pelvic and hip muscles, the sacroiliac joints, and the lumbosacral muscles

Necessary health tests/imaging

Blood tests

Complete blood count (CBC)

Erythrocyte sedimentation rate (ESR)

Differential count (DC)

Urine Tests

Sexually transmitted diseases Tests

Ultrasonography

Magnetic resonance imaging (MRI)

Laparoscopy

Treatment

NSAIDs

Diclofenac

Ibuprofen

Ketoprofen

Mefenamic acid

Combined oral contraceptive pills

Estrogen and Progestin

Progestin-only methods

Desogestrel

Medroxyprogesterone

Intrauterine levonorgestrel-releasing device (IUS)

Subdermal implant with etonogestrel release

See All

Types Of Dysmenorrhea

Mild pain and discomfort during menstrual periods are normal. However, excessive pain and cramping that interfere with your daily activity or work are not normal. Dysmenorrhea can be classified into two types:

Primary dysmenorrhea.

This type of dysmenorrhea occurs due to menstrual pain that’s not only a symptom of an underlying gynecologic disorder.

It is the most common type of dysmenorrhea, affecting more than 50% of menstruating women.

It is generally seen in younger girls soon after they attain menarche (puberty).

It can cause mild to severe menstrual pain and cramping which usually gets maximum at the starting of the cycle and then reduces in severity.

Secondary dysmenorrhea.

This type is a result of menstrual pain that’s a symptom of an underlying gynecologic disorder such as endometriosis, uterine fibroid, or pelvic inflammatory disease (PID).

Generally, it starts later in life as compared to primary dysmenorrhea and its symptoms tend to get worse over time.

During the menstrual cycle, the severe pain and cramping begin even 2 or 3 days before the cycle starts and may continue even after it ends.

Symptoms Of Dysmenorrhoea

Menstrual cramps usually begin 2 to 3 days before your periods, peak 24 hours after the onset of your period, and subside in a day or two.

Some of the common signs and symptoms of dysmenorrhea include the following:

Cramping in the lower abdomen

Pain in the lower abdomen

Low back pain

Pain radiating down the legs

Breast tenderness

Vomiting or nausea

Feeling emotional or tearful

Diarrhea or constipation

Faintness

Fatigue or tiredness

Bloating

Headache

Signs and symptoms of secondary dysmenorrhea are:

Irregular periods

Heavy bleeding during periods

Vaginal discharge with a foul smell

Pain during sexual intercourse

Pain in your back passage (rectum)

While discussing painful periods, it is also important to know what normal periods are. It is equally prudent to know out for any red flags and check timely with your doctor. To read more

Click Here

Causes Of Dysmenorrhoea

Primary dysmenorrhea

Prostaglandins are hormone-like substances that control the contractions of the uterus (womb). The cells that form the lining of the uterus begin to break down during periods and release large levels of prostaglandins.

Vasopressin is another hormone that is responsible for vasoconstriction which causes uterine contractions.

Women with primary dysmenorrhea are found to have excessive levels of prostaglandins and vasopressin. These naturally occurring chemicals constrict the blood vessels in the uterus, cutting off the oxygen supply to muscle tissue. This leads to muscle contractions and painful cramps.

Secondary dysmenorrhea

Various conditions that are associated with secondary dysmenorrhea include:

Endometriosis: This is a condition in which the cells that form the lining of the uterus (the endometrium) grow outside the uterus. It causes internal bleeding, infection, and pelvic pain.

Uterine growths: Fibroids, cysts, and endometrial polyps (benign growths in the wall of the uterus) are the most common noncancerous tumors in women of childbearing age. They can cause severe abdominal pain and excessive bleeding during periods.

Adenomyosis: This condition occurs when the lining of the uterus grows into the muscle of the uterus (womb). It can cause the uterus to get much bigger than it should be, along with abnormal bleeding, cramping, and pain.

Pelvic inflammatory disease (PID): It is a severe female inflammatory reproductive organs disorder caused by bacterial infection of the genital tract such as a sexually transmitted infection.

Structural differences: Some women are born with structural differences in size and shape of their wombs that cause more painful periods.

Is it normal to have irregular periods? Why do periods change dates every month? Are you worried about your menstrual cycle and always wanted to ask these types of questions?

Here you can clear some doubts about your menstruation cycle by watching this video till the end.

Risk factors

Several risk factors associated with dysmenorrhea are:

1. Non-modifiable risk factors:

Early age at menarche (started puberty at age 11 or younger)

Heavy bleeding during periods (menorrhagia)

Irregular menstrual bleeding (metrorrhagia)

Family history of dysmenorrhea

Age less than 30 years

Infertility

Nulliparity (miscarriage, stillbirth, elective abortion or never given birth to a live baby)

2. Behavioral risk factors:

Smoking tobacco

Less intake of omega 3 fatty acids

Body mass index (BMI) < 20 or > 30

High consumption of caffeinated beverages

Depression and anxiety

High levels of stress

Alcohol intake during menstruation cycle

Smoking causes many other diseases such as cancer, heart diseases, lung diseases, diabetes, and many chronic conditions. Don’t wait for the right time to quit it. Here we have an anti-smoking cessation range that will help you to stop your craving for smoking.

Explore Here

Diagnosis Of Dysmenorrhea

To diagnose dysmenorrhea, your doctor will likely take your medical history and perform a physical exam (pelvic exam). If they think an underlying disorder is causing your symptoms, they may perform other tests like:

Blood tests: These tests rule out any infectious process in the pelvic organs. These might include a complete blood count (CBC), erythrocyte sedimentation rate (ESR), and differential count (DC).

Urine tests: This test helps diagnose urinary tract infections (UTIs).

Sexually transmitted diseases tests: This panel of tests help determine any sexually transmitted diseases, such as chlamydia and syphilis. For a bacteria culture test, your doctor may take a sample of blood, stool, urine, skin, or mucus.

Ultrasonography: This imaging test uses high-frequency sound waves to create an image of the internal organs present in the lower abdomen of the body, including the pelvic cavity and reproductive system. This test helps in the evaluation of unexplained pelvic pain, inflammation, abnormal bleeding, or infection.

Magnetic resonance imaging (MRI): This test uses large magnets, radiofrequency, and a computer to make detailed images of internal organs and structures. It is particularly helpful in diagnosing endometriosis and adenomyosis of the uterus.

Laparoscopy: It is required when all non-invasive investigations fail to lead to a diagnosis. In this procedure, a thin fiber tube (which has a lens and a light) is inserted into an incision in the abdominal wall. This tube relays images of the inside of the abdomen or pelvis to a television screen. This procedure is also known as keyhole surgery or minimally invasive surgery.

Celebs affected

Priya Bapat

She is an Indian actress and model who works in Hindi and Marathi films. She shared about her massive menstrual cramps and mentioned that exercise and workouts helped her to control them.

Leona Lishoy

The South Indian actress was diagnosed with endometriosis. She mentioned her severe menstrual pains in her social media post and requested women not to neglect them.

Prevention Of Dysmenorrhea

Following are a few tips that can help you prevent dysmenorrhea:

Quit smoking

Smoking tobacco can cause severe menstrual cramps and is associated with a higher risk of dysmenorrhea. Quitting will not only help with dysmenorrhea but also improve your overall health.

Lose the extra kgs

Research has shown that overweight women are more at risk for dysmenorrhea. Losing and maintaining a proper weight may help reduce the severity of cramps.

Stay active

Light exercises, such as walking, jogging, or stretching, can help you produce chemicals that block pain. Therefore, make exercise a part of your lifestyle to prevent menstrual cramps in the long run and have pain-free periods.

A study also found that exercise helps reduce stress, which is also one of the factors linked to dysmenorrhoea.

Deaddict from alcohol and caffeinated beverages

Avoid or limit the intake of alcohol and other caffeinated drinks and beverages like sodas, coffee, and tea. They can increase vasoconstriction (the narrowing of blood vessels), which can further worsen the cramps during your menstruation cycle.

Practice yoga and meditation

Holistic living that includes yoga and meditation provides relief to the symptoms of dysmenorrhea.

To know what to eat and what to avoid during periods.

Click Here

Specialist To Visit

If you experience any of the symptoms of dysmenorrhoea it is important to visit your gynecologist and obstetrician at the earliest. These specialists can help you treat any conditions affecting the reproductive system.

Get a consultation from our team of trusted doctors.

Book Consultation Now

Treatment Of Dysmenorrhea

Dysmenorrhea can be treated with medicines and in a few cases with surgery. It depends on the severity and underlying cause of your pain. Here are some of the common treatment options for dysmenorrhea:

Pain relief medications:

NSAIDs are usually the first-line therapy for painful periods and should be tried for at least three menstrual cycles. They act by decreasing prostaglandin production. This consequently reduces prostaglandin concentration in menstrual fluid, leading to decreased uterine contractility and menstrual volume.

The most commonly used nonsteroidal anti-inflammatory drugs (NSAIDs) are:

Diclofenac

Ibuprofen

Ketoprofen

Mefenamic acid

These drugs are most effective when started before the onset of symptoms and continued for 3 days.

These are usually safe and well tolerated. Side effects might include gastrointestinal symptoms, such as nausea, vomiting, and heartburn.

Combined oral contraceptive pills:

This is the second line of treatment. If NSAIDs alone are not sufficient, oral contraceptives might be combined with them.

These medicines contain hormones (estrogen and progesterone) which prevent ovulation (the monthly release of an egg) and reduce the release of prostaglandins. This in turn, brings almost immediate relief from symptoms associated with menstruation: heavy periods, painful periods, and irregular bleeding.

These hormones are available as a pill, skin patch, flexible ring inserted into the vagina, or an intrauterine device (IUD).

Progestin-only methods:

Progestins-only hormones show efficacy in the treatment of menstrual pain by causing endometrial atrophy and inhibiting ovulation. These are more suitable for patients with secondary dysmenorrhea related to endometriosis.

Various drugs and methods of delivery include:

Desogestrel

Medroxyprogesterone

Intrauterine levonorgestrel-releasing device (IUS)

Subdermal implant with etonogestrel release

Managing underlying conditions:

In the case of secondary dysmenorrhea, it is important to identify and treat the root cause of menstrual cramps. Generally, in this type, the menstrual cramps are caused by underlying disorders, such as endometriosis, fibroids, adenomyosis, etc.

For example, to treat endometriosis (the lining of the endometrium grows outside of the uterus), removal of the endometriotic tissue is done through surgery which can provide great relief in menstrual cramps.

Home-care For Dysmenorrhea

The following home care remedies and tips can go a long way in managing dysmenorrhea:

Use A Heating Pad

Topical heat is an effective and low-cost natural method to manage dysmenorrhea. You can place a heating pad or a hot water pack over your lower abdominal area. The application of heat helps to improve the blood flow to the site of application and thus, aids in relieving pain.

If you do not have a heat pack at home, you can soak a towel in slightly hot water, squeeze it to drain excess water and apply it on the abdomen. You can also use a hot water bottle to do the same.

Exercise

Exercise helps to release the pain-relieving chemicals called endorphins and helps you to fight pain and cramps during periods. Moreover, exercising increases the circulation to the pelvic region and releases hormones to counteract the pain-inducing prostaglandins.

Make certain tweaks to your diet

Arachidonic acid is a fatty acid and works as a precursor in the production of prostaglandins. Intake of a low-fat diet, beans, fruits, and vegetables helps to lower the production of arachidonic acid. Therefore, switching to a healthy, clean diet may help to control symptoms of dysmenorrhea.

It is equally significant to be informed about what all food items to avoid during periods.

Foods that worsen your period pain!

Tap Here

Augment your diet with supplements

Vitamin E, omega-3 fatty acids, vitamin B1, vitamin B6 and magnesium supplements have also been found to be highly effective in giving relief from pain associated with menstrual cramps.

Drink more water

It is a common myth that drinking water during periods causes more blood flow. In fact, drinking 6-8 glasses of water is the best way to not only prevent bloating but also to manage period pain. You can also add some lemon or mint to water or load up your intake of foods rich in water such as cucumbers and watermelons to increase your water intake.

Consume Herbal Teas

The following ingredients are easily found in Indian kitchens. Make herbal teas from them to combat period pain:

Fenugreek (Methi): Fenugreek consumption has shown positive results in many problems related to the menstrual cycle and reproduction. It is considered to relieve menstrual cramps and helps to treat irregular periods. You can consume fenugreek tea by boiling it in water and then straining its grains. You can add it to your meal too.

Cumin (Jeera seeds): It is an Indian spice that helps to reduce period pain. Due to its relaxing effect, antioxidant, antispasmodic, and anti-inflammatory properties, it can relieve pain and spasms.

Ginger (Adrak): It has anti-inflammatory and analgesic properties that help to relieve menstrual pain associated with primary dysmenorrhea. It has great efficacy with no side effects.

Turmeric (Haldi): The use of curcumin for the treatment of different diseases is mentioned in Ayurveda. It also helps to reduce the production of prostaglandins which are involved in the pathogenesis of dysmenorrhea.

Apple Cider Vinegar: It contains a good amount of potassium and calcium that help to ease muscle cramping during periods. You can have it by mixing one teaspoon of apple cider vinegar in a glass of water. However, make sure to consume it using a stainless steel straw as it can erode teeth.

Cinnamon (Dalchini): It is another Indian spice that has excellent antispasmodic properties that help to reduce menstrual cramps and pain. It also helps in regulating menstrual irregularities, heavy menstrual bleeding, nausea, and vomiting with primary dysmenorrhea. You can have cinnamon powder with lukewarm water. You can also sprinkle it on your meals.

Chamomile: It is rich in antioxidants and helps to relieve pain originating from primary dysmenorrhea. It has antispasmodic, analgesic, and anti-inflammatory properties. You can simply have it by boiling it in hot water and then straining it. It also improves mood swings during periods.

A quick perusal of more home care Do’s and Don'ts to deal with pain and cramps during your periods.

Read Here

Alternative Therapies Of Dysmenorrhea

Women who experience severe menstrual cramps can try alternative therapies to ease their symptoms. However, it is always better to consult your healthcare provider before starting any of these.

Massage with essential oils

Massage therapy shows effective results in women suffering from dysmenorrhea. In this therapy, essential oils such as Lavender oil, Cinnamon oil, Roman chamomile oil, Clary sage oil, and Marjoram oil are used which have antispasmodic, analgesic, and anti-inflammatory properties.

You can massage your lower back and abdomen around bedtime for a restful sleep and relief from cramping.

Acupuncture and Acupressure therapy

Acupuncture is a traditional Chinese medicine therapy that involves pointed fine needles inserted in areas of the body known as acupuncture points. Acupuncture may improve to ease the symptoms associated with menstrual cramps and stimulate specific nerves and muscles, which in turn release natural pain-relieving hormones in the body.

However, more research is required for their recommendation, and further studies are needed to prove their effectiveness. They may be an alternative in women not interested in pharmacological management.

Transcutaneous Electrical Nerve Stimulation (TENS)

It is a noninvasive, inexpensive and portable therapy that delivers electrical currents through the skin.

Several studies have investigated the effectiveness of TENS in reducing pain, decreasing the use of analgesics, and improving the quality of life in primary dysmenorrhea patients.

Yoga and meditation

Practicing yoga and meditation regularly has proven to relieve stress, manage anxiety, and pain management. A study shows that practicing yoga for 60 minutes once a week may also help to reduce period cramps.

Complications Of Dysmenorrhea

Primary dysmenorrhea presents with mild to severe abdominal pains and cramps which can affect the overall well-being and quality of life of a woman. However, primary dysmenorrhea is not linked to any underlying conditions and therefore shows no complications.

In the case of secondary dysmenorrhea, complications depend on the cause. These might include:

Infertility: One of the problems caused by secondary dysmenorrhea is infertility or the inability to conceive a child.

Endometriosis, for example, is an underlying condition associated with secondary dysmenorrhea which can change the shape of the pelvis and reproductive organs. It can make it difficult for the sperm to find the egg or deform the fallopian tubes in such a way that they are not able to pick up the egg after ovulation.

Miscarriage: Serious hormonal imbalance can also lead to miscarriage or other complications associated with pregnancy.

Psychological stress: Irregular periods can be stressful, especially for women who are trying to conceive and plan a family.

Osteoporosis: Levels of estrogen play a vital role in overall bone health. Lack of estrogen production may cause a high risk of brittle or weak bones and joints.

Anemia: If any structural problem such as the size and shape of the uterus is causing dysmenorrhea, it may cause heavy bleeding during periods which may lead to anemia.

Insomnia: Painful cramps can severely affect the sleep cycle or cause insomnia.

Consulting the right expert for your reproductive health issues can help you get the right medical advice. Here is a list of types of medical experts you can consult.

Read On

Living With Dysmenorrhea

Painful periods poorly affect daily work or activities of females. Young girls end up missing school. It also impacts academic or work performance in terms of concentration, socialization and achievement. Dysmenorrhea could also limit women's participation in sports or social events. Sleep disturbances due to menstrual pain further hurt the productivity of women.

Painful periods are the main cause of recurrent short-term school absence in adolescent girls and a common problem in women of reproductive age.

If you are experiencing symptoms of dysmenorrhea or it is very challenging for you just simply follow these tips to ease your menstrual cramps:

During menstruation, getting a good amount of rest is essential. You can use a heating pad or hot bottle of water to ease the pain. A warm bath can also help to reduce the overall pain.

Certain foods can help to ease your cramps such as fruits, vegetables, whole grains, legumes, nuts, and seeds. Eating a healthy diet decreases inflammation in the body and also helps to tame menstrual cramps.

Constipation, bloating and an upset stomach are other common problems for women with dysmenorrhea, therefore it is advised to hydrate yourself and include fiber-rich food to relieve the symptoms.

Diet rich in vitamin E, omega-3 fatty acids, vitamin B1, vitamin B6 and magnesium has been found to be highly effective in giving relief from pain associated with menstrual cramps.

Regular exercise such as walking, jogging, and stretching improves blood circulation and helps nutrients and oxygen flow to all the systems of the body. Certain chemicals (endorphins) are released during exercise which helps to block the pain.

Avoid caffeinated drinks and beverages as they may increase vasoconstriction (the narrowing of blood vessels), which can further worsen cramps during your menstruation cycle.

Mild and moderate dysmenorrhea usually responds well to NSAIDs.

Menstruation comes with its own share of myths and misconceptions. They only add to the confusion surrounding periods. Time to get period myths busted.

Tap Here

Frequently Asked Questions

What do cramps feel like during menstruation?

Does chocolate help with period cramps?

Does dysmenorrhea feel like labor?

Do bananas affect your period?

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Piles

Also known as Hemorrhoids, Hemorrhoidal disease and Varicose veins of the anus and rectum

Overview

Piles also known as hemorrhoids refers to the swollen veins in anus and lower rectum. They can develop inside the rectum (internal hemorrhoids) or skin around the anus (external hemorrhoids). The common symptoms of piles include bleeding and pain during passing the stool, presence of lumps in the anal area, and feeling of incomplete defectaion.

Factors that increase the risk of piles include constipation, pregnancy, being overweight/obese, persistent diarrhea, prolonged sitting on the toilet, and straining to lift heavy objects.

In most cases, piles resolve with conservative medical management with lifestyle modifications and self care which includes eating a high fiber diet, staying hydrated, maintaining a healthy weight, staying physically active, and avoiding excessive straining.

Certain medical procedures and/or surgery may be required in some cases when the size of the hemorrhoids is very large.

Key Facts

Usually seen in

Adults between 45 to 65 years of age

Gender affected

Both men and women

Body part(s) involved

Anus

Rectum

Mimicking Conditions

Perianal abscess

Fistula

Anal/rectal cancer

Anal fissures

Anorectal abscesses

Proctitis

Necessary health tests/imaging

Medical history and physical examination

Rectal examination

Anoscopy

Proctoscopy

Colonoscopy

Barium enema test

Other tests: Hemoglobin, Complete blood count (CBC), Blood coagulation tests & Liver function test (LFT).

Treatment

Topical treatments

Painkillers: Paracetamol

Laxatives: Ispaghula husk, Polyethylene glycol & Lactulose

Phlebotonics: Diosmin, Troxerutin, & Calcium dobesilate

Hospital based treatments: Rubber band ligation, Injection sclerotherapy, Electrotherapy, Cryotherapy & Infrared coagulation (IRC)

Surgery: Hemorrhoidectomy, Stapled hemorrhoidectomy & Haemorrhoidal artery ligation.

Specialists to consult

General physician

Gastroenterologist

Colorectal surgeon

Proctologist

Symptoms Of Piles

Many people do not initially realize that they have piles because of not experiencing any symptoms. When symptoms occur, patients may have:

Bleeding during passing the stool (the blood is usually bright red)

Prolapse (protrusion of skin during passing the stool)

Pain during passing the stool

Itching in the anal area

Presence of lumps in the anal area, which may require pushing back after passing the stool

Mucus discharge especially while passing a stool which may be seen in your underwear or on toilet paper after wiping

Redness and swelling around the anus

Fecal seepage (the inability to control bowel movements, causing stool to leak unexpectedly from the rectum)

Feeling of incomplete defecation even after going to the toilet

Sitting for long periods to pass stool

Abdominal pain

Bloating

These symptoms usually get worse by excessive straining (pushing too hard to pass the stool), rubbing, and cleaning around the anus.

Piles are often mistaken as some other gastrointestinal disorders because various anal symptoms of piles such as abdominal pain, bloating, and bleeding resembles other medical conditions?

Did you know?

Although piles are the most common cause of these symptoms, the symptoms may also indicate some other digestive tract problems such as irritable bowel syndrome, Crohn’s disease, ulcerative colitis, or cancer of the colon or rectum. So what else can piles be? Let’s find out.

Consult Now

Causes Of Piles

Piles, also known as hemorrhoids and hemorrhoidal disease involves the disturbances in the naturally occuring cushions like structure in the anal canal. These cushions are naturally present in the anus and are known as hemorrhoids. It comprises loose connective tissue, smooth muscle and blood muscles. The main function of hemorrhoids is to hold stool.

The main cause of piles is exerting excessive pressure in the lower rectum which leads to increase in the size of anal cushions and degeneration of supportive tissues. This can be due to some disease conditions such as chronic obstructive pulmonary disease (COPD), enlarged prostate, constipation, ovarian tumor, etc. The anal cushions can also be affected by other conditions such as low fiber diet, pregnancy, advancing age etc.

Some studies also suggest that abnormalities in the quality and quantity of collagen present in anal cushion can also cause piles.

Types Of Piles

Piles can be classified into four main categories:

1. Internal hemorrhoids

These types of piles develop deep within the rectum in the lining of anus and lower rectum. Due to their location, they are not visible and often remain asymptomatic. In most cases, they go away on their own.

However, larger hemorrhoids can cause several symptoms such as pain, itching, burning sensation, rectal bleeding, etc.

2. Prolapsed hemorrhoids

Internal hemorrhoids are pushed into anal opening by passing stool or putting pressure on the anus leading to the formation of prolpased hemorrhoids. They can be graded according to the extent of protrusion:

Grade 1: In this stage, internal hemorrhoids bulge into anal canal but do not prolapse .

Grade 2: This grade is characterized by prolapse of the swollen veins in the presence of increased pressure in the rectal or anal area such as during defecation or straining. The protruded hemorrhoids reduce spontaneously on their own after passing stool.

Grade 3: This grade is similar to grade 2 except that in this case, hemorrhoids do not go inside on their own. Instead, they require manual reduction.

Grade 4: The prolapse hemorrhoids cannot be pushed back into their normal position and can lead to intense and sudden pain.

3. External hemorrhoids

Most people think of external hemorrhoids when they hear the word piles. These are the visible lumps that are formed under the skin around the anus. They cause more severe pain due to their external appearance which can disrupt daily activities such as sitting etc.

4. Thrombosed hemorrhoids

As the name suggests, it refers to the internal or external hemorrhoids with a blood clot called thrombus. It is usually a complication of an untreated hemorrhoid and causes more severe symptoms such as intense pain, burning, itching, redness and swelling.

Do piles lead to colon cancer?

Piles do not increase the risk of colon cancer. However, a more serious form of piles can cause similar symptoms as colon cancer. Know more about colon cancer in detail.

Click To Read

Risk Factors For Piles

Anything that can increase the pressure in the lower rectum for a long period of time increases the risk of piles. Various risk factors are discussed below:

1. Long term constipation

Constipation in the long run increases the chances of straining which can cause swelling of the veins of anus and lower rectum. This can lead to piles.

Watch this video by our expert to know the simple ayurvedic remedies to relieve constipation.

2. Age

As we age, the fibers of the muscles that support normally existing hemorrhoids become weaker. This makes them less supportive and can lead to prolapse of piles.

3. Diet

Low fiber diet leads to hardening of stools and increases the chances of straining. The constant straining can cause piles by injuring the local tissues.

4. Chronic diarrhea

Chronic diarrhea is also associated with an increased risk of piles. In a study, patients suffering from diarrheal conditions such as colitis, malabsorption, intestinal bypass, and chronic pancreatitis were more prone to piles.

5. Overweight/obesity

The excess weight especially in the abdominal or middle region puts an extra pressure on anal veins which can lead to piles.

Obesity is one of the most complex and largely preventable diseases that affects around one-third of the world’s population. Here are some of the common health complications due to obesity in women.

Click Here

6. Pregnancy

It is the most common risk factor for piles as increased baby’s weight puts pressure on the pelvic blood vessels and anal region.

Constipation is a common symptom during pregnancy which also increases the chances of piles. Here’s a quick guide with tips that can help to manage constipation in pregnancy.

Read To Know

7. Family history

The chances of piles also increases, if someone in the family had piles in the past.

Other factors that might increase the risk of piles include:

Lifting heavy objects

Persistent cough

Repeated vomiting

Sitting down for longer periods

Sitting on the toilet for long periods

Living in developed countries

Straining during bowel movements

Faulty bowel function due to overuse of laxatives or enemas

Spending long periods of time on the toilet

Sedentary lifestyle

Higher socioeconomic status

Injury to the spinal cord

Rectal surgery

Anal sex

Inflammatory bowel disease

Note: The prevalence of piles is more common in developed countries due to their dietary habits which include low fiber intake. The posture during defecation which is opposite of squatting is another reason that contributes to higher incidence of piles in these countries.

Diagnosis Of Piles

Piles is often confused with other anorectal disease such as fissures, fistulas, and abscesses. The complete diagnosis is important to confirm piles before initiating the treatment. The external hemorrhoids are usually diagnosed by physically analyzing the area around the anus whereas procedures such as digital rectal exam are performed to confirm internal hemorrhoids.

1. Medical history

The first step in diagnosing piles includes enquiry about the symptoms and medical history. The doctor also asks about the patient’s eating habits, toilet habits, laxative use, and current medical condition.

2. Physical examination

Rectal examination involves the inspection of a person's lower rectum, pelvis, and lower belly. The test is performed by inserting the gloved finger into the rectum. This test checks external hemorrhoids, skin tags, prolapsing internal hemorrhoids, fissures, fistulas, and abscesses. The examination is also done by pressing the surface of the rectum to assess abnormal masses and tenderness. The technique is not usually painful, but you may feel some slight discomfort.

3. Anoscopy

It involves examination of the anus and lower rectum with the help of a device called anoscope. It is used to rule out other possible causes of rectal bleeding. The procedure requires the insertion of a tube into the rectum through the anus. The anal region is then inspected using a light. Patients are instructed to sit on a commode and strain during the exam to give an accurate idea about the degree of prolapse.

4. Proctoscopy

This test is used to examine the internal organs of the rectum and anus using an instrument, known as protoscope. A protoscope is a straight, hollow metal or plastic tube, sometimes with light at the end. The instrument is a little larger than anoscope and helps in examining the entire anal canal. It is usually performed in case of red flag symptoms which includes bleeding, weight loss, change in bowel habits, or anemia.

5. Colonscopy

Colonoscopy is a procedure in which a doctor uses a colonoscope to look inside your rectum and colon. It is considered in patients with red flag symptoms.

6. Barium enema

The test includes the injection of barium enema (radio contrast fluid, barium sulfate) into the rectum from the anus.

7. Other tests

In some cases, other tests such as hemoglobin, complete blood count (CBC), blood coagulation studies, liver function tests (LFT) are also performed.

Celebs affected

Kishwer Merchant

Kishwer Merchant, an Indian television actress disclosed through a video that she suffered from piles during her pregnancy. She managed the condition by remedies suggested by her doctor.

Whitney Houston

The American singer, actress, and music producer who was also reported to suffer from piles.

George Brett

This American baseball player also suffered from plies. He managed to treat the condition with surgery.

Specialist To Visit

Piles is very common due to dietary habits and sedentary lifestyle. Various people experience symptoms but do not visit the doctor due to embarrassment. This worsens the condition of the patient and significantly impacts quality of life.

You should immediately consult the doctor if:

Are constantly losing weight

Your bowel habits have changed

Your stool become dark or sticky

You are experiencing rectal bleeding

You have a feeling of sitting on a foreign object

The symptoms of piles often resolve on their own or with simple treatments. However, speak to your doctor, if you have piles and there's no improvement after 7 days of treatment at home.

The specialist doctors that can help in this condition include:

General physician

Gastroenterologist

Colorectal surgeon

Proctologist (specializes in performing surgeries and treatment of the diseases related to the anus, colon, and rectum)

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

Consult Now

Prevention Of Piles

The proper education about the piles, its triggers and proper diet is vital for preventing piles. The following measures can aid in preventing piles:

Maintain a healthy weight

Eat fiber rich food

Keep the bottom clean and dry

Exercise regularly

Avoid excessive consumption of tea and coffee

Avoid long periods of sitting

Go to the bathroom immediately when there is an urge to defecate

Avoid taking mobile phones to the bathroom

Elevate your feet on a support while defecating

Avoid pushing too hard while passing stool

Stay physically active

Treatment Of Piles

The very first line therapy involves lifestyle modifications and self care. Patients should adopt dietary modifications with adequate fluid and fiber intake. The treatment regimen is based upon symptoms and grade of piles which can be grouped as:

A. Non-surgical treatment

It includes medications and office based treatments. They are initiated, if simple home remedies fail to resolve symptoms and includes:

1. Medications

Medications are generally prescribed to ease the symptoms such as pain, irritation, swelling, and to soften the stool.

Topical treatments: Creams, ointments and suppositories are given to relieve discomfort. These medications are to be applied only for 5 to 7 days in a stretch as they may irritate the sensitive skin of the anus. In case of severe inflammation in the anal region, corticosteroid cream that contains steroids is also given.

Pain relief medications: The common painkillers such as paracetamol are also used to relieve pain associated with piles. However, medications such as ibuprofen are avoided in case of excessive bleeding.

Laxatives: These medications soften the stools and help in emptying the bowel. Commonly used laxatives are ispaghula husk and lactulose.

Phlebotonics: Phlebotonics are a class of drugs consisting of plant extracts. They are available as dietary supplements and include diosmin, troxerutin, hydroxyethylrutoside, and calcium dobesilate. They have shown to reduce bleeding, itching, and discharge in piles.

2. Hospital-based treatments

These therapies are used in case home remedies and medications fail to resolve symptoms. The various hospital-based treatment include:

Rubber band ligation: It is one of the most popular non-surgical methods to treat piles due to its safety and cost effectiveness. The procedure involves inserting a band at the end of the internal hemorrhoid. The band restricts the blood supply to the hemorrhoid tissue. This helps in reducing and fixing the internal hemorrhoid.

This method has a very high cure rate with very less chances of recurrence. This therapy is effective for first, second, and third-degree hemorrhoids. Multiple treatments may be necessary for large and bulky hemorrhoids.

Injection sclerotherapy: It involves injecting sclerosants at the base of hemorrhoids. Sclerosants are chemical agents that lead to an inflammatory response and kill the hemorrhoid tissue. The commonly used agents include 5% phenol in an oil base, hypertonic saline, 5% quinine, and urea.

Electrotherapy: This therapy coagulates the blood supply in the hemorrhoids which causes shrinkage of the swollen tissue.

Cryotherapy: It is a rarely used technique and involves freezing of the piles using liquid nitrogen.

Infrared coagulation (IRC): In this procedure, few bursts of infrared light are delivered using a small probe. This helps in the coagulating of the blood supply to the hemorrhoids.

B. Surgical treatment

The surgical intervention is required in case:

Inability to tolerate the hospital procedures

Large external hemorrhoids

Failure of non-operative procedures

Mixed hemorrhoids with prolapse

Grade 3 and 4 hemorrhoids

Coagulopathic patients requiring management of hemorrhoidal bleeding

Surgery involves either removing the hemorrhoid or restricting their blood supply which causes them to shrink. The various surgical procedures include:

Hemorrhoidectomy: It involves removal of extra tissue that causes bleeding and protrusion. It is done for both internal and external hemorrhoids under anesthesia using sutures. Hospitalization and rest is required as postoperative care.

Stapled hemorrhoidectomy: In this, a stapler like device is used to reposition the hemorrhoids which eventually cut off their blood supply.

Haemorrhoidal artery ligation: In this procedure, the arteries supplying blood to the hemorrhoids are tied and cut off.

Home-care For Piles

1. Follow good toilet practices

There are various toilet behaviors such as excessive straining, pushing, and prolonged time on the toilet that can contribute to piles. The following measures should be taken to follow good toilet practice:

Limit the toilet time to 3 to 5 minutes to prevent protrusion

Avoid excessive wiping

Avoid straining to pass the stool to reduce the pressure on piles

Use moist toilet paper to clean your bottom after passing stool

Avoid rubbing the area around the bottom

2. Do sitz baths

Sitting in warm water for at least 15 minutes in a stretch is very helpful for relieving itching, pain, and burning sensation in the anal region. It should be practiced 2-3 times to help the healing process. Avoid adding any salts, lotions, or oils to the water as it can cause inflammation. A warm bath also helps in relieving itching and pain.

3. Take high fiber diet/supplements

It is very important to keep the stool soft and regular in piles to avoid straining as excessive straining can worsen the condition. This can be done by keeping a good amount of fiber in the diet by including foods such as whole grain bread, cereal, fruit and vegetables. High fiber diet i.e 25g/day for women and 38g/day for men is recommended in piles.

OTC supplements such as ispaghula husk can also be taken to soften the stool. Low fiber foods such as white bread, red meat, processed foods, and fried foods should be avoided.

Here, have a look at what foods to avoid when you are suffering from piles.

tap To Know

4. Maintain proper hydration

The patient should also take an adequate amount of water to keep stool consistency.

Watch this video by Dr. Suchin Bajaj in which he addresses the importance of water, the amount of water to drink each day, and the benefits of drinking water.

5. Avoid caffeinated beverages

It is advised to avoid or limit caffeinated beverages (tea and coffee) as they may harden the stools and make the process of defecation even more painful.

6. Indulge in some physical activity

Exercise is found to be related to the regular bowel habit. The light physical activity also helps in relieving constipation. The patient of piles should spare some time for physical activity.

7. Avoid spicy and processed foods

Spicy foods can aggravate the symptoms of piles such as pain, burning sensation, and discomfort and hence should be avoided.

8. Avoid certain medications

Painkillers such as codeine should be avoided as it can cause constipation. NSAID such as ibuprofen should also be avoided as it can increase rectal bleeding.

9. Use ice packs

Ice packs are an excellent tool for reducing swelling and pain associated with piles. Ice pack wrapped in a soft towel is kept for at least 15 minutes on the affected area. The procedure should be repeated on an hourly basis for immediate relief.

10. Sit right

The people having piles should elevate their feet while passing stool. This changes the position of rectum that allows easy passage of the stool.

11. Modify your clothing

Patients can increase the healing process of piles by wearing loose-fitting, breathable, cotton underwear and pants. This can help prevent the area surrounding the piles from becoming irritated by excess sweat, and help reduce symptoms.

Watch this video by our expert to know the home remedies to ease the symptoms of piles.

Complications Of Piles

Most of the hemorrhoids are resolved with the treatment but it can rarely lead to following complications:

1. Skin tags

It refers to the flap of tissue that hangs off from the skin of anus. It develops when the clot of a thrombosed hemorrhoid dissolves. It often irritates the patient.

2. Anemia

The patient’s blood count can also drop due to bleeding from a chronic hemorrhoid.

3. Infection

Untreated external hemorrhoids can also get infected due to the presence of sores.

4. Strangulated hemorrhoid

Sometimes, blood flow is cut off from the prolapsed hemorrhoid. This can be very painful and cause bleeding.

5. Blood clots

In various cases, a blood clot is formed in the piles. It is extremely painful and sometimes needs to be drained.

6. Hemorrhage

It is the most common complication of piles in which hemorrhoids can rupture and can cause serious rectal bleeding. This requires immediate medical attention. Passing a very hard stool can aggravate this process. Patients may also come across various complications due to various procedures that are performed to treat piles.

Complications of hemorrhoidectomy

Patients who have undergone surgery usually experience pain and fullness within the first week following hemorrhoidectomy. The other complications include:

Early complications:

Bleeding

Urinary retention

Thrombosed external hemorrhoids

Late complications:

Anal stenosis (narrowing of the anal canal that makes it difficult to pass stools)

Skin tags

Recurrent hemorrhoids

Delayed hemorrhage

Fecal or bowel incontinence

Rare complications:

Sepsis

Abscess formation

Excessive bleeding

Peritonitis (inflammation of the inside of abdomen)

Complications of rubber band ligation

This procedure can be associated with delayed hemorrhage. The immunocompromised patients can develop sepsis that can be characterized as fever, perineal edema, and pain.

Alternative Therapies For Piles

1. Nutrition and dietary supplements

- Psyllium: It is a very well known fiber that is known for its stool softening effect. It reduces the pain associated with piles and makes the process of passing the stool smooth. It can be consumed with water or milk. Patients with inflammatory bowel disease should consult their doctor before consuming it. The dose of the psyllium should be gradually increased as excessive fiber can cause bloating.

Looking for fiber supplements?

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- Probiotics: They are the good bacteria that helps in maintenance of gut health. Regular consumption of probiotics rich food like curd, buttermilk, etc helps in reducing the symptoms of piles. They also speed up the process of healing and aids in preventing recurrence.

2. Herbs

The use of herbs in treating is a very well known and old practice. However, one should start taking the herbs under the supervision of a doctor. Some of the herbs that are used to manage piles are:

Witch hazel (Hamamelis virginiana): This herb is either applied topically or used as a sitz bath. It is known to reduce the pain by temporarily shrinking piles. The various pads that are available in the market to treat piles contain witch hazel.

Goldenrod (Solidago virgaurea): It is used to reduce inflammation of hemorrhoids through topical application.

Gotu kola (Centella asiatica): It is used for venous insufficiency or varicose veins

Yarrow (Achillea millefolium): It is used to treat bleeding that is associated with hemorrhoids.

3. Other home remedies

Castor oil: It reduces the size of the piles and eases the pain. It can be taken by adding in milk or can be applied topically on the affected region.

Tea tree oil: It possesses antimicrobial properties and helps in keeping the inflamed site of piles germs free. It is applied topically on the affected area.

Coconut oil: It acts as a moisturizer and helps in relieving symptoms of piles such as swelling and inflammation. It also helps in reducing the urge of itching.

Myrtle essential oil: This oil improves bleeding, pain, irritation and itching for low-grade piles.

Aloe vera: Aloe may provide relief from the burning, itching, and swelling caused by piles, when applied to the anus.

4. Homeopathy

The following homeopathic preparations are also used in piles.

Aesculus: It is used to manage piles that have a burning sensation.

Collinsonia: It is used for chronic, itchy hemorrhoids with constipation.

Living With Piles

The treatment of piles is not always satisfactory despite its easy diagnosis. It is best managed by a team of people dedicated to anorectal conditions. Piles are not life-threatening but seriously affect quality of life.

Managing postoperative pain

The overall result of surgery varies from good to poor. The patient should expect pain and anal fullness in the first week after hemorrhoidectomy. The adequate pain control is achieved by using oral narcotics in addition to NSAIDs, muscle relaxants, and sitz baths. The use of stool softeners is also advised to avoid straining that may aggravate pain. Patients who have undergone surgery should reconsult their doctor, if their pain is getting worse as it may indicate a soft tissue infection.

Educating patient

Patient education plays a very vital role in the post operative care and preventing recurrence. The nurse, dietitian, and pharmacist should encourage the patient to avoid constipation, drinking sufficient water, taking a stool softener, reducing body weight , avoiding prolonged seating, eating a high fiber diet, and avoiding excessive pain medication. These simple measures not only reduce the risk of hemorrhoids but also decrease healthcare expenses.

Managing relapse

The surgery for piles, especially for those who do not change their lifestyle are not always satisfactory. Pain, urinary retention, and recurrence are very commonly seen postoperatively. Individuals experiencing recurrence, prolapse, and bleeding of internal piles should immediately refer to a colorectal surgeon.

Frequently Asked Questions

How long will it take to recover from piles?

How to cope up with piles during pregnancy?

Is there a loss of stool control after piles surgery?

How squatting helps prevent piles?

Can you cure piles permanently?

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Pneumonia

Also known as Lung infection, Respiratory infection, Lower respiratory tract infection (LRTI) and Bronchopneumonia

Overview

Pneumonia is a disease of the lungs that makes breathing difficult and limits oxygen levels in the body. It is mostly caused due to an infection by microbes such as bacteria, viruses, and fungi. In pneumonia, the air pouches which usually fill with air when breathing, gets filled with infective material, mucus and fluid. This can lead to symptoms such as cough, fever, shortness of breath, and chest pain.

Worldwide, pneumonia is one of the leading causes of morbidity and mortality in children under five years of age despite being easily preventable and treatable. Community-acquired pneumonia (CAP) is the leading cause of morbidity and death in adults across the world. India contributes to 23% of the global pneumonia burden. Due to the high risk, it is advised that people above 65 years of age and those above 18 years of age with risk factors for pneumonia must take pneumococcal vaccines routinely.

Pneumonia is more common during the winter months and can affect people of any age. However, the risk is high in patients with compromised immunity like young children upto 2 years of age, people older than 65, and people with underlying medical problems such as heart disease, diabetes, or chronic lung disease. Mild pneumonia can usually be treated at home with rest and use of antibiotics prescribed by a doctor. More severe cases may need hospital treatment.

Key Facts

Usually seen in

Children below 5 years of age

Adults above 65 years of age

Gender affected

Both men and women

Body part(s) involved

Lungs

Prevalence

Worldwide: 14 cases per 1000 children (2018)

India: 403 cases per 1000 children (2015)

Mimicking Conditions

Asthma

Lung abscess

Bronchitis

Atelectasis

Croup

Respiratory distress syndrome

Necessary health tests/imaging

Sputum test

Chest X-ray

Complete blood count (CBC)

Pulse oximetry

Arterial blood gas test

Bronchoscopy

Urine test (Streptococcus pneumoniae)

Chest CT scan

RT-PCR

Treatment

Antibiotics: Ciprofloxacin, Cefepime, Azithromycin & Levofloxacin

Antifungals: Fluconazole, Itraconazole & Amphotericin B

Antivirals: Oseltamivir

Mucolytics: Acetylcysteine

See All

Symptoms Of Pneumonia

The signs and symptoms of pneumonia can have some common presentation or vary from person to person depending on the type of pneumonia, age, and overall health.

Some of the common pneumonia symptoms in adults are:

Cough with sputum

Fever

Shaking & chills

Rapid shallow breathing

Shortness of breath

Chest pain

Low energy

Loss of appetite

Nausea & vomiting

The symptoms of pneumonia in adults above 65 years of age include confusion, changes in mental awareness and lower than normal body temperature. Pneumonia symptoms in children may include intercostal breathing (where the child uses the chest muscles to breathe), not taking any feed and high-grade fever. Also, children with very severe pneumonia may show symptoms such as unconsciousness, hypothermia (dangerously lower than normal body temperature), and convulsions.

Moreover, the symptoms also vary based on the cause of the infection. For example, bacterial pneumonia can cause symptoms such as a very high-grade fever (around 105 degrees F) along with severe sweating and increased breathing and pulse rate. In some cases, bluish coloration of the lips and nails is also seen due to lack of oxygen in blood. Whereas, in case of viral pneumonia, symptoms usually develop over a period of time and are similar to influenza symptoms which include fever, headache, weakness, muscle pain and, dry cough. These symptoms often worsen in a day or two.

Causes Of Pneumonia

Pneumonia is caused by a number of infectious agents and is classified based on the organisms that cause the infections. The common causes and types of pneumonia include:

Bacterial pneumonia, caused by bacteria such as Streptococcus pneumoniae, Haemophilus influenzae type b (Hib) and Klebsiella pneumoniae.

Viral pneumonia, caused by viruses such as the respiratory syncytial virus and coronavirus.

Fungal pneumonia, caused by fungi such as candida, aspergillus, and mucor.

Atypical pneumonia or mycoplasma pneumonia, caused by mycoplasma (organisms that have traits similar to bacteria and viruses but do not belong to either category).

Pneumonia can spread via airborne droplets when a person coughs or sneezes. These droplets when inhaled can infect the lungs. It can also be transmitted through saliva and blood.

Types Of Pneumonia

Pneumonia can be acquired during hospital stay (known as hospital-acquired pneumonia) or outside any medical setting (known as community-acquired pneumonia). Other forms of pneumonia can be aspiration and atypical pneumonia.

1. Hospital-acquired pneumonia (HAP)

Also known as nosocomial pneumonia, hospital-acquired pneumonia can be serious because the bacteria causing it may be more resistant to antibiotics and because the people who get it are already sick. People who are on breathing machines (ventilators), often used in intensive care units, are at higher risk of this type of pneumonia. It is mostly caused by bacteria such as staphylococci & pseudomonas aeruginosa.

2. Community-acquired pneumonia (CAP)

If you get pneumonia not related to your hospital stay, then it is known as community-acquired pneumonia. It is usually caused by organisms present in the environment like pneumococcus bacteria.

Note: Aspiration pneumonia, although rare, can occur when food, drink, vomit or enters into your lungs. Aspiration is more common in comatose patients, people with brain injury or who have swallowing problems.

Did you know?

Atypical pneumonia, also known as walking pneumonia, is a condition in which pneumonia isn't severe enough to require bed rest or hospitalization. People with walking pneumonia may not even know they have pneumonia as their symptoms may feel more like a mild respiratory infection than pneumonia. The symptoms are generally so mild that you don't feel you need to stay home from work or school, so you are out walking around, hence the name “walking pneumonia”.

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Risk Factors For Pneumonia

Pneumonia causes more than a million hospitalizations each year. It is one of the most common infectious killers in children, claiming one child every 39 seconds.

Anyone can get pneumonia, however the risk is higher in people:

Above 65 years of age

With chronic lung diseases like COPD, cystic fibrosis, bronchial obstruction, or lung cancer or those with a previous episode of pneumonia

Suffering from conditions that cause any alteration in level of consciousness (eg stroke, seizure, anesthesia, drug or alcohol intoxication) or dysphagia

With immunocompromised conditions like HIV infection, organ/stem cell transplantation, diabetes or those on immunosuppressive medicines

Suffering from metabolic disorders like malnutrition, uremia, and acidosis

With lifestyle risk factors such as smoking, alcohol & toxic inhalants

With intubation or bronchoscopy

With viral respiratory tract infection like influenza

Can pneumococcal vaccines keep you safe during winters?

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Breastfeeding can lower the chances of pneumonia in kids

Studies suggested that exclusive breastfeeding during the first six months of life as well as breastfeeding upto 24 months of age can lower the chances of pneumonia in infants and young children. This is attributed to the presence of numerous immunoprotective and immune boosting compounds in the breast milk. Here are more reasons why it is important to breastfeed.

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Diagnosis Of Pneumonia

Based on your symptoms and clinical history, your doctor will perform a physical examination and may even order several investigations. Typically, pneumonia can be diagnosed with a physical exam (to hear the sound of your breathing) and X-ray. However, depending upon the severity of the symptoms, your doctor may even order other tests such as:

1. Sputum test: It is recommended to detect various respiratory tract diseases caused by fungi or bacteria including pneumonia.

2. Chest X-ray: It is used to diagnose any problems like infections, inflammations or abnormal growth in the lungs.

3. Complete blood count (CBC): This test may be required to evaluate if the patient is suspected of having a severe infection or inflammation.

4. Pulse oximetry: It helps to check the oxygen levels of the blood in a non-invasive way that too within seconds.

5. Arterial blood gas: This test measures the acidity (pH) and the levels of oxygen and carbon dioxide in the blood from arteries.

6. Bronchoscopy: It provides direct visualization of the lungs including the bronchioles and airway passages to detect for any infection or tumors.

7. Urine test: This test is used to check for the presence of the bacteria streptococcus pneumoniae in the urine.

8. Imaging tests: It includes tests such as chest CT scan and lung ultrasound might be recommended to check for any damage in the lungs.

9. RT-PCR: It is the most reliable and accurate test to diagnose COVID-19 infection complicated with pneumonia. It helps to detect the genetic material of the virus present in the sample (usually a throat or nasal swab).

10. Viral serology: It helps to detect viral pneumonia and confirm the presence of antibodies targeted against the virus. It also helps to measure the quantity of the viral antigens in the blood sample confirming the presence of viral infection.

Celebs affected

Naseeruddin Shah

The veteran Bollywood actor Naseeruddin Shah was hospitalized in June 2021 after being diagnosed with pneumonia.

Dilip Kumar

The late Bollywood actor was known to suffer from bronchial pneumonia. He was admitted due to a chest infection and was known to be experiencing recurrent pneumonia.

Oprah Winfrey

The popular producer and host of a talk show, Oprah Winfrey, said in an interview that she was diagnosed with pneumonia. She visited a lung specialist on experiencing a little rattling in her chest, who confirmed she has pneumonia after checking up with a stethoscope.

Prevention Of Pneumonia

Pneumonia can be prevented in many cases. There are few ways to prevent pneumonia such as:

Washing your hands frequently, especially before touching your face and handling food

Using a hand sanitizer, if soap and water aren’t available, to clean your hands

Quitting smoking and avoiding secondhand smoke

Covering your mouth when coughing or sneezing

Getting adequate sleep, exercising regularly & eating a well-balanced diet

Avoiding close contact with people who have pneumonia or other contagious illnesses

Getting vaccinated if you belong to the high risk group such as above 65 years or age or are above 18 years of age but have several risk factors for pneumonia

Pneumococcal vaccine

Pneumococcal vaccine protects from pneumococcal diseases caused due to Streptococcus pneumoniae bacteria. This vaccination can help prevent the respiratory infection caused by bacteria.

The pneumococcal vaccine is indicated in special high-risk groups only such as:

People who underwent splenectomy

People with low immunity

People suffering from diabetes

People with chronic organ failure

Note: Pneumonia vaccination won’t prevent all cases of pneumonia, however, it can lead to a milder and shorter course of the disease and lower risk of complications.

Pneumococcal vaccine can be given to children below 5 years of age. It is given in three doses, starting at 1.5 years. The second and the third dose, also known as booster doses, are recommended after a month and two month post first dose, respectively.

Make sure you consult your child’s doctor to make sure which vaccines are best for your child. Remember, vaccinations given at the right time can help you give the best quality healthcare to your child.

Specialist To Visit

Call your doctor immediately if you have:

Difficulty breathing

Develop a bluish color in your lips and fingertips

Chest pain

High fever

Cough with mucus

While your family doctor or a general physician can help in the diagnosis of the condition, if you want to go to a specialist then you can consult:

Pulmonologist or lung specialist

Pediatrician

Worried about your child’s health? Consult India’s best doctors here.

Consult Now!

Treatment Of Pneumonia

The treatment for pneumonia depends on the type, severity, and overall health. In most cases, antibiotics, antiviral, or antifungal medications are prescribed to treat pneumonia based on its type along with other medications to treat symptoms like fever & cough.

1. Antibiotics

Your doctor might recommend antibiotics if he/she suspects bacterial infection. Some of the commonly prescribed antibiotics include:

Amoxycillin + clavulanic acid

Ciprofloxacin

Cefepime

Cefuroxime

Azithromycin

Levofloxacin

2. Antifungals

These medicines are recommended if you have fungal infection along with pneumonia, which is mostly seen in patients with comorbidities such as diabetes.

Fluconazole

Itraconazole

Amphotericin B

3. Antivirals

These medicines help to fight the viruses that are responsible for worsening the condition thereby improving the effectiveness of the treatment.

Oseltamivir (influenza virus)

Remdesivir (COVID-19)

4. Mucolytics

Acetylcysteine is one of the commonly used mucolytics that helps to treat respiratory diseases with excessive mucus such as pneumonia, COPD, and bronchitis. It loosens and thins mucus in the respiratory tract or airways thereby making it easier to cough out.

In severe cases, most people respond to treatment and recover from the condition. However, in some cases, such as diabetes, a weak immune system, or heart failure, complications can arise. This is why it is important to consult your doctor the moment you spot the symptoms of pneumonia.

Consult India’s best doctors from the comfort of your home.

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Home-care For Pneumonia

Most cases can be treated at home by taking the prescribed drugs, taking enough rest, and drinking lots of water. However, if it’s not being managed at home, your doctor may advise hospitalization for appropriate treatment.

Some of the common measures to follow at home to treat and manage pneumonia include:

You can take antipyretics and painkillers to control fever and pain. Do not take any medications without consulting your doctor first.

Drink lots of fluids as this not only helps you to keep your body temperature in control but also aids to loosen up the secretions and help to manage cough.

If you suffer from a severe cough or if your cough is preventing you from getting sleep, then talk to your doctor about what medications can help.

Use a humidifier, take warm baths and drink warm beverages as this helps to open up your airways and also ease your breathing.

If you smoke, then make sure to stay away from smoking (this includes secondhand smoke or vehicular smoke). This is because smoke can further impair your lungs and hasten your healing process.

Take sufficient rest and eat a healthy diet. Make sure to limit your daily chores and not overdo any activity until you feel fully recovered.

You can try some chest exercises that help to clear up mucus from the respiratory tract and also improve your breathing.

Here are a few simple breathing exercises to increase your oxygen level. Watch the video to know.

Complications Of Pneumonia

The common complications due to pneumonia include:

Impaired breathing

Acute respiratory distress (a severe form of respiratory failure)

Lung abscesses (pus in the lungs)

Bacteremia (bacteria in the blood)

Pleural effusion (fluid in the lungs)

Septic shock

Empyema

Renal failure

Respiratory failure

Pneumothorax

COVID-19 and pneumonia

The second wave of COVID-19 in India has been known to cause detrimental consequences across the nation. Not only the number of positive cases increased spirally but it also led to drastic reduction in the essential treatment supplies and a significant increase in the hospitalization due to lung complications. One of the severe complications seen during this phase was COVID-19 related pneumonia, especially in people with chronic diseases and lung problems.

This also led to an increase in the demand of various medicines and use of novel treatment options to improve the overall lung function and reduce the viral load. Some of the commonly used medicines include fabivirapir, ivermectin, tocilizumab, steroids, montelukast and levocetirizine. Also, treatment options such as remdesivir, plasma therapy, antibody cocktail, and 2-deoxy-D-glucose (2-DG) were also used to treat COVID-19.

To know more about COVID-19, its treatment & latest updates/news, check out our coronavirus section.

Click Here!

Alternative Therapies Of Pneumonia

As cough is one of the most common symptoms of pneumonia, here are a few remedies for cough, other than your conventional medicines.

Lavanga (clove) can be fried in ghee and should be kept in mouth for sucking. This preparation is quite useful for relieving cough.

For relieving cough you can also take 60 mg powdered fruit of pippali (long pepper) and 120 mg of saindhava namak (rock-salt), mix it with hot water & take it two times in a day.

Take 3-6 g of fruit and root of pippali (long pepper) and shunthi (dried ginger) in equal proportion. Mix this with honey and take this mixture two times in a day.

Prepare ghrta also called ‘ghee’ from equal part of fruit of maricha (black pepper), ardraka (ginger) and sharkara (raw sugar). It is to be taken twice a day in a dose of around 12-24 gm.

Taking 1-3gm of sitopaladi churna with 4 to 6 gm of honey twice a day may also help.

You can also take 300mg of karpooradi churna along with equal parts of sugar candy, twice a day.

You may take a juice of ardraka (ginger) 14 ml with equal quantity of honey, twice a day.

The decoction of tamarind leaves (14 to 28 ml) is to be taken with 2 gm of saindhava namak (rock salt) and 500 mg of hing (asafoetida) fried in ghee. This preparation can be taken twice a day.

Did you know?

Approximately 30% of patients who receive mechanical ventilation can develop Ventilator-associated pneumonia (VAP). As the name suggests, it is a type of pneumonia that occurs in patients who have been intubated or mechanically ventilated by means of a tracheostomy for at least 48 hours. Mechanical ventilation allows oral and gastric secretions to enter the lower airways, which can trigger the bacteria in the lower respiratory tract to cause pneumonia. Consult our professional and seek help.

Consult Now!

Frequently Asked Questions

What happens in pneumonia?

Is pneumonia contagious?

Is pneumonia in kids serious?

What increases the risk of pneumonia in kids?

How to improve breathing with exercises?

What exercises remove mucus from lungs?

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Polio

Also known as Poliomyelitis

Overview

Polio is a highly infectious disease caused by polioviruses. It is transmitted only from person to person through the fecal-oral route or, less frequently, by contaminated water or food.

Signs and symptoms of polio range from no symptoms to limb deformities, paralysis, and even death.

Not receiving the polio vaccine, weak immunity, and travel to areas endemic to the disease are the main risk factors for getting infected with poliovirus.

Diagnosis of polio is based on the patient's history, physical exam, and symptoms. The virus may be isolated from the patient's throat, feces, and cerebrospinal fluid (CSF) to confirm the diagnosis.

There is no cure for polio. Treatment of polio is mainly supportive and focuses on limiting and alleviating symptoms.

For most patients, the prognosis is good because there are few or no symptoms; however, the prognosis is severely limited if the patient develops more severe symptoms such as limb deformity, paralysis, difficulty breathing, and inability to swallow foods.

Polio can only be prevented by immunization. The vaccine, given multiple times, can protect a child for life. Due to the launch of a few initiatives like Global Polio Eradication, more than 18 million people who would otherwise have been paralyzed can walk today.

Key Facts

Usually seen in

Children under 5 years of age

Gender affected

Both men and women, but more common in men.

Body part(s) involved

Brain

Spinal cord

Prevalence

World: 6 (2021)

India: 1 (2011)

Mimicking Conditions

Flu-like symptoms

Acute flaccid myelitis

Guillain-Barre syndrome

Necessary health tests/imaging

Virus isolation and detection

Cerebrospinal fluid analysis

Electromyogram (EMG)

Blood tests

Treatment

No cure. Only supportive treatment:

Pain relief medications: aspirin, paracetamol or ibuprofen, gabapentin

Physical or occupational therapy

Mobility aids

See All

Symptoms Of Polio

The effects range from asymptomatic (most common) to the most severe forms of debilitating paralysis. Various symptoms are discussed below:

1. Non-Paralytic Polio

About 95% of people who get infected with polio won't have any symptoms. They are able to fight off the infection without even realizing they are infected.

In approximately a few cases, 4%–8% of polio infections result in a minor illness without any evidence of central nervous system invasion. This is known as abortive poliomyelitis. Complete recovery usually occurs in less than a week.

Few people experience a flu-like illness for 3 to 21 days after they are infected. The symptoms observed in this type of infection are:

High temperature (fever) of 100.4F or above

Headache

Abdominal pain

Sore throat

Gastrointestinal disturbances (nausea and vomiting)

2. Paralytic Polio

Around 1 percent of cases can lead to paralytic polio. Paralytic polio causes paralysis of the spinal cord, brainstem, or both. The early symptoms are related to nonparalytic polio. But after a week, severe symptoms appear like

Muscle weakness

Tight joints (contractures)

Shrinking of the muscles (atrophy)

Deformities, such as twisted hips, feet, or legs

Loss of reflexes

Sudden paralysis (temporary or permanent)

Many people with paralytic poliomyelitis recover completely, and muscle function returns to some degree in several cases.

3. Post-Polio syndrome (PPS)

Polio can return even after 15 to 40 years of recovery. Some common symptoms of Post Polio syndrome include

Easily exhausted or fatigued

Low tolerance to cold temperatures

Worse muscle pain

Muscle atrophy

Trouble with concentration and memory

It has been estimated that 25-50 percent of people who survive polio will get PPS.

Causes Of Polio

Polio is a highly infectious disease caused by the poliovirus.

Poliovirus only infects people. An infected individual can spread the virus to others before or up to 2 weeks after symptoms appear. An asymptomatic carrier can also infect others.

The poliovirus can survive in an infected person's intestines for many weeks. This can lead to the contamination of food and water in an unclean environment. Transmission can occur in the following ways:

Contact with the feces of an infected person

Droplets from a sneeze or cough of an infected person

Touching contaminated surfaces.

Close contact with an infected person.

Risk Factors For Polio

Polio tends to affect the most vulnerable members of the population. This includes pregnant, young children, and those with weakened immune systems.

Various risk factors for contracting the infection are as follows:

Not vaccinated against polio

Travel to countries where polio is widespread or endemic, like Pakistan or Afghanistan.

A weakened immune system

Tonsillectomy or having tonsils removed

Handling of a laboratory specimen of the virus

Diagnosis Of Polio

A general practitioner diagnoses polio by a detailed medical history, performing a physical exam, and testing samples of body fluids.

Medical history

This includes taking information like any travel to an area where polio is endemic or any contact with a person infected with polio.

Physical examination

This involves a complete body check-up. The function of respiratory muscles is examined as polio affects the spinal cord and the brain stem, which may infect the respiratory muscles. The muscle reflexes are also evaluated as there may be stiff neck and back muscles or difficulty lifting the head or legs while lying flat on the back.

Laboratory diagnosis

The following tests help in the diagnosis and confirmation of polio infection:

Virus isolation and detection

Virus isolation in culture is the most reliable method for diagnosing poliovirus infection. Poliovirus is usually isolated from stool specimens or throat swabs. Two samples are collected at least 24 hours apart from patients with suspected poliomyelitis to increase the chances of isolating poliovirus.

Cerebrospinal fluid analysis

The cerebrospinal fluid (CSF) can also be used for diagnostic testing of the virus. CSF is collected using a lumbar puncture (also called a spinal tap), in which a needle is inserted into the spinal canal to collect CSF.

Blood tests

Blood is tested for antibodies for poliovirus, produced by the body in defense against an invading virus or bacteria.

Electromyogram (EMG)

EMG measures electrical activity in response to a nerve's muscle stimulation. This test is used to help detect any neuromuscular abnormalities and differential diagnosis of muscle weakness in post-polio syndrome.

Fingerprinting the polio virus

Poliovirus is isolated and tested by a particular test called oligonucleotide mapping (fingerprinting) or genomic sequencing. This test helps look at the virus's genetic sequence to screen if the virus's origin is wild-type or vaccine-like. Wild-type viruses naturally occur in the environment, whereas a vaccine-like virus is derived after a spontaneous mutation of the virus's genes.

Book your tests from the comfort and safety of your home.

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Celebs affected

Frida Kahlo

Renowned artist Frida Kahlo contracted polio at the age of 6 years. She had to spend months in bed recovering from the disease. Although she was not paralyzed, her right leg was left noticeably shorter and thinner than her left one. Ulcers developed on her foot in the years that followed.

Joni Mitchell

Joni Mitchell, a Canadian-American musician, producer, and painter, contracted polio at the age of 9 years in the early 1950s. Her spine got twisted, and she couldn't walk and be paralyzed. After 40 years, she suffered from a resurgence of her symptoms in the year 1995. She started feeling extreme fatigue and muscle weakness for the second time.

Specialist To Visit

There's currently no cure for polio, so treatment focuses on managing symptoms and improving the quality of life. A team often treats patients with different healthcare professionals. This is called a multidisciplinary team (MDT) of doctors.

The multidisciplinary team of doctors includes

General physician: Diagnoses polio by taking a detailed medical history, performing a physical exam, and advising necessary diagnostic tests.

Neurologists: Specialize in the treatment of problems affecting the nervous system.

Mobility specialist: Advice about mobility aids, such as walking sticks and wheelchairs.

Physiotherapist: Help patients improve their range of movement and coordination

Respiratory consultant: Deal with problems affecting breathing

Rehabilitation consultant: A specialist in managing complex disabilities

Get a consultation from our team of non-judgemental and trusted doctors.

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Prevention Of Polio

There is currently no treatment for polio. However, it is a vaccine-preventable disease.

Vaccination is usually done in childhood. If you are not vaccinated as a child, ask your healthcare provider about your vaccination.

A healthcare professional will recommend four polio shots in childhood:

First shot at 2 months

Second shot at 4 months

Third shot between 6 and 18 months

Booster shot between 4 and 6 years

If a person is not vaccinated in childhood and is recommended to get vaccinated as an adult, that person will get three shots:

Two doses 1-2 months apart

A third dose is 6-12 months after the second

There are two types of vaccines:

Inactivated polio vaccine (IPV): The IPV contains poliovirus that is treated ("killed") so that it cannot multiply anymore. It has an inactive version of polio strains types 1, 2, and 3. IPV is administered as a series of shots (injections).

Oral polio vaccine (OPV): This is also known as the live attenuated polio vaccine. It uses a live virus that has been weakened (attenuated) and cannot make you sick. However, it creates an immune response in the intestines called mucosal immunity, which protects from polio infection. It is given in a liquid form orally.

Did you know?

April 24th – April 30th (The last week of April) is observed as World Immunization Week every year. The aim is to promote vaccines across all age groups to protect against diseases.

Read Now

Treatment Of Polio

There is no cure for polio. The management of this condition focuses on increasing comfort, speedy recovery, and preventing complications. Supportive treatments include:

Pain relief medications

Over-the-counter medication such as aspirin, paracetamol, or ibuprofen, and stronger NSAIDs and opiates can be prescribed by the doctor to help relieve pain. But these medications should not be taken for a long time as they can cause side effects, such as stomach ulcers. If these medications don't work, the physician may prescribe medicines like gabapentin for pain.

Rest and exercise

Staying active is beneficial for most people with post-polio syndrome, as it may slow down progressive muscle weakness. However, patients may find it challenging to stay active as symptoms may worsen over some time.

To overcome this issue, "pacing" techniques may be recommended. This involves

Prioritizing tasks

Taking regular breaks and rest during the day

Doing regular gentle exercise

Physical or occupational therapy

Physical therapy aims to ease pain and helps to function, move, and live better. This can help alleviate arm or leg weakness caused by polio and improve long-term outcomes, primarily if implemented early in the illness.

Mobility aids

Mobility aids are designed to assist in walking or improve the mobility of people with a mobility impairment. These include

Wheelchairs

Walking sticks

Braces to support weakened muscles or joints

Shoe inserts

The physical deformities with polio tend to affect the extremities and limbs. The physical effects of polio can lead to changes in gait and bone structure, and shoe inserts help move around without causing pain.

Using cold and heat compression

Alternate applications of heat and cold can help to relieve muscle pain and tension.

Managing the psychological impact

PPS can lead to a significant psychological impact as it can trigger anxiety, isolation, stress, and depression. Therefore, managing the symptoms and improving the quality of life is essential.

Healthy eating and managing weight

Being overweight can further strain weakened muscles and hurt energy levels and general health. A well-balanced and nutritious diet will help control weight and improve your overall health.

Here are a few practical weight loss tips.

Click To Read

Complications Of Polio

The most significant complications of polio infection include paralysis, fatal respiratory and cardiovascular collapse, and Post-polio syndrome (PPS).

It has been estimated that up to 30 to 40% of the 15 to 20 million known polio survivors worldwide develop some form of PPS. It has been characterized by new-onset or progressive muscle weakness in a patient previously diagnosed with poliomyelitis.

The other symptoms include myalgias, respiratory distress, joint pain, atrophy, dysphagia, and generalized fatigue.

Paralysis can often cause problems with breathing, swallowing, and bowel and bladder functioning.

Alternative Therapies of Polio

Massage Therapy

Massage under medical supervision can help a great deal to relieve muscle aches and pains. Targeting the right muscle areas for a perfect massage to relieve the symptoms is imperative. Applying herbal oils can also help enhance the effects of a massage and add to the relaxing effect.

Hydrotherapy

Hydrotherapy can do wonders for polio survivors due to reduced gravity and buoyancy, especially when the body is undergoing a lot of strain. A few hours in a swimming pool or tub for sore and aching joints relieve the muscles.

Living With Polio

Polio can have various adverse effects on the patient's lifestyle, depending on the severity of the symptoms. The challenge or ease of living with polio varies for each survivor, subject to the availability of medical care and rehabilitation opportunities and their family and social support. Various forms of rehabilitation and support include:

Polio patients often require assistive devices for movements, such as braces, canes, orthotics, and wheelchairs, so they can individually also take care of the daily chores of life.

Physical or occupational therapy can also help ease pain and enable them to function, move, and live better.

Emotional and caretaking are also required by the person dealing with polio. As this ailment can also lead to lifelong impairment, a helping hand or support from the family on the emotional ground can do wonders in recovery.

Frequently Asked Questions

How long does polio last?

At what age does polio affect?

Is polio temporary or permanent?

Can polio come back?

Does polio cause pain?

Where was polio most common?

Which part of the body does polio affect?

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Polycystic ovarian syndrome (PCOS)

Also known as PCOS, Functional ovarian hyperandrogenism, Hyperandrogenic anovulation, Polycystic ovary disease, Ovarian hyperthecosis, Stein-Leventhal syndrome and Sclerocystic ovary syndrome

Overview

Polycystic ovary syndrome (PCOS) is a hormonal disorder in which ovaries produce large amount of male sex hormones or androgens which interfere with the development and release of the eggs. Some of these eggs develop into cysts, which are the little sacs filled with liquid, hence the name, polycystic ovary syndrome. However, some women suffering from PCOS do not develop cysts, while some women not having this disease might develop cysts due to some other conditions.

The exact PCOS causes are not known yet. However, it has been observed that most women with PCOS have insulin resistance. Another factor that can affect the occurrence of PCOS is obesity, as it can result in high levels of inflammation in the body, leading to higher levels of androgen. PCOS is also mostly thought to be hereditary, running through the genes, into different generations.

Women suffering from this condition may experience irregular menstrual cycles, excess growth of facial hair, hair thinning, acne, and sleep disorder. PCOS can also increase the risk hypertension, high cholesterol, diabetes, heart diseases, and endometrial cancer.

The symptoms of PCOS are manageable under proper medical guidance. Medications that regulate the menstrual cycle can help to ovulate, reduce hair growth and also help to manage other PCOS symptoms. Along with the help of a nutritious diet, a healthy lifestyle, and regular exercising, one can maintain healthy blood glucose levels and a healthy weight. These go a long way in the management of PCOS.

Key Facts

Usually seen in

Women between 20 to 30 years of age

Gender affected

Women

Body part(s) involved

Ovaries

Prevalence

Worldwide: 3.4% (2016)

India: 20% (2019)

Mimicking Conditions

Hyperprolactinaemia

Thyroid disorder

Endocrine disorders

Ovarian cancer

Adrenal hyperplasia

Necessary health tests/imaging

Polycystic ovarian disease panel (PCOS Panel)

Treatment

Diet and weight control

Oral contraceptive agents: Ethinyl estradiol & Medroxyprogesterone acetate

Antiandrogens: Spironolactone, Leuprolide, & Finasteride

Selective estrogen receptor modulators: Clomiphene citrate

Topical hair-removal agents: Eflornithine

Topical acne agents: Benzoyl peroxide, Tretinoin, Adapalene, & Clindamycin

Hypoglycemic agents: Metformin & Insulin

Surgery: Ovarian drilling

See All

Symptoms Of Polycystic Ovarian Syndrome (PCOS)

The symptoms of PCOS vary among women as per their age. While younger women experience irregular, light, or missed menstrual periods along with mood swings; older women suffer from metabolic disorders such as weight gain and insulin resistance. The severity of the symptoms also varies as per one’s health.

Some of the common signs and symptoms of polycystic ovarian syndrome (PCOS) include the following:

1. Hair growth

Most women affected with PCOS experience excessive hair growth on their face and body due to excess male hormone androgen. The issue of excess hair growth, known as hirsutism, can occur on their face, belly, back, and chest.

2. Acne

The presence of increased androgen levels also result in oil breakouts which in turn can cause oily skin and acne on the face and the upper body.

3. Skin darkening

Women with PCOS may also experience a condition called acanthosis nigricans. It is characterized by patches of thick, dark and velvety skin, especially in the skin folds and creases like neck, under the breast, and in the groin area due to insulin resistance.

4. Weight gain

One of the most evident symptoms of PCOS is sudden weight gain. Insulin resistance, which occurs due to PCOS, increases the levels of male hormones called androgens. High androgen leads to weight gain.

5. Headache

Hormonal imbalances may also cause headaches and a feeling of heaviness in the head. Although, it is difficult to differentiate if a headache is caused due to PCOS.

6. Irregular menstrual cycle

Women with PCOS ovulate only occasionally, hence their uterine lining does not shed every month, causing irregular or missed menstrual periods. Because of lack of ovulation, polycystic ovary syndrome is one of the most common causes of infertility in women.

7. Sleeping disorders

Women with PCOS may also experience sleeping disorders such as feeling sleepy throughout the day, finding it difficult to fall asleep at night, or waking up frequently in the middle of the night due to disturbed sleep.

8. Mood swings

Due to hormonal imbalances, women suffering from PCOS tend to experience sudden mood changes and feel low. This could include sudden episodes of feeling irritated or depressed.

9. Fatigue

PCOS can also result in low levels of energy and a feeling of tiredness in women. This can majorly be experienced at night with pain in the calves and arms.

10. Pelvic pain

It is a less common symptom of PCOS which is attributed to the presence of cysts in ovaries. It usually causes a dull, sharp pain in the lower abdominal area which often comes and goes.

11. Infertility

Lack of ovulation from a long time can cause difficulty in getting pregnant and thus, infertility.

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Causes Of Polycystic Ovarian Syndrome (PCOS)

The exact causes of PCOS are not known yet. However, hormonal imbalances are considered the most potential cause of this medical condition. Following are some of the probable PCOS causes that have been proposed as the major factors resulting in the occurrence of PCOS in women after their puberty.

1. Hormonal imbalance

Hormonal imbalance is considered as one of the most probable causes of PCOS. Women suffering from the following hormonal imbalances may experience PCOS during their reproductive age.

Increased prolactin levels: Prolactin is the hormone that stimulates the production of milk in the breast glands. Increased prolactin levels may cause PCOS.

Increased testosterone levels: Testosterone is a male hormone that is usually present in small quantities in women. Higher levels of testosterone in women may result in PCOS.

Increased luteinizing hormone (LH) levels: Luteinizing hormones are meant for stimulation of ovulation; their presence in increased amounts may cause heavy bleeding and irregular menstrual periods.

Decreased sex hormone-binding globulin (SHBG) levels: SHBG is a protein that binds testosterone in blood to reduce its effect. The presence of SHBG in decreased amounts may result in an increased concentration of testosterone in women.

2. Genes

It is believed that PCOS may pass from one generation to another because this condition has been observed among women with a family history of the disease. Researchers have not yet identified the exact genes which causes PCOS. However, the role of genes is considered one of its potential causes.

3. Inflammation

Inflammation is a normal phenomenon of the body’s immune system to fight infections by producing white blood cells. It has been seen that women suffering from PCOS have low grade inflammation in their bodies, causing polycystic ovaries to produce excessive amounts of the male hormone. However, the link between inflammation and PCOS has not been established concretely yet.

Risk Factors For Polycystic Ovarian Syndrome (PCOS)

Several factors can increase your risk of having PCOS. Some of the notable factors which accelerate your risk quotient towards the medical condition are as follows:

1. Family history of PCOS

You may have a higher risk of getting PCOS if your sister, mother, or grandmother had it. A woman is most likely to have PCOS if her mother or sister suffers from the same. However, the severity of this medical condition may vary on an individual level.

2. High stress levels

Psychological stress is another factor that exposes women to the risk of developing PCOS. It is often observed that women suffering from PCOS also experience depression, anxiety, and frequent mood swings.

3. Higher insulin levels

An increased amount of insulin in the body also puts women at a higher risk of suffering from PCOS. This is because higher insulin levels may stimulate increased production of androgen in the body.

4. Obesity

It is observed that women who are obese or are overweight are more likely to suffer from PCOS. This happens because obesity can cause imbalance in hormonal levels. It has been seen that the risk of suffering from PCOS complications is low if you manage your weight.

5. Use of birth control pills

The use of contraceptive pills also puts women at an increased risk of getting bilateral polycystic ovaries due to altered hormonal activities in the body. It is a condition that involves infrequent, irregular, or extended menstrual cycles. Women who may not have any problems might experience some PCOS symptoms after discontinuing the contraceptive pill.

6. Endocrine disrupting chemicals

PCOS may be related to or worsened by exposure to endocrine disrupting chemicals such as bisphenol A (BPA) and certain phthalates.

Diagnosis Of Polycystic Ovarian Syndrome (PCOS)

Polycystic ovary syndrome is one of the common causes of infertility and pelvic pain in women. It can also trigger diabetes if left untreated. If you are experiencing specific symptoms such as irregular or missed periods, frequent mood changes, or abnormal hair growth on your face or upper body, then consult a doctor to ensure whether or not you are suffering from PCOS.

Your doctor may ask you to get the Polycystic ovarian disease panel done, which includes the following tests to ascertain the presence of the medical condition.

Fasting glucose level: In this test, a blood sample is collected after overnight fasting. A test result of less than 100 mg/dL is considered normal whereas, results ranging between 100 and 125 mg/dL indicate that the individual is prediabetic, and the presence of 126 mg/dL or more shows that the person has diabetes. Women are prone to high glucose levels if they suffer from PCOS.

Insulin fasting: This test measures the level of insulin in the body and thus, diagnoses if the individual is insulin resistant or not. This test also requires overnight fasting before sample collection. A typical insulin level ranges between 2.6 - 24.9 mcIU/mL. Insulin resistance is common in women with PCOS.

Luteinising hormone (LH): This test measures the amount of the luteinizing hormone in the blood to check the normalcy of the woman’s menstrual cycle. The amount of luteinizing hormone increases in the body with ovulation. Higher levels may indicate PCOS.

Testosterone total: This test helps your doctor know the testosterone level in your blood, which is the primary sex hormone present in males. High levels of testosterone may indicate the presence of PCOS.

Thyroid stimulating hormone (TSH): This blood test measures the thyroid-stimulating hormone (TSH) in the blood. PCOS is associated with a high incidence of hypothyroidism or low thyroid level.

Follicle stimulating hormone (FSH): This test measures the level of the FSH in your blood which plays a significant role in the control of menstruation and growth of eggs in women. If you have PCOS, then your FSH level may be lower than normal.

Other tests

Gynecologic ultrasonography: This imaging test specifically looks for small ovarian follicles. According to the Rotterdam criteria, which are widely used for diagnosis, 12 or more small follicles should be seen in an ovary on ultrasound examination. More recent research suggests that there should be at least 25 follicles in an ovary to designate it as having polycystic ovarian morphology (PCOM) in women aged 18–35 years.

Laparoscopic examination: This may reveal a thickened, smooth, pearl-white outer surface of the ovary. This would usually be an incidental finding if laparoscopy were performed for some other reason, as it would not be routine to examine the ovaries in this way to confirm a diagnosis of PCOS.

Celebs affected

Sonam Kapoor

National Award Winning Bollywood actress Sonam Kapoor shared the story of her fight against PCOS. She shared how she decided to become fit, how she changed her diet, gave up sugar, and practiced yoga and meditation to manage her condition.

Sara Ali Khan

In a chat show in 2018, the popular Bollywood Actress, Sara Ali Khan, shared her story about PCOS with all her fans. She told how she gave up junk food, incorporated a healthy diet, and followed a disciplined lifestyle, added sports and workouts to her routine to manage her condition.

Victoria Beckham

The former Spice Girl, Victoria Beckham, has always been open about her diagnosis of PCOS and her irregular menstrual cycles. The mother of 4 kids also publicly talked about how PCOS can be easily managed with a nutritious diet, healthy lifestyle, and regular exercising.

Prevention Of Polycystic Ovarian Syndrome (PCOS)

Following are a few tips and tricks which can help you prevent and manage PCOS.

1. Make healthy changes to your diet

A nutritious and healthy diet helps you manage PCOS symptoms and complications. The right diet changes help you regularize your menstrual cycle as you keep away abrupt mood changes by helping you maintain your hormonal levels. Following diet changes can help you with the PCOS issues.

Add anti-inflammatory foods: To keep a check on the inflammation in your body, you should increase the intake of anti-inflammatory foods such as tomatoes, leafy greens, olive oil, and tree nuts in your diet.

Increase your iron intake: Some women experience heavy bleeding while battling PCOS, resulting in a lack of iron in the body, causing anemia. Thus, you must up your iron intake with iron-rich food like eggs, spinach, beans, seafood, peas, and dried fruits in your diet.

Balance carbohydrates and proteins: Right amounts of carbohydrates and proteins help you stimulate your insulin production. To manage PCOS symptoms, you must balance low carbs with high protein intake to optimize your energy and hormone levels.

Add whole foods: Whole foods are unprocessed and free from added sugars and preservatives. You must add whole foods like fruits, nuts, legumes, and green vegetables to your diet to maintain your hormone and sugar levels.

Increase fiber intake: Fiber-rich foods help you with digestion and keep a check on your metabolism. To avoid PCOS symptoms, you must include fiber-rich foods like nuts, bananas, curd, broccoli, sprouts, and avocados.

Reduce caffeine consumption: Caffeine affects the hormonal activities in your body. You can substitute your caffeine intake with herbal tea, green tea, or lemon-ginger water.

2. Maintain a healthy weight

The right body mass index (BMI) helps you regulate your insulin levels and menstrual cycle. Therefore, you must aim at maintaining a healthy weight to get some relief from the PCOS symptoms. However, you must note that you should not work out too much also as the same can hamper your hormonal functions. You can try some gentle exercises such as pilates, yoga, light aerobics, and swimming.

3. Have at least 8 hours of sleep

Your sleep routine significantly affects your stress and energy levels. It also affects your hormones. You must try to get 8-9 hours of sleep every day. Setting a routine for your sleep can be beneficial. You may go to bed light on your stomach to help with a sound sleep.

4. Avoid stress

Stress is not good for your health, especially if you are suffering from polycystic ovarian disease. Stress adversely affects your hormonal balance and state of mind. To avoid stress, you can practice meditation, yoga, or go for a walk. You can also keep your stress levels low by taking sound sleep and cutting down your coffee consumption. Another way of navigating yourself from stress includes becoming a part of social support groups.

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Specialist To Visit

Mild PCOS symptoms can be treated with the help of lifestyle changes. However, if you are experiencing severe symptoms or even mild symptoms of polycystic ovaries from a prolonged period, you must consult a doctor. Specialists who can help you with PCOS symptoms and issues include:

Gynecologist

Endocrinologist

Here is a list of types of gynecologist you can consult.

Click To Know!

Treatment Of Polycystic Ovarian Syndrome (PCOS)

PCOS treatment depends on various factors such as your symptoms, medical family history, other health conditions, and whether you want to get pregnant or not. PCOS can not be cured but can be treated with the help of medications and lifestyle changes.

1. Weight control and healthy diet

Before the treatment using hormonal birth control, doctors advise changes in diet and lifestyle to improve overall health. Dietary changes aid in maintaining healthy glucose levels and a healthy weight, which in turn helps regulate menstruation.

2. Medications to regulate ovulation

Pharmacological treatments are reserved for derangements such as anovulation, hirsutism, and menstrual irregularities. First-line medical therapy usually consists of an oral contraceptive to induce regular menses.

If symptoms such as hirsutism are not sufficiently alleviated, an androgen-blocking agent may be added. The first-line treatment for ovulation induction when fertility is desired are letrozole or clomiphene.

Medications used in the management of symptoms of PCOS include the following:

Hormonal birth control pills like etonogestrel, ethinyl estradiol and medroxyprogesterone acetate

Antiandrogens or androgen blocking medications such as spironolactone, leuprolide, and finasteride

Selective estrogen receptor modulators such as clomiphene citrate

Topical hair-removal agents such as eflornithine

Topical acne agents such as benzoyl peroxide, tretinoin, adapalene, erythromycin, clindamycin and sodium sulfacetamide

Hypoglycemic agents like metformin and insulin. Other drugs similar to metformin that may be prescribed include repaglinide, canagliflozin, and dapagliflozin.

3. Ovarian drilling

It is a surgical process that stimulates ovulation by removing ovarian tissues that produce the male hormone androgen in females. This surgery is recommended for women who do not ovulate even after weight reduction and trying fertility treatments.

4. Supplements

Certain supplements such as inositol are often prescribed to help improve ovarian function and regulate periods, which makes it easy to conceive. Inositol is a vitamin-like substance found in citrus fruits, beans, brown rice, and wheat bran. Omega 3 supplements are also recommended to reduce the risk of inflammatory diseases and depression. Chromium supplements are prescribed to help reduce blood sugar levels and increase insulin sensitivity.

Quit smoking and alcohol to keep your hormone levels stable

Consumption of tobacco or nicotine adversely affects your endocrine system. Thus, you must quit or refrain from smoking and consuming alcohol to keep your insulin and hormone levels undisturbed. Women can double their chances of conceiving each month if they quit smoking. Check out our smoking cessation products.

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Home-care For Polycystic Ovarian Syndrome (PCOS)

PCOS is a complex health condition that requires immediate attention and complete care. It is possible to take care of your loved one suffering from PCOS at home with the help of the following do’s and don’ts.

Do’s

Exercise at least thrice a week to keep a check on your weight.

Sleep well. Try to get around 8-10 hours of sleep and go to bed early every day.

Enrich your diet with fruits, leafy vegetables, grains, iron-rich foods, fiber, and anti-inflammatory foods like cucumber and curd.

Mediate for at least 20 minutes to keep your stress levels low.

Include antioxidants like nuts and avocados in your diet.

Increase the intake of low-fat dairy products.

Don’ts

Do not smoke.

Do not consume alcohol.

Avoid consuming processed foods.

Reduce your consumption of carbohydrates.

Avoid stress.

Complications Of Polycystic Ovarian Syndrome (PCOS)

Unattended PCOS can lead to serious medical conditions and complications. These include:

1. Infertility: It is a medical condition of the reproductive system that affects the chances of a woman getting pregnant.

2. Miscarriage: It refers to a sudden loss of a woman’s pregnancy before the 20th week. It can cause both physical and emotional distress.

3. Premature childbirth: It refers to childbirth that happens before the 37th week of pregnancy. It can result in the birth of a child with immature vital organs like lungs, heart, etc.

4. Type 2 diabetes: It is a chronic medical condition under which the body either does not produce insulin at all or becomes insulin resistant.

5. Dyslipidemia or disorders of lipid metabolism: Dyslipidemia in women with PCOS may be common in women who are insulin resistant.

6. Heart diseases: Common heart diseases include high blood pressure, heart failure, coronary artery disease, heart valve disease, and arrhythmia.

7. Depression and anxiety: These are common mental health conditions in which the individual generally experiences loss of joy.

8. Endometrial cancer: It is a type of cancer that affects the lining of the uterus (womb) in females.

9. Abnormal uterine bleeding: It refers to irregular and heavy bleeding between and/or during menstrual periods.

10. Stroke: PCOS is associated with significantly higher risk for stroke which is a condition in which the blood supply to the brain is disrupted.

11. Sleep apnea: Patients with PCOS are at higher risk to develop sleep apnea. This condition is characterized by pauses in breathing while sleeping that last for a few seconds and can occur multiple times throughout the night, depending on the severity of the conditio.

12. Non-alcoholic fatty liver disease: It can be seen in women with PCOS, particularly if they are obese.

Alternative Therapies For Polycystic Ovarian Syndrome (PCOS)

Home remedies for PCOS

Following are some of the home remedies which you can try for treating PCOS.

Fenugreek (Methi): Fenugreek can help reduce the cyst size and regulate the menstrual cycles in females. You can have fenugreek by boiling it in water and then straining its grains. You can also add methi leaves to your vegetables or parathas.

Cinnamon (Dalchini): Cinnamon is a known ingredient for regulating menstrual irregularities. You can have cinnamon powder with a spoon of honey. You can also have it with lukewarm water.

Flax seeds (Alsi): These are small seeds that are high in fiber, protein, and omega 3 fatty acids. Flax seeds consumption helps in the reduction of testosterone levels in the body.

Cumin seeds (Jeera): Jeera is an Indian spice that is an excellent antioxidant. It also helps manage the blood glucose levels in the body.

Green tea: It is full of antioxidants, green tea helps in relaxing the hormone levels in the body. It is known to be effective for PCOS symptoms.

Apple cider vinegar: It helps you manage PCOS symptoms by regulating the insulin levels in the body. You can mix one teaspoon of apple cider vinegar in lukewarm water and have it empty stomach. It also helps in losing and controlling weight.

Yoga for PCOS

Symptoms of bilateral polycystic ovaries can also be treated with the help of the following yoga asanas.

Garland pose, also known as malasana, helps strengthen the pelvic and abdominal muscles.

Bridge pose, also called setu bandhasana, helps in PCOS by reducing stress levels and anxiety.

Bow pose, popularly known as dhanurasana, helps relieve pelvic pain and menstrual discomfort by stimulating normal menstrual flow.

Cat-Cow pose also known as the chakravakasana, helps relieve muscle pain.

Eat fermented foods to up the count of good bacteria

If you are suffering from polycystic ovaries, you must eat fermented foods to accelerate the number of good bacteria in your body. According to research, women with PCOS have a lesser number of healthy gut bacteria. You can consume probiotics to speed up the production of good bacteria and positively affect your metabolism, hormones, and weight. Here are 7 more reasons to add prebiotics to your diet.

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Living With Polycystic Ovarian Syndrome (PCOS)

Living with PCOS is not easy. The abrupt mood swings, fatigue, and physiological distress further add to the agony caused by hormonal and menstrual disturbances. However, its effects can be managed and reduced with simple lifestyle changes if you are experiencing mild PCOS symptoms. It includes:

Eat a filling breakfast: Breakfast is the first meal of the day, and it must be a good one so that you can keep yourself energized the entire day.

Substitute cups of coffee with green tea: Today, green tea is available in a wide array of flavors to meet the different taste preferences of different individuals. Choose your favorite flavor and start substituting your high caffeine consumption with it.

Supplement your food with curd, yogurt, and probiotics: These dairy products are rich in fiber, which ease your digestion process and enhance the number of good bacteria in your gut.

Go for a morning walk: You can begin by walking for 15 minutes and then gradually translating it into 30 minutes or in an hour. If a morning walk is not possible, try going for short walks after meals. Alternatively, you can also start running on a treadmill.

Get a hobby: Hobbies are one of the finest and most effective ways of keeping yourself happy and in a good mood. For this, you can sing, dance, or join a sport of your choice.

Join a support group: This is where you can meet others suffering from the same condition. Sharing your experiences with them will provide emotional support.

If you have been suffering from polycystic ovaries for a long time and have not experienced any improvement in the condition, it would be prudent to consult a doctor and seek professional advice to get some relief from the physical and emotional discomfort.

Long term PCOS affects the psychological health of women, too. It increases the risk of depression, anxiety, bipolar disorder, and obsessive-compulsive disorder. It is, therefore, essential to follow a personalized mental healthcare program that will help women deal with their psychological issues and lead a healthy life.

They could consult a psychiatrist who may prescribe antidepressants or anti-anxiety medications to control their anxiety symptoms. Or, they could try alternate therapies such as acupuncture, yoga, mindfulness techniques, guided relaxation techniques, and breathing exercises that help control the mind and reduce symptoms of anxiety and depression.

Frequently Asked Questions

What is the difference between PCOS and PCOD?

Can one live life normally with PCOS?

Does PCOS affect breast size?

Can PCOS be cured permanently?

Can PCOS cause death?

What is the best age to get pregnant with PCOS?

Can PCOS result in a hoarse voice?

How do I know if I have PCOS?

Can removal of ovaries cure PCOS?

Can I consume coffee if I have PCOS?

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Postpartum depression

Also known as Peripartum depression

Overview

Pregnancy and childbirth are significant turning points in a woman's life. Most new mothers experience the "baby blues" after childbirth. These include a range of emotions from joy and pleasure to sadness and crying bouts, mood swings, irritability, anxiety, being overwhelmed,etc.

While women experiencing baby blues tend to recover quickly, around one in seven women can develop postpartum depression (PPD). PPD tends to last longer and severely affects women's potential to return to normal function. The onset of PPD can occur either during pregnancy or in the four weeks following delivery.

Also, postpartum depression is not a condition that is exclusive to mothers. Fathers can experience it as well. Many biological, psychological, emotional and social factors play an important role in predisposing to the development of this illness.

PPD may present as feelings of profound anger, sadness, irritability, guilt, lack of interest in the baby, changes in eating and sleeping habits, trouble concentrating, thoughts of hopelessness and sometimes even thoughts of harming the baby or themselves.

There is a growing need to incorporate mental health screening into routine primary care for pregnant and postpartum women, followed by treatment or referral and follow-up care. Treatment usually includes psychotherapy and antidepressant medications.

Key Facts

Usually seen in

Individuals above 25 years of age

Gender affected

Both men and women but more common in women

Prevalence

Worldwide:10-20%

Mimicking Conditions

Baby Blues

Hyperthyroidism or Hypothyroidism

Postpartum Psychosis

Necessary health tests/imaging

Clinical/psychiatric evaluation

Edinburgh Postnatal Depression Scale (EPDS)

Treatment

Antidepressants: Citalopram, escitalopram, fluoxetine, paroxetine, sertraline, desvenlafaxine, duloxetine, diazepam, lorazepam, bupropion etc.

Psychotherapy: Cognitive behavioral therapy (CBT) & Interpersonal therapy (IPT)

Surgical and other interventions: Electro-convulsive therapy (ECT), (TMS)Transcranial magnetic stimulation (TMS)

Specialists to consult

General physician

Psychiatrist

Obstetrician and gynecologist

Symptoms Of Postpartum Depression

After childbirth, a mother can experience a range of emotions, from joy and pleasure to sadness and crying bouts, mood swings, irritability, anxiety, being overwhelmed, appetite problems, etc. These mild depressive feelings are called "baby blues'' and may include the following:

Having doubts that you can be a good mom

Putting pressure on yourself to be a perfect mom

Feeling that you’re no longer the person you were before you had your baby

Feeling that you’re less attractive after having your baby

Having no free time for yourself

Feeling tired and moody because you aren’t sleeping well or getting enough sleep

Baby blues typically develop within two to three days of delivery, peak over the next few days, and tend to decrease over the first two weeks after delivery.

While women experiencing baby blues tend to recover quickly, around one in seven women can develop postpartum depression (PPD). PPD tends to last longer and severely affects women's potential to return to normal function. The onset of postpartum major depression can occur either during pregnancy or in the four weeks following delivery.

The symptoms of postpartum depression are similar to symptoms of depression and the duration and intensity can vary from person to person. The symptoms of postpartum depression may include:

Depressed mood

Loss of interest

Agitation

Anxiety

Changes in sleep patterns or insomnia (lack of sleep)

Change in appetite

Feelings of worthlessness or guilt

Loss of energy or fatigue

Inability to concentrate or indecisiveness

Recurrent thoughts of death, which may include thinking about or even planning suicide

Change in weight or appetite (weight change 5% over 1 month)

Patients may also experience delusions or hallucinations

Postpartum depression needs to be addressed as it interferes with women’s ability to care for themselves and the baby, poor maternal-infant bonds, failure of breastfeeding, negative parenting practices, marital discord, as well as worse outcomes concerning the child's physical and psychological development.

Did you know?

Some women experience postpartum psychosis, a mental health emergency that needs immediate medical attention. This condition disrupts a woman's sense of reality after childbirth. Symptoms may include hallucinations, delusions, mania, and paranoia.

Causes Of Postpartum Depression

Postpartum depression is linked to the various chemical, social, and psychological changes that occur during childbirth.

It has been found that changes or alterations in hormone levels during and after pregnancy are more likely to affect a woman's mood. However, all mothers experience these hormonal changes in their body during pregnancy, but only about 10–15% suffer from PPD (Postpartum Depression).

The female reproductive hormones progesterone and estrogen are ten times more abundant during pregnancy.

Within 48 hours following birth, the level of these hormones dramatically lowers. The levels usually return to their normal levels within three days following childbirth. The rapid changes in these reproductive hormones following delivery can be a potential stressor in susceptible women and lead to the onset of PPD.

Oxytocin and prolactin hormones regulate the milk let-down reflex as well as the synthesis of breast milk. Low levels of these hormones, failure to lactate and unwanted early weaning are associated with PPD.

Risk Factors For Postpartum Depression

The time following the birth of a child is one of intense physiologic and psychological change for new mothers. There is no single cause of postpartum depression, but genetics, physical changes and emotional issues may play a role.

1. Age

Having a child before the age of 20 years predisposes the woman to PPD

2. Genetics

Having a family history of depression or postpartum depression

3. Emotional factors

Lack of sleep makes it difficult to deal with even small issues.

Worried about being able to take care of a newborn.

Feelings of being less attractive, identity issues, or lack a sense of control over your life.

A poor relationship with one’s own mother.

Stressful life events (eg, marital conflict, emigration, or the COVID-19 pandemic) during pregnancy or after delivery

Lack of emotional support from the partner or family

4. Social factors

Lack of support from family or friends

Unemployment, low income or lack of financial support

Domestic violence, verbal abuse etc.

Intimate partner violence and lifetime history of physical and/or sexual abuse

5. Psychological factors

History of depression and anxiety, or depression during pregnancy

A prior episode of PPD

Premenstrual syndrome (PMS)

Unplanned pregnancy

Fear of childbirth

Negative attitude towards the baby

The reluctance of the baby's gender

Childcare stress such as inconsolable infant crying, difficult infant temperament, or infant sleep disturbance

Body image dissatisfaction (preconception, antenatal, and/or postpartum)

6. Obstetric factors

Complications during pregnancy, like premature birth, being pregnant with multiples, birth defects and pregnancy loss.

Previous miscarriage

7. Overall health status

Poor perinatal health eg, obesity at the time of conception, pregestational or gestational diabetes, antenatal or postnatal hypertension, or infection following delivery

Rapid alteration of reproductive or thyroid hormones post-delivery. This makes one feel tired, depressed, agitated etc.

8. Lifestyle choices

Smoking or drinking excessive alcohol

Less sunlight exposure. This can lead to a drop in serotonin and melatonin levels in the body and disrupt mood and sound sleep.

Working late till night and getting up late or spending less time outdoors. This can disrupt the circadian rhythm and may trigger depression.

Did you know?

As per research, COVID-19 outbreaks appear to be linked to an increase in psychological problems like depression and anxiety in pregnant women and the postpartum period as a result of stress.

Read more about COVID-19

Diagnosis Of Postpartum Depression (PPD)

There is no one specific test that can definitively diagnose PPD. Therefore, doctors diagnose this condition by gathering comprehensive medical, family, and mental health history along with an assessment of lifestyle habits:

1. Discussion of symptoms

The healthcare provider will ask about your symptoms, their duration, and severity. They will inquire about your mood, energy levels, sleeping patterns, appetite, and any thoughts of self-harm or harm to the baby.

2. Medical history and physical examination

The doctor will ask questions about symptoms and medical histories including drug and alcohol history, smoking habits, and all prescription and over-the-counter-drug medications.

They may also request blood tests to rule out other causes of depression.

3. Psychological assessment

The most commonly used screening tool for PPD is the Edinburgh Postnatal Depression Scale (EPDS). It is a simple 10-item questionnaire, including a question on suicidal ideation.

Patients must have an EPDS cutoff score of 13 or higher in order to be considered at risk for PPD.

This screening test provides the basis for additional clinical tests to rule out other psychiatric illnesses.

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Did you know?

Postpartum depression is not just limited to women! 1 in 10 Dads can suffer from postpartum depression. Parents of any race, culture, age, income level can develop perinatal mental health disorders.

Celebs affected

Sameera reddy

Sameera Reddy is an Indian actress and model who has been open about her experience with postpartum depression. Reddy highlighted the significance of a strong support system, including family, friends, and healthcare professionals, in overcoming this condition.

Drew Barrymore

Drew Barrymore, an American actress, has been candid about her experiences with postpartum depression. In one of her interviews she mentioned- ‘I didn’t have postpartum the first time [I had a baby] so I didn’t understand it because I was like, ‘I feel great!’" "The second time, I was like, 'Oh, whoa, I see what people talk about now. I understand.'

Gwyneth Paltrow

Gwyneth Paltrow is an American actress and businesswoman. She wrote on her website about post depression on how she was confronted with one of the darkest and most painfully debilitating chapters of her life after childbirth.

Courteney Cox

Courteney Cox, an American actress and filmmaker, widely recognised for her role as Monica Geller on the famous sitcom Friends once shared her experience with postpartum depression. In an USA Today interview she mentioned- ‘"I went through a really hard time — not right after the baby, but when (Coco) turned 6 months,".

Brooke Shields

Brooke Shields is an American actress and model who has been open about her experience with postpartum depression. In 2003, she published a memoir called "Down Came the Rain: My Journey Through Postpartum Depression," where she shared her personal story and brought attention to this condition.

Prevention Of Postpartum Depression

Postpartum depression may not be entirely preventable. However, knowing the symptoms of postpartum depression can help you manage the condition and get treatment sooner if necessary. The following tips can help prevent postpartum depression to some extent:

Keep in touch with family and friends, don’t isolate yourself before your baby is born

Take antenatal and postnatal educational classes

Have an arrangement for childcare in place so you can take a break

Maintaining a balanced diet and try to get some exercise and fresh air every day

Avoid alcohol and caffeine

Getting adequate sleep and general rest

Reducing alcohol intake or avoiding it altogether

Your doctor can prescribe medical counseling and even some medicine even during pregnancy if you feel any kind symptoms associated with depression.

After delivery, the doctor might recommend an early postpartum checkup to look for symptoms associated with depression.

Additionally, psychological and psychosocial methods help prevent PDP. It includes interpersonal therapy and cognitive behavioral therapy (helps to modify negative patterns of behavior) during and after pregnancy may reduce the risk of postpartum depression in those at an increased risk of developing it.

Note: If you have a history of depression or if you are taking an antidepressant, tell your ob-gyn or health care professional early in your prenatal care.

Want to know more about prenatal care?

Browse Here

Doctor To Visit

If you think you may be depressed or not feeling yourself, you should contact a healthcare professional such as-

General physician

Psychiatrist

Obstetrician and gynecologist

Immediately contact your OB/GYN or primary care doctor or psychiatrist to discuss treatment and address your physical symptoms like:

The symptoms last longer than two weeks.

You are unable to manage daily tasks or behave properly.

You've considered hurting your baby or yourself.

Most of the day, you feel incredibly nervous, afraid, and panicked.

If you have any physical conditions, especially any kind of mental health condition, let your doctor know. You must also disclose all current medications you are taking, including OTC, herbal, and other supplements with dosage information.

Book a consultation with our doctors now to discuss any health issues.

Consult Now

Treatment Of Postpartum Depression

Management of PPD involves a non-pharmacological and pharmacological component. Non-pharmacological treatment is usually the first line of treatment and if need be followed by pharmacological treatment.

A. Non Pharmacological treatment

Psychotherapy helps to talk through your concerns with a psychiatrist, psychologist or other mental health professional. This involves sessions which help a patient understand and deal with feelings of anxiety, modify behavior, and improve responses to particular situations.

The two most commonly used psychotherapies that have been found to be beneficial are:

Interpersonal therapy (IPT) -This approach focuses on improving the symptoms of depression and mood disorders. In this, a therapist emphatically engages the patient to work on their communication with others and solve their issues.

Cognitive behavioural therapy (CBT)- This psychological therapy helps teach the patient various coping skills to manage difficult situations. It helps the patient to change their thoughts about a particular situation and the behavioral component further helps them to change their reactions to any situation.

For mild to moderate postpartum depression psychotherapy is an effective treatment. Psychotherapy can also be used as adjunct therapy with medications for moderate to severe postpartum depression.

B. Pharmacological Treatment

A combination of therapy and antidepressant drugs is recommended for women with moderate to severe depression.

Antidepressant medications include-

1. Selective serotonin reuptake inhibitors- SSRIs are the first choice of drugs, which includes Citalopram, escitalopram, fluoxetine, paroxetine, sertraline etc.

2. Serotonin-norepinephrine reuptake inhibitors (SNRIs)- If SSRIs are not effective, then SNRIs are prescribed. These include desvenlafaxine, duloxetine, venlafaxine etc.

3. Other medications- It may require a combination of medicines such as antidepressants, antipsychotic medicines, mood stabilizers and benzodiazepines to control your signs and symptoms. Examples include diazepam, lorazepam, bupropion etc.

NOTE: Many women are worried about exposing their children to these medications via breastfeeding. While the risk of breastfeeding while taking a serotonin reuptake inhibitor is relatively low, it is important for lactating women to discuss the benefits of breastfeeding and the risks of antidepressant use during lactation with their healthcare provider. It is best that all apprehensions are adequately addressed and an informed decision is made.

Have a lot of questions and doubts regarding antidepressants?

Here are 8 things about antidepressants you need to know.

Click to read

C. Other Treatment options

Transcranial magnetic stimulation (TMS)- This treatment is an alternative option for women who do not want to take antidepressants while breastfeeding or for those who haven't responded to psychotherapy and antidepressants. It is a non-invasive procedure in which a coil placed against the scalp sends brief magnetic pulses to stimulate and activate nerve cells in the brain.

Electroconvulsive therapy (ECT)- For patients with severe PPD or postpartum psychosis who do not respond to medications, ECT may be recommended. Previously called electroshock therapy or shock treatment, it involves inducing seizures by placing electrodes on the person's head while the person is fully sedated. ECT seems to cause changes in brain chemistry that can reduce the symptoms of psychosis.

Many studies have suggested ECT as a safe option for lactating mothers with fewer side effects on both the mother and the infant.

Home-care For Postpartum Depression

In addition to pharmacological and non-pharmacological treatment, you can do some things for yourself that build on your treatment plan and help speed recovery.

Build a secure bond with your baby- Emotional bonding is the secure attachment that forms between parents and children. It may include skin-to-skin contact with the baby, baby massage, smiling with the baby etc.

Pay attention to your diet- Consuming a diet rich in omega-3 fatty acids during pregnancy and after delivery can lower the risk of postpartum depression. Omega-3s can easily travel through the brain cell membrane and interact with mood-related molecules inside the brain. Fish, salmon, nuts and seeds, plant oils, walnuts, flaxseeds, chia seeds etc. are rich sources of Omega-3s.

Cover any gaps in your diet with Omega fatty acids supplements

Fill your cart now

Folic acid - It also provides beneficial effects in depressive symptoms. Rich sources include beans, peanuts, sunflower seeds, whole grains, liver, seafood etc.

Maintain a healthy lifestyle- Exercise regularly, take a walk with your baby, get enough rest and avoid alcohol and smoking.

Take out time for yourself- Indulge in self-care, visit friends, or spend time alone with your partner, or do something that makes you happy such as a hobby or some form of entertainment.

Avoid being isolated- Keep in touch with family and friends. Don’t isolate yourself. Talk to your partner or any family member and share your feelings with them.

Set realistic expectations- Expect some good days and some bad days. Do not pressure yourself to do everything on your own.

Reduce your screen time- Reduce spending much time on phone calls or television. Rather, go outside in the fresh air.

Time management- Try to take sleep or rest when your baby sleeps. Otherwise, sleep deprivation may lead you to other problems. Try getting at least 7–8 hours of sleep each night.

Talk to your partner- Try to nurture the relationship with your partner. Take out time for yourselves and spend some quality time together. Talk about your feelings with your partner, supportive family members, and friends.

Ask for help- Don’t try to do too much or to do everything by yourself. Ask your partner, family, and friends for help. Try to open up to the people close to you and let them know you need help. If someone offers to babysit, take them up on it.

Do proper planning- Proper planning before conceiving and during pregnancy goes a long way in reducing stress after delivery.

Follow up with doctors- Keep up with all your medical appointments and follow-ups about your health concerns.

Complications Of Postpartum Depression

Postpartum depression not only affects the mother but the infant and the father as well in the following ways:

1. Mother- If postpartum depression is not treated timely, it can last for months or longer, even turning into a chronic depressive disorder. Even after the treatment of PDP, it can make you more likely to have depression episodes in future as well.

2. Father- If the mother is in depression, it can be a precipitating factor for depression in the father as this will be a stressful event for the entire family. The symptoms may include irritability, restricted emotions, and depression.

3. Infant- Babies or infants born to women with a medical condition of postpartum depression are at risk of prematurity, low birth weight, problems with sleeping, cranky, crying more than usual, delays in language development, eating difficulties, attention deficit/hyperactivity disorder (ADHD) etc.

Alternative Therapies For Postpartum Depression

Some alternatives that can help your postpartum depression symptoms may include-

1. Bright light therapy

It is an inexpensive therapy that can be done at home and has a low risk of side effects. When you are exposed to this type of light, your brain undergoes a chemical change that improves your mood and reduces symptoms such as fatigue.

2. Acupuncture

It offers great relief from the symptoms associated with anxiety and depression. It regulates the nervous system and enhances blood flow to bring one to a place of calm, inner peace, and strength.

3. Yoga

There is plenty of evidence that suggests yoga can help improve a person’s mood and induce feelings of happiness, positivity, and exhilaration.

Here are some yoga postures to help you fight depression and anxiety.

Check Out Now

4. Massage

A light touch massage or a deeper massage can help relax muscles, improves blood circulation and reduces stress hormones.

Learn more about some age-old practices like meditation, tai chi (a form of exercise), and breathing exercises that can help reduce stress and anxiety.

Click Here

Did you know?

Herbal preparations derived from St. John's wort can help reduce stress and improve mood and support emotional well being. It is natural over-the-counter medication which is popularly assumed to be safe. However, always consult your healthcare provider before starting them.

Explore our supplements containing St. John's wort

Living With Postpartum Depression

Living with postpartum depression is often very challenging as it interferes with a person's day-to-day life and affects work and social interactions. Here are a few tips that will help you cope with depression effectively:

Speak up- Seek social help, connect with your friends, and share your feelings or burden.

Engage in activities that make you feel happy- Stay active by opting for activities that relax and energize you, it will help to fight depression effectively.

Don’t be harsh on yourself- To overcome this condition, it is important for you to love your own self. Take others’ help but do not stretch yourself for any activity.

Seek medical help- If all the tips mentioned above fail to get results it is better that you seek help from a therapist. Medical help will help you combat the situation and keep your symptoms in check.

Here are some ways you can help women with postpartum depression-

Help her get an appropriate diagnosis and treatment. You may need to make an appointment and go with her to see her healthcare provider.

Be a good listener. Let them know you're there to listen and help.

Offer to help watch their baby while they sleep or rest.

Frequently Asked Questions

What are baby blues?

What is postpartum psychosis?

Is it safe to take antidepressants while having postpartum depression?

Does a father get postpartum depression?

When should I go to a healthcare provider for medical treatment for symptoms associated with postpartum depression?

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Blood cancer

Also known as leukemia

Overview

Blood cancer, also known as leukemia, is a condition in which there is an uncontrolled growth and multiplication of blood cells in the bone marrow and lymph nodes. Although blood cancer can affect people in any age group, for various subtypes of blood cancers, there is a tendency to occur more commonly in a particular age group. For example, acute lymphocytic leukemia, a type of blood cancer, is common in children.

The exact cause of blood cancer has not been identified yet. It is believed to occur when the blood and bone marrow cells undergo genetic mutations. Blood cancer can be acute (onset is sudden and more severe) or chronic (develop slowly over a long time and less aggressive) based on the duration of symptoms or it can be lymphocytic or myelogenous based on the type of cells affected.

Acute blood cancer may cause symptoms like chronic fatigue, recurrent infections, unintentional weight loss, etc. On the other hand, chronic blood cancer may not show any symptoms initially and symptoms may appear as the condition progresses.

Tests such as blood smear examination and bone marrow aspiration are some of the common diagnostic tests used to detect blood cancer. There are various treatment options available that can improve the life of the patient. Treatment modalities such as chemotherapy, immunotherapy, and stem cell transplant are known to help slow the progression of the disease.

Key Facts

Usually seen in

Children below 15 years of age (ALL)

Individuals between 40 to 60 years of age (AML)

Individuals above 55 years of age (CLL)

Individuals above 65 years of age (CML)

Gender affected

Both men and women but more common in men

Body part(s) involved

Blood

Spleen

Brain

Prevalence

Worldwide: 5.185 Lakh (2017)

Mimicking Conditions

Aplastic anemia

Agranulocytosis

Infectious mononucleosis

Bone marrow failure

Systemic lupus erythematosus

Bleeding disorders

Autoimmune thrombocytopenic purpura

Leukemoid reaction to infection

Viral induced cytopenia, lymphadenopathy and organomegaly

Drug induced cytopenias

Myelodysplastic syndromes

Benign cancer conditions

Necessary health tests/imaging

Complete blood count (CBC)

Flow cytometry

Immunohistochemistry

Cytochemistry

Lymph node FNAC and biopsy

Bone marrow imaging

PET CT scan (whole body)

Peripheral smear examination

Coagulation profile

Treatment

Chemotherapy: Vincristine, Daunorubicin & Cytarabine

Monoclonal antibodies: Inotuzumab & Rituximab

Tyrosine kinase inhibitors: Imatinib mesylate, Dasatinib & Nilotinib

Immunotherapy: Pembrolizumab & Atezolizumab

Radiation therapy

Stem cell transplant

Chimeric antigen receptor (CAR) T-cell treatment

See All

Causes Of Blood Cancer

Blood cancer is cancer that affects the bone marrow and blood cells. It starts when the DNA of a single cell in the bone marrow gets changed (mutation) and as a result of that, can’t develop, multiply and function normally. This rapid, out-of-control growth of abnormal cells takes place in the bone marrow and lymph nodes of the body. These abnormal cells then spill into the bloodstream.

Also, abnormal and excessive production of the white blood cells or leukocytes causes overcrowding and clumping in the blood vessels. These abnormal cells also reduce the count of other normal blood cells, such as red blood cells and platelets. The white blood cells are responsible for fighting off infections and keeping the body’s immune system healthy. With blood cancer, the abnormal white blood cells are unable to function properly, and thus the body becomes susceptible to infections.

The exact cause of why blood cancer occurs is not yet identified. It is thought to occur when the blood cells undergo genetic mutations and start behaving abnormally.

Types Of Blood Cancer

Based on whether it is an acute or chronic condition and the type of cells affected, blood cancer is divided into the following four types:

1. Acute lymphocytic leukemia (ALL)

This is the most common type of blood cancer that affects children. It can affect adults too. Acute lymphocytic leukemia occurs when the bone marrow produces an abnormal amount of white blood cells or leukocytes. This blood cancer can worsen very rapidly.

2. Acute myelogenous leukemia (AML)

This is the most common type of acute blood cancer. It is more common in adults (those between 40-60 years of age) and in men compared with women. In this type of blood cancer, the bone marrow produces an abnormal amount of immature white cells called myeloid blast cells that later divide into abnormal RBCs, WBCs, or platelets.

3. Chronic lymphocytic leukemia (CLL)

This type of cancer is most commonly seen in people above the age of 55. Children and adolescents are rarely affected by this type. It is more common in men than women and especially in white men. This is a slowly progressive cancer where the bone marrow produces an abnormal amount of white blood cells over a period of time. CLL is the most common chronic adult leukemia.

4. Chronic myelogenous leukemia (CML)

This is a slowly progressive type of cancer that often does not cause many symptoms. This blood cancer is more common in older adults (most common in those over 65 years of age) and in men. It rarely occurs in children. A person with CML may have few or no symptoms for months or years before entering a phase in which the blood cancer cells grow more quickly. It may be detected during a routine examination. In this type, the body continues to produce abnormal myeloid cells.

There are other rare types of blood cancers such as hairy cell leukemia, multiple myeloma, myelomonocytic leukemia, granular lymphocytic leukemia, etc.

Symptoms Of Blood Cancer

Certain chronic blood cancers may not cause any noticeable symptoms at first, and symptoms may appear as the condition progresses. Acute types of blood cancer can cause aggressive symptoms such as:

Recurrent fevers

Recurrent infections

Enlarged lymph nodes

Joint pains

Unintentional weight loss

Fatigue and tiredness

Abdominal pain due to spleen enlargement

Easy bruising and bleeding

Nosebleeds and bleeding gums

Tiny red spots in skin (called petechiae)

Purplish patches in the skin

Breathlessness

Confusions

Headaches

Risk Factors For Blood Cancer

Certain factors can increase the risk of a person developing blood cancer. These include:

1. Family history

There is a higher risk of developing blood cancer if a close family member has suffered from blood cancer. This is particularly true for chronic lymphoid leukemia, where there is a threefold to fourfold increased risk of getting the disease if a first-degree relative such as mother, uncle or brother has it.

2. Smoking

Smoking tobacco products and cigarettes increase the risk of blood cancer. 20% of all acute myeloid leukemia cases are linked to smoking.

3. Chemotherapy and radiation

Exposure to chemotherapy or radiation can increase the risk of developing blood cancer in later life.

4. Genetic syndromes

Down’s syndrome, Fanconi’s anemia, Li Fraumeni syndrome, etc., are diseases caused due to genetic abnormalities and have been associated with a higher risk of blood cancer.

5. Viral infections

Exposure to certain viruses such as the Epstein Barr virus, human T-cell leukemia virus, etc., can increase the chances of blood cancer.

6. Exposure to carcinogens

Certain chemicals such as benzene are known carcinogens which increase the risk of blood cancer.

Did you know?

Some cancers can be prevented by vaccination. There are currently no vaccines that can prevent all cancers. However, vaccines against some viruses have proven extremely effective, thereby providing a certain degree of protection against cancers caused by these viruses. Here’s more on the cancers that can be prevented with vaccination.

Read To Know!

Diagnosis Of Blood Cancer

The doctor usually performs a detailed physical examination and notes the history of symptoms.

Laboratory tests, bone marrow studies, and imaging studies are useful in diagnosing and identifying the subtype of blood cancer.

1. Physical examination

Your doctor will look for physical signs of blood cancer such as pale skin from anemia, swelling of your lymph nodes, and enlargement of your liver and spleen.

2. Laboratory tests

Flow cytometry aids in the detection of antigens present on or inside the cells based on their specific characteristics. It also helps in monitoring the recurrence of the disease, assessing the extent of cancer, and checking the efficacy of ongoing treatment.

Cytochemistry helps in the diagnosis of different types of acute blood cancers with the use of cytochemical stains.

Complete blood count (CBC) is required to study the quantities and morphology of the different blood cells.

Peripheral smear examination is necessary to evaluate the blood cells in greater detail.

Supportive tests like coagulation profile, kidney function test, liver function test, etc., may be essential to evaluate the overall health status.

3. Bone marrow studies & biopsy

Bone marrow biopsy is a procedure in which a needle is used to withdraw a sample of the cancerous cells or tissue from the bone marrow. It uses the immunohistochemistry technique which helps in the diagnosis of abnormal cells such as those found in cancerous tumors or tumor markers.

Bone marrow aspiration is a procedure in which a sample is drawn from the fluid portion in the bone marrow with the help of a fine needle. It uses the cytochemistry technique to check cancerous cells.

Lymph node FNAC & biopsy is used to examine lesions or lumps inside the body observed by touch or during a scan to detect tumors in different parts of the body.

4. Imaging studies

A PET CT scan (whole body) may be performed to check for signs of blood cancer in the body.

CT Scan not only helps to check for the presence of cancerous cells but also plays a vital role in the treatment of blood cancer such as bone marrow transplant.

Your doctor may order a chest X-ray or magnetic resonance imaging (MRI) scan if you have symptoms that indicate a complication of leukemia.

5. Lumbar puncture

A lumbar puncture (also called a spinal tap) may be ordered to see if cancer had spread to the spinal fluid surrounding the brain and spinal cord.

Celebs affected

Rishi Kapoor

Famous Bollywood actor Rishi Kapoor was diagnosed with blood cancer.

Jill Clayburgh

Award-winning actress Jill Clayburgh battled chronic myelocytic leukemia for 20 years.

Prevention Of Blood Cancer

Avoiding exposure to known risk factors such as benzene, radiation, smoking, etc., may reduce the chances of developing blood cancer.

Although cancer cannot be prevented, there are some simple and effective lifestyle changes that you can make now to ward off the cancer risk. Want to know how to reduce cancer risk?

Click Here!

Specialist To Visit

If you suspect that you may have blood cancer or suffer from symptoms like bleeding easily, chronic fatigue, unintentional weight loss, and recurrent fever or infections, it is essential to seek expert medical advice from a team of:

Hematologist

Hemato-oncologist

Medical oncologist

Pediatric oncologist

Bone marrow transplant specialist

Did you know the Philadelphia chromosome?

The Philadelphia chromosome, named for the city in which it was discovered in 1960, is a marker in almost all cases of CML and some cases of ALL. The discovery of the Philadelphia chromosome was a game changer in treatment of leukaemia. Genetically targeted treatments were based on this. These targeted treatments kill unhealthy cells more precisely and leave healthy cells undamaged. Don’t ignore any symptoms and get tested from a doctor.

Consult Now!

Treatment Of Blood Cancer

Treatment of blood cancer depends on the type of disease and the patient’s overall health condition. Majorly, the treatment approaches are as follows:

1. Chemotherapy

Chemotherapy medicines are the mainstay of treatment used to kill cancer cells. Chemotherapy agents are either given as an intravenous drip into a vein or a central line or given in shots under the skin (subcutaneously) or as oral medications on a regular basis or in a pattern of fixed chemotherapy cycles. In chemotherapy cycles, a certain number of days of treatment are followed by days of rest to allow the body to recover. The chemicals kill leukemia cells or stop them from dividing. Often, a combination of chemotherapy agents is used to treat cancer.

The length of time for treatment can vary by regimen ranging from six months to indefinite treatment. These include drugs such as:

Vincristine

Daunorubicin

Cytarabine

Mercaptopurine

Ifosfamide

2. Targeted therapy

With targeted therapy, drugs are given against a cancer cell-specific target. These targets of drugs are generally not present in normal dividing cells of our body. In this way, adverse effects of drug treatment on normal cells can be avoided. Examples of targeted therapy include:

Monoclonal antibodies such as inotuzumab, gemtuzumab, rituximab, ofatumumab obinutuzumab, and alemtuzumab

Tyrosine kinase inhibitors such as imatinib mesylate, dasatinib, nilotinib, ponatinib, ruxolitinib, and fedratinib.

These therapies are generally expensive but more specific in their action.

3. Immunotherapy

As the name suggests, immunotherapy works by helping the immune system work to fight cancer cells. This therapy uses substances that activate the body's immune system to work against the cancer cells. Common examples are:

Pembrolizumab

Atezolizumab

4. Radiation therapy

This therapy uses radiation (high-energy rays similar to X-rays) to kill the cancer cells. This treatment uses strong beams of energy to kill the focus present in the body forming cancer cells (lymph nodes) blood cancer cells or stopping them from growing. Radiation is directed to exact sites in your body where there is a collection of cancer cells or can be given over your whole body as part of a hematopoietic cell transplant.

This therapy can also be used along with other treatment modalities such as chemotherapy and surgery.

5. Stem cell transplant

Also known as hematopoietic stem cell transplant or bone marrow transplant, this procedure replaces the cancerous blood-forming cells with new, healthy hematopoietic cells. These healthy cells are taken from the patient itself (before exposure to chemotherapy or radiation therapy) or from a donor’s blood or bone marrow and are infused into the patient's blood. Healthy hematopoietic cells grow and multiply forming new bone marrow and blood cells that develop into all the different types of cells your body needs (red blood cells, white blood cells, and platelets).

6. Supportive care

Supportive care is required for patients to help stimulate the production of blood cells, combat infections, and manage side effects such as nausea and vomiting.

Antiemetic drugs such as ondansetron and palonosetron provide relief from nausea and vomiting.

Recombinant human erythropoietin alpha preparations help produce red blood cells and help treat anemia due to blood cancer or post-chemotherapy.

Various antibiotics and antiviral medications are used to prevent and treat infections.

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7. Chimeric antigen receptor (CAR) T-cell treatment

This is a new form of therapy where the patient’s own T-lymphocyte cells are harvested and engineered in the laboratory to make them capable of fighting the blood cancer cells. These cells are then reinserted into the body.

Note: A treatment plan will be developed specifically for you. Several of the treatment methods described above will be a part of your treatment plan. Your treatment depends on your age, overall health, type of blood cancer and other unique features of the blood cancer, response to initial treatment, and many other factors. Your doctor (oncologist) will determine a treatment plan they think will be most successful for you.

Living With Blood Cancer

Most people who are diagnosed with blood cancer tend to enjoy a healthy and long life after being treated successfully. Thanks to the recent advances in treatment, the chances of survival for blood cancer are fairly improving. Although getting detected with cancer can impact the emotional health of both the patient and their families, with early diagnosis and effective treatment, the patient can lead a good life.

As blood transfusions, chemotherapy, and their side effects become part and parcel of life, several lifestyle changes are essential to keep fatigue and infections at bay. Anxiety can be overwhelming at times, and initially many people feel a sense of loss of control and uncertainty about the future. It is important that you talk about how you feel with someone you trust or feel comfortable with. This might be a friend or relative or it might be your doctor or nurse. Counselling and antidepressant drugs can also be very useful for some people.

Here are a few tips that may help blood cancer patients to stay happy and positive:

1. Learn about your diagnosis

Don’t be afraid to ask your healthcare team about anything you don’t understand. It is best to ask your doctor about your health and the condition rather than search online or depend on other people for help.

2. Join a support group

Staying positive during cancer treatment can be a lot easier if you have other people cheering you on. A support group can keep you cheered up since the other participants will have their own insights into cancer treatment. You can even find inspiration from the other members, or strategies for coping with pain or other side effects of treatment.

3. Surround yourself with supporters

When you’re feeling low, one of your friends or family members can provide some much-needed encouragement. When you’re feeling distressed, a trained mental health counselor can be of great help.

4. Pursue a passion or hobby

Engage yourself in the hobbies which have given you pleasure in the past. It could be reading, writing, dancing, travelling, etc.

5. Make sleep a priority

Sleep can be elusive when you’re feeling anxious or depressed, or even just exhausted from your cancer treatment. But a lack of sleep can make you feel even more anxious or despairing. You’re more likely to feel positive if you’re well rested.

Home-care For Blood Cancer

Patients with blood cancer suffer from chronic fatigue and are at risk of getting recurrent infections. Also, the chemotherapy sessions bring about various side effects. There are a few things you can do to care for yourself or a loved one suffering from blood cancer.

Eat fresh home-cooked meals and drink plenty of water or energy drinks daily.

Embrace the side effects of chemotherapy, like loss of hair. Counselling and connecting with other people who are going through the same can help with the acceptance.

Nausea and vomiting due to chemotherapy can be managed with medications or home remedies like sucking on peppermint lozenges.

Infections must be kept at bay. Follow good hand hygiene. Avoid crowded places and unhygienic places. Wear a surgical mask when visiting the hospital.

Engage in light physical activity as it will help boost energy levels and help with symptoms of chronic fatigue.

Did you know?

September 22 is Chronic Myeloid Leukemia (CML) Day. 9/22 represents the genetic change of chromosomes 9 and 22 that causes the disease. The hidden cancer cells are a reason why leukemia comes back or relapses. Cancer can be treated effectively if diagnosed early. Know the symptoms of cancer.

Click To Read!

Complications Of Blood Cancer

In the terminal stages, the patient sleeps through most of the day, has reduced appetite, extreme muscle wasting and feeble heartbeat.

It may also cause other complications such as:

Recurrent and serious bacterial or fungal infections.

Tumor lysis syndrome is a side effect of chemotherapy where the tumor cells die quickly and result in dangerously high levels of metabolites, harming the kidneys.

Disseminated intravascular coagulation is a condition in which the blood clots abnormally and leads to thrombosis or hemorrhage.

Blood cancer survivors are at a higher risk of getting other types of cancers as well.

Alternative Therapies Of Blood Cancer

Alternative therapies can be used to provide symptomatic relief for patients with blood cancer.

1. Yoga and exercise

Yoga and exercise can help boost energy levels and combat chronic fatigue. Breathing exercises can help with relaxation. It can also induce feelings of positivity and help deal with the diagnosis.

2. Massage

Foot and body massages can help with relaxation and provide symptomatic relief.

3. Diet

Taking a balanced diet rich in fresh fruits, vegetables, certain herbs, and spices can boost energy levels and help with fatigue. Patients with blood cancer must take care to eat well and on time regularly. Do not skip any meals as it may lead to increased fatigue levels. Always stay hydrated by drinking plenty of water and fresh fruit juices. Avoid eating spicy, unhygienic, or raw, uncooked food as it may cause gastrointestinal upset.

According to the National Cancer Institute USA, about one-third of cancer deaths are related to poor dietary choices. You can do your bit to prevent cancer by adding fruits that have cancer-fighting and preventing abilities. These include apples, kiwis, oranges, and many more.

Click To Know More!

4. Aromatherapy

Aromatherapy is the use of certain scents to induce relaxation of the mind and body. It promotes a feeling of calmness and positivity.

5. Acupressure and acupuncture

Acupressure and acupuncture techniques also help combat pain, fatigue, and other symptoms.

6. Meditation

Meditation techniques like focused breathing and positive imagination help deal with stress and anxiety post diagnosis. It helps increase mental strength and willpower, which is essential to fight such grave diseases.

Frequently Asked Questions

Can blood cancer be cured?

How can one stop the progression of blood cancer and its complications?

How can I find a stem cell donor for my child who has blood cancer?

Will my child survive normally after a stem cell transplant for blood cancer?

Is blood cancer genetic? Will it pass down from parent to child?

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Q fever

Q fever pneumonia, Atypical pneumonia, Rickettsial pneumonia, Balkan grippe, Coxiellosis and Nine mile fever

Overview

Q fever is a zoonotic disease that is transmitted from animals to humans. It is caused by the bacterium Coxiella burnetii which is mainly found in cattle, sheep, and goats. The bacteria is present in the milk, urine and feces of the infected animals. Moreover, large numbers of bacteria are shed in the birth products like placenta and amniotic fluid during birthing. When these products dry over time they contaminate the air. Inhalation of this contaminated air can cause infection in humans.

Q fever is mostly considered as an occupational disease associated with slaughterhouse workers, dairy workers, farmers, veterinarians or researchers involved in animal studies. The infection causes flu-like symptoms however, many people do not have symptoms at all or could be asymptomatic. If the Q fever persists or reoccurs, it can cause complications that can severely damage organs such as heart, lungs, liver, and brain.

The disease is prevalent globally, however, remains under-reported in many countries such as India. The disease can be prevented by avoiding close contact with animals when they are birthing, and practicing good hygiene at the workplace (farms and barnyards).

Key Facts

Usually seen in

Individuals above 50 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Heart

Lungs

Liver

Brain

Necessary health tests/imaging

Antibody test

Polymerase chain reaction (PCR) test

Complete blood count (CBC)

Liver function

Kidney function tests

Chest X-rays

Echocardiography

Treatment

Antibiotics: Doxycycline

Anti-inflammatory drugs

Hydroxychloroquine

Specialists to consult

General physician

Infectious disease specialist

Types of Q fever

The infection can cause two types of Q fever that vary by severity and nature. The two types are:

Acute Q fever

This form of Q fever usually begins two to three weeks after exposure to the bacterium. Acute Q fever is characterized by flu-like symptoms which include high fevers, chills, muscle pain, and headaches. Acute Q fever is usually self-limited which means it can resolve itself without treatment.

Chronic Q fever

This form of Q fever may occur months to years after acute disease or without a previous history of acute Q fever. It has been observed that predisposing conditions such as pre-existing heart valve or vascular abnormalities or an immunocompromised immune system increases the risk for chronic Q fever.

Did you know?

Q fever is also known as “Query” fever. It was named Query fever by Edward Derrick who was the first one to isolate the bacteria from one of his patients in 1930. Back then, the causative agent of the disease was still unknown and therefore was named “query”.

Consult Now!

Causes of Q fever

Q fever is caused by the bacterium Coxiella burnetii. It is primarily found in cattle, sheep and goats. The bacteria pass into milk, urine and feces of infected herd animals. Infected aerosols can also travel, affecting people living downwind of an infected goat or sheep farm.

Other causes include contact with contaminated clothing, wool, hides or straw, dressing infected animals or consuming infected raw or unpasteurized dairy products. Usually, Q fever is an occupational disease seen in slaughterhouse and dairy workers, livestock farmers, rendering-plant workers, herders, woolsorters, veterinarians or those involved in animal studies or research.

The bacterium is highly infectious in nature and remains viable in dust and stool for months. Even a quick exposure to the bacterium can cause an infection. However, person-to-person spread is extremely unlikely. Very rarely, Q fever can spread through blood transfusion, from a pregnant woman to her fetus, through sexual intercourse or by the bite of an infected tick.

Symptoms of Q fever

The symptoms of Q fever can vary significantly from person to person. Many people infected with Q fever do not show symptoms for a long time or are asymptomatic. About 5 out of 10 people infected with the bacteria get sick.

For symptomatic cases, symptoms show between two to three weeks after exposure to the bacteria. Symptoms can be mild or severe depending on the level of infection.

Signs and symptoms include:

High fever (upto 105°F)

Severe headache

Malaise or general feeling of being unwell

Fatigue

Chills or sweats

Non-productive cough

Shortness of breath

Muscle aches

Nausea

Vomiting

Diarrhea

Chest pain while breathing

Stomach pain

Drowsiness or confusion

Weight loss

Sensitivity to light

Jaundice

Risk Factors For Q fever

Q fever can infect men more often than women and adults more often than children. However, it has been commonly reported in elderly males. Certain factors can increase your risk of getting infected with Q fever, which include:

1. Occupation

The following are at high risk as they are exposed to animals and animal products:

Workers in cattle, sheep, and goat abattoirs

Farmers, stockyard workers, and livestock transporters

Dairy workers

Wool shearers and sorters

Agricultural college staff and students

Wildlife and zoo workers exposed to high-risk animals

Veterinarians, veterinary nurses, and students

Tanning and hide workers

Professional dog and cat breeders

Laboratory workers handling veterinary products or working with Coxiella burnetii

Others who are exposed to cattle, camels, sheep and goats or their products

2. Location

If you are located close to a farm or farming facility or live on a farm that may increase your risk towards the disease.

3. Season

Though there is no specific time of year when one can get infected, it seems to be more common in the spring and early summer.

4. Consumption of unpasteurized milk or dairy products

Not often, but rare cases were reported by consuming infected raw, unpasteurized milk or dairy products.

5. Immunocompromised individuals

A weak immune system can increase the risk for a severe form of the infection. Some of the common reasons that lead to weakening of the immune system include:

Malnutrition

Certain diseases such as acquired immunodeficiency syndrome (AIDS) and cancer

Genetic disorders

Excessive consumption of medicines such as steroids, anti-cancer drugs, and painkillers

Lifestyle habits such as smoking, excessive drinking, and unhealthy eating

Diagnosis Of Q fever

In case of an infection, not every patient shows symptoms and many patients can be asymptomatic. Moreover, symptoms do not readily suggest the diagnosis of Q fever. In the early stages, Q fever resembles infections like influenza, other viral infections, salmonellosis, malaria, hepatitis, and brucellosis. Later, it resembles many forms of bacterial, viral, and mycoplasmal and other atypical pneumonias. Therefore, the diagnosis of the disease can be difficult at times based on the symptoms alone.

When a patient is symptomatic and shows flu-like symptoms, your doctor may suspect you to have the infection if you live or work in an environment that can put you at high risk for exposure. Your doctor might ask you about the whereabouts of your close contacts or similar exposure.

Based on your answers, your doctor might recommend you to get some blood tests along with additional tests done. The tests include:

Antibody test: Individuals infected with Q-fever develop specific antibodies against Q fever including immunoglobulin G (IgG), immunoglobulin A (IgA) and immunoglobulin M (IgM). Measuring the levels of these classes of antibodies can help confirm a diagnosis of Q fever.

During the acute phase of Q fever, IgG and IgM antibodies may be detected. In chronic Q fever, IgG or IgA levels may be detected.

The most common serological tests for Q fever that detects the presence of specific antibodies or antigens in the blood or other fluids are:

Indirect immunofluorescence

Complement fixation

Enzyme-linked immunosorbent assay (ELISA)

Polymerase chain reaction (PCR) test: A PCR test is a highly sensitive test to detect the presence of C. burnetii infection in biopsy specimen. It can detect infection earlier than the antibody test, but it is less readily available. However, a negative PCR result does not rule out the diagnosis.

Complete blood count (CBC): It is done to check for low red blood cells (anemia) and levels of white blood cells.

Liver function or kidney function tests: They are done to diagnose any liver or kidney malfunction.

Prolonged infection with the bacteria can eventually damage the lungs and heart. The doctor might suggest a few imaging tests to confirm if the infection has caused damage to other organs.

Chest X-rays: Q fever can damage the lungs and cause pneumonia in some people. A chest X ray produces images of the heart, lungs, blood vessels, and bones of the chest, spine, and airways. The test confirms the presence of fluid in or around the lungs, which can be indicative of a concern. The chest x-ray can be performed to see if the lungs are healthy and have no obstruction.

Echocardiography: An echocardiography is a test that uses sound waves to produce images of the heart called an echocardiogram (ECG). The images show the heart beat and pumping of blood. Your doctor may recommend you to get an ECG done to identify if the heart valves are healthy and confirm the absence of a heart disease.

Tests to rule out other causes for symptoms such as tick-borne disease or more common viral or bacterial infections.

Prevention Of Q Fever

If your occupation involves close contact with cattle, vaccination would be the best preventive measure. However, the Q fever vaccine is not available globally. If you are not vaccinated, primarily, Q fever can be prevented by being extra cautious if you are in close contact with cattle, sheep, pigs, and horses.

Vaccination

There is a vaccine available for Q Fever named (Q-VAX®) which can help prevent the occurrence and severity of the infection. But it is only commercially available in Australia.

However, pre-vaccination screening with skin and blood tests should be done to identify preexisting immunity to Q fever as vaccinating people who already have immunity can cause severe local reactions.

If you are not vaccinated and are at a high risk for Q fever you must follow these preventive measures:

Disinfect and decontaminate areas in the workplace or house where you suspect an exposure to the infection

Avoid unnecessary contact with animals, especially the ones giving birth

Dispose of all birth materials after a livestock animal has given birth properly

Avoid dogs, cats, birds, and other animals from scavenging birthing products

Wash your hands properly at regular intervals

Perform regular tests and inspection on animals and farms

Avoid consumption of unpasteurized milk or milk products

Pregnant women should avoid helping with livestock birth

Minimize or restrict the airflow from facilities that house animals to residential areas

Quarantine infected and exposed animals

Practice safe workplace practices, protocols and procedures to minimize risk of infection

Specialist To Visit

If you are asymptomatic or showcase mild infection, the symptoms may resolve within a few weeks without any treatment. However, if you have a severe infection and you have an underlying heart condition or are immunocompromised, you are recommended to see a doctor at the earliest. Also, if you are pregnant, consult a doctor.

Specialists that can help to manage and treat Q fever include:

General physician

Infectious disease specialist

Treatment Of Q Fever

The severity of the disease and symptoms plays a key role in deciding the treatment regime for Q fever.

In most cases, asymptomatic cases and people with a mild infection showing symptoms usually resolve within a few weeks without any treatment. However, in case of a severe infection your doctor will have to prescribe a medication – an antibiotic.

1. Antibiotic therapy

Doxycycline is the most commonly prescribed antibiotic for treating Q fever. People with chronic Q fever usually are prescribed a combination of antibiotics for a span of 18 months. Once the chronic Q fever is treated, your doctor may ask you to come back for follow up tests to confirm the absence of recurrence.

2. Anti-inflammatory drugs

Some individuals might not respond to the antibiotic treatment, in that case, the doctor will prescribe some anti-inflammatory drugs. Hydroxychloroquine, a drug used for treating malaria, has been found to be effective against Q fever.

If you are pregnant and show symptoms of the disease, your doctor will recommend an antibiotic treatment. The medication type may vary depending on your condition.

3. Multiple/combination drugs

Chronic Q fever, the severe form of the infection, can be difficult to treat. Endocarditis, inflammation of the inner lining of the heart's chambers and valves, may require the patient to undergo multiple drug treatments. People with heart conditions require an early diagnosis and antibiotic treatment for at least 18 months.

Home-care For Q Fever

Q fever is a bacterial infection and in most cases the infection is self limited. In case of severe symptoms, the disease can be managed using antibiotics and anti-inflammatory drugs. Some tips to manage the symptoms of Q fever include:

Stay home and avoid contact with anyone.

Eat healthy, nutrient dense and easy to digest food.

Consume fluids (water, coconut water, electrolytes, soups, and fresh juices) to stay hydrated, if you have diarrhea as one of the key symptoms.

Take plenty of rest as it will help the body fight against the infection and cope with the condition.

Living With Q Fever

In some cases, people may get a reinfection or the severity of the disease may lead to chronic Q fever and related complications. Here are some tips that will help you get better:

If you have mild flu-like symptoms, your symptoms may resolve in a few weeks (1-2). If you don’t feel better, book an appointment and see your doctor.

If you are immunocompromised or have a heart or lung condition, take extra care until the symptoms resolve. Your doctor may even call you frequently for follow up tests even after the infection has been treated.

Q fever and other diseases

Below is a list of some other bacterial diseases which cause similar symptoms and therefore it is important to understand how these diseases seem to be similar to Q fever yet are different.

Legionnaires’ disease is a rare infectious bacterial disease caused by Legionella pneumophila. The infection is contracted by inhaling contaminated water from showers and whirlpool baths. Some of the common symptoms of the disease include severe pneumonia, chills, fevers, cough and a sharp pain in the side of the chest.

Rocky mountain spotted fever is a bacterial disease caused by R. rickettsii. The disease is characterized with mild to serious symptoms such as headache, fever, chills, muscle aches (myalgia), joint pain (arthralgia), extreme exhaustion (prostration), and/or a characteristic skin rash.

Brucellosis is an infectious disease that affects livestock and can get transmitted to humans. The infection is caused by the bacteria that belongs to the genus Brucella. Common symptoms of the infection include fevers, muscle pain, headache, loss of appetite, profuse sweating, and physical weakness. Similar to Q fever, brucellosis can be prevented by avoiding consumption of unpasteurized milk.

Tularemia is a bacterial infection that commonly affects small mammals such as rabbits, rodents and hares. It is a highly transmissible disease and gets transmitted when the diseased animal bites a human or it gets bitten by a tick or fly.

Complications Of Q Fever

In most cases, the symptoms of Q fever are mild flu-like and resolve within a few days to week. If the Q fever persists or reoccurs, it can cause complications that can severely damage organs such as heart, lungs, liver, and brain. Chronic Q fever is the severe form of Q fever which develops months or years after the first diagnosis. Complications caused due to chronic Q fever are:

Pneumonia, which affects 30%-50% of patients can lead to acute respiratory distress and may sometimes cause a medical emergency

Hepatitis (inflammation of the liver)

Myocarditis or endocarditis (inflammation of heart)

Meningitis (inflammation of the membrane around the spinal cord and brain) or encephalitis (inflammation of the brain)

Osteomyelitis (bone inflammation)

Acalculous cholecystitis (inflammation of the gallbladder)

Persistent fatigue (also called post-Q fever fatigue syndrome, which lasts more than a year after the infection)

Pregnancy problems such as miscarriage, low birth weight, premature birth, and stillbirth could be seen due to severity of Q fever

Many patients with Q fever may also develop long term complications such as chronic and persistent fatigue.

Alternative Therapies For Q Fever

Since Q fever is an infectious bacterial disease, it can only be treated with antibiotics. There are no alternative therapies available for the disease.

Frequently Asked Questions

Where is Q fever most common?

Why is Q fever called Q fever?

Who is at maximum risk for Q fever?

What animals can carry Q fever?

What type of disease is Q fever?

Can Q fever affect your liver?

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Body Ache

Also known Body pain

Overview

A feeling of generalized, dull aching pain all over the body that may or may not be accompanied by weakness and tiredness is known as body ache. In this, a person is not able to recognize the origin of the pain or the exact location of the pain. Instead, it is characterized generally by dull aching pain or a feeling of soreness all over the body.

Body aches can vary in intensity and frequency with sharp, intermittent pains or a dull but persistent ache. Body aches often occur in the presence of other symptoms like weakness, fatigue, shivers, and fever.

Body ache is very common and can affect individuals at any age and time. Lifestyle factors such as stress, poor diet, lack of sleep, or strenuous workouts can cause generalized body aches. These can be managed by dietary and lifestyle modifications. However, certain health conditions, such as viral fevers, anemia, fibromyalgia, lupus, etc., can also cause body aches and require medical intervention.

Over-the-counter painkillers are often used to get symptomatic relief from body aches. However, it is essential to seek medical care when body aches are chronic or associated with any signs of an infection, such as fever, chills, etc.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but more common in women

Body part(s) involved

Whole body

Mimicking Conditions

Spasmodic pain

Fibromyalgia

Rheumatoid arthritis

Joint pains

Disuse atrophy

Vitamin D deficiency

Vitamin B12 deficiency

Peripheral nerve lesions

Soft tissue cancers

Blood cancer

Chronic fatigue syndrome

Imbalance of electrolytes

Hypothyroidism

Peripheral artery disease

Stress

Necessary health tests/imaging

Complete Hemogram

Serum Electrolyte

Urine Routine and Microscopy

Glucose - Fasting Blood

Glycosylated Hemoglobin (HbA1c)

HRCT Chest - Plain

X-Ray Chest PA View

Liver Function Test

Kidney Function Tests

Iron Studies

ECG

Lipid Profile

PET CT

EMG - All 4 Limbs

NCV - All 4 Limbs

MRI Brain

MRI Screening of Whole Spine

Treatment

Antipyretics and analgesics: Paracetamol

Antibiotics and Antivirals

Folic Acid

Vitamin C supplements

Recombinant Human Erythropoietin Alfa

Specialists to consult

General Physician

Internal Medicine Specialist

Neurologist

Immunologist

Symptoms Of Body Ache

Following symptoms are commonly associated with body aches:

A dull aching, low-intensity pain that occurs all over the body.

Not having enough energy to perform routine activities or a feeling of discomfort while performing routine activities.

Not feeling refreshed even after taking ample rest.

Sometimes, fever and chills occur along with body ache.

Causes Of Body Ache

There are numerous reasons why a person can get body aches such as:

Lifestyle factors

1. Stress: A constant stressful lifestyle predisposes the body to fatigue and increases wear and tear. The person may become weak and have an increased risk of infections due to a reduced immune response. All this may cause the patient to have body aches. Stress is also known to cause other types of muscular pain, such as tension headaches, stiff and painful shoulders, etc.

2. Heavy exercise: An intense full-body workout session may leave the muscles sore and tired. Sore muscles cause pain. When a large number of muscles are involved, it can cause pain in the whole body.

3. Lack of sleep: Around 6 to 8 hours of sleep is essential for the body. While sleeping, the body regenerates its energy resources and refreshes you. A lack of sleep can hamper the overall health of the body.

4. Dehydration: The human body is made up of about 70% water. When you don’t drink enough water or lose more water than you consume (such as diarrhea), your body gets depleted of its stock of water. All these factors can lead you to feel tired and achy.

5. Nutritional deficiencies: If you do not consume a healthy and balanced diet, you are at risk for nutritional deficiencies. A deficiency of essential nutrients like calcium, vitamin D, vitamin B complex, iron, and potassium can cause your body to feel weak, tired, and achy.

6. Medications: Certain medications such as statins (lipid-lowering medicine) or a few blood-pressure relieving medications are known to cause body aches.

Most of us are aware of the effects of stress on our mood, emotions, and behaviors. However, very less is known about the negative impact of stress on key organs and systems of the body. Here is a brief on the effects of stress on the body and how different organs react to stress.

Read To Know More!

Health Conditions

1. Viral fever: Body aches are a common symptom of viral infections such as the common cold or the flu. Body ache is also a symptom of the novel coronavirus infection which has caused the Covid-19 pandemic.

2. Pneumonia: Infections in the lung, known as pneumonia, can be viral or bacterial. Body aches are a predominant symptom in the early stages of pneumonia.

3. Anemia: Anemia is a health condition caused by the deficiency of the pigment hemoglobin in the blood. It is characterized by weakness, fatigue, body aches, and many other symptoms.

4. Hypothyroidism: This occurs when your thyroid gland doesn’t make enough of certain key hormones. It can cause muscle and joint aches, as well as swelling and tenderness. It can make you tired and lead to memory problems, thinning hair, dry skin, high cholesterol, slowed heart rate, and other issues.

5. Multiple sclerosis: This is a chronic neurological disorder that occurs due to demyelination (inflammation that destroys the protective covering of nerve cells). It causes periods of flare-ups characterized by extreme fatigue, weakness, and generalized pain.

6. Fibromyalgia: In this disease, the entire musculoskeletal system of the body gets affected. The muscles feel tired, weak, and achy. The exact cause of this disease is not yet known.

7. Arthritis: Arthritis or inflammation of joints in the body can also cause generalized aches and pains.

8. Lupus: Systemic lupus erythematosus is an auto-immune disorder that affects the skin, joints, and internal organs. It is known to cause muscle and body pain.

9. Chronic fatigue syndrome: It is a complicated disorder characterized by extreme fatigue that lasts for at least six months and that can't be fully explained by an underlying medical condition. The fatigue worsens with physical or mental activity, but doesn't improve with rest.

10. Peripheral neuropathy: A neurological condition that causes numbness, aches, and pains throughout the body. This condition is frequently caused by a traumatic injury to the nervous system or exposure to certain toxins and leads to burning and tingling sensations in the hands and feet.

11. Depression: Negative emotions, including sadness and anxiety, seem to aggravate chronic pain. Depression is an overwhelming feeling of sadness or loss of interest. It leads to difficulty in sleeping, lack of energy, feelings of worthlessness, or thoughts of commiting suicide. Depression mentally drains the body and predisposes to body aches and pains.

Risk Factors For Body Ache

If you have a poor and stressful lifestyle or are suffering from any active infections or chronic diseases, you are at an increased risk of suffering from body aches. Women, in general, are at a higher risk for certain diseases, such as fibromyalgia and multiple sclerosis. These are some of the known causes of body aches.

Pain is nature’s way to protest when something is not right with your body. Rather than snuffing the voice of the body, pay attention to what it is trying to convey. Here are a few easy and manageable techniques to conquer four common types of pains before it troubles you more.

Read To Know More!

Diagnosis Of Body Ache

If you experience body ache occasionally, you can associate it with lifestyle factors or a bout of recent infection. But in either of the cases, there is no need to investigate it in further detail. However, if you have a chronic body ache that may or may be accompanied by other symptoms, it is necessary to perform tests to identify the underlying health conditions that may be causing these aches.

Along with a detailed history and physical examination, the following tests may be essential to establish a cause of the body aches:

Complete hemogram and serum electrolyte to screen for overall health, presence of infections, electrolyte imbalance, etc.

Urine routine and microscopy to check for latent urinary tract infections.

Glucose - fasting blood and glycosylated hemoglobin (HbA1c) to evaluate diabetes mellitus.

HRCT chest - plain and X-Ray chest PA view to check for suspected pneumonia.

Liver function test and Kidney function test to check the metabolic health of the body.

Iron studies in cases of suspected anemia.

ECG and lipid profile to check the heart’s health.

PET CT in cases of suspected malignancy.

EMG - All 4 limbs to evaluate the health of the muscles and NCV - All 4 Limbs to evaluate whether the nerves are carrying impulses to and from the brain correctly.

MRI brain and MRI screening of whole spine to evaluate possible neurological causes of muscle weakness.

The doctors may order additional tests based on the preliminary test results to further evaluate suspected causes of body ache.

Celebs affected

Selena Gomez

Famous American pop star Selena Gomez was diagnosed with Systemic Lupus Erythematosus, which often causes body aches along with other symptoms

Lindsay Lohan

In 2014, American actress Lindsay Lohan contracted the Chikungunya virus and reportedly had fatigue and body aches. She recovered with timely treatment.

Prevention Of Body Ache

Making healthy lifestyle choices can help prevent body aches arising from lifestyle disorders. While it is not possible to completely prevent a body ache arising from health conditions, lifestyle changes may help reduce the intensity of the symptoms.

The following lifestyle modifications can help prevent body aches:

Take a wholesome diet rich in protein, vitamins, and minerals. Cut back on processed foods.

Drink plenty of fluids throughout the day, especially during the summer season.

Establish a sound sleep schedule. Do not sleep during the day.

Exercise daily, but do not over-exercise.

To prevent catching an infection, wash your hands regularly and thoroughly with soap and water, especially before meals. Do not constantly touch your face, eyes, and nose with contaminated or unclean hands. Also, having a warm bath, as the heat can help relax muscles and ease tension in the body.

Specialist To Visit

If you experience a constant body ache and suspect it is not because of lifestyle factors, such as strenuous workouts or stress, it is better to get evaluated by your physician who will diagnose you himself or refer you to other specialist doctors:

Immunologist

Internal medicine specialist

Infectious disease specialist

Neurologist

Consult India’s best doctors online with a single click. Book your appointment now.

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Treatment Of Body Ache

Treatment for body ache is broadly divided into:

1. Symptomatic relief

Antipyretics and analgesics: Drugs like paracetamol can help with pain relief. In severe body aches, NSAID painkillers may be used for pain relief.

2. Treatment of underlying cause

Treatment for body ache varies according to the cause.

Fever and infections: Antibiotics and antivirals are used to treat bacterial or viral infections, respectively.

Anemia: The treatment for anemia covers a very broad area and is mostly based on the type of anemia. Common formulations used to treat anemia are folic acid supplements, Vitamin C supplements, recombinant human erythropoietin alfa, etc.

Neurological and related disorders: The treatment for neurological and other related causes of body ache, such as multiple sclerosis, fibromyalgia, chronic fatigue syndrome, etc., is vast and complex. It usually consists of a combination of neurotonics, multi-vitamins, and neurotransmitter enzyme regulators wherever applicable.

Home Care For Body Ache

If you have a chronic body ache, it is essential to identify what is causing the pain so that the cause may be addressed and treated accordingly. There are certain things you can do at home that may help combat body aches-

Take a wholesome and balanced diet rich in vitamins and minerals.

Drink plenty of fluids and energy drinks throughout the day.

Do not over-exercise to a point where your muscles become exceptionally sore.

Take a cold shower immediately post your workout to reduce muscle soreness and aches.

If you are stressed out, have a low-intensity body ache or try to sleep better at night. You may take a bath in a hot tub with Epsom salts or a hot shower to help you relax and ease the pain.

Avoid daytime naps. It is better to get 8 hours of sound sleep at night rather than catching up on sleep in bits and parts.

Reduce excessive consumption of caffeinated drinks (especially in the evening) and alcohol. Quit smoking and recreational drugs.

Do you know?

A good massage relaxes your muscles and improves muscle tone, circulation, and blood flow. It also relieves any physical tension and mental stress. Here are 6 top essential oils that you can use for an oil massage for body ache.

Click To Read!

Complications Of Body Ache

Worsening body ache is usually a sign of the worsening of the underlying health condition. If you have a fever and body ache and your symptoms are worsening, it may suggest a possible case of a severe infection, such as pneumonia. However, if your pain worsens after a workout, it can be a sign of a muscle injury. In conditions like multiple sclerosis, worsening body ache usually signals the onset of a flare-up or aggravation of the disease.

Alternative Therapies Of Body Ache

Along with the medical treatments for the underlying health conditions, you can overcome body aches with several alternative therapies like:

Diet

Consuming a balanced diet rich in essential nutrients is an excellent way of providing the body with the fuel it needs to perform activities. A balanced diet ensures there are no vitamin or mineral deficiencies that often cause body aches. Drinking plenty of water and fluids, like buttermilk, herbal teas, soups, coconut water, etc., keeps your body hydrated and refreshed.

Meditation

Meditation techniques like focusing on breathing awareness, progressive relaxation, etc. can help channel and conserve the body’s energy. It may help overcome chronic pain and also boost energy levels.

Massage and relaxation

Gentle body massage has been known to promote relaxation and improve blood flow to various parts of the body. This may help relax muscle soreness and provide pain relief while rejuvenating the body. Soaking in a hot tub with Epsom salts is another great way to promote relaxation and reduce body aches.

Aromatherapy

Inhaling soothing fragrances like rosemary, lavender, chamomile, etc helps calm your mind and can soothe an ache.

Exercise and yoga

Light exercises and yoga help boost the body's energy levels and are a great way of combating muscle aches. However, care must be taken not to overdo the physical activities as it may lead to soreness and become an indirect cause for body aches. Strenuous exercises followed by a cold shower may help reduce the onset of muscle soreness.

Ayurveda

Certain ayurvedic herbs, like Ginseng, Ashwagandha, Shatavari, Licorice, etc., are known for their medicinal properties. They can help increase the body’s overall strength and stamina. They may even help to an extent in combating body aches. Massage with ayurvedic oils or panchakarma is useful in promoting relaxation and reducing muscle and body ache.

Homeopathy

Homeopathic preparations in the form of oral drops/pills, such as Rhus Toxicodendron, Arnica Montana, Solanum Dulcamara, etc., are known to improve pain, especially joint pains.

Living With Body Ache

Body aches are typically a sign that your body is feeling down and out. In most cases, this pain is dull and will resolve on its own and is rarely severe. However body pain is usually accompanied by weakness, low endurance, sleep disturbances, and fatigue which drain the body further. This can lead to a vicious cycle. Conditions such as traveling long distances, over exertion, dehydration, or emotional stress also influence pain. Adequate rest, good sleep cycle, balanced nutritious diet along with stress management can go a long way in managing body aches and pains.

Hence, an occasional episode of body ache has no severe impact on a patient’s quality of life. But chronic body aches may interfere with daily activities, leading to restrictions in movements and travel. Often, chronic pain can be a source of anxiety and depression in patients. Proper and in depth diagnosis and relevant treatment of the underlying cause is of utmost importance in such cases. Do not hesitate to visit your doctor in case you have been tackling body aches for a long time.

Do you know?

Excessive tiredness or feeling tired even after a good night’s sleep could indicate an underlying health problem. There are various health conditions that can manifest in the form of tiredness and body aches in addition to other symptoms.

Click To Know!

Frequently Asked Questions

What is the difference between body ache and muscle ache?

Does body ache always occur with viral fevers?

What are some home remedies for body ache?

Why do our bodies ache?

Why does a body ache when a person wakes up?

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Rabies

Also known as Hydrophobia or Lyssa

Overview

Rabies is a vaccine-preventable viral disease that is usually transmitted by the bite of a rabid animal. Dogs are the main source of infection, contributing up to 99% of all rabies transmissions to humans.

The virus usually attacks the brain causing several symptoms such as confusion, agitation, paralysis, and coma. Once symptoms start developing, the disease can be life threatening in the absence of prompt treatment.

Fortunately, the onset of symptoms can be prevented by extensive washing of the wound with soap and water after a bite from a suspected rabid animal followed by timely administration of rabies immunoglobulin and rabies vaccines.

The best way to avoid the transmission of rabies is by vaccination of dogs and preventing dog bites. Children should be adequately educated about rabies and protected from dogs. Pre - exposure vaccines are also recommended for the high risk people such as veterinarians, scientists working on rabies virus, and people working with wild animals.

Key Facts

Usually seen in

Children under 15 years of age

Gender affected

Both men and women

Body part(s) involved

Salivary glands

Brain

Spinal cord

Mimicking Conditions

Psychosis

Seizures

Poisoning with belladonna alkaloids

Stroke

Jacob Creutzfeldt disease

Brain tumor

Encephalitis

Tetanus

Necessary health tests/imaging

Lumbar puncture

Nuchal skin biopsy

Real time polymerase chain reaction (RT-PCR)

Blood tests: Fluorescent antibody virus neutralization FAVN) test & Rapid fluorescent focus inhibition (RFFIT) test

Imaging tests: Magnetic resonance imaging (MRI) of head & Computed tomography (CT) scan of head

Treatment

Wound cleansing

Rabies immunoglobulin(RIG)

Rabies vaccine

Specialists to consult

General physician

Infectious disease specialist

Neurologist

Neurosurgeon

Causes Of Rabies

Rabies is caused by the rabies virus that usually gets transmitted from infected animals. The virus lives in the saliva, brain and spinal cord of the infected animal. Rabies can infect mammals such as dogs, cats, bats, monkeys, foxes, raccoons, skunks, jackals and mongooses. The most common cause of transmission in humans are dogs.

Transmission

The salivary glands play a very important role in spreading the infection. When an infected animal bite, the virus is released through saliva into the person’s body. The infection can spread through:

Bite of an infected animal

Scratches by claws of infected animal

Exposure of the infected saliva to nose, eyes, mouth, or cut skin

Rabies virus can also be transmitted from human to human through transplantation of the cornea or other organ. Although this transmission is rare, it is possible. Therefore, the corneas and other organs of a person who died of rabies should not be used for transplantation.

Note: Rabies is not spread by petting or touching dried saliva, blood, urine, or feces of a rabid animal.

After entering into the bloodstream, the virus enters into the central nervous system. After establishing the infection in the brain, the virus travels down the nerves from the brain and multiplies in different organs causing several complications.

Did you know?

28th September, is established as World Rabies Day (WRD) by the Global Alliance for Rabies Control (GARC) and recognized by the World Health Organization (WHO). This date is chosen as on this date, back in 1895, the inventor of the rabies vaccine, Louis Pasteur, passed away. His discoveries are still saving countless lives.

Symptoms Of Rabies

Symptoms of rabies can be divided into the following stages:

Stage 1 (Incubation): It is the period from exposure of virus to the onset of symptoms and differs from person to person. This time is generally 2 to 3 months but may range from 1 week to 1 year. It is dependent on factors such as site of entry of the virus and the viral load

Stage 2 (Prodrome): This stage consists of non-specific symptoms that mostly resemble the flu with several gastrointestinal symptoms:

Fever

Headache

Malaise

Decrease in appetite

Pain, numbness, tingling, and itching at the wound site

Stage 3 (Neurological): In this stage, the virus reaches the central nervous system. It causes fatal inflammation of the brain and spinal cord which can be experienced as the following symptoms:

Anxiety

Confusion

Agitation

Delirium

Disturbed behavior

Hallucinations

Hydrophobia (fear of water)

Insomnia

Muscle aches

Weak arms and legs

Difficulty in swallowing

Aerophobia (fear of fresh air)

Stage 4 (Coma): This stage usually develops within ten days of stage 3. Patients may have consistent hydrophobia and can develop paralysis.

Stage 5 (Death): The stage 4 can lead to death within 2 to 3 days without supportive care.

Did you know?

The "frothing" in rabies, as portrayed in the movies Cujo and Old Yeller, is due to hypersalivation. The victims suffer from intense throat muscle spasm at the mere sight, taste, or sound of water.

Types Of Rabies

Rabies can be divided into two types depending upon the symptoms. These are:

Encephalitic (furious) rabies

It is the most prevalent form of rabies and affects 85% of the population infected with the rabies virus.

In this type, patients experience symptoms such as:

Hyperactivity

Excitable behavior

Hydrophobia(fear of water)

Aerophobia(fear of flying)

Tachycardia (increase in heart rate)

Tachypnea (abnormal rapid breathing)

It can also be life threatening due to cardio-pulmonary arrest.

Paralytic rabies

As the name suggests, it causes paralysis of muscles that usually starts at the site bitten by the animal. Almost 20% of cases of rabies are of the paralytic type. It may also result in coma and eventually death of the patient.

This form is often misinterpreted as normal paralysis and Guillain-Barre syndrome due to the absence of classical symptoms of rabies which include hydrophobia. Patients may also feel:

Ongoing fevers

Weakness

Bladder dysfunction

Classic form

This form of rabies is rare, generally associated with seizures and more profound motor and sensory symptoms.

Risk Factors For Rabies

Low knowledge levels regarding rabies

Rabies is highly prevalent in the areas where people are having low knowledge regarding rabies and dog bites. The cases are especially seen in rural areas where people are unaware about the measures taken to prevent and manage rabies.

Exposure to unvaccinated dogs

Dogs are the main source of spreading rabies. Exposure to stray dogs or unvaccinated dogs can be a source of infection.

Living in rabies endemic countries

People living in rabies endemic countries with a poor control on dogs and wildlife are more prone to rabies infection.

Age

Children are at high risk of catching the virus as they are more prone to be attacked by animals. Most cases of rabies are seen in children who are bitten by dogs, especially on their arms and faces.

Diagnosis Of Rabies

An immediate medical attention is essential, if anybody is suspected to be bitten or scratched by an animal as there is no direct way to recognise a rabid animal.

However, the diagnostic tests can confirm the infection but it usually takes time and the dependency on the results can delay the treatment process.

Testing the animal

The animal that is caught biting or scratching is first tested for rabies. This testing may save a patient from unnecessary physical, psychological, and financial stress if the animal is not found to be rapid.

The rabies is usually diagnosed by direct fluorescent antibody (DFA) test. The DFA test detects the rabies virus antigens in brain tissue of the euthanized (put to death humanely) animal.

Animals that are found to be healthy such as a vaccinated dog or cat are not usually tested and kept under observation for 10 days. After this period, a doctor usually decides what to do after discussing with the local health department.

Testing in humans

Rabies can be confirmed by various tests that detect the whole virus, viral antigens, or nucleic acids in infected tissues. Some of the tests are discussed below:

Lumbar puncture

In this, a sample of cerebrospinal fluid is taken for detection of the virus. The sample is taken using a thin needle from the lower part of the lumbar spine.

Nuchal skin biopsy

It is the most reliable method of detecting the rabies virus during the first week. In this, a sample is collected from the skin of the back of the neck. The virus is detected using immunofluorescent antibody staining under a microscope.

Real time polymerase chain reaction (RT-PCR)

In this, the saliva is tested for the presence of rabies virus. The method amplifies the genetic material of the virus (RNA) for the ease of identification. The test usually has high sensitivity and is used as a confirmatory test for detection of rabies infection.

Blood tests

These tests are not used often for detection of rabies virus as the virus specific antibodies take time to reflect in the blood. They are mainly used to check the efficacy of the rabies vaccines given to the patient. The most common antibody test used is virus neutralization test which can be performed in two ways:

Fluorescent antibody virus neutralization FAVN) test

Rapid fluorescent focus inhibition (RFFIT) test

Imaging tests

These tests are usually done to diagnose rabies encephalitis. The tests include:

Magnetic resonance imaging (MRI) of head: This imaging technique uses magnetic fields and radio waves to create detailed pictures of the brain.

Computed tomography (CT) scan of head: In this, X-rays are used to create detailed pictures of the head..

Specialist To Visit

Rabies is a medical emergency as it can lead to fatal consequences in the absence of timely treatment. Any bite or scratch of an unfamiliar or wild animal should not be ignored. Patients should wash the wounds immediately with soap and water and consult the doctor for the assessment of the risk of rabies.

Doctors usually decide the course of treatment after checking the wound developed due to an animal attack. The following doctor can help in the diagnosis and treatment of rabies:

General physician

Infectious disease specialist

Neurologist

Neurosurgeon

If you are noticing any of the symptoms, seek advice from our world-class medical professionals.

Consult Now!

Prevention Of Rabies

Eliminating rabies in animals

Rabies is a vaccine-preventable disease. It is important to keep the vaccinations of your dogs, cats, ferrets, and selected livestock up-to-date. A booster vaccination is also recommended in case your dog and cat is attacked or bitten by a wild animal.

Vaccination

The same vaccine that is used in animals is also used to immunize people after an exposure. In some cases, vaccination is also required in humans before exposure to rabies.

The vaccines for rabies have been available for more than 125 years. Earlier nerve tissue vaccines were used which have now been replaced with various modern cell culture and embryonated egg-based vaccines (CCEEVs). CCEEVs are more effective than earlier vaccines and have lesser side effects.

Vaccinations of high risk people (Pre-exposure vaccination)

Vaccination is also recommended for the people who are at high risk of getting the disease. These include:

Veterinarian or an animal handler

Veterinary student

People who study or explore animals

Students working on rabies virus

People traveling to the rabies prevalent countries

Vaccination is also recommended for children and infants living in an area with a high incidence of rabies and where the supply of immunoglobulin is limited. The vaccine can be given in 2 schedules, either via intramuscular route or va intradermally at days 0, 7, and 21 and 28.

The booster doses are required only in some cases where there is a continuous exposure of the rabies virus. In case of exposure to rabies virus to vaccinated people, still post-prophylaxis is required.

Vaccination after an animal bite

The vaccination is required if a person is bitten by a rabid animal. In this case, a doctor usually decides if you need the rabies vaccine. The vaccine is given in 4 doses, if you have not previously been vaccinated for rabies. The first dose is given immediately after the bite, followed by additional 3 doses which are given after 3 days, 1 week, and 2 weeks after the first dose.

The person who has already received the rabies vaccine, requires only 2 doses. The first dose is given immediately after the bite and the second dose is given after 3 days.

Vaccines lower the immunity for a period of time. So, it is necessary to tell your doctor if:

Had an allergic reaction to the rabies vaccine in the past

Have severe other allergies

Have HIV infection

Have cancer

Are on some medications that can affect your immune system

Are pregnant or breastfeeding

But in case, if it is confirmed that you are bitten by a rabid animal, you need to get vaccinated even in the presence of these conditions.

Side effects of vaccination

The side effects of rabies vaccines are very mild and usually go away on their own. The common side effects include:

Pain, swelling, and redness at the injection site

Headache

Upset stomach

Pain in the stomach

Muscle aches

Dizziness

Some of the rare side effects include:

Itchy spots on the skin

Joint pain

Fever

Avoiding animal exposure

The best protection against rabies is to avoid any wild animal that can transmit rabies. The following measures should be taken to avoid the exposure:

Do not touch injured animals. In case you find an injured animal, contact the local authorities immediately for assistance.

Do not feed, play or pat unknown animals, especially in areas where rabies is known to occur.

Do not touch stray dogs and cats while traveling.

Do not allow your pets to roam free as they may be infected by other animals.

Do not leave garbage or pet food outside. It may attract wild or stray animals.

Do not keep wild animals as pets.

Do not ignore the strange behavior of your pet. Any change in behavior of the pet should be immediately reported to the veterinarian.

Do not allow kids to touch or feed stray cats and dogs that may be wandering around them. Educate and remind kids to stay away from stray animals.

Awareness on rabies

It is very important to understand the risk of rabies. Rabies is a fatal disease which is transmitted through animals, especially dogs. But, rabies in humans can be prevented through prompt vaccination and appropriate medical care. If you are bitten or scratched by an animal, immediately inform your doctor.

Educating both children and adults about rabies and its prevention plays a very important role in limiting the exposure. Increasing awareness of rabies prevention and control in communities includes education and information on responsible pet ownership, how to prevent dog bites, and immediate care measures after a bite.

Treatment Of Rabies

What to do after a bite or scratch by an animal, particularly a dog?

Wash the wounds with soap and water, immediately as it will reduce the chances of infection.

Flush the wound thoroughly for about 15 minutes with water.

Give first aid to the wound that includes applying an iodine-containing or anti-viral medication

Capture the animal in a large box, or atleast identify it, if possible. Do not risk further injury to yourself.

Call your family doctor immediately and explain to him/her about the bite.

Call the Department of Health and animal control officer and provide them the accurate description of the animal.

Avoid covering the wound with dressings or bandages.

Keep the biting animal under observation for 10 days.

What to do if your pet is bitten or scratched by another animal, particularly a dog?

Wear rubber gloves while washing your pet’s wounds.

Call your pet’s veterinarian immediately.

Post-exposure prophylaxis (PEP)

There is no specific treatment for rabies, if symptoms start to develop. Therefore, the focus is given on preventing the exposure. Even if rabies is not confirmed, treatment should start straight away. This is called post-exposure prophylaxis (PEP) and is done to prevent the infection. PEP refers to the prompt treatment of a bite that might expose the person to rabies. This helps in preventing the entry of viruses into the brain and consists of:

Extensive wound washing: It includes immediate washing of the wound with water, soap, detergent and povidone iodine for at least 15 minutes. This may help in removing or killing the virus.

Administration of rabies immune globulin: This gives immediate protection before the vaccine starts to work.

Administration of rabies vaccine: The vaccine is injected immediately after a bite. It is given in 4 doses at 0,3rd, 7th, and 14th day of the bite. An extra dose at day 28 is also given to the patient with a weak immune system.

Home-care For Rabies

Rabies is a serious disease that involves the nervous system. Most of the patients are admitted to hospitals for the treatment. The caregivers or the family plays a very important role in maintaining the overall health of the patient. The following measures can be taken by the people that are taking care of the person.

Keep the patient calm, comfortable, and free from emotional upset

Avoid contamination from saliva and broken skin of the patient by taking special precautions

Keep the patient in a quiet room

Keep the patient away from triggers (loud noise, intense light, and cold air) of muscle spasms and convulsions

Allow the patient to take proper sleep to control excitability

Keep the patient hydrated.

Complications Of Rabies

The rabies virus travels through the peripheral nervous system and targets the central nervous system (brain) which can cause neurological complications such as encephalomyelitis. This can also cause anxiety, agitation and delirium. The virus can travel back to the PNS and can attack various peripheral organs such as salivary glands.

The virus can cause the complete failure of the entire nervous system which can even cause death of the infected person. All these changes can develop following complications in patients.

Seizures

Fasciculations

Psychosis

Aphasia

Autonomic instability

Paralysis

Coma

Cardiopulmonary disorders

Multiple organ failure

Cardiac arrest

Hypotension

Confusion

Paralysis of lower legs

Problems swallowing due to painful throat and voice box spasms

Insomnia

Apnea

Death

Frequently Asked Questions

What should be done immediately in case of a dog bite?

What is the life of the rabies virus outside the rabid animal?

How can you distinguish a rabid animal from a normal animal?

What should not be done in case of animal bite?

Can the rabies vaccine and immunoglobulin be given to a pregnant woman or a lactating mother?

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Rheumatoid arthritis

Overview

Rheumatoid arthritis (RA) is an autoimmune disease in which the immune system starts attacking healthy cells of the body and causes chronic joint inflammation.

Rheumatoid arthritis affects the joints, such as wrists, hands, and knees, and causes painful swelling. Symptoms include tender and swollen joints and stiff joints which worsen in the morning. The patient experiences fatigue, followed by fever and loss of appetite.

It’s still unclear as to what starts off this process. However, genetic factors along with family history, age, obesity, smoking, and an unhealthy lifestyle increase the risk of developing this disease.

Rheumatoid arthritis does not have a permanent cure but early treatment can result in a better prognosis. This disease can be managed with the help of medications and occasionally with surgery as they can slow down the spread of the disease, control its symptoms, and prevent deformity of the joints.

Lifestyle changes, such as being physically active, maintaining a healthy weight, and managing the symptoms through self-care strategies, can help RA patients lead productive lives.

Key Facts

Usually seen in

Adults above 30 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Joints

Prevalence

Worldwide: 0.6% - 1.27% (2019)

India: 0.5% - 0.75% (2022)

Mimicking Conditions

Osteoarthritis

Lyme disease

Systemic Lupus Erythematosus

Gout

Reactive arthritis

Psoriatic arthritis

Necessary health tests/imaging

Blood tests: Rheumatoid factor (RF), C-reactive protein (CRP) & Antinuclear antibody

Joint scans: X-rays & MRI

Treatment

NSAIDs: Ibuprofen

DMARDs: Methotrexate, Leflunomide, and Hydroxychloroquine.

Steroids: Prednisone

Biological DMRADs: Rituximab, Abatacept, Tocilizumab, and Anakinra

Targeted synthetic DMARDs: Barticinib, Tofacitinib and Upacitinib

Physical/occupational therapy

Surgery

See All

Symptoms of Rheumatoid Arthritis

Symptoms of rheumatoid arthritis tend to fluctuate. There are times when the symptoms are severe, known as ‘flares’. The symptoms might go into ‘remission’ when they become mild.

Signs and symptoms include:

1. Fatigue: Fatigue or the feeling of tiredness and exhaustion is the first sign of RA which affects a person’s everyday routine and productivity.

2. Fever: Fatigue is followed by a rise in temperature which further leads to a feeling of sickness and exhaustion.

3. Loss of weight: Occurrence of fever and fatigue results in the loss of appetite and this can lead to weight loss and weakness.

4. Pain and stiffness: Pain and stiffness are first felt in the smaller joints like joints of the fingers or the toes. The intensity of these symptoms increases over time. The pain often lasts for several days and is followed by a gradual stiffness in the body. This stiffness intensifies after periods of inactivity for eg.after getting up from sleep in the morning.

5. Swelling: Swollen hands and feet are the most common signs of rheumatoid arthritis. The inflammation in the joints causes the lining of the joints to thicken, leading to excess production of fluids in the joints. This excess fluid production puts pressure on the area surrounding the joints, leading to irritation of the nerve endings and pain and swelling of the joints.

Did you know?

May 20th is observed as World Autoimmune Arthritis Day with the aim to spread awareness about different types of arthritis. Know more about the myths and facts related to rheumatoid arthritis.

Click To Read!

Causes Of Rheumatoid Arthritis

The immune system safeguards the body from infections and diseases by producing antibodies. However, sometimes antibodies tend to attack the thin layer that covers the joints. This thin layer becomes inflamed and affects the surrounding bones, cartilage, tendons, and ligaments, resulting in rheumatoid arthritis.

Genes play a role in causing rheumatoid arthritis. They make us vulnerable to infections caused by certain viruses and bacteria. This sometimes triggers the development of autoimmune diseases like rheumatoid arthritis.

Risk Factors For Rheumatoid Arthritis

The exact cause of rheumatoid arthritis is yet unknown; however, the researchers have pointed out a few factors that could increase its risk:

1. Genetic factors: Genes play an important role in the development of autoimmune diseases, like rheumatoid arthritis. Therefore, if a close family member has this disease, then an individual has an increased risk of developing it.

2. Age: Although rheumatoid arthritis can develop at any age, it has an increased chance of developing during middle age. Its onset is mostly noticed among senior citizens or those in their 60s.

3. Sex: Women are more prone to developing RA than men because the hormonal changes during prenancy and menopause might increase one’s susceptibility to this disease.

4. Obesity/Excessive weight: Obese individuals are at a higher risk of developing rheumatoid arthritis. The excess fat tissue releases cytokines (proteins that cause inflammation) into the body. This aggravates the pain and increases the progression of the disease.

5. High birth weight: Research has shown that high birth weight (>4 kg) is associated with an increased risk of RA.

6. Smoking: It is the most substantial known environmental risk factor for RA. The risk of RA increases with the amount and duration of cigarette use.

7. Diet: Many dietary factors, such as red meat intake and vitamin D deficiency, have been found to increase the risk of RA. Excessive coffee consumption and salt intake can also be a risk factor for ACPA-positive RA (the most aggressive form of RA with a worse prognosis).

8. Infections: Microbes, like Mycoplasma, Enteric bacteria, and Epstein-Barr virus, are the commonly implicated infective agents that cause infections and predispose to RA. In India, an epidemic of chikungunya virus infection also contributed to the increase in the prevalence of RA in the susceptible population.

9. Periodontitis: It is a chronic inflammatory disease of the gums in which gums pull away from the teeth and form pockets that become infected. Various studies have shown that the occurrence and severity of periodontitis were found to be higher in people suffering from RA, suggesting a positive correlation between these two chronic inflammatory diseases.

Are you suffering from bleeding from gums?

Try these home remedies and to get rid of bleeding gums. make sure to visit the dentist in case the bleeding doesn't stop.

Tap To Know!

Diagnosis Of Rheumatoid Arthritis

The signs and symptoms of rheumatoid arthritis are very similar to some other joint disorders, which make the diagnosis of this disease difficult in the early stages. But, if you experience any of the symptoms, consult a doctor at the earliest. It is essential to get a check-up done within six months of noticing the symptoms. This helps in slowing down the damage to the joints and in better management of the disease.

The doctor will conduct a physical examination during which they will check the joints for redness, swelling, and warmth. They may also check the muscle strength and reflexes.

There are specific blood tests and imaging tests/X-rays that help in the diagnosis of RA. The doctor will prescribe the tests depending upon the symptoms and the results of the physical examination.

1. Blood tests

Rheumatoid factor (RF): The rheumatoid factor is an autoantibody that attacks joints in people with rheumatoid arthritis. This rheumatoid factor (RF) test measures the level of RF in the blood.

C-reactive protein (CRP): This test checks for any kind of inflammation throughout the body. It helps detect rheumatoid arthritis and psoriatic arthritis.

Antinuclear antibody: This test helps in identifying abnormal antibodies for detecting rheumatoid arthritis.

Erythrocyte sedimentation rate (ESR): This test helps determine how fast the red blood cells cling together and settle at the bottom of a test tube. It helps indicate any inflammation in the body.

Anti cyclic citrullinated peptide (Anti-CCP): This test helps to detect autoantibodies (associated with joint damage) which are usually present in most patients with rheumatoid arthritis.

Human leukocyte antigen tissue typing (HLA): This test helps detect the presence of specific genetic markers that indicate the possibility of developing rheumatoid arthritis.

2. Imaging techniques:

Apart from blood tests, scanning of joints is also conducted to detect rheumatoid arthritis. These scans detect the inflammation of the joints and the damage caused due to this inflammation. They also help in identifying the type of arthritis and how much the disease has progressed.

X-rays: They help to detect any damage to the joints or bones due to rheumatoid arthritis.

MRI: An MRI of the joints and the musculoskeletal system can help get a clear picture of the extent of inflammation and damage to the joints.

Get your lab tests done with us at the comfort and safety of your home.

Book Now!

Celebs affected

Hrithik Roshan

Hrithik Roshan was diagnosed with rheumatoid arthritis. It took the help of modern medicine and a fighter’s attitude to overcome his debilitating pain.

Kathleen Turner

Mary Kathleen Turner is an American actress, who is known for her distinctive voice. Turner has won two Golden Globe Awards. She refused to let RA defeat her and stays active by doing pilates twice a week.

Megan Park

Megan Park is a Canadian actress and director. She is known for her portrayal of Grace Bowman in the television series ‘The Secret Life of the American Teenager’. She shared her diagnosis of RA with the public to let others know they weren’t alone.

Prevention Of Rheumatoid Arthritis

Various genetic and environmental factors are responsible for rheumatoid arthritis. While the genetic factors can’t be changed, modifications in one’s lifestyle and incorporation of healthy habits will go a long way in reducing the risk and the damaging side effects of this disease.

Here are a few ways to stay safe and to prevent the worsening of this condition:

1. Quit smoking: Smoking increases the risk of developing rheumatoid arthritis in people who are genetically prone to developing this condition as this activity triggers a faulty immune system functioning. It causes the symptoms to advance at a faster pace.

Quitting smoking is one of the best ways to prevent damage to your overall health. If you cannot quit smoking by yourself, you could use the help of family or friends to hold you accountable for quitting the habit.

Here are some practical tips that can help quit smoking!

Click To Know!

2. Lose weight: People with excess weight experience faster disease progression, pain, and disability. Obesity also increases the susceptibility to other diseases in people with rheumatoid arthritis.

Low-intensity exercises (thirty minutes of physical activity), such as walking, swimming, and yoga, help reduce weight,pressure on the joints, and the chance of developing joint diseases. These activities also increase energy levels and improve flexibility, making one leaner and fitter and healthy in body and mind.

Finding it challenging to lose weight? Here are some weight loss tips that can work for you!

Tap To Read!

3. Change the diet: Changing the diet also goes a long way in preventing a disease or reducing the chances of damage to the body.

Foods to consume: Foods rich in antioxidants help fight free radicals that damage the body. Increase the consumption of fiber and vitamin-rich foods and foods that help fight inflammation, like:

Fruits

Green vegetables

Nuts and seeds

Whole grains

Low-fat dairy

Lean proteins

Small amounts of saturated fats

Foods rich in omega-3 fatty acids

Spices, such as turmeric, are known to fight inflammation. Include them in the recipes to reap their benefits.

Foods to avoid

Red meat and protein

Caffeine

Sweetened beverages

Excessive salt

Processed, packaged, and junk food

4. Vitamins and supplements: Supplements containing Vitamin D, Vitamin C, and antioxidants have been shown to reduce the risk for RA.

5. Dental health: There is a potential link between gum infections, like periodontitis, and RA. Getting regular checkups from the dentist, maintaining good oral hygiene, and not neglecting bleeding gums can help prevent the progression of minor gum diseases into periodontitis.

6. Seek timely help: If any signs or symptoms of rheumatoid arthritis, such as pain, tenderness, or swelling in the small joints of your hands and feet, are noticeable, then consult a doctor immediately. Seeking timely help will prevent damage to the joints and help in better management of the condition. A rheumatologist can guide towards the proper treatment and prescribe tests and scans to study the progress of the disease.

Protect your joints!

Choose activities that are easier on the joints and don’t cause further harm. Low-impact activities, such as walking and swimming, are safer. Always remember to wear protective equipment to prevent injury to the joints. To read more about 5 simple ways for keeping joints healthy.

Tap To Read!

Specialist To Visit

Early detection of rheumatoid arthritis helps in getting better treatment and in preventing damage to the joints. Specialists who will make the perfect diagnosis and prescribe the right treatment are:

Rheumatologist

General physician

Orthopaedist

Orthopedic surgeon

A rheumatologist specializes in arthritis, hence, is the ideal doctor to consult.

If not a rheumatologist, one may also consult a general physician who has treated patients with rheumatoid arthritis and who can also work closely with a rheumatologist. It is essential to consult a rheumatologist periodically as they will prescribe blood tests,joint scans, MRIs, or X-rays to inspect the joints and a suitable treatment based on the study.

If the symptoms intensify, consultation from an orthopedist or an orthopedic surgeon can also be considered. Orthopedic surgeons specialize in joint replacement surgery. So, if the damage to the joints is severe and is hampering your daily life, they will recommend surgery, or any other treatment, as per requirement.

Seek advice from our world-class medical professionals in case of any symptoms.

Consult Now!

Treatment Of Rheumatoid Arthritis

Rheumatoid arthritis has no cure. However, an early diagnosis can help in selecting a treatment to keep the symptoms under control. Some medications, such as disease-modifying antirheumatic drugs (DMARDs), work in slowing down the progression of the disease and saving the joints from damage.

There are three methods of treating rheumatoid arthritis related pain and symptoms:

A. Medications

These are given depending upon the intensity of the symptoms and the progression of the disease.

1. NSAIDs: Nonsteroidal anti-inflammatory drugs (NSAIDs) are prescribed for reducing pain and inflammation. NSAIDs, like ibuprofen, are available as an over the counter drug, but for stronger NSAIDs, a doctor’s prescription is needed.

2. DMARDs: Disease-modifying antirheumatic drugs (DMARDs) slow down the progression of this disease. This action helps save the joints and tissues from damage and disability.

Methotrexate: It is an immunosuppressant. It slows the activity of the body’s immune system and reduces pain, swelling, and stiffness.

Leflunomide: It blocks the chemical messengers that cause inflammation and swelling.

Hydroxychloroquine: It eases the progression of the disease and reduces pain, swelling, and redness.

Sulfasalazine: It suppresses the overactivity of the immune system and blocks the chemical messengers that cause inflammation.

3. Steroids: Corticosteroids reduce inflammation and damage to the joints and provide relief from pain. These drugs have specific side effects, such as weight gain, diabetes, and thinning of the bones. Therefore, they are prescribed for a short duration and the dose is decreased gradually. Prednisone is one such corticosteroid that is prescribed to patients with rheumatoid arthritis.

4. Biological DMRADs: These are some of the latest DMARDs that are prescribed for swelling and redness. These are also known as biologic response modifiers. They block the chemical messengers that cause inflammation and give relief from swelling and redness. This category includes drugs like:

Rituximab: This drug works by targeting the unwanted activity of immune cells (B cells) in rheumatoid arthritis.

Abatacept: It blocks the action of certain chemical messengers that are responsible for inflammation, swelling, and redness associated with certain joint diseases.

Tocilizumab: This is an anti interleukin-6 (IL-6) medication. IL-6 plays a key role in driving the inflammation that is responsible for joint destruction in rheumatoid arthritis.

Anakinra: Interleukin-1(IL-1) is another important chemical messenger responsible for the development of RA. This drug works by blocking interleukin-1.

5. Anti-TNF drugs: Tumor necrosis factor (TNF) is a cytokine involved in systemic inflammation which plays a major role in the pathogenesis of RA. Some anti-TNF drugs which can be used in this condition are:

Infliximab

Etanercept

Adalimumab

6. Targeted synthetic DMARDs: If the conventional DMARDs and the biological agents do not work, then targeted synthetic DMARDs are prescribed. Take these as per the doctor’s prescription to notice their effect. Doctors can also advise regular blood tests to monitor the liver, kidneys, and blood count. Examples of these drugs include:

Bariticinib

Tofacitinib

Upacitinib

B. Therapy

Physical or occupational therapy helps improve flexibility and eases joint pain. A therapist may teach ways to simplify tasks and to reduce mental and physical strain and stress. They may also guide in selecting gadgets that don’t strain the painful joints.

C. Surgery

It is advised when medications and therapy fail to slow the damage. It improves the functioning of joints and restores one’s ability to lead a productive life. A rheumatologist will advise some of the following procedures:

Tendon repair: This consists of repairing the tendons around the joints.

Synovectomy: It’s a surgery to remove the inflamed lining of the joints.

Joint fusion (arthrodesis): Fusing of two or more bones in a joint to get relief from pain.

Total joint replacement surgery: It consists of removing the damaged parts of the joint and replacing them with a metallic or plastic prosthesis.

Did you know?

Healthy eating habits can help reduce weight and ease the pressure on joints. As per a study, developing healthy eating habits can prevent weight gain, which may also be beneficial to reduce the effects of RA. Read more about healthy diet plans and weight loss tips.

Click To Read!

Home-care For Rheumatoid Arthritis

Although painkillers help ease the pain and the inflammation, there is no cure for this condition. Therefore, making lifestyle changes, dietary changes, and managing stress are crucial in reducing the discomfort and slowing down the progress of the disease.

Here are a few changes that will provide relief and help live a comfortable life:

1. Home remedies

Rheumatoid arthritis (RA) involves inflammation; therefore, adding anti-inflammatory herbs and spices will have health benefits. However, these should be taken after consulting a healthcare provider. These herbs include:

Turmeric (haldi): This golden spice has anti-inflammatory properties and analgesic (pain relieving) effects.

Ginger (adrak): It has anti-inflammatory properties and may improve RA symptoms by affecting the expression of certain genes.

Green tea: It is rich in antioxidants. It can help reduce inflammation and can protect joints.op

Cinnamon (chakla): This ancient spice is filled with antioxidants that can prove beneficial for tender and swollen joints.

Garlic (lehsun): This spice can liven up any meal and has anti-inflammatory properties that reduce cytokines (known to cause inflammation) and relieve pain due to RA.

Black Pepper (kalimirch): This simple and household spice has antioxidant, antimicrobial, anti-inflammatory, and gastro-protective effects.

Willow bark: This spice has significant anti-inflammatory properties and reduces various markers of inflammation.

Indian frankincense: It is derived from the bark of the Boswellia tree, which has strong anti-inflammatory as well as analgesic properties.

Ashwagandha: It is also called Indian ginseng and is known to ease pain and joint swelling in people with rheumatoid arthritis. However, the supplement can cause an additive effect if taken with diabetes or thyroid medications. Hence, do not consume it without consulting a physician. Moreover, pregnant women should talk to their doctors before taking ashwagandha.

2. Physical activity

This is the most important and effective way of reducing pain and discomfort associated with rheumatoid arthritis.

Tailor an exercise program according to the schedule and health benefits that are needed with the help of a doctor or physiotherapist. Half an hour of physical activity every day is enough to increase stamina and flexibility. This will also improve one’s sleep pattern and will ease depression and anxiety related to rheumatoid arthritis.

3. Dietary changes

Make informed choices about diet with the help of a nutritionist to not just reduce weight but to also improve the overall health. The necessary nutrients supplied through a tailored diet will improve one’s energy levels as their weight decreases. Having a well-balanced diet rich in antioxidants can lessen the pressure on the joints and give comfort from pain. Make sure to consult a doctor or dietician before starting any supplements. The food or supplements rich in the following can be beneficial:

Omega-3 fatty acids

Zinc

Iron

Folate

B vitamins

Calcium

Vitamin D

Fluoride

4. Sleep

It is of utmost importance in one’s fight against any disease. Eight hours of sound sleep every night helps maintain a positive mindset and also eases pain. Consult a doctor if you have difficulty sleeping. Also try taking short naps in the afternoon to energize you for the remaining part of the day.

5. Massage

Massages increase the fresh oxygenated blood supply to the muscles and organs and aid in removal of waste products from the body, which alleviate rheumatic disorders. It also improves flexibility and reduces soreness of the joints.

Castor oil or essential oils, like black currant seed, evening primrose, lemongrass, and borage seed, can be used for massages. However, they should be used only after testing on your skin to ensure there is no irritation.

6. Heat and cold

Ice packs help bring down the swelling and the inflammation. One can use them during the flares but only for 15 minutes. Alternately, use a hot water bag or a warm towel to relax the muscles and to increase blood flow to the treatment area. Hot tub baths also provide relaxation to stiff, painful muscles.

Complications Of Rheumatoid Arthritis

Rheumatoid arthritis affects the lining of the joints and causes gradual bone erosion and deformity. Besides these side effects, rheumatoid arthritis increases the risk of developing other ailments, such as:

1. Osteoporosis: Rheumatoid arthritis and the medications used to treat it increase the risk of developing osteoporosis. In this condition, our bones become weaker and are prone to fractures. Lack of exercise due to pain and swelling and insufficient calcium intake are other factors that lead to loss of bone density, which further leads to osteoporosis.

Osteoporosis is a disease condition in which bones get thin and weak due to low bone mass (bone density). This makes bones fragile and increases the risk of fractures from the slightest trauma.

Read More!

2. Carpal tunnel syndrome: When the nerve that serves the hand and the fingers get compressed due to inflammation, it is referred to as a condition known as carpal tunnel syndrome. As rheumatoid arthritis typically affects the hands, it will also affect the wrist, putting it at a greater risk of developing carpal tunnel syndrome.

3. Lung diseases: Rheumatoid arthritis increases the chances of inflammation and scarring of the lung tissues. This could lead to shortness of breath, dry cough, fatigue, loss of appetite, and weakness. Due to the inflammation, obstruction in the walls of the airway in the lungs can also cause shortness of breath and chronic dry cough.

4. Heart problems: Inflammation due to rheumatoid arthritis causes plaque build-up in the arteries, leading to narrow blood vessels. This blocks the blood flow and affects the heart. Furthermore, the drugs used to treat RA symptoms and the lack of exercise due to pain and swelling increase blood pressure. People suffering from this disease tend to have high LDL (bad cholesterol) levels and low HDL levels (good cholesterol). All of these factors increase the risk of cardiovascular diseases in these patients.

5. Dry eyes: Rheumatoid arthritis also affects eye health. Dry eyes are the most common side effect of this chronic disease. Dry eyes increase the risk of damage to the cornea and cause inflammation in the sclera or the white part of the eyes. Therefore, eye pain or change in the vision needs to be addressed as soon as possible to prevent further damage to the eyes.

6. Nodules on the skin: Rheumatoid arthritis can cause rheumatoid nodules under the skin. These typically appear on the fingers, forearms, elbows, and heel and are a sign of the progression of the disease.

7. Depression or anxiety: Rheumatoid arthritis dramatically affects the patient’s emotional health. Feelings of sadness, anxiety, loss of interest, and lack of sleep can all lead to depression. Support groups and emotional bonding with family and friends can help patients deal with the condition better.

Did you know?

Rheumatoid arthritis (RA) increases the chance of getting COVID-19. Moreover, the symptoms could be more severe than someone who does not have RA. Conversely, there is also some evidence that COVID-19 can also raise the risk of getting RA.

Read More About COVID!

Alternative Treatment For Rheumatoid Arthritis

Apart from taking prescribed medications, one may also follow some alternative therapies to relieve pain and stiffness. Examples of these therapies are:

1. Homeopathy: Studies suggest use of homeopathy for relief from pain and stiffness. It strengthens the immune system and controls the symptoms without the risk of side effects. However, it is essential to consult a doctor before beginning any alternative treatment.

2. Acupuncture: It uses needles to heal chronic pain. It lowers the levels of chemicals that cause inflammation in the body. Since this method uses needles that need to be sterile and correctly used, ask a doctor to suggest the right acupuncture practitioner.

3. Chinese medicine: Thunder god vine is a herb that is used as a natural remedy to ease inflammation and tenderness of joints in people with rheumatoid arthritis. However, one needs to be sure about its quality. It also has certain side effects that could harm pregnant women. Therefore, caution is advised during its use.

4. Tai chi: It is a Chinese martial art that has several health benefits. Its slow and gentle movements improve strength, flexibility, and balance. This form of martial art has statistically shown significant benefits on lower extremity range of motion, in particular ankle range of motion, in people with RA.

5. Yoga: This low-intensity, ancient Indian workout is perfect for improving flexibility, easing pain, and bringing relief from mental stress. A few simple yoga asanas that help improve muscle strength and posture are mentioned below:

Virabhadrasana II (Warrior Pose 2)

Marjaryasana - Bitilasana (Cat pose - Cow pose)

Vrikshasana (Tree pose)

Setu bandha sarvangasana (Bridge pose)

Viparita-Karani (Legs-up-the-wall pose)

Read more about various alternative treatments to deal with long term pain.

Read Now!

Living With Rheumatoid Arthritis

Rheumatoid arthritis is an autoimmune disease. Although it doesn’t have any permanent cure, one can get the right treatment to keep the symptoms under control if detected early. Therefore, seeking early medical attention is crucial.

The symptoms of this chronic disease aren’t constant. At times, they flare, while other times, they are in remission. Here are some essential things to remember when living with rheumatoid arthritis:

1. Health care

Start an exercise program to increase your stamina and to improve flexibility.

Maintain the right posture while sitting, standing, and walking.

Do not lift heavy objects.

Avoid kneeling or sitting down.

Buy an ergonomic chair for work.

Make changes in the diet to help relieve inflammation and to improve overall health.

Seek physical or occupational therapy.

Do not miss medications or doctor’s appointments.

2. Lifstyle changes

Plan the day ahead, but allow space for changes in the tasks.

Simplify daily routine and everyday tasks.

Cook simple meals.

Shop online.

Buy toothbrushes and combs/hair brushes with wide handles.

Use a chair in the shower and install a handrail for support.

Buy easy-to-wear clothes with large fasteners, such as buttons and zippers.

Pick easy-to-wear footwear over ones with laces or buckles.

3. Self care

Make self-care a priority.

Avoid being homebound.

Take care of both emotional and mental health.

Manage stress using stress management techniques, like meditation, mindfulness practices, or deep breathing.

Indulge in a hobby.

Spend time with the loved ones.

Join support groups.

Meditation is the key to a healthy life!

Practicing meditation for just 10-15 minutes a day can go a long way in protecting against diseases and has numerous other benefits.

Click To Know!

Frequently Asked Questions

What are the early warning signs of rheumatoid arthritis?

What are the five signs of rheumatoid arthritis?

What is the difference between osteoarthritis and rheumatoid arthritis?

What foods are bad for rheumatoid arthritis?

At what age does rheumatoid arthritis start?

Can rheumatoid arthritis go away?

Which organs are affected by rheumatoid arthritis?

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Rickets

Also known as Vitamin D-dependent rickets, Phosphopenic rickets, Calcipenic rickets, Acquired rickets and Nutritional rickets

Overview

Rickets is a medical condition commonly seen in children. It is characterized by bowed legs and a curved spine, which causes a lot of pain and discomfort. Depending on the type of rickets your child develops, it can be hereditary (genetic in nature) or acquired (because of low consumption of essential nutrients).

Mainly, a lack of essential nutrients such as Vitamin D, calcium, and phosphorus have been attributed to the development of rickets. Other factors such as living in cold countries, having dark skin, and genetics can also increase the risk of developing rickets.

Mostly seen in children between the ages of 6 months to 2 years, your child can combat the symptoms of rickets with Vitamin D and calcium supplements and high exposure to sunlight.

Rickets can be prevented by proper exposure to sunlight and having a diet rich in Vitamin D, calcium, and phosphorus. It can also be treated by taking Vitamin D supplements and exposure to sunlight.

Key Facts

Usually seen in

Children between 6 months to 2 years of age

Gender affected

Both men and women

Body part(s) involved

Spine

Bones

Legs

Skeleton

Mimicking Conditions

Osteomalacia

Osteogenesis imperfecta

Primary hypoparathyroidism

Lowe syndrome

Fanconi syndrome

Scurvy

Necessary health tests/imaging

Bone X-rays

Blood tests

Bone biopsy

Treatment

Stoss therapy

Multiple doses of Vitamin D

Phosphorus supplements

Calcium supplements

Symptoms Of Rickets

Rickets is described as the weakening and softening of bones, which is caused by prolonged lack of exposure to Vitamin D. Look out for the following rickets symptoms in your child to get quick and effective treatment.

1. Fragile bones

A symptom that is commonly associated with rickets and severe calcium and Vitamin D deficiency can lead to very weak bones, increasing the risk of fractures. Your child could have fragile bones, if they suffer from fractures frequently.

2. Pain in the spine and legs

Due to the bones being soft and weak, they become sore, making it very painful for a child. This might make your child reluctant to walk, so they may waddle and tire easily after a few steps.

3. Teeth problems

A child with rickets may show abnormalities in teeth structure, holes in the enamel, increasing cavities, and delay in teeth growth and formation.

Good dental care helps your children develop good dental habits. Read more about how to manage dental problems in children.

Click To Know More!

4. Skeletal deformities

When your child’s body has a deficiency in the required nutrients, rickets lead to many skeletal abnormalities. These include bowed legs or rickets leg, which refers to a curve in the spine, protruding breastbone, an oddly shaped skull, and pelvic deformities.

Nutritional rickets usually presents in infancy or preschool age, usually as widened wrists or bowing of legs.

5. Retarded growth and development

Delay in the development of bones and growth can lead to your child having short stature and stunted growth.

6. Craniotabes

This is a disorder where the bones of the skull are soft, and the fontanels are wide. This is frequently seen in infants who are older than three months.

7. Rachitic chest

In this case, a child is seen with a wide costochondral junction, which is the joint between the ribs, and Harrison’s groove, a depression at the lower side of the rib cage that develops when the diaphragm pulls the soft ribcage.

A condition known as rachitic rosary can result in the thickening caused by nodules forming on the costochondral joints. This appears as a visible bump in the middle of each rib in a line on each side of the body. This somewhat resembles a rosary, giving rise to its name.

8. Hypocalcemia

Defined as low calcium levels in the blood, infants with hypocalcemia may show signs and symptoms such as muscle spasms and convulsions.

Causes Of Rickets

Rickets is a bone disorder in children that leads to weak bones, muscle pain, and skeletal deformities. Today, nutritional rickets or rickets caused by the deficiency of Vitamin D, calcium, or phosphorus are the most common bone diseases affecting children. But other than this, rickets can be caused by genetics, drugs, or lack of mineralization.

These are the common types of rickets caused due to several deficiencies. These include:

1. Calcipenic rickets

This is the most common form of rickets, along with Vitamin D deficiency that is reported in children. This type of rickets develops due to a deficiency of calcium in the body. This can occur due to trouble in absorbing calcium seen in diseases such as celiac diseases.

2. Phosphopenic rickets

As the name suggests, this type of rickets is caused by the deficiency of phosphorus in your body. This can not only be due to low intake of phosphorus-rich food but also due to factors such as problems in phosphorus absorption by the intestine or high renal loss.

3. Vitamin D-dependent rickets

Vitamin D-dependent rickets is the most common type of rickets that children all over the world suffer from. This is the type of rickets caused by the deficiency of Vitamin D. This can be due to problems in the synthesis of Vitamin D, a defect in the Vitamin D receptor, low consumption of Vitamin D-rich food, and low exposure to sunlight.

4. Genetics

Other than the lack of nutrients in the body, rickets can also be genetic in nature. This is attributed to the genetic mutation of certain genes that stop the synthesis of Vitamin D in the body.

5. Familial hypophosphatemic rickets

This is the most commonly inherited form of refractory rickets, being inherited as X-linked dominant with variable penetrance. Sporadic instances are frequent and an autosomal recessive inheritance has also been reported. The gene responsible for X-linked hypophosphatemic rickets is termed as PHEX gene (phosphate regulating gene with homology to endopeptidases on the X chromosome)

6. Renal tubular acidosis (RTA)

Proximal or RTA are important causes of refractory rickets in children. The conditions are characterized by hyperchloremic metabolic acidosis with normal blood levels of urea and creatinine. Patients with proximal RTA may show low levels of phosphate, aminoaciduria (amino acids in the urine), and proteinuria (proteins in the urine). The use of bicarbonate and phosphate supplementation results in the healing of rickets.

7. Chronic kidney disease

Refractory rickets may occasionally be the presenting manifestation of chronic kidney disease. The features of the mineral bone disease depend on the patient's age and duration of disease. Elevated blood levels of creatinine, phosphate, and parathormone are characteristic. Therapy consists of restricting phosphate intake and providing supplements of calcium and active Vitamin D analogs.

8. Oncogenic rickets

Mesenchymal tumors may secrete fibroblast growth factors that result in phosphaturia (phosphates in urine), hypophosphatemia (low level of phosphorous), rickets, and muscle weakness.

9. Secondary to other diseases

McCune-Albright syndrome: It is a disorder in which the bones, skin and several hormone-producing (endocrine) tissues are affected.

Epidermal nevus syndrome: The presence of skin lesions known as epidermal nevi that are associated with additional extra-cutaneous abnormalities, affecting the brain, eye, and skeletal systems.

Dent's disease: It is a chronic kidney disorder that causes, kidney problems as a result of damage to the structures called proximal tubules.

Did you Know?

Chronic kidney diseases can cause premature deaths, lower quality of life, and increased medical expenses. Learn more about chronic kidney diseases and their management.

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Risk Factors For Rickets

There are certain factors that can make your child more vulnerable and at risk of developing rickets. They are:

People with dark skin are more prone to developing rickets due to high levels of the pigment melanin, which reduces the skin’s ability to produce Vitamin D from the sun.

Lack or low exposure to sunlight in colder regions of India.

Low consumption of food rich in Vitamin D, calcium, and phosphorus.

Infants who are fed only breast milk, which has a low amount of Vitamin D.

Individuals who stay more indoors during the daylight hours.

Note: Our bodies produce more Vitamin D when they’re exposed to sunshine, so you’re more at risk for rickets if you live in an area with little sunlight.

Did you know?

Children with poor intake of Vitamin D-rich foods have a higher risk of developing rickets. So increase the intake of foods such as fish, meat, dairy products, and mushrooms in your child’s diet to boost the Vitamin D level. Here’s more on Vitamin D and the right way to take it.

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Diagnosis Of Rickets

You must go to a pediatrician as the first point of contact. They will first conduct a physical examination to check for tenderness or pain in the bones by lightly pressing on them. During the examination, the doctor will gently press on your child's bones, checking for abnormalities. He or she will pay particular attention to your child's:

Skull: Babies who have rickets often have softer skull bones and might have a delay in the closure of the soft spots (fontanels).

Legs: While even healthy toddlers are a little bowlegged, exaggerated bowing of the legs is common with rickets.

Chest: Some children with rickets develop abnormalities in their rib cages, which can flatten and cause their breast bones to protrude.

Wrists and ankles: Children who have rickets often have wrists and ankles that are larger or thicker than normal.

Once that is done, your pediatrician may order certain tests to help make a definitive rickets diagnosis. These tests include:

Blood tests: These blood tests will be done to measure the levels of calcium, phosphorus, parathyroid hormone, and alkaline phosphatase (ALP) in your blood.

Urinary calcium: In the diagnosis of rickets, establishing an inappropriately high urinary calcium excretion in the face of low serum calcium levels is important.

Bone X-rays: X-rays will be conducted to check for any deformities in the bones.

Bone biopsy: In rare cases, if the situation demands it, a bone biopsy will be performed, which involves the removal of a small part of the bone, which is sent to a laboratory for analysis.

DEXA scan: Also known as bone densitometry, it is a means of measuring bone mineral density (BMD) using spectral imaging.

Celebs affected

OJ Simpson

OJ Simpson is a famous footballer who came from very humble beginnings. At the age of two, he was diagnosed with rickets, which left him with bow legs. It was his interest in sports that helped him overcome this affliction.

Prevention Of Rickets

Here are a few tips or suggestions that can go a long way in preventing the development of rickets. These include:

1. Sun exposure

The National Health Service of England suggests that exposing your hands and face to the sun every day can prove useful in preventing rickets. Don’t let your child in the sun for more than 60 minutes (depending on their skin type); if you do so, you must apply sunscreen to prevent sunburns. Also, reduce the amount of time of exposure to the sun between 10 AM to 4 PM as sun rays are intense during this period of time.

Here's more on how to choose the right sunscreen and the right way to use it.

Tap To Know!

2. Diet rich in phosphorus, calcium, and Vitamin D

Eating food filled with essential nutrients such as Vitamin D, calcium, and phosphorus, is important for healthy bone development and growth. Different types of fish, meat, egg yolks, and mushrooms can also help your child to prevent acquiring Vitamin D deficiency. It is also suggested to add foods rich in calcium and phosphorus to the diet.

Exposure to ultraviolet B light (most easily obtained when the sun is highest in the sky), cod liver oil, halibut-liver oil, and viosterol are all sources of Vitamin D.

3. Vitamin D supplements

Adults, pregnant women, and children over the age of 1 year and older are suggested to take 10 mcg of Vitamin D supplements every day, while children at birth, up to 1 year old, can take 8.5 mcg to 10 mcg of Vitamin D tablets every day or 500 ml of infant formula every day.

Vitamin needs of the body are generally met through your diet, but Vitamin D is an exception. Read more about it.

Click To Know More!

Specialist To Visit

If your child has any signs or symptoms of rickets such as bone pain, delayed growth, muscle weakness, or skeletal problems, take them to your doctor for a check-up.

If you are an adult and are experiencing bone pain or muscle weakness, see your doctor to get it checked.

Specialists that can help in the treatment and management of rickets include:

Pediatrician

General physician

Orthopedic specialist

Take medical advice from world-class professionals if you notice any symptoms.

Consult Now!

Treatment Of Rickets

For the treatment of rickets, a diet rich in Vitamin D, calcium, and phosphorus can help. Other treatment options include:

1. Surgery

Deformed bones due to rickets can be treated without surgery. However, in severe cases, surgery may be the only option to correct severely bowed legs, among other bone deformities. Chest or pelvic deformities and growth retardation may be permanent and can not be treated through surgery.

2. Stoss therapy

In this type of treatment, a single large dose of Vitamin D is administered orally or intramuscularly for infants less than a month old. Oral treatment is advised because it restores Vitamin D levels quickly. This regimen is generally both safe and effective in treating Vitamin D deficiency rickets.

3. Multiple doses of Vitamin D

In this regimen, small, daily doses of Vitamin D are given depending on the age of the child. The daily dose for infants less than a month old, 1-12 months, more than 12 months are 1000 IU, 1000 – 5000 IU, and 5000 IU, respectively, for a period of 2 to 3 months. Eventually, a dose of 400 IU is recommended for daily consumption.

4. Calcium and phosphate supplements

For rickets resulting from genetics, treatment by a pediatric endocrinologist and orthopedic specialist is suggested. For Vitamin D-dependent rickets, children are treated with high doses of calcitriol and calcium. If your child is diagnosed with familial hypophosphatemic rickets, oral administration of phosphate supplements along with Vitamin D is prescribed as treatment.

Home-care For Rickets

Doctors have pointed out that diet plays an incredibly important role in the prevention and treatment of rickets. Follow these steps to fight rickets:

You must give your child 400 IU/day of vitamin D supplementation to fight Vitamin D-dependent rickets.

If your child is still on breastmilk, completely or partially, 400 IU/day Vitamin D should be introduced into the diet until he/she starts receiving at least 1 liter of formula per day.

Your child should be given 400 IU/day of Vitamin D, if he/she is receiving less than 1 liter of formula per day and is not consuming mother’s milk.

Include foods such as milk, yogurt, cheese, meat, and fish to help increase the levels of Vitamin D, calcium and phosphorus levels.

If your child is lactose intolerant, you can give orange juice or soy milk as both contain high concentrations of Vitamin D.

When you hear calcium, all you can think of is a glass of milk. However, there’s much more to calcium than just milk and milk products. Read more about calcium-rich foods and supplements.

Click Here!

Complications Of Rickets

Rickets caused due to deficiency of calcium may lead to a child getting seizures, breathing problems, and cramps. But in the long run, it can lead to serious complications, including complications like:

Short stature

Multiple bone fractures

Pneumonia (lungs become filled with fluid)

Dental hypoplasia (poor formation of enamel))

Cardiomyopathy (disease of the heart muscle where the heart muscle is unable to pump enough blood to the muscle)

Hydrocephalus (fluid buildup in the cavities of the brain)

Seizures

Cavities in the teeth

Irregularities in the bones

Alternative Therapies For Rickets

Ayurveda has been treating various medical conditions for centuries, and many people have seen the effect of that. Find below a few ayurvedic remedies that can help in the treatment of rickets. Consult an Ayurvedic practitioner for proper guidance.

1. Pearl ash

Administer up to 125 mg of moti bhasma or pearl ash with two teaspoons of honey to your child twice a day. In case of a critical condition, consult an Ayurvedic practitioner.

2. Oatstraw bath

Take dried oatstraw herb and boil it in 4 liters of water and use it for bathing twice every week.

3. Dandelion tea

Dry dandelion leaves and add them to a cup of boiling water. Let the leaves sit for about 5 minutes. After 5 minutes, strain the water and serve the tea to your child.

4. Nettle herb

Add an ounce of dried nettle herb to a jar and pour one-quarter of hot water into it. Cover the jar and let it sit overnight. Strain the water and drink two cups daily.

5. Horsetail tea

Add one teaspoon of horsetail tea leaves to 2 cups of hot water along with oat straw herb. Let it steep for 5 to 7 minutes. Strain the water and drink the tea after every meal.

Living With Rickets

If your child has been diagnosed with rickets, you can follow these tips to effectively manage the disease:

Give Vitamin D supplements every day after consulting your doctor.

Make your child sit under the sun for 10-15 minutes (depending on their skin type) every day.

Give the child a diet that is rich in meat, fish, milk, and dairy products.

Make the child engage in any form of physical exercise every day to strengthen their bones.

Take your child to a qualified physiotherapist on a regular basis to ensure better pain management and mobility. It will help in managing rickets better.

If you see your child still suffering from muscle pain and cramps, please consult your doctor for further treatment. You should also take your child to a qualified physiotherapist who can help in improving physical functioning and pain management.

Doctors might suggest applying braces in some cases to ensure straighter longitudinal growth and provide support to limbs. Braces are also applied post-surgery. However, there is no valid study confirming the validity of bracing to treat or manage rickets. If your doctor advises bracing, make sure that your child wears braces properly and on a regular basis.

Rickets can be very painful for a child. While the symptoms may be severe and scary, they can be treated easily with the proper vigilance of the caregiver. Caregivers should ensure proper diet, physiotherapy, and outdoor activities for the child.

To get sufficient Vitamin D from sunlight, expose your back to the sun. Read about more ways to give your body the Vitamin D it needs.

Click Here!

Frequently Asked Questions

Can adults get rickets?

How long does my child need to stay in the sunlight to prevent the development of rickets?

Which specialist should I take my child to for rickets treatment?

Does orange juice help in the prevention of rickets?

If your child is lactose intolerant, what are the other food sources for obtaining Vitamin D?

How long does it take before we can see improvement in the symptoms of rickets?

Can rickets be confused with any other diseases?

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Ringworm

Also known as Tinea, Dermatophytosis and Dermatophyte infection

Overview

Ringworm is a common fungal infection that affects millions of people worldwide. Despite its name, ringworm is not caused by any worm. The disease gets its name from the occurrence of round and circular worm-like rashes on the skin. Several species of fungi such as Trichophyton, Microsporum, and Epidermophyton are known to cause ringworm.

The fungi can infect the skin of any part of the body like scalp, beard, hands, nails, groin, inner thighs, and feet. Ringworm is highly contagious and can spread from infected person and even pet animals. The symptoms usually develop between 1-2 weeks post infection and generally include itchy skin, ring-shaped rash and hair loss.

Due to its easy transmission to other body parts and to people, it is very important to take proper preventive measures such as keeping your body clean, drying off the body completely after taking shower, wearing loose clothes, and not sharing objects like brushes and combs with anyone.

Ringworm can be treated easily with the right topical and oral antifungal medications available in the form of creams, gels, sprays, shampoos, lotions, tablets, and capsules. For the complete recovery and to avoid reoccurrence, it is necessary to complete the duration of therapy as per the recommendations of the doctor even in the absence of symptoms.

Key Facts

Usually seen in

All age groups but more often in adults

Gender affected

Both men and women but more common in men

Body part(s) involved

Skin

Nails

Scalp

Mimicking Conditions

Annular psoriasis

Atopic dermatitis

Cutaneous candidiasis

Erythema annulare centrifugum

Erythema multiforme

Erythrasma

Granuloma annulare

Granuloma faciale

Gyrate erythema

Seborrheic dermatitis

Eczema

Spider bites

Nummular eczema

Lyme disease

Necessary health tests/imaging

Physical examination

Microscopy

Fungal culture

Polymerase chain reaction

Wood’s lamp examination

Treatment

Topical antifungals: Ketoconazole, Clotrimazole, Ciclopirox & Selenium sulphide

Oral antifungals: Griseofulvin, Itraconazole, Terbinafine & Fluconazole

Surgery

Specialists to consult

General physician

Dermatologist

Types Of Ringworm

Ringworm can attack any part of the body and can also cause extensive infection all over the body. However, it commonly affects:

Skin folds.

Areas prone to sweating like armpits and back.

Flexures like underbust, armpits, and groin.

Areas between the fingers and toes get affected, especially in the rainy season.

Depending upon the affected body site by the fungi, ringworm can be classified into following types:

Tinea capitis: It occurs on the scalp causing itchiness and loss of hair.

Tinea barbae: This is when the infection affects the beard area.

Tinea manuum: It occurs on the hands or in between the fingers.

Tinea cruris: Also known as jock itch, this infection affects the groin area due to excessive sweating and poor hygiene.

Tinea pedis: Commonly known as athlete’s foot, it affects the feet and is commonly found between the toes.

Tinea unguium: Also known as onychomycosis, this fungal infection affects the nails and nail plates causing them to deform and break easily.

Tinea corporis: This affects the torso, back and upper portions of the limbs.

Tinea imbricata: Another variant of tinea corporis and is recognized clinically by its distinct, scaly plaques arranged in concentric rings.

Tinea incognito: This is tinea corporis with an altered presentation due to corticosteroid treatment.

Here’s everything you need to know about fungal skin infections.

Click To Know!

Symptoms Of Ringworm

The symptoms of the ringworm depend upon the location of the body invaded by the fungi but they broadly include:

Itchy or scaly patches that are red, brown, or grey, or raised areas of skin called plaques

Patches that develop blisters or pustules

Patches that resemble a ring with deeper colour on the outside

Patches with edges that are defined and raised

Overlapping rings

Hair loss

Depending upon the site of infections, a person may experience following clinical manifestations:

1. Feet (tinea pedis or athlete’s foot)

It is the most common type of tinea infections. It usually occurs in men and young adults but children, women, and older people can also be affected. It is characterised by:

Red, swollen, peeling & itchy skin between the toes

Whitening of the skin between the toes

Scaling of the feet

Blisters on the foot

2. Scalp (tinea capitis)

This type of infection involves skin and hair, usually affects children more than adults. Symptoms include:

Hair loss

Dry scaly areas on the scalp

Itching on the scalp

Bald patches on the scalp

3. Beard (tinea barbae)

This infection affects beard and moustache areas of the face, and usually affects only adult men. The infections can be recognized by the following symptoms:

Presence of lumps around the hairs

Easily pulling out of the hairs

Presence of bald patches & itchy red spots on the cheeks, chin and around the neck

Fatigue

Swollen lymph nodes

4. Body (tinea corporis)

This type of fungal infection can affect any part of the body except the hands, feet, scalp, face, beard, groin, and nails. The typical symptoms of tinea corporis include:

Pink to red round patches on the skin

Itching

5. Nails (tinea unguium)

It is also known as onychomycosis, it is the fungal infection of the fingernails or toenails. Onychomycosis affects toenails more often than fingernails and is most common among persons who have tinea pedis. Onychomycosis is more common in older adults and in persons with vascular disease, diabetes mellitus and trauma to nails. The nails of the person infected with tinea unguium are:

Discolored

Thick

Fragile

Cracky

6. Hands (tinea manuum)

It refers to the fungal infection of the hands & involves following changes on the hands:

A ring-shaped, scaly rash

Itchiness

Clear, scaly, or bumpy center of the ring rash

Slightly raised rings

A round patch of itchy skin

7. Groin (tinea cruris)

This type of fungal infection often affects skin of the genitals that can spread to the upper inner thighs. The symptoms includes:

Rash that can be painful or painless

Burning sensation in the groin area

Continuous itching

Causes Of Ringworm

The causative organism behind ringworm infection is fungus. Approximately 40 different species of fungi are known to cause ringworm. Some of the common species that causes ringworm are:

Trichophyton

Microsporum

Epidermophyton

Once the fungi attach to the outer layer of the skin, they trigger an allergic reaction causing certain blood cells like eosinophils and chemicals called histamines to rush to the infected site. These cause the characteristic itching sensation. Scratching the area causes further damage to the skin. It helps the infection spread deeper and wider.

A person gets ringworm mainly from these three sources:

Humans: This is called anthropophilic transmission. It involves parasites that prefer humans to animals. This is the most common form of transmission.

Animals: Known as zoophilic infection, this happens when animals become the preferred source of food for the fungus. The infected animal then goes on to infect a human.

Soil: Ringworm-causing fungi can also be the earth-loving variety that cause geophilic ringworm infection.

Risk Factors For Ringworm

Your risk of getting ringworm increases, if you:

Live in a tropical area

Spend time in hot, humid weather

Sweat heavily

Wrestle, play football, or participate in another contact sport

Live in close contact with infected person or animal

Share towels, clothes, razors, and other things with infected person

Are obese

Have diabetes

Wear tight clothes

Have weak immune system

Use public showers or locker rooms

Note: Ringworm can easily transfer from animals to humans. You can get the infection through touching the skin and belongings of the infected animal.

Did you know?

Fungal infections such as ringworm develop more in wet environments like sweaty sites of the body. Sweating can be generalised sweating or can result from some other reasons. Read more about sweating and its most unpopular causes.

Click To Read!

Diagnosis Of Ringworm

To confirm a ringworm infection, your healthcare provider can perform following tests:

1. Physical examination

Ringworm are characterised by its specific lesions which are examined by the doctor. The severity and the stage of the infection can also be diagnosed by examining the lesions under black light.

2. Microscopy

In this, scrapings of the lesions are placed in potassium hydroxide (KOH) solution and examined under the microscope. The method is highly specific and cost effective.

3. Fungal culture

It is the most reliable method to diagnose ringworm wherein scrapings taken from the infected area are allowed to grow in an artificial medium. The method is more specific than any other tests but requires more time.

4. Polymerase chain reaction (PCR)

If KOH and fungal culture clinical evaluations are inconclusive, a polymerase chain reaction (PCR) test for fungal deoxyribonucleic acid (DNA) identification can be done.

5. Wood’s lamp examination

In this, the skin is examined under ultraviolet (UV) light using a wood lamp in a dark room. The fungal infection is confirmed through the colour changes of the skin under UV rays.

Celebs affected

Lindsay Lohan

Lindsay Lohan, an American actress, suffered from athlete’s foot. She successfully managed her condition with proper treatment and hygiene.

Prevention Of Ringworm

Proper preventive measures help the patient in speedy recovery. One can prevent the ringworm infection by practicing following measures such as:

Maintaining good hygiene by regular bathing.

Wearing fresh socks and undergarments daily.

Avoiding tight clothes.

Drying off the upper body followed by drying the lower body (feet) after taking a shower.

Regularly trimming and cleaning of nails.

Washing infected clothes in hot water with antifungal agent.

Taking shower after playing sports that involves skin to skin coat.

Avoiding sharing personal items of infected people such as clothes, towels, hair brushes, and combs.

Wearing shoes or slippers in locker rooms and public showers

Disinfecting exercise machines regularly

Wearing gloves while handling infected pets

Disinfecting surfaces and pet bedding

Wearing loose shoes to allow air to circulate

Avoiding sharing of sports gears such as helmets with other players

Did you know?

The chances of fungal infection increases in the summer season as fungi grow rapidly in hot and humid environments. The excessive sweating in the summer season also provides a favourable condition to the fungi that infects skin. Here’s more on the management of fungal infections in summer.

Read Now!

Specialist To Visit

Ringworm is a mild condition and usually resolves with OTC medication. However, consult a doctor immediately if:

You have been using OTC antifungal medication for 2 weeks without any improvement.

You have ringworm infection on the scalp.

Your infection is spreading fast affecting larger areas of your body.

Your ringworm patches have become inflamed and are painful.

You are immunocompromised.

Doctors who can help in the diagnosis and treatment of ringworm are:

General physician

Dermatologist

Consult our professional doctors and seek help. Click here to book an appointment.

Consult Now!

Treatment Of Ringworm

Ringworm is a fungal infection and can be treated by antifungal creams, lotions, sprays, tablets, and shampoos. The treatment that is given to the patient depends upon severity of the diseases and the affected body part such as hair, skin, and nails.

Some ringworm infections can be treated by over-the-counter drugs whereas some severe forms require prescription medications. The following treatment can be given as per the need and severity of the disease:

Topical antifungal medications

These are available in the form of creams, gels, lotions, powders, and shampoos. Shampoos are used for the fungal infections of the scalp and are generally instructed to apply twice a week initially. Topical antifungal formulations such as creams, lotions, gels, and sprays are meant to apply on the affected area of the skin.

Antifungal nail paints are also available in the market for the fungal infections of the nail. Some of the medicines used for ringworm are:

Terbinafine (cream or solution)

Butenafine (cream)

Clotrimazole (cream, solution, or lotion)

Econazole (cream)

Ketoconazole (cream or shampoo)

Miconazole (cream, spray, lotion, or powder)

Oxiconazole (cream or lotion)

Ciclopirox (cream, lotion or nail lacquers)

Tolnaftate (cream, solution, or powder)

Selenium sulphide (shampoo)

Naftifine (cream or gel)

Sulconazole (cream or lotion)

Onychomycosis mostly does not respond to topical therapy although ciclopirox nail lacquer applied daily for a year is occasionally beneficial. Itraconazole and terbinafine both accumulate in the nail plate and can be used to treat onychomycosis.

Oral antifungal medications

Oral antifungal agents are prescribed in case of severe infection, failed topical treatment or immunocompromised patients. Thses are available in the form of tablets and capsules. Some of the common examples include:

Terbinafine

Griseofulvin

Itraconazole

Fluconazole

Surgical care

Surgical treatment is usually not indicated except for drainage of superficial vesicles, bullae, pustules, or deep abscesses.

Note: Relapse of tinea cruris and tinea pedis are common and should be treated early with creams to avoid development of more extensive disease.

Home-care For Ringworm

1. Hygiene

Ringworm is a highly contagious disease. Hence, maintaining good hygiene is necessary to prevent spreading of the infection to other parts of the body, to other people and to pets. Practising cleanliness also ensures faster recovery.

The following measures can be taken to adopt a fungus free environment:

Wash your hands with a soap and water after applying medication to the affected area.

Shower daily and after playing any sports.

Wash the belongings of the patients such as towels, clothes, and bedding in hot water.

Wear washed clothes everyday.

Keep your body and clothes clean and dry.

Disinfect your shoes regularly.

Take measures to reduce sweat.

2. Duration of treatment

Generally, antifungal medications show improvement in the lesions quickly and patients discontinue taking or applying medicines. Take the medications as per the recommendations of your doctor to avoid recurrence of the infection.

3. Consult veterinarian

Ringworm can be spread from your pets such as dogs and cats to humans or vice versa. All the preventive measures taken by the patient and family members should be followed for the pets too. If a pet is showing any symptoms of ringworm, consult a veterinarian.

4. Keep in touch with your dermatologist

Most of the ringworm infections often started to show improvement with the first treatment within 1 to 2 weeks. If infections persist and are not responding to the treatment, follow up with your doctor.

5. Eat right

Diet alone cannot treat fungal infections but some food helps in speedy recovery through their anti-inflammatory properties such as:

Protein rich foods like meats, pulses & beans

Food rich in omega-3-fatty acids that includes nuts, seeds & fish

Green vegetables

Yoghourt

Garlic in the form of food

Avoid excess sugar and processed foods as high sugar serves as a medium for the growth of fungi that may delay your recovery and healing process.

Eat green food as it is good for body odor.

The green vegetables such as spinach have a powerful deodorising effect. This effect is due to the presence of chlorophyll. Minimise the intake of processed food and move over to green vegetables. Read more ways to avoid excessive sweating and thus body odor.

Tap To Read!

Complications Of Ringworm

As ringworm is a superficial fungal infection, the complications are rare. As it is highly contagious, leaving it untreated can lead to several complications by spreading to other parts of the body. Some of the possible complications include:

Dark spots on the skin known as post inflammatory hyperpigmentation (PIH).

Hair loss.

Nail deformities such as change in shape of the nails.

Deep infections such as Majocchi’s granuloma in which fungi invade deeper skin layers.

Secondary bacterial infections, if bacteria penetrates broken skin.

Kerion, a type of abscess filled with pus.

Interface dermatitis (ID) reaction

Fungal reactions can trigger interface dermatitis (ID) reaction. It is characterised by an itchy rash with small, water-filled blisters, usually seen on the sides of fingers. ID reaction is thought to be an allergic or autoimmune reaction in which the immune system starts to attack and target the skin.

Alternative Therapies For Ringworm

Some of the alternative therapies that can be easily applied at home include:

1. Tea tree oil

Tea tree oil is an essential oil that is extracted from a tree that is found in Australia. Studies have shown that tea tree oil has antibacterial and antifungal properties. It is commonly used to treat ringworm. It is applied directly on the affected area of the skin.

Note: People with sensitive skin should dilute tea tree oil in some medium such as coconut oil.

2. Coconut oil

Also known as “tree of life”, it is one of the most popular and widely available home remedies to treat ringworm infections. Studies suggest that there are various fatty acids present in coconut oil that possess antifungal properties.

It can be applied directly on the skin and scalp. It is a convenient way to treat the ringworm of the scalp because of its ease of application.

3. Aloe vera

It has been used for many years for its several skin care properties. According to various studies, it also possesses antifungal properties. The gel of the aloe vera can be applied on the affected skin 3 to 4 times daily.

Additionally, it also provides symptomatic relief from itching as it has cooling properties.

4. Garlic (lehsun)

It has shown properties against various species of Candida. It is applied in the form of paste that is made by blending crushed garlic cloves with coconut oil.

Note: Do not reapply and rinse off immediately, if you have stinging, swelling or redness after applying the paste. .

5. Turmeric (haldi)

It is known to exhibit excellent anti-inflammatory properties. Mix about half a teaspoon of turmeric powder with coconut oil and apply on the infected skin.

6. Epsom salt

Studies have shown that epsom salt works as an antifungal agent. For this, it has to be mixed with some warm water and should be applied on the skin.

7. Eucalyptus oil

The anti-inflammatory effect of this oil serves as a tool to inhibit the growth of fungus. It has to be applied on the skin with some warm water.

8. Apple cider vinegar

It is also known to have antifungal properties against some fungi. It is wiped on the infected area to treat ringworm.

Watch the video to know more about the benefits of apple cider vinegar.

Frequently Asked Questions

Is my rash ringworm or something else?

Is ringworm an actual worm?

Is ringworm contagious?

Why is ringworm relapsing?

What to do if a ringworm reappears again and again? What is a permanent cure?

How to get rid of marks from ringworm infection?

Is there any injection medicine for it?

When to contact a doctor for ringworm?

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Rosacea

Also known as Acne rosacea, Couperrose, and Facial erythrosis

Overview

Rosacea is a chronic inflammatory skin disease characterized by repeated episodes of redness, flushing, acne-like breakouts, and small dilated blood vessels on the skin.

Rosacea usually involves the central region of the face, mainly the forehead, cheeks, chin, and the lower half of the nose. It can also cause pink, irritated eyes with an increased sensitivity to light.

The symptoms are usually triggered by various factors such as sunlight, spicy foods, stress, alcohol amongst others. The condition predominantly affects individuals with a lighter skin tone.

Diagnosis is confirmed by identifying the type of rosacea and its triggers. The treatment options include several topical and oral anti-inflammatory medications and antibiotics. Surgery may be recommended in severe cases to remove the thickened skin.

Key Facts

Usually seen in

Individuals between 30 to 50 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Cheeks

Chin

Nose

Forehead

Nose

Ears

Eyes

Prevalence

Global: 5.46% (2018)

Mimicking Conditions

Acne

Psoriasis

Seborrheic dermatitis

Keratosis pilaris rubra

Flushing

Acute cutaneous lupus erythematosus

Drug-induced acneiform eruption

Necessary health tests/imaging

Physical examination

Treatment

Topical therapies: Brimonidine, Oxymetazoline, Azelaic acid, Ivermectin, Metronidazole, Minocycline, Tranexamic acid, Benzoyl peroxide, Ciclosporin, Tacrolimus & Pimecrolimus

Oral therapies: Tetracycline, Doxycycline, Isotretinoin, Erythromycin, Azithromycin, Clarithromycin, Isotretinoin, Carvedilol & Propranolol

Laser and light therapies: Intense pulsed light, pulsed dye laser, Potassium titanyl phosphate (KTP) laser, Diode laser & Ablative laser

Injectables: Botulinum toxin & Secukinumab

Surgery

See All

Symptoms Of Rosacea

The symptoms of rosacea are complex. The appearance and pattern of symptoms vary among individuals. The symptoms often cycle between occurrence and remission when the individual does not experience any symptoms.

The condition usually affects the face but other body parts such as sides of the face, ears, neck, scalp and chest can also be involved.

The symptoms progress from having red skin of the nose and cheeks to long lasting redness. These symptoms often lead to the appearance of a rash and small blood vessels beneath the skin.

Because of the complexity of signs and symptoms, the condition is divided into 4 subtypes. Individuals can have more than one subtype at the same time. The treatment approaches of every subtype are different.

Subtype 1: Erythemato-telangiectatic rosacea (ETR)

This subtype usually affects the face. Individuals with this subtype have very sensitive skin. The classical symptoms include:

Persistent redness of the central face

Telangiectasia (visible blood vessels on the face)

Stinging and burning sensation on the skin

Dry skin

Swollen skin

Scaling

Tendency to blush more easily

Increased sensitivity to skin

Subtype 2: Papulopustular rosacea

The most common symptom of this subtype is the appearance of acne like breakouts. The spots resemble acne but there are no blackheads and white-heads. The breakouts do not remain permanently and usually come and go. This type is more common in middle aged females.

Most of the symptoms are the same as type 1. The other distinguishing symptoms include:

Papules (solid raised spots on the skin)

Pustules (small, inflamed pus filled lesions on the skin)

Plaques (raised scaly patches on the skin)

Oily skin

Subtype 3: Phymatous rosacea

This subtype primarily affects the nose but may also involve chin, forehead, ears, and eyelids. It is mainly characterized by the thickening of skin.

This subtype is rare and include the following symptoms:

Bumpy texture of the skin

Larger pores on the skin

Oily skin

Thickened skin on the chin, forehead, cheeks and ears

Rhinophyma (thickening of the skin of the nose)

Subtype 4: Ocular rosacea

This subtype affects the eye and individual can have one or more of the following symptoms:

Bloodshot or watery appearance

Feeling of having sand in the eyes

Burning/stinging sensation in the eyes

Dry eyes

Itching in the eyes

Increased sensitivity to light

Blurred vision

Visible broken blood vessels on an eyelid

Cyst on the eyelid

Did you know?

Earlier, rhinophyma was thought to be caused by heavy alcohol use. But later on studies suggest that rhinophyma occurs in both people who do not consume alcohol and in those who drink heavily. The problem is much more common in men than in women and is usually associated with severe rosacea.

Causes Of Rosacea

The exact cause of rosacea is not known. While the causes of inflammation are not fully understood, the following theories have been postulated:

Genes

Some theories suggest the role of genes in developing rosacea and making some individuals more prone to skin inflammation.

Alterations in immunity (first line of defense)

Our body has a natural immunity against disease causing microbes. This immunity is provided by specific chemicals, which are released after stimulation of receptors present on the skin.

Individuals with rosacea have an increased expression of these receptors, leading to elevated levels of specific chemicals which trigger skin inflammation even in the absence of any microbes.

Ultraviolet (UV) light

Both UVA and UVB light contribute to the development of rosacea by triggering the inflammatory cascade mentioned above.

Abnormalities in the blood vessels

Triggers such as sun rays may be responsible for the degeneration of the elastic tissue of the skin and dilation of blood vessels of the face. This may cause rosacea symptoms such as flushing, persistent redness and visible broken blood vessels.

Triggers that initiate inflammation

External triggers such as ultraviolet rays (UV), spicy food, alcohol, exercise, and stress may stimulate the immune system and nerves to cause dilation of blood vessels. This can lead to inflammation and redness seen in rosacea.

Role of mites and bacteria

Mites known as demodex folliculorum live harmlessly on the skin of human beings. However, studies suggest that these mites are present in large numbers in rosacea patients.

Other microbes that may cause rosacea is Staphylococcus epidermidis. This bacteria is not found on normal skin and triggers an immune response that may cause rosacea.

H.pylori, a bacteria known to cause gastritis, gastric cancer, and gastrointestinal ulcers is also known to be associated with rosacea.

Defective skin barrier

A defective skin barrier function can also lead to symptoms of inflammation, redness, and blisters that are characteristic of rosacea.

Risk Factors For Rosacea

The risk factors that are associated with rosacea include:

Age

Individuals between the age of 30 to 50 years of age are more prone to rosacea.

Gender

Females are at higher risk of having rosacea. However, the symptoms tend to be more severe in males.

Ethnicity

People of specific European ancestry such as Celtic or Scandinavian are more likely to have rosacea.

Skin tone

It is seen that lighter skin individuals are more susceptible to the development of rosacea.

Positive family history

It is seen that many people with rosacea have a family history of rosacea. Individuals having a familial history of acne are also at a higher risk of developing rosacea.

Medical history

Individuals who have a lot of acne, acne cysts, and/or nodules are at higher risk of developing rosacea.

Sunlight exposure

Long term sunlight exposure especially during peak sun hours can increase the susceptibility to rosacea.

Weather

Windburn is a painful skin inflammation that occurs after prolonged exposure to winds. It is commonly associated with rosacea flare-up, especially in the winter.

Cosmetics

The use of waterproof cosmetics, heavy foundations that require a makeup remover are associated with an increased risk of rosacea.

Stress

Stress also serves as a trigger for rosacea by increasing the level of hormone cortisol. Consistently high levels of cortisol can lead to inflammation and a weakened immune system, triggering rosacea.

What Happens To Your Body When You Are Stressed?

Read Now

Menopause

The hormonal fluctuations during menopause also serve as a trigger for rosacea.

Book this test if you are experiencing irregular periods, vaginal dryness, sleep problems, hot flashes, anxiety, and depression as this can be a sign of menopause.

Book Now

Other triggers that can increase rosacea flare ups include:

Strenuous exercise

Hot baths

Humidity

Alcohol

Spicy food containing capsaicin, mostly found in red chili peppers, cayenne pepper, jalapeno peppers, bell peppers, paprika and green peppers.

Food items containing the compound cinnamaldehyde, such as cinnamon, cassia, tomatoes, citrus fruits.

Foods high in histamine, such as aged cheese, wine, nuts, legumes, smoked fish and processed meats

Hot caffeinated drinks like coffee, tea, cider, and cocoa

Chocolate

Dairy products

Diagnosis Of Rosacea

There is no specific diagnostic test for rosacea. Diagnosis is usually made after a physical examination of the skin and eyes. The patients are also asked about any potential triggers, symptoms, and medical history.

In some cases, medical tests are performed to rule out the presence of any other disease with resembling symptoms such as lupus and allergic skin reaction.

Are Rosacae and Psoriasis the same?

While rosacea and psoriasis can both be caused by genetic and age-related factors, they are different conditions. Rosacea usually causes flushing which is limited to the face. In severe cases, acne and thickened skin can be seen in rosacea. On the other hand, psoriasis usually causes red, scaly plaques on the entire body, amongst other symptoms.

Read this detailed account on psoriasis.

Click Here

Celebs affected

Sai Pallavi

Sai is an accomplished Indian actress and dancer. She has shared in one of her interviews that she is photosensitive and turns pink in front of the camera and light.

Bill Clinton

Former US president Bill Clinton reportedly suffered from rosacea flare-ups. Sun exposure and stress were reported as the most important triggers for his condition.

Sofia Vargera

Sofia is an American and Colombian actress. She suffers from rosacea and has managed the condition by switching from her favorite beauty products to ones that are more suitable for sensitive skin.

Specialist To Visit

The early recognition and treatment can help in the prevention of permanent changes in the face. The following speciality of doctor might help in preventing the same:

General physician

Dermatologists: The doctor who specializes in conditions of the skin, hair, and nails.

Ophthalmologist (in case of ocular rosacea): The specialist who manages and treats eye problems.

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Prevention Of Rosacea

Avoidance of triggers

Rosacea can have multiple triggers such as:

Sunlight

Humidity

Cold winds

Strenuous exercise

Hot baths

Stress

Alcohol

Spicy food

Caffeinated drinks

Dairy products

Makeup and cosmetic

Avoiding and limiting these triggers are helpful in preventing the flare-ups but not the occurrence of disease.

However, limiting sun exposure can play an important role in preventing the disease. The following measures can be taken to prevent exposure of sun:

Spend less time in direct sun

The exposure to the sun should be restricted to prevent rosacea. The person should avoid going outdoors when the sun is at its peak, which is usually 11 am to 3 pm. Additionally, sunbathing should be avoided at all costs.

Cover yourself up in the sun

Wear lightweight clothing

Use wide-brimmed hats

Wear long-sleeved shirts and long pants

Use clothes made from tight woven fabric

Use thoroughly dry clothes

Wear dark colored clothes as they absorb more UV rays

Wear clothes with ultraviolet protection factor (UPF) above 30

Use shade while going out

Staying under an umbrella, tree, or any surface also protects the skin to get exposed to the sun when needed.

Wear sunglasses

Sunglasses should be used while moving out under the sun. They not only protect eyes but also the soft skin around the eyes.

Use sunscreens diligently

A strict sunscreen regimen is the cornerstone of sun protection. All individuals, especially people with high risk should wear a high quality sunscreen with Sun protection factor (SPF) 30 or more to protect their skin under the sun.

Tips to use sunscreen effectively!

How much to use: An FTU o Fingertip Unit is used to measure the amount of cream that covers the end of the finger to the first crease of a finger. For the face and neck, use 2.5 FTU. To cover the other exposed parts of the body, you need an ounce of sunscreen, which is sufficient to fill a shot glass.

When to apply: Always apply sunscreen around half an hour before going out because it takes at least 30 minutes for the chemicals in sunscreen to get absorbed and start working.

When to reapply: If you are going out, playing sports or exercising outdoors, it is advised to re-apply the sunscreen every 2 hours. The same rule applies when you go swimming.

How to store: Usually, it is recommended to store in a cool, dry place, away from sunlight. Also, do remember to close it properly after every use.

When to discard: Do not use sunscreen that has passed its expiry date or if there are any visible changes in the sunscreen such as a change in color, smell or consistency. It is advised to buy a new one every year.

Looking for the right sunscreen? Watch our doctor discuss how to choose the best sunscreen for yourself.

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Treatment Of Rosacea

The treatment approach of rosacea depends upon its type and symptoms and is individualized for every patient. The following points are taken into consideration before initiating treatment:

Symptoms

Triggers

Patient’s wish of the appearance

Psychological aspect

Goals of the treatment

Easing the discomfort

Preventing rosacea from worsening

Due to the multiple symptoms observed in rosacea, there is a stepwise approach to combat them. It includes:

Step 1: Controlling the inflammatory lesions through anti-inflammatory medications and antibiotics

Step 2: Getting rid of the blood vessels using laser technology

Step 3: Minimizing the background redness by using brimonidine

The best treatment outcome is offered by a combination of the following therapies:

Topical therapies

These are the first line of therapy and are available in the form of cream, gel, and ointments. The medications that are given via topical therapy include anti-inflammatory medications and antibiotics.

US-FDA approved topical agents include:

Azelaic acid

Metronidazole

Sodium sulfacetamide

Brimonidine

Other topical medications include:

Retinoids like adapalene, tretinoin

Calcineurin inhibitors like tacrolimus and pimecrolimus

Macrolides like erythromycin, azithromycin, and clarithromycin

Benzoyl peroxide

Permethrin

Ivermectin

Clindamycin

Oxymetazoline

Minocycline

Tranexamic acid

Note: Ciclosporin ophthalmic emulsion is usually recommended for ocular rosacea.

Oral therapies

Oral therapies are generally used in combinations to treat moderate to severe papulopustular rosacea.

US-FDA-approved oral medications include:

Tetracycline, doxycycline, and minocycline

Other oral medications include:

Macrolides like erythromycin, azithromycin, and clarithromycin

Beta- blockers like Carvedilol and propranolol

Isotretinoin

Oral Ivermectin

Laser and light-based therapy

Some clinical symptoms of rosacea such as telangiectasias, persistent facial erythema, and phymas (especially rhinophyma) do not respond well to the above-mentioned approaches.

Lasers and light-based therapies are used to destroy the dilated blood vessels present in the superficial skin.

Commonly used lasers include:

Intense pulsed light laser

Pulsed dye laser

Potassium titanyl phosphate (KTP) laser

Diode laser

Ablative laser

Surgery

It is used rarely to remove the thickened skin in phymatous rosacea. The skin is excised with razor blades and tangential excisions using scalpel under either local or general anesthesia.

Radiofrequency ablation (uses heat to target the affected tissue) is very effective in the treatment of rhinophyma. It has a better safety profile than lasers as it produces less heat in the tissues.

Injectables are also used to treat severe rosacea, resistant to topical and oral medications. Examples include:

Intradermal botulinum toxin

Secukinumab

Home-care For Rosacea

Incorporate lifestyle interventions

Rosacea remains for life as there is no permanent cure of the condition. Some lifestyle interventions are important to prevent the flare-ups and to improve the overall quality of life.

Do’s

Wear sunscreen daily

Choose low-intensity workouts in an air-conditioned gym

Cleanse your face at least twice a day gently

Apply moisturizer daily, especially after taking a shower

Don’ts

Do not go out in the sun, if not necessary

Do not try cosmetics without consulting dermatologist

Do not consume alcohol

Eat consciously

Foods to limit/avoid

Spicy food containing capsaicin, mostly found in red chili peppers, cayenne pepper, jalapeno peppers, bell peppers, paprika and green peppers.

Food items containing the compound cinnamaldehyde, such as cinnamon, cassia, tomatoes, citrus fruits.

Foods high in histamine, such as aged cheese, wine, nuts, legumes, smoked fish and processed meats

Hot caffeinated drinks like coffee, tea, cider, and cocoa

Chocolate

Dairy products

Artificial sweeteners

Processed foods containing preservatives, dietary emulsifiers or additives

Foods to include

Foods that promote a healthy gut microbiome should be included in the diet. This includes a fiber-rich diet and probiotics (foods containing good bacteria). The examples of such food include:

A variety of vegetables including beans, broccoli, cauliflower, cabbage

Whole grains like wheat, oats and barley

Yogurt

Pickled vegetables

Kale

Kefir (fermented milk drink)

Kombucha tea

Kimchi

Sauerkraut

Try home remedies

Some traditional and old age home remedies can give respite from rosacea. However, it is important to take consent from your doctor before using any of these in rosacea:

Lavender: It is known from centuries for its use in rashes and other skin ailments such as rosacea. The topical application of lavender oil eases inflammation and shrinks blood vessels.

Licorice (Mulethi): The strong anti-inflammatory activity of licorice can be used to control redness of rosacea. It can be applied in powdered form directly on the skin.

Feverfew: This plant prevents blood from pooling in facial capillaries and reducing the appearance of facial blood vessels in rosacea. The dried leaves of the feverfew can be directly consumed. The extract of feverfew (made by boiling the leaves with water followed by straining) can also be applied topically.

Green tea: It is loaded with anti-inflammatory properties and helps reduce sun-triggered rosacea flare ups. Studies have also shown that consumption of green tea is associated with the prevention of papules and pustules associated with rosacea.

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Oatmeal: The application of oatmeal reduces itchiness and dryness in rosacea patients. Oatmeal can be easily prepared at home by boiling oats with water for about 20 minutes.

Chamomile: It has several active compounds that reduce inflammation. According to studies, chamomile-based creams are effective in managing mild to moderate rosacea.

Aloe vera: It minimizes inflammation of the skin in rosacea. Aloe vera can be directly applied on the skin for the effect.

Coconut oil (Nariyal tel): It is a wonderful remedy for rosacea due to its anti-inflammatory, antioxidant, and moisturizing benefits. The coconut oil can be directly applied on the affected skin.

Raw honey (Shehad): Raw honey keeps the skin moist which is helpful in rosacea patients as dry skin worsens rosacea.

Tea tree oil: The application of tea tree oil is associated with reducing inflammation and itching associated with rosacea.

Turmeric (Haldi): It possesses anti-inflammatory properties and is used to reduce pain and inflammation in rosacea. It can be consumed in food or can be applied on the skin as a thick paste.

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Complications Of Rosacea

In most of cases, rosacea does not lead to any complications. But, if left untreated, it can develop permanent scarring and persistent redness.

The prevalence of rosacea is also found to be associated with a series of cardiovascular diseases, gastrointestinal diseases, neurologic disorders, and psychiatric disorders.

Alternative Therapies For Rosacea

Plant-based therapies

Ginkgo biloba: It is a herbal supplement that possesses antioxidant properties. It is also known to reduce redness of the skin by reducing blood circulation.

Chrysanthellum indicum: This plant has been found to possess anti-inflammatory properties. Its extract protects the skin from UVB induced skin damage. In a study, a reduction in the redness and overall improvement of rosacea was seen after the application of C. indicum cream.

Quassia extract: Quassia amara is a small South American tree thought to have anti-inflammatory properties. Studies have shown that application of quassia gel is associated with an improvement in rosacea.

Living With Rosacea

Living with rosacea is challenging due to its longer duration. The relapses and remissions of the condition also makes the journey exhausting. It also affects psychological and mental health due to changes in the facial appearance.

The following measures are prove to be helpful in easing symptoms:

Avoid triggers

Rosacea is triggered by several factors such as spices, caffeinated drinks, sunlight, stress, strenuous exercise, waterproof cosmetics, and heavy foundations. Patients should understand these triggers and should avoid them. This will help in relieving symptoms that are aggravated by the triggers.

Establish a good cleansing regimen

Patients should clean the skin regularly with a cleanser before going to bed. The skin cleansing regimen should also be followed after coming home from outside. This helps in removing oil and dirt that might irritate the skin. The following tips proves to be helpful in reducing the symptoms:

Choose mild cleanser

Avoid soaps as they are harsh which can further damage the skin

Rinse off the cleanser with lukewarm water

Use only fingertips to clean the face

Moisturize your skin regularly

The dry skin is more prone to sun damage. So, use a good moisturizer after applying serum to restore the lipid barrier of the skin. Studies have also shown that moisturizers improve the results of treatment.

Explore our wide range of moisturizers.

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Protect your skin from the sun every day

Sun is the most important trigger for rosacea. It is very important to protect the skin from the sun even on cloudy days. Sunscreen should be applied daily irrespective of the weather.

Choose a sunscreen from our extensive range.

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Choose gentle skin care products

Many skin care products and cosmetics can irritate the skin. Waterproof and opaque makeup should be used. The products containing the following ingredients should be avoided:

Alcohol

Camphor

Fragrance

Glycolic acid

Lactic acid

Menthol

Sodium lauryl sulfate (often found in shampoos and toothpaste)

Urea

Witch Hazel

To reduce irritation, it’s also best to:

Use a cream instead of lotion or gel

Creams containing allantoin

Avoid astringent or toner

Test skin care products

Individuals having rosacea should test skin care products before applying to the face. This can be done by applying a very small amount of product near rosacea prone skin. The product should be avoided if it irritates the skin within 72 hours.

Consider cosmetic camouflage

Makeup products like green color correctors can be used to mask or camouflage the red appearance of the skin in rosacea patients.

And last but not the least! Cope with mental stress

Rosacea has a significant psychosocial impact due to the changes in the appearance of the individual. It has an overall impact on self-esteem which can lead to anxiety and embarrassment in some individuals.

Studies suggest that rosacea affects 77.7% patients emotionally, 67% patients socially and 53% are affected in their relationships and dating behavior.

The following measures might help:

Engage yourself in activities you like such as crafting, painting, and singing

Do regular exercise as it helps in reducing stress

Join any support group either online or offline

Ask help from a professional counselor

Meet someone who is undergoing the same type of treatment

Be patient. Even with treatment, it may take months for rosacea to clear up.

Be diligent. Rosacea will be quick to return if you're not careful about sun protection. So, long-term maintenance requires an ongoing commitment to protecting your skin.

Frequently Asked Questions

How long does it take for rosacea to improve?

Is rosacea contagious?

Can rosacea be diagnosed before you have a major flare-up?

How long does rosacea last?

Is oily skin common for rosacea sufferers?

Are rosacea sufferers more likely to get skin cancer later in life?

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Rubella

Also known as German measles, Three-day measles and Epidemic roseola

Overview

Rubella is a contagious infection caused by the rubella virus. It mostly affects children and young adults.

Symptoms usually appear 2 to 3 weeks after exposure to the virus. The symptoms include rash, fever, nausea, and conjunctivitis. The rashes which occur in majority of cases, usually start on the face and neck, before progressing down the body. They can last from 1 to 3 days. The most infectious period is usually 1–5 days after the appearance of the rash.

Rubella infection during pregnancy, especially during the first trimester, can result in miscarriage, fetal death, stillbirth, or congenital malformations in children, which is also known as congenital rubella syndrome (CRS).

The diagnosis of rubella includes detection of antibodies in blood like IgM for new rubella infection and IgG antibodies for a past infection or immunization against it.

Rubella can be prevented by timely administration of the measles, mumps, and rubella (MMR) vaccine. It is a safe and effective way to protect you and your family from rubella.

There is no specific treatment for rubella. However, symptomatic care including good nutrition, adequate fluid intake, rest along with Vitamin A supplements can help in alleviating symptoms.

Key Facts

Usually seen in

Children and young adults

Gender affected

Both men and women

Body part(s) involved

Skin

Mimicking Conditions

Kawasaki disease

Infectious mononucleosis

Scarlet fever

Measles

Rocky Mountain spotted fever

Chickenpox

Dengue

Malaria

Drug reactions

Adenovirus infection

Meningococcemia

Necessary health tests/imaging

IgM antibody

Real-time polymerase chain reaction

IgG antibody

Urine sample

Molecular analysis

Treatment

Paracetamol

Ibuprofen

Specialists to consult

General physician

Pediatrician

Infectious disease specialist

Symptoms Of Rubella

The main symptom of rubella is a red or pink spotty rash. Once a person is infected, the virus spreads throughout the body in about 5-7 days. The symptoms of rubella usually appear after 2 to 3 weeks after exposure. The most infective stage is usually 1–5 days after the appearance of the rash.

In children, the symptoms of the disease include:

Rashes

Mild fever

Nausea

Mild conjunctivitis

Lymphadenopathy (swollen lymph glands) behind the ears and in the neck

Runny nose

General discomfort

Cough

The rashes occur in 50–80% of cases, and it usually starts on the face and neck before progressing down the body and lasts 1–3 days.

Lymphadenopathy (swollen lymph glands) may be noted during the second week after exposure. It is usually the earliest and characteristic symptom of rubella infection. It can be more severe if the rash is present but may also occur even in the absence of a rash.

The infected adults are majorly women who may develop arthritis and painful joints that usually last from 3 to 10 days.

Congenital rubella

When a woman is infected with the rubella virus early in pregnancy (especially in the first trimester), she has a 90% chance of passing the virus to her baby. Pregnant women getting rubella have a high chance of miscarriage, premature delivery or fetal death. Also, their babies can have birth defects such as:

Heart problems

Intellectual disabilities

Loss of hearing or eyesight

Liver or spleen damage

Microcephaly (baby's head is much smaller than normal)

Central nervous system sequelae like mental and motor delay, autism

Thrombocytopenia with purpura/petechiae (blueberry muffin syndrome)

Intrauterine growth retardation

Meningoencephalitis

The classic triad of congenital rubella syndrome -- cataracts, hearing impairment and heart defects is seen in 10% of infants with congenital rubella syndrome. Hearing impairment is the most common single defect.

Rubella infection of children and adults is usually mild, self-limiting and often asymptomatic. The prognosis in children born with CRS is poor.

Causes Of Rubella

Rubella is a ribonucleic acid (RNA) virus of the genus Rubivirus within the Togaviridae family. Humans are its only known reservoir. It is transmitted through droplets and contact with an infected person. An infected person can spread the infection 2 weeks prior to the symptoms of infection appearing. One can spread the rubella virus infection through various modes like:

Contaminated droplets that are spread through the air while coughing, sneezing, talking, or coming in direct contact with infected nasal or throat secretions. The virus remains contagious in the air for up to two hours.

Sharing food, drinks, and utensils with someone who has rubella.

Kissing someone with rubella.

Shaking hands or hugging someone having rubella.

Pregnant women can pass on to their babies during the pregnancy, delivery, or while breastfeeding.

A person with rubella may spread the disease to others up to one week before the rash appears, and remain contagious up to 7 days thereafter.

Risk Factors For Rubella

While rubella can affect anyone, some risk factors elevate the risk of contracting the disease. Some of the risk factors are:

1. Being unvaccinated

Unvaccinated young children are prone to rubella and its complications including death. Unvaccinated pregnant women and nonimmune people can become infected.

2. International traveling

Traveling to countries where rubella is common and less controlled puts you at a higher risk of developing the disease.

3. Countries experiencing a rubella outbreak

Countries experiencing or recovering from a natural disaster. Damage to health infrastructures interrupts routine immunization and greatly increases the risk of infection.

4. Being in close contact with people suffering from rubella

Since it is a droplet infection, the infection can spread from an infected person to a non- infected person.

Diagnosis Of Rubella

It is important to detect rubella as soon as possible since it is a contagious disease. Establishing a diagnosis for rubella involves the following:

1. Clinical evaluation

Healthcare providers should consider rubella in patients a pink or red-spotted rash which is often the first sign of infection. These spots are especially helpful because they appear early. If the child has recently traveled or is unvaccinated, rubella is even more likely. Sometimes, other diseases can be complicated with rubella, but rubella rashes are easy to differentiate from other rashes. The rash starts on the face and spreads to the rest of the body.

2. Lab tests

Laboratory confirmation is important after the clinical evaluation is done by the doctor.

IgM antibody: Detection of rubella-specific IgM antibody in serum. The antibody is usually present soon after the rashes appear. The level of antibodies is highest during the 14th day and is not present after the 30th day.

IgG antibody: A four-fold or greater increase in measles virus-specific IgG antibody levels is seen between acute and convalescent-phase serum specimens.

Cell culture: Rubella can also be diagnosed by isolation of the virus in cell culture from respiratory secretions, nasopharyngeal or conjunctival swabs, blood, or urine.

Biopsy: Direct detection of giant cells in the respiratory secretions, urine, or tissue obtained by biopsy provides another method of diagnosis.

Real-time polymerase chain reaction (RT-PCR): Rubella RNA by RT-PCR is a common method for confirming rubella. Serum samples as well as the throat swab are used for sample collection. RT-PCR is now a common assay that can detect 3 to 10 copies of rubella virus RNA. This test can sometimes be necessary since many specimens have small amounts of rubella RNA.

Urine sample: A urine sample can also contain the virus. Collecting urine samples can increase the chances of detecting the rubella virus.

Did you know?

According to the World Health Organization (WHO), around 830 women die every day because of issues related to childbirth or pregnancy. So here is a list of a few medical tests that can help you go through a smooth sailing pregnancy and healthy delivery. Read more about this and aware yourself as it is always said prevention is better than cure.

Click Here!

Specialist To Visit

Patients exhibiting the signs and symptoms of rubella should visit a general physician. The doctor will be able to diagnose rubella from the combination of the symptoms, especially with the characteristics of rashes and if the condition worsens many complications can also be seen. If needed, your doctor may recommend you to go to a specialist such as:

Infectious disease specialist: A doctor who is trained in internal medicine and specializes in diagnosing, treating, and managing infectious diseases.

Pediatrician: A pediatrician is a children’s specialist who diagnoses and treats malignancies, infections, genetic defects, and organic diseases.

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Prevention Of Rubella

1. Measles, mumps, and rubella (MMR) vaccine

Getting vaccinated is the best way to prevent rubella. You can either take the measles, mumps, rubella, and varicella (MMRV) combination vaccine or opt for MMR. From time to time, boosters of the vaccine need to be taken to prevent ourself from getting the disease.

The following people should get themselves vaccinated to safeguard themselves.

People who never had rubella.

The immunization for measles includes 2 doses wherein the first dose should be given between 12-15 months of age followed by the second dose after an interval of 4 weeks, usually up to 4-6 years.

If you are not sure if you are vaccinated in the past.

2. Special circumstances

A dose of MMR vaccine can also be given to children over 6 months of age under certain circumstances. For example, in conditions like:

If there is an outbreak of rubella in your area.

Exposure to rubella.

Planning to travel where rubella is widespread.

3. Isolation

To prevent rubella, keep a distance from the person having the infection. An infected person should be isolated for a few days to a few weeks to return to normal activities.

4. Practice hygiene and cleanliness

To prevent rubella keep yourself clean and free of infections. The steps to be taken care of:

Avoid touching your nose and mouth as much as possible.

Use tissue paper while coughing and sneezing.

Always use a sanitizer.

Did you know?

You can wash away illnesses by simply following a simple and easy hygiene technique. Improved hand hygiene is one of the most important steps you can take to avoid getting sick and spreading germs to others. Here’s more about how, when and why you should wash your hands.

Click Here!

Treatment Of Rubella

There is no specific treatment for rubella and the condition usually improves by itself within 7 to 10 days. To avoid the spreading of infection, avoid contact with people who are vulnerable like pregnant women, immunocompromised people, and young children. Also, try to stay away from work or school for at least 4 days when the rubella rash first appears.

The treatment includes relieving the symptoms and fighting the infection. If symptoms are causing discomfort then the symptoms need to be treated first, while you wait for your body to fight off the virus. The treatment approach includes:

1. Controlling fever and relieving pain

Paracetamol and ibuprofen can be taken to control fever and the pain caused by the fever. Liquid infant paracetamol can be used for young children.

2. Drinking plenty of fluids

If your child is having a high temperature drink a lot of fluids to eliminate the risk of dehydration.

3. Treating sore eyes

Cleaning your child’s eyelids and closing curtains or dimming lights can help in soothing the eyes.

4. Treating cold-like symptoms

If your child has cold-like symptoms then make them sit in a hot bathroom or make them drink warm liquids containing honey to relax the airway and soothe a cough.

5. Dealing with other illnesses

Medical care is necessary to avoid serious complications because of the rubella virus. Some serious problems are:

Shortness of breath

Convulsions

Sharp chest pain

6. Role of immunoglobulins

Immunoglobulins do not prevent rubella virus infection after exposure and therefore are not recommended as a routine treatment. However, administration of immunoglobulins can be considered only when a pregnant woman who has had exposure to a person with rubella will not consider termination of pregnancy under any circumstances. In such cases, administration of immunoglobulins within 72 hours of rubella exposure may reduce, but not eliminate the risk of rubella infection.

Home-care For Rubella

The following home remedies can help in recovery from rubella.

1. Aloe vera: It is applied on the inflamed area and helps in soothing inflamed skin.

2. Neem leaves: Neem has antibacterial and anti-allergic properties. It is used to relieve the itching sensation caused due to skin rashes. Take neem leaves and make a thin paste of them, apply them to the affected area and let them dry.

3. Licorice (mulethi) herb: It is an ancient herb to cure rubella. Tea can be prepared by adding licorice herb and it helps in reducing the cough caused by rubella.

4. Baking soda: One cup of baking soda can be added to bathing water and this will provide quick relief from itching.

5. Coconut water (nariyal paani): It is rich in nutrients and cleanses the body. Drinking plenty of coconut water helps in flushing the toxins out of the body. It keeps the body hydrated.

6. Turmeric (haldi): It has both antioxidant and antiseptic properties. It is used as an ancient home remedy. Drinking hot water infused with turmeric and honey helps reduce symptoms associated with rubella.

7. Green tea: Green tea can be consumed for antioxidant, anti-inflammatory, and immune effects. Try to consume caffeine-free green tea.

Complications Of Rubella

Rubella can cause the following complications:

1. Common complications

The development of polyarthritis and polyarthralgia is the most common complication of rubella infection, affecting up to 70% of adolescents and adult women.

2. Severe complications in children and adults

The most serious complication of rubella infection is the harm it can cause to a pregnant woman’s developing baby.

When a pregnant woman is infected with rubella, she is in danger of miscarriage or stillbirth, and her developing fetus is in danger of being born with severe birth defects known as congenital rubella syndrome (CRS). Passing on the virus to the developing baby can develop serious birth defects such as heart problems, loss of hearing and eyesight, and liver or spleen damage.

3. Rare complications

Some rare complications include:

Thrombocytopenia: It is a condition in which a person has a low blood platelet count. Platelets are tiny blood cells that are made in the bone marrow from larger cells. Platelets help in blood clotting (stopping bleeding).

Hemolytic anemia: It is a blood condition that occurs when your red blood cells are destroyed faster than they can be replaced.

Myocarditis: Myocarditis is inflammation of the heart muscle (myocardium). The inflammation can reduce the heart's ability to pump and cause rapid or irregular heart rhythms.

Pericarditis: It is the inflammation of the pericardium, a thin, two-layered sac that surrounds your heart. Pericarditis often causes sharp chest pain.

Hepatitis: It is a condition in which inflammation of the liver takes place. The liver is a vital organ that processes nutrients, filters the blood, and fights infections.

Orchitis: It is an inflammation of the testicles.

Retinopathy: It is a disease that damages the retina. The retina is the part inside the eye that senses light.

Uveitis: It is the swelling and irritation of the uvea, the middle layer of the eye. Uveitis can affect one or both eyes with inflammation.

Guillain-Barré syndrome: It is a rare and serious neurological disorder in which the body's immune system attacks your nerves.

Post-infection encephalitis: This condition results from a faulty immune system reaction to an infection elsewhere in the body. Instead of attacking only the cells causing the infection, the immune system also mistakenly attacks healthy cells in the brain.

Alternative Therapies For Rubella

Dietary modifications

Drink a minimum of 8 glasses of water daily.

Avoid refined foods, such as white bread, pasta, and sugar.

Use healthy oils in cooking, such as olive oil, coconut oil, or ghee.

Reduce or eliminate trans fats found in processed and packaged foods like biscuits, namkeens, cakes, etc.

Limit caffeine-containing beverages like coffee

Avoid alcohol and tobacco.

Nutritional supplements

A multivitamin should be taken daily containing antioxidants, vitamins A, B, C, E, and minerals such as magnesium, calcium, zinc, and selenium.

Omega-3- fatty acids such as fish oil and flaxseed oil can be taken to reduce inflammation and improve immunity.

Probiotic supplements can be taken for maintaining gastrointestinal and immune health.

Living With Rubella

There is no specific home care treatment for rubella. The patient requires care and time to time medicines and few precautions since it is a contagious disease.

Get plenty of rest.

A sponge bath can reduce discomfort due to fever.

Drink plenty of water.

Pain relievers and analgesics such as acetaminophen.

To reduce itching from the rash, one can use witch hazel on the rashes or add oatmeal to a bath.

Talking with a doctor openly in case of any questions related to the disease.

Lowering the stress levels.

Taking adequate sleep.

Frequently Asked Questions

Is the rubella vaccine safe?

How is rubella transmitted?

What should I do if I get rubella?

How can I prevent getting rubella?

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Breast cancer

Also known as Breast tumor and Breast carcinoma

Overview

Any changes in the breast or nipples, lumps in the armpit, pain in the breast or nipples should not be ignored as it could be a symptom/s of breast cancer. Breast cancer affects breast tissue that contain milk producing glands called lobules and thin tubes called ducts. In breast cancer, the cells start growing and dividing in an uncontrolled way. These cancerous cells often invade other healthy breast tissue and lymph nodes, and can spread to other parts of the body.

Breast cancer usually affects women but can also occur in men and children, though it is very rare. It is beleived that 1 in 22 women in urban areas and 1 in 60 women in rural areas are likely to develop breast cancer during their lifetime. Breast cancer can be detected with the help of screening tests. These tests do not prevent cancer but can help you to diagnose breast cancer early which in turn can make the treatment easier and more effective.

The treatment of breast cancer does not always involve removal of the whole breast by surgery. In some cases, only a part of the breast tissue or a lump in the breast is removed. Apart from surgery, cancer can be treated with the help of medications (known as chemotherapy), radiation and hormonal therapy.

Key Facts

Usually seen in

Adults above 40 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Breast

Prevalence

Worldwide: 2.1 million (2018)

India: 0.13 million (2015)

Mimicking Conditions

Circumscribed breast lesions

Benign breast disease (fibroadenomas and cysts)

Breast lymphoma

Metastasis to the breast from other primary sites (neuroendocrine or extramedullary acute myeloid leukemia)

Necessary health tests/imaging

CA 15.3

CA 27.29 (Breast cancer marker)

Mammography

MR Mammogram

Treatment

Chemotherapy: Cyclophosphamide, Vinblastine, Fluorouracil & Gemcitabine

Radiation therapy

Hormonal therapy: Tamoxifen, Fulvestrant, Letrozole & Megestrol

Targeted therapy: Trastuzumab, Pertuzumab, Neratinib & Alpelisib

Immunotherapy: Pembrolizumab, Atezolizumab & Pertuzumab

Surgery: Mastectomy, Breast conserving therapy & Breast reconstruction therapy

See All

Symptoms Of Breast Cancer

Although breast cancer may not show symptoms in the early stage, there are certain changes that happen in the breast as you age. Knowing about these changes in the breast can help in the early detection and treatment of cancer.

Here are some of the common signs and symptoms of breast cancer every woman needs to be aware of:

Presence of a lump in the breasts that feels different from the rest of the breast tissue

Changes in the size, shape, or appearance of the breast

Inverted, painful, or enlarged nipple

Any discharge or bleeding from the nipple

Skin dimpling or appearance of folds on breast skin

Pain around the breast/s

Swollen lymph nodes (in underarms and around the collarbone) may indicate that the cancer has spread.

Watch the video to know more about the symptoms and stages of breast cancer explained by our expert Dr. Priya Tiwari (in Hindi).

Risk Factors For Breast Cancer

Most people believe that genes put you at risk of breast cancer and it cannot be prevented. But in reality, only 5-10% of the cases of breast cancer have genetic predisposition. In the remaining 90% which are known to be sporadic breast cancers, the identified risk factors can be managed.

The factors that increase the risk of breast cancer include:

Being woman as they are much more likely to develop breast cancer than men.

Old age as the risk increases with age. Most breast cancers are diagnosed after the age of 50.

A personal history of breast conditions like lobular carcinoma in situ (LCIS) or atypical hyperplasia of the breast.

A personal history of breast cancer. Also a history of cancer in one breast, increases the risk of developing cancer in the other breast.

A family history of breast cancer or ovarian cancer. The risk for breast cancer increases if your mother, sister, or daughter or any family members have had breast or ovarian cancer. Also having a first degree male relative with breast cancer elevates the risk.

Presence of certain harmful mutations of genes [BReast CAncer genes 1 and 2 (BRCA1 and BRCA2)]. For example, BRCA2 mutation in women carries a lifetime risk of approximately 26% to 84%.

Having dense breasts.

Early menarche (before 12 years) or delayed menopause (after 55 years).

Never being pregnant or having the first child after 30 years of age.

Smoking and excessive alcohol consumption.

Obesity.

Hormone therapy after menopause (estrogen with progestin).

A personal history of radiation therapy especially to the head, neck or chest.

Myth: A lump in your breast means you have breast cancer.

Fact: Only a small percentage of lumps in the breast are cancerous. A lump can be a non-cancerous fibrous growth as well. Consult a doctor for a clinical breast examination. This examination becomes all the more important for if there is any discharge or change in the size and/or shape of a lump.

Consult Now!

Diagnosis Of Breast Cancer

The best way to know about breast cancer is through early screening. The different types of breast cancer screening tests include:

1. Physical examination of the breast

Breast self-examination (BSE), as the name suggests, is a breast cancer screening test that can be done by oneself and at home. It usually takes 5-10 minutes and should be done every month by all women above 15 years of age.

Stand topless in front of a mirror with your hands on your sides and shoulders straight.

Look at your breasts in the mirror for any visual changes in the breasts such as dimpling, inverted nipple, puckering, and changes in the size, shape or symmetry.

Lift your hands and place the palms on the back of the head to look for changes in the breast. Repeat this by lifting one breast at a time.

Feel your breasts by using the pads of your fingers (not the tips). Apply pressure and move your fingers over the breasts in a circular motion just like massaging the area. As you do this, make your way to the collarbone, center of the breastbone and near the armpits.

Inspect your breasts when lying down and again in the shower. The use of water and soap while taking a shower makes it easier for your fingers to glide over the skin and make it easy to feel the breasts.

Repeat the procedure by placing one hand over the back of the head and massaging the breast with the other hand. Lastly, gently squeeze the nipple to check for any discharge.

2. Clinical breast examination (CBE)

A clinical breast exam is done by a doctor or a nurse. During this exam, the clinician uses his/her hands to feel any lumps, hardness, nipple discharge or any other changes in the breast. It should be done once in six months in women who are at a high risk of breast cancer or at the earliest sign of any abnormality or symptoms of breast cancer. If you observe any abnormality during BSE, it’s advised to get a CBE done immediately to investigate further.

3. Blood marker tests

Also known as blood tests for tumor markers, these tests help to detect cancer activity in the body. In addition to being diagnostic tests, these can also help to determine whether the cancerous cells have moved to other areas of the body or to assess how the treatment is working. If you have already recovered from cancer, then these tests can help to check if the cancer has come back (recurrence). Some of the common blood markers that your doctor might recommend:

CA 15.3

CA 27.29 (Breast cancer marker)

Carcino Embryonic Antigen (CEA)

4. Mammography

Mammography is basically an X-ray of the breast tissue. It should be done by all women once a year after the age of 40 years or as advised by your doctor. Mammography alone is not useful in women with dense breasts. In these women, it has to be done in conjunction with ultrasonography or as advised by your doctor.

5. Magnetic resonance mammogram

This method uses magnetic and radio waves to take pictures of the breast and check for abnormalities. It is considered to be better than mammograms and CBE for screening women with a high risk of breast cancer such as those with BRCA gene mutation. For women in high-risk groups, MRI along with mammography and CBE is used as a screening tool. As breast MRIs may appear abnormal even if there is no cancer, they are not advised for women who have an average risk of cancer.

6. Other tests

In case of any abnormality being detected in the screening tests, the woman might be directed to take further tests to diagnose the condition. This includes:

Excision biopsy: A mass of tissue is removed for examination. This is used to determine the types of cells involved in breast cancer.

FNAC (fine needle aspiration cytology): A fine gauge needle is used to remove fluid from the breast tissue for microscopic evaluation.

CT scan: It helps to check whether breast cancer has spread to other regions.

Did you know?

Breast cancer is the leading cause of death due to cancer in Indian women. According to the National Cancer Registry Programme, 1 in 22 women in urban areas and 1 in 60 women in rural areas is likely to develop breast cancer during her lifetime. So get tested if you have any doubts about symptoms of breast cancer.

Book Test Here!

Celebs affected

Mumtaz

In 2000, Yesteryear's Bollywood diva Mumtaz was diagnosed with breast cancer. She was 54 years-old when a malignant lump was detected in her breasts. She underwent 6 chemotherapies and 35 radiation sessions.

Tahira Kashyap

Tahira Kashyap was diagnosed with breast cancer. She underwent chemotherapy, mastectomy and reconstruction to bounce back hail and hearty from the disease.

Shreyl Crow

Sheryl Crow is an American actress and musician who was diagnosed with a non-invasive form of breast cancer, at the age of 44. She underwent lumpectomy and seven weeks of radiation therapy before she was declared cancer-free.

Cynthia Nixon

"Sex and the City" star Cynthia Nixon was diagnosed with breast cancer in 2002. She discovered the lump herself and it was biopsied only to be diagnosed as cancerous.

Kylie Minogue

Australian pop star Kylie Minogue was diagnosed with breast cancer in the year 2005 when she was just 36 years old. She underwent chemotherapy and surgery before getting cancer-free.

Prevention Of Breast Cancer

1. Go for regular physical activity

A sedentary lifestyle and physical inactivity increase the risk of breast cancer. Women who get regular physical activity have a 10%-20% lower risk of breast cancer compared to women who are inactive. This could be attributed to the effect of exercise on systemic inflammation, hormones, and energy balance. Even walking seems to exert beneficial effects. So make sure you go for moderate-intensity exercise 30 minutes a day for at least 4 days a week for better personal health.

2. Quit smoking

Heavy smoking over a long-time is linked to a higher risk of breast cancer. Moreover, it is also reported that exposure to secondhand smoke may increase the risk of breast cancer, particularly for premenopausal women.

3. Restrict alcohol intake

Cut down on your alcohol intake as excess intake can increase the risk of breast cancer. If you have to, then restrict the alcohol consumption to only social gatherings.

4. Get rid of excess body weight

Obesity is an important risk factor for breast cancer. Postmenopausal breast cancer risk is about 1.5 times higher in overweight women and about 2 times higher in obese women than in women with healthy weight. This might be due to higher estrogen levels as fat tissue is the largest source of estrogen in postmenopausal women. Therefore, it is important to maintain your weight within the normal range.

Opt for a regular fitness program and try to stay active throughout the day. Make healthy dietary choices and cut down on refined, processed and oily foods.

5. Do breast self examination once a month

It is important to do a regular self-examination of the breasts since they might help in early detection. First of all, look at your breasts in the mirror with your shoulders straight and arms on your hips. Look for any dimpling, bulging of the skin, or inverted nipple. Now, feel your breasts using the first few finger pads of your hand moving in a circular motion. The easiest way to feel breasts is when the skin is wet and slippery while taking a shower.

6. Get clinical examination done yearly

After the age of 35, it is recommended to get a clinical examination done by an experienced breast surgeon every year. In women with a family history of breast cancer, it is recommended to get an annual clinical examination done after the age of 25.

7. Get mammography/ultrasound done

A mammogram is an X-ray picture of the breast. It can be used for screening purposes when you have no symptoms of cancer. It can also be used if you have a lump or other sign of breast cancer. It is recommended to get regular mammograms done yearly after the age of 40 years. But if you are below 40 years of age, then an ultrasound of the breast is the recommended test to know the changes in your breast.

8. Take special care in case of family history

If there is a family history of breast cancer, do consult your oncologist to discuss your risk of breast cancer. If you or any woman in your family is above 40 years of age, then get mammography done. Remember, early lump detection can aid in early detection of breast cancer which in turn can help in a complete recovery from breast cancer.

Myth: Wearing underwire bras can cause breast cancer.

Fact: Those who claim that underwire bras cause cancer believe these bras restrict the lymph system, resulting in a build-up of toxins in the breasts. However, there is no scientific evidence that proves compression of the lymph nodes by bras can cause cancer. In reality, body fluids travel up and into the underarm lymph nodes, not towards the underwire. Click to know more myths.

Click To Read!

Specialist To Visit

See a doctor if you feel a lump in your breast or have a discharge from the nipple. It is wise to opt for regular mammography (once a year) if you have a family history of breast cancer.

When it comes to the treatment of breast cancer, there is not just a single doctor but a team of specialists who work together to create a comprehensive plan known as a multidisciplinary approach. Doctors specializing in different areas of cancer treatment include:

Oncologist

Oncosurgeon

Radiation oncologist

These experts along with radiologists, pathologists, nutritionists, counsellors and physicians create a patient's overall treatment plan which includes different treatment options. In case you are above 65 years of age, then a geriatric oncologist or a geriatrician might also be involved to take care of your health.

Treatment Of Breast Cancer

There are different types of breast cancer. For example, some tumors are small but grow rapidly whereas some are big in size but grow at a very slower pace. This is why the treatment for breast cancer needs to be customized as per the patient’s profile. Some of the common parameters that need to be taken into account before deciding the type of treatment include:

The location of the cancer in the breast

The size of the tumor

Whether it has spread to other sites of the body

The type of the cancer

The stage/grade of the cancer

Menopausal status of the woman

The age of the patient

The presence of any genetic mutations

The presence of hormonal receptors or proteins on the cancer cells

The general health & fitness of the patient

The treatment options for breast cancer might involve one or more of the following:

1. Chemotherapy

It involves the use of medications/drugs to shrink or kill the cancerous cells. These medicines can be given either in the form of pills or as injections (through intravenous mode) or both. Usually, chemotherapy involves intravenous administration of the drugs either through a central line (long tube attached to the large vein in the chest) or a cannula (thin short tube attached to the vein in the arm).

Chemotherapy is found to be most effective when these drugs are used in combinations. It can be given before surgery (neoadjuvant) or after surgery (adjuvant). Chemotherapy before surgery aims to shrink the tumour down & lower the chances of recurrence of the cancer. Chemotherapy after surgery might be recommended if:

There is a presence of cancer cells in the lymph nodes under your arm

There is a large tumour in your breast

The cancer cells were of a high grade (grade 3 or more)

Hormone therapy fails to work (due to absence of hormone receptors on the cancer cells)

How many cycles?

A chemotherapy schedule involves use of a combination of drugs in a specified number of cycles set over a specific time by your doctor. The regimen can be once a week, 2 weeks, 3 weeks or 4 weeks. In most cases, you can have chemotherapy cycles in a day & come back home. In some cases, you may need to stay in the hospital overnight or for a few days.

Some of the common examples of chemotherapy drugs include:

Cyclophosphamide

Vinblastine

Vinorelbine

Fluorouracil

Capecitabine

Gemcitabine

The common side-effects of chemotherapy includes fever, loss of appetite, weight loss, extreme fatigue, risk of infections, bleeding/bruising easily, diarrhoea or constipation & hair loss.

Note: Consult your doctor if you have any signs of an infection following the treatment.

2. Radiation therapy

This therapy uses radiation (high-energy rays similar to X-rays) to kill the cancer cells. This therapy can also be used along with other treatment modalities such as chemotherapy and surgery. The radiotherapy team will work out the radiotherapy which includes the dose of the radiation, where you need it & also the dose of the surrounding tissue.

Types of radiation therapy

External-beam radiation therapy: Radiation given from a machine outside the body

Intraoperative radiation therapy: Radiation given using a probe in the operating room

Brachytherapy radiation: Given by placing radioactive sources into the tumor

External-beam therapy is the most common one which is used for whole breast & partial breast radiation therapy.

What happens during radiotherapy?

The radiographers will tell you to lie on a special board called a breast board. If you have had a shell (mould) made, it will be fixed over your breast & you might need to raise your arms over your head. After this, the experts will line up the machine using the marks on your body or shell to place you in the right position.

As you lie still on your back, multiple images will be taken before your treatment to make sure you are in the right position. Your radiographer might ask you to hold your breath for a few seconds (at times) during the treatment.

Radiation therapy can cause side effects such as fatigue, swelling of the breast, redness and/or skin discoloration, pain or burning in the skin (at the site of radiation) & pneumonitis (very rare).

How many cycles?

A radiotherapy schedule involves a specified number of cycles set over a specific time by your doctor for example 5 days a week for 3 to 6 weeks. The daily treatment of radiotherapy is known as a fraction.

It is recommended:

When the cancerous mass is huge enough that it can’t be removed with surgery

To treat metastatic breast cancer (cancer that has spread to other parts of body such as bones or brain)

After breast-conserving surgery (BCS) to lower the risk of cancer recurrence in the same breast or nearby lymph nodes

After mastectomy (breast removal surgery), if cancer is found in nearby lymph nodes or is larger than 5 cm in size or has spread to nearby skin or muscle

3. Hormonal therapy

This treatment approach works by either lowering or blocking the production of the hormones needed for the growth of the cancer cells. This therapy is often used as an adjuvant therapy post surgery to help lower the risk of recurrence. Most types of hormone therapy either lower estrogen levels or stop estrogen from acting on the breasts thereby aiding in the treatment.

Who should take it?

Hormone therapy is only likely to work if the breast cancer cells have estrogen receptors (ER). It is seen that around 70% of breast cancers have estrogen receptors. These types of breast cancers are known as estrogen receptor positive cancer or ER positive cancer.

The type of hormone therapy used depends on the status of menopause, chances of cancer recurrence & side-effects of the drug.

How to take it?

The medicines used for hormonal therapy are available in the form of tablets or injections. The drugs such as tamoxifen or aromatase inhibitors such as anastrozole are usually advised for a period of 5 years (or more depending on the need), whereas fulvestrant is given in the form of an injection once every month.

Examples of these class of drugs include:

Tamoxifen acts as selective estrogen receptor modulator (SERM) that blocks estrogen receptors

Fulvestrant acts like an anti-estrogen which blocks and damages estrogen receptors

Letrozole acts as aromatase inhibitors which lowers the level of estrogen by blocking the production of the hormone estrogen

Megestrol acts as progesterone-like drug which lowers progesterone level in the body

The side-effects of hormonal therapy might vary based on the drugs used, however some of the common side-effects include hot flushes and sweating, irregular periods, low sex drive, vaginal dryness or discharge, feeling sick, joint pain, mood changes & tiredness

4. Targeted therapy

Targeted therapy is a treatment in which the drugs are targeted to the cancer’s specific genes, proteins, or the environment that contributes to cancer growth and survival. Unlike chemotherapy, this treatment works in a focussed manner & limits the damage to the healthy cells. As tumors might have different targets, your doctor might need to run a few tests to identify the target before initiating the treatment.

Hormonal therapies were the first approved targeted therapy for breast cancer. Recently, HER2 (human epidermal growth factor receptor 2) targeted therapies were approved for HER2-positive breast cancer. HER2 is a gene that can play a role in the development of breast cancer.

Targeted therapy is usually recommended:

Before surgery (to shrink a cancer)

After surgery (to reduce the risk of recurrence)

For secondary breast cancer (if cancer has spread to other parts of the body)

If cancer recurs

Examples of drugs

Some of the common examples include:

Trastuzumab approved for non-metastatic HER2-positive breast cancer

Pertuzumab approved for HER2-positive breast cancer in combination with trastuzumab & chemotherapy

Pertuzumab, trastuzumab, and hyaluronidase–zzxf approved for people with early-stage HER2-positive breast cancer

Neratinib approved for higher-risk HER2-positive, early-stage breast cancer

Alpelisib used hormone receptor-positive, HER2-negative metastatic breast cancer along with fulvestrant

The side effects of targeted therapy for breast cancer is dependent on the type of drug, dose of the drug, overall health & other drugs used for the therapy (along with it). Some of the common side-effects seen include feeling sick, breathlessness, allergic reactions, fatigue & tiredness, diarrhea or constipation, body pain, hot flushes, muscle spasms, soreness & loss of appetite

5. Immunotherapy

As the name suggests, immunotherapy works by helping the immune system work to fight cancer cells. This therapy uses substances either made naturally by the body or chemically (in the form of medicines) to:

Stop or slow down the growth of cancer cells

Prevent the spread of cancer other parts of the body

Aid the body to kill cancer cells

Some of the approved immunotherapy drugs to treat breast cancer are:

Pembrolizumab

Atezolizumab

Pertuzumab

How does it work?

One of the immune cells produced by our body is T-cells. These cells fight infection by analyzing and identifying the proteins present on a cell’s surface. If the surface proteins signal that the cell is normal & healthy, then T cells leave it alone. However, if the surface proteins indicate that a cell is cancerous or abnormal, then T cells attack the cell. These specialized proteins that keep healthy cells and tissues safe are called immune checkpoints. Immunotherapy drugs are targeted to these proteins to help identify cancerous cells & attack them.

Immunotherapy medicines are very new and have not been studied as long as other cancer treatments such as surgery, chemotherapy, radiation therapy, and hormonal therapy. However, research has revealed that there is a risk that medicines targeted to specific proteins may help to attack the healthy cells. This in turn can lead to various effects on the major organs of the body such as the lungs, liver, pancreas, kidneys and the intestines.

Watch Dr. Priya Tiwari, expert oncologist, explaining the treatment of breast cancer.

6. Surgery

Some of the common surgical treatments for breast cancer include:

1. Mastectomy

It involves surgical removal of the entire breast and not just the lump as in the case of lumpectomy. Depending upon the type and the stage of breast cancer, your doctor might decide whether you need to undergo mastectomy or lumpectomy. Your doctor is most likely to recommend mastectomy if you have:

a large lump (tumour), particularly in a small breast

a tumour in the middle of your breast

more than one area of cancer in your breast

large areas of DCIS in your breast

had radiotherapy to the breast before

The type of surgery depends on how big the cancer is, where it is in the breast and whether you have a breast reconstruction. The scar from a simple mastectomy extends across the skin of the chest and into the armpit. Breast reconstruction surgery can be performed at the same time after mastectomy or later as per the convenience.

You may also go for prophylactic mastectomy which is preventive removal of the breast to lower the risk of breast cancer in high-risk people.

2. Breast-conserving therapy

Also known as lumpectomy, this technique involves the excision of the tumor and some of the normal tissue that surrounds the cancer cells. Technically, a lumpectomy is a partial mastectomy, because part of the breast tissue is removed.

Before the surgery, your surgeon or a nurse may draw markings on your breast that show where the incision will be made. It is followed by radiation of the entire breast area. The lumpectomy surgery itself should take about 15-40 minutes.

You may be advised to rest at home followed by instructions to take medications, care for the incision area/stitches, exercise the arm & report any signs of infection at the earliest to the doctor. A follow-up is mandatory as it helps in a prompt detection of local recurrence of the cancer (if any) post the therapy.

3. Breast reconstruction therapy

It is mostly considered by women who have a mastectomy or lumpectomy. It is a surgical procedure in which a plastic surgeon helps to recreate a breast. There are two main techniques for reconstructing your breast. These are:

Implant reconstruction involves inserting an implant which is a saline-filled or silicone gel-filled forms to reshape the breast

Autologous or "flap" reconstruction involves use of tissue transplanted from another part of the body such as your belly, thigh, or back

Breast prostheses come in many shapes, sizes, and materials such as silicone gel, foam, or fiberfill interior. The common ones inculde a lightweight model (polyfill or foam) and a silicone prosthesis (look more realistic & feel natural).

Here’s more on cancer treatment options by a medical oncologist.

Note: The prognosis of breast cancer depends on:

Stage of cancer (lymph node status and tumor size)

Expression of certain proteins such as estrogen receptor and progesterone receptor (ER and PR) and human epidermal growth factor receptor 2 (HER2)

If the woman is still menstruating or has had menopause

Regular examination and screening through mammography can help in early detection of breast cancer.

Home-care For Breast Cancer

There are certain changes that happen in the breast as you age. But these changes should not be ignored as they could indicate an underlying breast cancer. This is the reason why every woman above 25 years of age or those with a family history of breast cancer are recommended to do a self-breast examination as it could indicate early changes that happen in the breasts.

In addition to following your treatment routine such as radiation and chemotherapy, here are a few tips you need to keep in mind.

Eat foods rich in antioxidants as they help the body to fight free radicals

Stay away from processed and oily foods

Check your weight as obesity is also a risk factor for breast cancer

Exercise daily without fail as it helps you to stay active and strong

Stay away from stress

Boost your immunity to fight free radicals which can put you at risk for various illnesses

Quit smoking & limit your intake of alcohol as it is known to up the risk of breast cancer

Complications Of Breast Cancer

If left untreated for a long period of time, breast cancer can be life threatening. In case of metastatic breast cancer, there is a high risk that the cancer can spread to the lungs known as lung metastasis. It often does not cause any symptoms but is discovered only on chest CT scan.

That's why it is recommended that you should consult a doctor if you experience any symptoms of breast cancer to diagnose it at an early stage and get appropriate medical treatment. There have been various treatment advances against breast cancer, bringing new hope and excitement for better self care. And, the silver lining is that if detected early, it has high chances of cure.

Living With Breast Cancer

Breast cancer can affect daily life in different ways, depending on what stage it is and the treatment received. How a woman copes with her diagnosis and treatment varies from person to person, but there are several forms of support needed.

Talk to your friends and family as they are your biggest support system.

Communicate with other people in the same situation and make time for yourself and engage more in physical and spiritual activities that calm your mind.

Tiredness and lethargy can be a problem during treatment but some gentle physical activity can help in alleviating the pain and symptoms. Avoid doing too much work or overexerting yourself when the body feels low.

Breast cancer and its treatment are likely to cause a few physical problems. Changes to the shape of one or both breasts and scarring after surgery can affect self-esteem and confidence. If possible join support groups and activities that divert your mind and make you happy.

You may find it helpful to talk to a trained counselor or psychologist, or any expert. Taking to a professional can be helpful in getting all the information about breast cancer and post-treatment queries. Talking openly and knowing everything about what's happening with you and your body, gives a sense of confidence.

Recovery and follow-up after treatment

As most women with breast cancer undergo surgery, getting back to their normal life can take time. During recovery, avoid lifting things such as heavy shopping bags, doing excessive household chores. Post treatment, a regular follow-up with routine blood tests and mammogram is necessary.

Frequently Asked Questions

How does breast cancer start?

What are the different types of breast cancer?

Do negative screening test results indicate no risk of cancer?

How quickly does breast cancer grow?

What is the most aggressive type of breast cancer?

What is breast cancer pain like?

How can I test my breast cancer at home?

Do deodorants cause breast cancer?

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Scabies

Also known as Crusted scabies, Norwegian scabies

Overview

Scabies is an parasitic infestation that occurs due to an 8-legged mite called Sarcoptes scabiei. It is estimated that about 200 million people suffer from scabies worldwide at any given time and upto 10% of children from poor economic backgrounds tend to be affected by it. Scabies is a highly contagious disease that spreads through prolonged and close physical contact with an infected patient.

Scabies outbreaks are more commonly seen in crowded places such as nursing institutions, daycare centers, prisons, etc., where people live in close proximity to each other. The symptoms of scabies range from a severe itching sensation to the formation of skin lesions such as burrows, papules, crusts, etc. The urge to itch may be especially strong at night.

Scabies is contagious and can spread quickly through close physical contact. Since scabies is a contagious disease , physicians often recommend treatment for entire families or contact groups. Scabies is treated with topical application of anti-scabies creams or lotions. Oral tablets might be required in some cases. It is recommended to simultaneously treat all members living in close proximity to the patient to prevent reinfection.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Skin

Genitals

Prevalence

World: 200 million (2020)

Mimicking Conditions

Psoriasis

Impetigo

Atopic dermatitis

Contact dermatitis

Bites from other insects mosquitoes, fleas, bedbugs

Urticaria

Folliculitis

Necessary health tests/imaging

Complete Blood Count (CBC)

Treatment

Antiparasitic medications

Antipruritics (or anti-itch drugs)

Permethrin

Crotamiton

Sulphur

Benzyl Benzoate

Ivermectin

See All

Symptoms Of Scabies

If you have had scabies before, signs and symptoms may develop within a few days of exposure. If you’ve never had scabies, it can take as long as six weeks for signs and symptoms to begin. A person may have scabies if the following symptoms are present:

A severe itching sensation in the affected areas of the skin that usually worsens at night.

Rash or bumps on the skin with a burrow-like appearance.

Although scabies can affect any part of the skin, common sites of infestation are - armpits, between fingers, inner elbows, around the waist, scalp, palms, soles of feet, etc.

Occasionally, there may be scaly patches on the skin that resemble eczema.

A severe type of scabies, called Norwegian scabies, leads to the formation of thick crusts on the skin.

NOTE: In infants and young children, common sites of infestation usually include the scalp , palms of hand, and soles of feet.

Causes Of Scabies

Scabies is not an infection. It is an infestation that occurs due to an 8-legged mite called Sarcoptes scabiei. This mite can enter your skin through direct human-to-human contact with a person with scabies or by sharing personal items, such as bed sheets, towels, linen, etc.

Once the mite comes in contact with human skin, it starts burrowing into the skin’s upper layer and lays eggs. The eggs hatch in a couple of days and develop into adult mites within two to three weeks and spread to other parts of the body.

A severe infestation of scabies known as crusted scabies or Norwegian scabies occurs when the mites and eggs are present in huge numbers. This condition is seen in people with poor or weakened immune systems.

Risk Factors For Scabies

The following conditions increase the risk of contracting scabies -

Living in close proximity to people in overcrowded places, such as nursing homes, prisons, daycare centers, etc.

Sexual relationships with multiple partners.

Sharing toiletries, bed sheets, linen, etc., with other people in the surroundings.

Did you know?

Severe form of scabies can spread even through short contact with a patient : In common scabies, the scabies mite is transmitted during sufficiently long-lasting skin-to-skin contact—at least 10 minutes. In contrast, for crusted scabies, with millions of mites on the skin, short contact with patien

Shop Now!

Diagnosis Of Scabies

The physician takes a detailed history of the onset of symptoms and performs a thorough physical examination to identify the site and type of skin lesions. Usually, the close contacts of the person are also examined to check for the spread of scabies.

Scabies can be confirmed by the following tests -

Microscopic examination of a skin scraping

Direct visualization of magnified skin lesions or Dermatoscopy

Burrow ink test to evaluate the burrowing lesions of scabies

Routine laboratory tests or imaging studies play very little role in establishing a diagnosis of scabies. Occasionally, if a patient presents with crusted lesions or Norwegian scabies, routine laboratory tests like Complete Blood Count (CBC) may be performed to get a general idea of the person’s health and immunity status.

Prevention Of Scabies

Scabies is a highly communicable disease that spreads very rapidly by prolonged, close human-to-human contact. It can also spread through fomite contact, such as sharing of items of a personal nature. To prevent the reinfestation or transmission of scabies, the following precautions must be followed:

Do not share items of a personal nature, such as bed sheets, linen, pillow covers, etc., with others, especially anyone with an active infestation of scabies.

Avoid visiting overcrowded areas which have reported an outbreak of scabies.

If you live with someone who has scabies, take care to wash all clothing, towels, etc., with hot water and detergent. Items that cannot be washed must be kept isolated in a separate room for 2-3 days. When the scabies mites cannot be transferred to humans, they eventually die, and the cycle of transmission breaks.

All members of the household must undergo scabies treatment simultaneously if someone in the house has scabies to prevent the reinfection and transmission of the disease in close proximity.

Specialist To Visit

It is essential to seek prompt medical care in presence of symptoms, such as severe itching which worsens at night especially, accompanied by rashes, or other characteristic skin lesions like burrows. A dermatologist and general physician can diagnose and treat scabies.

Consult India’s best doctors online. Click here to book an appointment now.

Book Now!

Treatment Of Scabies

Scabies is treated with topical application of anti-scabies creams or lotions. The creams or lotions must be applied all over the body and not just the area of itch as the scabies mite may be present in different areas of the body. It is recommended to simultaneously treat all members living in close proximity to the patient to eradicate the parasite completely.

The following medicines are used to treat scabies.

Antiparasitic medications and antipruritics (or anti-itch drugs) are commonly recommended drugs to treat scabies. In some cases, lotions are also advised to relieve itching.

5% Permethrin topical preparations are the first line of treatment for scabies and are highly effective in killing the scabies mites.

Crotamiton formulations are also used which can be applied to scabies lesions.

0.5% malathion, 5-10% Sulphur ointment, 10-25% Benzyl Benzoate emulsion are other compounds used for topical application to treat scabies.

Ivermectin preparations may occasionally be given orally or may be prescribed for topical applications.

Over-the-counter (OTC) preparations in the form of lotions can be used to provide relief from the skin itch.

Tips to apply anti-scabies topical medications

After taking a tepid bath or shower and patting your body dry, apply a thin layer of cream/lotion to the whole body from neck down. Avoid applying on your face due to risk of medicine side effects.

Make sure to carefully wash off the ointment after 12 hours.

Reapply the medication topically after 24 hours and follow the same instructions.

Did you know permethrin is also used for head lice treatment?

Permethrin, the drug which is prescribed for the treatment of scabies is also used for the treatment of head lice. However, it is not available over the counter, rather, it can be used only if prescribed by a doctor. Do not self-medicate and use it only under the supervision of a healthcare professional to get maximum benefit of Permethrin.

Buy Now!

Home Care For Scabies

It may take 4-8 weeks for the symptoms of scabies to appear after coming into contact with the mite. As the symptoms start to appear, the severity of the itching sensation starts increasing. Care must be taken to avoid scratching the skin aggressively as it may lead to further irritation, breaking, and bleeding in the skin.

Application of topical emollient creams and lotions may help the sensation of severe itching subside.

Apply the medicine all over your body from the neck to the toes. Take a bath before applying the prescribed lotions.

As scabies is a highly contagious disease, special care must be taken to break the transmission chain and prevent others around you from getting infected.

It is advisable to seek anti-scabies treatment for all close contacts simultaneously.

At the same time, it is necessary to thoroughly wash all items of personal nature, such as clothes, towels, bed sheets, etc., that you have used in the three days preceding scabies treatment.

Complications Of Scabies

Scabies infestation leads to a severe itching sensation. If the patient does not refrain from scratching aggressively, it may lead to breaking of the skin, which can result in secondary bacterial infection.

Crusted scabies or Norwegian scabies is a type of severe scabies that affects those with weaker immune systems such as HIV patients. There may be millions of scabies mites affecting larger areas and causing a crusty appearance of the skin. Crusted scabies is highly contagious and resistant to treatment.

Alternative Therapies For Scabies

Ayurveda: Ayurvedic formulations, such as lotions, creams, soaps, etc., made from naturally-occurring substances, such as tea tree oil, aloe vera gel, neem oil, camphor oil, eucalyptus oil, turmeric, etc., may provide symptomatic relief to patients with scabies.

These herbal remedies are known for their medicinal properties, and they also give a soothing effect when applied to the skin, reducing the itching sensation.

If you are suffering from scabies, you may get symptomatic relief by applying tea tree oil or aloe vera gel directly to the lesions. You can bathe with soaps made from neem oil extract or eucalyptus oil extract as they are known for their antimicrobial action.

Living With Scabies

Constant itching can considerably hamper the quality of life of a scabies patient. Scabies itch usually worsens at night, and this may disturb the sleep schedule of the patient and leave them feeling restless and tired.

There is also a risk of transmission of scabies from one person to another. Thus, a scabies patient needs to take considerable precautions to avoid the disease transmission. This is especially important if the scabies patient is living in close proximity with other persons in confined spaces.

It is understandable that scabies can lead to isolation and lot of frustration. Proper medical treatment with psyclological support from family and friends can help the patient overcome the condition.

Frequently Asked Questions

I shook hands with a scabies patient. Will I get scabies?

Can scabies spread by sharing bed sheets or towels?

I cannot resist itching myself due to scabies. What should I do?

Will scabies leave scars on my skin?

Will my family get scabies if I am diagnosed with scabies?

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Stroke

Also known as Brain stroke, Brain attack, Cerebrovascular accident (CVA), Transient ischemic attack (TIA), Ischemic stroke and Hemorrhagic stroke

Overview

Stroke is a condition in which the blood supply to the brain is disrupted. This mainly occurs due to either blockage in any of the blood vessels that supply blood to the brain (known as ischemic stroke) or due to rupture or leaking of the blood vessels in the brain (known as hemorrhagic stroke).

Stroke often occurs suddenly. However, symptoms that can help in identifying a stroke are face drooping, arm & leg weakness, lethargy, slurred speech, and loss of balance. There are several factors that can increase your risk of stroke. These include old age, sedentary lifestyle, stress, obesity, smoking, uncontrolled hypertension, uncontrolled diabetes and coronary artery disease.

The treatment approach consists of medications such as statins, anticoagulants, and procedures like thrombectomy. Recovery after stroke depends on severity of stroke, which part of the brain is affected, extent of damage and how quickly the treatment was initiated.

A stroke is a medical emergency and there is a better chance of recovering from a stroke if emergency treatment is started right away. Remember, during a stroke, every minute counts.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Brain

Blood vessels

Neurons

Prevalence

India: 44.54 to 150/100000

Mimicking Conditions

Transient ischemic attack (TIA)

Cerebral neoplasm

Syncope

Hyponatremia

Hemiplegic migraine

Encephalitis

Brain abscess

Conversion disorder

Hepatic encephalopathy

Uremia

Bell's palsy

Hypertensive encephalopathy

Necessary health tests/imaging

ABC monitoring

CT scan (Head)

Magnetic resonance imaging (MRI)

Magnetic resonance angiography (MRA)

Electroencephalography (EEG)

Lipid profile

Cardiac markers

Blood glucose test

Treatment

Fibrinolytics: Alteplase & Reteplase

Antiplatelets: Aspirin & Clopidogrel

Anticoagulants: Warfarin, Apixaban & Rivaroxaban

Anti-hypertensives: Angiotensin receptor blockers, Calcium channel blockers, Beta-blockers & ACE inhibitors

Statins: Atorvastatin, Rosuvastatin & Pitavastatin

Thrombectomy

Carotid endarterectomy

Surgery

See All

Symptoms Of Stroke

Following are the common signs & symptoms one may experience during a stroke:

Sudden dizziness & loss of balance: A person suffering from stroke tends to lose balance and might feel dizziness or lightheadedness.

Visual disturbances: Vision troubles in one or both eyes are common with stroke.

Face drooping: If you suspect someone in your family is having a stroke, ask them to smile. If the face droops to one side, it could be a potential sign of a stroke.

Paralysis (weakness in the arms & legs): If the arms drift downwards after raising, it can be a sign of stroke.

Slurred speech: The person having a stroke finds it difficult to pronounce a simple sentence.

Confusion: The person might have confusion or difficulty in understanding others while having a stroke.

Headache: A sudden severe headache with no known cause could be a warning sign of stroke.

Did you know?

F.A.S.T = Spot the signs of stroke and save a life. FAST stands for what you need to do and how to recognize the signs of a stroke. F stands for face drooping, A stands for arm weakness or arm drifting downwards, S stands for slurring of speech and T stands for time to call your nearest medical help. Know about the first-aid tips to follow in case of a suspected attack of stroke/paralysis.

Click Here To Know!

Causes Of Stroke

The cause of a stroke depends on the type of stroke. Stroke is broadly classified into 3 major types namely:

1. Ischemic stroke: Most of the strokes are ischemic strokes. These types of strokes occur when the oxygen-rich blood supply to some parts of the brain gets blocked or severely restricted. As a result of the deprived blood and oxygen, the cells of that part of the brain die, and the part of the body that it controls stops working. Restriction of blood supply can happen by the following:

Clogged arteries: Fat, cholesterol, and other deposits can accumulate on the walls of blood vessels. With time, these deposits calcify or harden and this build up is called plaque. The plaque clogs the blood vessels thereby narrowing the passage for blood.

Blood clots: When a clot forms in a blood vessel of the brain that is already very narrow, it leads to a thrombotic stroke. When a blood clot that has formed somewhere else in the body, breaks away and travels to a blood vessel in the brain, the result is an embolic stroke or cerebral embolism. An embolic stroke can also result from an air bubble or other foreign substance in the blood that moves and blocks a blood vessel in the brain.

2. Hemorrhagic stroke: In hemorrhagic stroke, a weakened blood vessel in the brain gets ruptured allowing blood to leak into the brain. This blood accumulates and compresses the surrounding brain tissue. Two types of weakened blood vessels which usually cause hemorrhagic stroke are aneurysms (balloon-like bulges in an artery that can stretch and burst) and arteriovenous malformations (tangles of blood vessels).

There are two types of hemorrhagic strokes:

Intracerebral hemorrhage is the most common type of hemorrhagic stroke. “Intracerebral” means “within the brain”, it occurs when a blood vessel in the brain bursts, flooding the surrounding tissue with blood. Intracerebral strokes are usually caused by high blood pressure.

Subarachnoid hemorrhage is a less common type of hemorrhagic stroke. It refers to bleeding in the space between the brain and the skull. Factors like head injury, overtreatment with blood thinners, and bleeding disorders can cause subarachnoid hemorrhage.

3. Transient ischemic attack (TIA): Also known as “mini-stroke” or a “warning stroke”, it usually does not occur for more than a few minutes. A TIA is a warning sign of a future stroke, so should be considered a medical emergency, just like a major stroke. Like ischemic strokes, blood clots often cause TIAs. More than a third of people who have a TIA and don’t get treatment have a major stroke within 1 year. Recognizing and treating TIAs can lower the risk of a major stroke in the future.

Did you know?

A single stroke attack can damage millions of neurons and brain cells. An acute ischemic stroke (AIS) without timely treatment leads to the loss of 4 million neurons, 12 million brain cells, and 15 billion synapses every minute! Hence, it is important to recognize the signs and get the treatment immediately to prevent severe brain damage. In case of emergencies, here is what you need to do.

EMERGENCY! What to do?

Risk Factors For Stroke

Some of the common risk factors of stroke are:

Age: Aging tends to narrow down the arteries, therefore increasing the risk of stroke.

Gender: Stroke occurs more commonly in men, but more casualties are seen in women than men due to a stroke.

Family history: Heredity or genetics can influence the risk of getting a stroke.

Sedentary lifestyle: Long sitting hours with very little movement or exercise is a major risk factor for stroke

Excessive alcohol consumption: Excessive consumption of alcohol with more than 2 drinks per day raises blood pressure. Uncontrolled drinking can lead to stroke.

Obesity: Obesity or excessive weight is a major risk factor for stroke or other cardiovascular complications.

Tobacco: Narrowing of blood vessels is a common consequence of chronic use of tobacco in any form. Nicotine also increases blood pressure, which also increases the risk of stroke.

Diabetes: Diabetes can lead to pathological changes in the blood vessels, therefore increasing the risk of stroke.

Uncontrolled hypertension: Blood pressure of 140/90 mmHg or higher can damage blood vessels that supply blood to the brain.

Elevated red blood cell (RBC) count: High levels of red blood cells thicken the blood and predispose to formation of clots. This raises the risk for stroke.

Elevated blood cholesterol and lipids: High cholesterol levels can increase buildup of plaque and lead to atherosclerosis or thickening or hardening of the arteries. This can decrease the amount of blood flow to the brain and cause a stroke.

Heart conditions: Heart conditions like heart valve defects and arrhythmias (irregular heart rhythm) can cause long term damage to the heart thereby increasing risk of a stroke.

Birth control pills: Also known as oral contraceptives, these drugs can also increase the risk of stroke.

Extreme weather conditions: Stroke casualties occur more often during extreme temperatures or weather conditions.

History of prior stroke: The risk of a second stroke increases if someone already had a stroke in the past.

History of transient ischemic attacks (TIAs): TIAs are called mini-strokes. If someone has had one or more TIAs, they are at a very high risk of suffering from a stroke.

ABCD2 score is a prediction rule used to determine the risk for stroke after a transient ischemic attack. The ABCD2 score is based on five parameters - age, blood pressure, clinical features, duration of TIA, and presence of diabetes. Scores for each item are added together to produce an overall result ranging between zero and seven. People found to have a high score often need to visit a specialist sooner.

Interpretation of ABCD2 score is

Score 1-3 (low)

Score 4-5 (moderate)

Score 6–7 (high)

Higher the score, the higher the risk of stroke in the near future.

Take care of your life. Don't let diabetes control you. Explore our diabetes care range.

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Diagnosis Of Sroke

ABC monitoring

When a patient arrives at the hospital with the suspicion of stroke, the first step is the stabilization of airways, breathing, and circulation. Complete medical history is recorded and a physical exam is done.

Initial evaluation

In terms of initial evaluation, The National Institutes of Health Stroke Scale or NIH Stroke Scale (NIHSS) is the most frequently used score worldwide for assessing the clinical severity and prognosis of a stroke. The NIHSS is composed of 11 items, each of which scores a specific ability between 0 and 4. For each item, a score of 0 typically indicates normal function in that specific ability, while a higher score is indicative of some level of impairment. The maximum possible score is 42, with the minimum score being 0.

Score 0: No stroke symptoms

Score 1 to 4: Minor stroke

Score 5 to 15: Moderate stroke

Score 16 to 20: Moderate to severe stroke

Score 21 to 42: Severe stroke

The following blood and imaging tests help in diagnosing the cause of a stroke:

1. Blood tests

Blood tests can help to diagnose the factors that might have disrupted the normal flow of blood and in drafting a proper treatment plan. Blood tests are used to determine the following:

Blood sugar should be detected early and both hyperglycemia and hypoglycemia need be treated accordingly in time

Presence of any infections

Platelet counts

Blood coagulation profile

Lipid profile

Cardiac markers

2. Imaging tests

Cranial (head) CT scan: This imaging technique is usually the initial test used to diagnose stroke as it shows clear, detailed images of the brain. It can display bleeding in the brain or damage to brain cells caused by a stroke. It can also detect any abnormalities along with the location or type of stroke.

Computed tomographic angiography: This test uses CT technology to visualize detailed images of blood vessels.

Magnetic resonance imaging (MRI): It uses magnetic fields to find small changes in brain tissue that help to detect and diagnose stroke. It is more sensitive than CT to see the soft tissues of the brain and to localize the area of the brain affected.

Magnetic resonance angiography: This technique uses MRI technology and is regarded as the gold standard for detecting blood flow through the blood vessels involved.

Carotid doppler or doppler sonography : In this test, ultrasound waves help to visualize blood flow in the carotid arteries. It helps to detect the formation of plaques and fatty deposits in walls of carotid arteries.

Electrical activity test: Two tests, namely electroencephalography (EEG) or evoke tests show the electrical impulses in the brain.

The following heart tests are used to diagnose any heart conditions that may have caused a stroke:

Electrocardiography (ECG): An ECG records the heart electrical activity and can determine any heart conditions that may have led to a stroke such as atrial fibrillation or irregular heart rhythms.

Echocardiogram: An echocardiogram uses sound waves to find a source of clots in the heart that may have traveled from the heart to the brain and caused a stroke. It also checks the function of the heart valves.

Celebs affected

Rahul Roy

Bollywood actor Rahul Roy, who acted in the film Aashiqui, suffered a stroke in the year 2020, while shooting in Kargil.

Emilia Clarke

Game of Thrones, actress, Emilia Clarke is known to suffer her first stroke in 2011. She recovered after the surgery without any lasting cognitive or physical deficits.

Sharon Stone

American actress Sharon Stone suffered a stroke at the age of 43. After the right treatment and years of rehabilitation, she has reemerged as a next-level version of her former self.

Specialist To Visit

Stroke should be treated as early as possible, ideally within 3 to 4.5 hours of the first symptoms. If you think someone may be having a stroke use the F.A.S.T test.

Face: Check their face. Has their face fallen on one side?

Arms: Can they raise both arms and keep them there?

Speech: Is their speech slurred?

Time: It is critical to act in time. If you notice any of these signs, call the nearby hospital immediately.

Once you spot any signs of stroke, you can consult:

General physician

Neurologist

If it is a hemorrhagic stroke, then a neurosurgeon should be consulted as well. Also, during the recovery process post a stroke attack, you may also need help from a physiotherapist and a speech therapist.

Treatment Of Stroke

The treatment of stroke depends upon the type of stroke.

A. Treatment for ischemic stroke

1. Fibrinolytics/thrombolytic medications: Medications that break down or dissolve the clot can restore the blood flow to the brain. Some of the common examples that belong to this class are:

Alteplase

Reteplase

Note: Citicoline, a neuroprotective drug, is approved for the treatment of acute ischemic stroke. However, its efficacy over the currently used fibrinolytics is not known. Also, piracetam has been shown to improve learning and memory, and it may facilitate recovery and rehabilitation after a stroke.

2. Antiplatelet medications: Antiplatelet medications help to prevent the formation of a clot in the blood vessels, thereby aiding in the management and prevention of stroke. Examples are:

Aspirin

Clopidogrel

3. Anticoagulants: Anticoagulants prevent clot formation by altering the chemical composition of the blood. Novel oral anticoagulants (NOACs) are alternatives to warfarin for high-risk patients (including those with a history of stroke) who have atrial fibrillation. The advantage of these drugs is that they dont require frequent monitoring like warfarin. Examples of NOACs include:

Apixaban

Rivaroxaban

Dabigatran

Edoxaban

4. Blood pressure medications: Antihypertensives are given in stroke to maintain normal blood pressure. Some of the commonly prescribed drugs that belong to this category include:

Angiotensin receptor blockers (ARBs)

Calcium channel blockers (CCBs)

Diuretics

Beta-blockers

Angiotensin-converting enzyme (ACE) inhibitors

5. Statins: This class of drug is known to help in the treatment of stroke and prevention of a second attack by reducing the cholesterol levels in the blood. Examples include:

Atorvastatin

Rosuvastatin

Pitavastatin

6. Thrombectomy: Thrombectomy refers to the procedure of removing the clot to ensure normal blood flow to the brain.

7. Carotid endarterectomy: Carotid stenosis or narrowing of the carotid artery may occur due to the deposition of fatty substances. This is a surgical procedure where an incision is made on the carotid artery to remove the deposited fatty substances.

B. Treatment for hemorrhagic stroke

1. Surgery: Surgery is needed in a hemorrhagic stroke to reach the source of bleeding. Sometimes, a catheter or small tube is inserted in the arm or leg artery, guiding it to reach the brain tissue and to evaluate the problem.

2. Endovascular procedures: Endovascular procedures may be used to treat certain hemorrhagic strokes. The doctor inserts a long tube through a major artery in the leg or arm and then guides the tube to the site of the weak spot or break in a blood vessel. The tube is then used to install a device, such as a coil, to repair the damage or prevent bleeding. These are details of endovascular procedures:

Surgical clipping: A surgeon places a tiny clamp at the base of the aneurysm to stop blood flow to it. This clamp can keep the aneurysm from bursting.

Coiling (endovascular embolization): Using a catheter inserted into an artery in the groin and guided to the brain, the surgeon will place tiny detachable coils into the aneurysm to fill it.

3. Surgery for hydrocephalus: In hydrocephalus, fluid accumulates around the brain. This can be treated with the help of a tube, called a shunt, to drain the excess fluid.

C. Supportive treatment

In some cases, supportive treatment measures might be required to improve the overall condition of the patient such as:

Inserting a feeding tube into your stomach through your nose (nasogastric tube) to provide nutrition, if you have difficulty swallowing.

Intravenous administration of fluids (fluids given directly into a vein), if you're at risk of dehydration.

Did you know?

If you get to the hospital within 3 hours of the first symptoms of an ischemic stroke, you may get a type of medicine called a thrombolytic (a “clot-busting” drug) to break up blood clots. Tissue plasminogen activator (tPA) is a thrombolytic. Timely administration of thrombolytics in a suitably selected patient can result in quick recovery of the patient, hence the phrase "time is brain" is rightly justified. Read about warning signs of stroke.

Click Here!

Prevention Of Stroke

Prevention is a must, especially in people who have suffered from stroke, once as they have a higher chance of having another stroke in the future. The following measures can be taken to prevent stroke:

1. Dietary modifications: Eat a wholesome diet rich in green leafy vegetables, fruits, and nuts. Consume foods low in saturated fats, trans fat, and cholesterol and high in fiber to prevent high cholesterol. Limiting salt in the diet can also lower blood pressure. Also, avoid red meat and other greasy and fatty junk foods to lower the risk of stroke.

2. Maintain healthy weight: If you are overweight/obese or have high cholesterol levels, then it is advised to lose weight to attain body mass index (BMI) between 18.5 and 24.9. This can lower the risk of stroke in the future.

3. Stay active: Sedentary lifestyle is a major factor in progression of cardiovascular and cerebrovascular complications. Hence, it is recommended that you try to move as much as possible and indulge in some form of exercise most days of the week. For adults, 2 hours and 30 minutes of moderate-intensity aerobic physical activity such as a brisk walk is recommended for each week.

4. Keep your blood pressure in check: High blood pressure can increase your risk of having a stroke. High blood pressure usually has no symptoms, so make sure to have it checked on a regular basis. If you have high blood pressure, proper medication, some changes in lifestyle, or foods with lower sodium can help in managing the condition.

5. Control diabetes: Uncontrolled diabetes can lead to higher risk of development of stroke, it is of paramount importance to watch your blood sugar levels. In case you have diabetes, your doctor may recommend some lifestyle changes like more physical activity or choosing healthier foods along with necessary medications. These steps will help keep blood sugar under good control and hence help lower the risk for stroke.

6. Cut down on alcohol: If you consume alcohol, it is advised either to quit or decrease it to a minimum to avoid the risk of stroke. Men should not consume more than two drinks per day, and women should have no more than one drink.

7. Quit smoking: Smoking is a strict no-no when it comes to prevention of stroke. If you don’t smoke, don’t start. If you do smoke, quitting will greatly reduce the risk for stroke. Your doctor can advise ways to help you quit smoking.

8. Evaluation of risk factors: If you are at high risk for stroke, appropriate lifestyle changes along with bi-annual health checkups can go along way in preventing a stroke.

Additionally, here are a few tips to prevent another stroke:

Work with your doctor to identify the cause of it.

Always ensure to keep up with the follow-up appointments.

Consult your doctor if you are changing/stopping any medications.

Do not ignore the warning signs and symptoms of stroke.

Did you know?

Up to 50% of strokes are preventable by managing risk factors such as high blood pressure, heart diseases, uncontrolled diabetes, high cholesterol, smoking, excessive alcohol intake, and obesity. Stroke can be prevented by making healthy lifestyle changes. Here are ways by which you can prevent stroke.

Read Now!

Complications Of Stroke

The complications of stroke vary from person to person. They depend on the severity of the stroke along with which part of the brain is affected by it. Some of the complications associated with stroke are as follows:

Vision problems

Cognitive impairment including dementia (forgetfulness)

Reduced mobility or ability to control certain muscle movements

Sensory changes

Loss of bladder and bowel control

Deep venous thrombosis

Epileptic seizures

Pneumonia

Pulmonary embolism

Shoulder pain

Mood or emotional changes

Anxiety and depression

Pressure or bed sores

Recurrent stroke

Living With Stroke

Although, it is estimated that 1 in 4 stroke survivors will have another attack, not many know that up to 80% of strokes can be prevented with simple measures. These include a combination of medication, healthy diet, physical activity, and controlling comorbidities.

Here are a few tips for stroke survivors as well as caregivers to help identify and handle the condition.

Learn about the condition

Whether it is the warning signs and symptoms, the cause of stroke, or the side effects of medications, it is important to be well aware of the condition & its impact on the overall health.

Control risk factors

If the risk factors, modifiable ones like cholesterol, blood pressure, and diabetes are not controlled, then the risk of stroke striking again is high. So, make sure you eat a healthy diet, stay active, take medications as advised and keep up with the follow-up appointments. Also, avoid any smoking and drinking as they can severely hamper the road of recovery.

Keep a tab on recovery

Recovery post stroke is influenced by many factors like which part of the brain was affected, how much was affected, general health of the survivor before the stroke, etc. Although, most people tend to show improvement 3-4 months after a stroke, for others it may take a year or two.

Maintain regular checkups

This helps to monitor your blood pressure, blood sugar, lipid profile and overall recovery.

Do not ignore falls/injury

It is seen that falls after stroke is a common occurrence. So, it is important to follow measures to prevent the same. Also, if a survivor has had minor falls more than twice in six months or has bruising or bleeding or pain after a fall, then please consult your doctor without fail.

Rehabilitation

Successful recovery from a stroke often requires some specific therapies and support systems including:

Speech therapy: A stroke can sometimes cause deranged speech. A speech and language therapist can help with problems producing or understanding speech. In case verbal communication is difficult after a stroke, they can help in finding new and innovative ways of communication. Regular practice along with change in communication style can make communicating simpler.

Physical therapy: Loss of muscle tone and strength after a stroke restricts certain movements of the body. A physical therapist can help to regain strength and relearn movement and coordination. New ways to learn to adjust to any limitations can go a long way in rehabilitation.

Occupational therapy: Sometimes, stroke can dull the senses. It means that the sensation of temperature, pressure, or pain are significantly reduced. An occupational therapist can help to adjust to this lack of sensation. They can also help a person improve their ability to carry out daily activities such as bathing, dressing, eating, and reading.

Cognitive therapy: After a stroke, many patients may experience changes in their thinking or reasoning skills. This can also lead to behavioral and mood swings. Cognitive therapy can help to regain former patterns of behavior, along with management of emotional responses.

Take care of your mental health

Sound mental health plays an important role in recovery and rehabilitation. So if needed, seek help.

Joining a support group to cope with any mental health issues. Many people find it helpful to share their experiences and exchange ideas and information.

Family along with close friends and relatives should provide comfort and practical support after a stroke. Letting family and friends know how they can help is very important.

With the right help and the support of loved ones, attaining a decent quality of life is usually possible, depending on the severity of the stroke.

Frequently Asked Questions

Is stroke life-threatening?

Can stroke be cured?

What are the warning signs of a stroke?

What is a silent stroke?

What foods to avoid after a stroke?

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Stye

Also known as sty a hordeolum

Overview

A stye is a painful red bump on the rim of the eyelid that may look similar to a boil or a pimple. They are often caused by a bacterial infection in the hair follicle of an eyelash.

Risk factors for developing a stye include poor eyelid hygiene, rubbing or touching the eyes, wearing contact lenses for an extended period, and certain underlying medical conditions such as diabetes.

Most styes resolve on their own within a few days to a week. It is important to avoid squeezing or popping them since the infection may reach to other parts of the eyelid or eye. Warm compresses applied to the affected area might help reduce inflammation and facilitate healing. Antibiotic eye drops or ointments may be recommended in some circumstances to speed up the healing process and prevent complications.

If a stye does not improve after a week, gets very painful, or interferes with vision, it is best to see an eye doctor.

Key Facts

Usually seen in

Adults between 30- 50 years of age.

Gender affected

Both men and women

Body part(s) involved

Eyes

Mimicking Conditions

Basal Cell Carcinoma

Chalazion

Pneumo-Orbita

Preseptal Cellulitis

Sebaceous Gland Carcinoma

Squamous Cell Carcinoma

Necessary health tests/imaging

Patient history and physical examination

Treatment

Use warm compresses

Antibiotic treatment: Erythromycin ointment and eye drops

Pain relief medications: Ibuprofen, Acetaminophen

Surgery

Specialists to consult

General Physician

Ophthalmologist

Symptoms Of Stye

A painful red bump on the edge of the eyelid may look similar to a boil or a pimple.

Tenderness, swelling, or pain in the eyelid

A gritty, scratchy sensation, as if there is a foreign body in the eye

Sensitivity to light

Excessive tearing

Types of stye

There are two kinds of styes:

1. External stye

It develops at the base of the eyelash due to an infection in the hair follicle resembling a pimple. It can be pus-filled and is painful to touch.

2. Internal stye

It grows inside the eyelid due to an infection in a meibomian gland (oil-producing gland)and is considerably more painful than an external stye. It can produce continual pain and irritation in the eye, as well as the sensation that something is stuck in the eye.

Did you know?

People generally confuse stye with chalazion. While a stye is a painful swelling that usually occurs at the edge of the eyelid and is caused by an infected eyelash root, a chalazion is usually not painful and appears further back on the eyelid than a stye. It occurs when the oil gland in the eyelid clogs.

Causes Of Stye

Stye is a bacterial infection caused by the bacterium staphylococcus. Our eyelids include numerous oil glands that produce an oily film on the surface of the eye, which aids in the maintenance of healthy eye lubrication. However, these oil glands might become clogged due to old oil, debris, dead skin cells, or germs. When this occurs, debris accumulates, resulting in gland clogging. Stye can also be caused by blepharitis (swelling of eyelid). This condition causes the eyelids at the base of the lashes to become red and puffy.

Risk Factors For Stye

Anyone can have stye but there are the following reasons which can make you more prone to have stye, such as:

Skin conditions such as seborrhoeic dermatitis

Medical conditions such as diabetes, high serum lipids etc.

History of stye or chalazion

Poor hygiene of eyes

Blepharitis (irritated, swollen eyelids)

Using old and contaminated eye makeup

Wearing contact lenses

Do you wear contact lenses? Have a look at some of the common mistakes that contact lens wearers make!

Read Now

Did you know?

Wearing masks led to a rise in cases of stye during the COVID-19 pandemic.Research has shown that wearing a mask or breathing upward while wearing a mask, improperly-fitted masks, and fogging glasses, can cause the skin around the eyes to become oily and congested, increasing the risk of styes.

Diagnosis Of Stye

An ophthalmologist can diagnose a stye by conducting a physical examination of the affected eye. During the examination, the ophthalmologist will inspect the eyelid to look for any visible signs of a stye, such as redness, swelling, or a small bump on the eyelid.

The ophthalmologist may also ask the patient about their symptoms, such as pain or discomfort in the affected eye, and whether they have had styes in the past.

In some cases, the ophthalmologist may also conduct a culture test to determine the exact type of bacteria causing the stye.

Celebs affected

Selena Gomez

The singer and actress have been photographed with a visible stye on her eye on several occasions.

Kim Kardashian

The reality TV star Kim Kardashian once tweeted about having a stye and asked her followers for home remedies.

Sam Smith

The famous English singer and songwriter, Sam Smith revealed his experience with stye. He underwent a 15-minute procedure to remove a stye on his right eye.

Prevention Of Stye

There are several tips that can be done to maintain eye hygiene and prevent stye, such as:

Before touching your eyes or the skin around your eyes, always thoroughly wash your hands.

Disinfect your contact lenses on a regular basis.

Before going to bed, remove any eye makeup.

Use only cosmetic eye products that are not outdated or expired.

Avoid sharing a towel with someone having stye or chalazion.

You can also take fish oil supplements to prevent clogging of oil glands.

Explore our wide range of omega and fish oil supplements.

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Preventive measures to prevent stye in children:

A stye is a common eye infection that can occur in children of all ages. Here are some precautions you can take to prevent stye in children:

Teach children to avoid rubbing their eyes as it can spread bacteria from the hands to the eye area.

Encourage children to wash their hands frequently to prevent the spread of bacteria that can cause stye.

Ensure children use a clean towel and washcloth when cleaning their face or eyes.

Teach children to avoid sharing towels, washcloths, and eye makeup with others, as this can spread bacteria.

If your child wears contact lenses, ensure that they follow proper hygiene practices and avoid sleeping in contact lenses.

Ensure that children do not share eye drops or other eye medications with others.

Consult with your child's healthcare provider if your child is experiencing recurring styes or if the stye does not improve after a few days.

Specialist To Visit

Usually, a stye begins to improve over a few days. However, it is very important to consult a doctor in case:

You experience vision problems.

The eyelid bump worsens and there is no improvement after a week or two of self-care.

Eyelid lumps can grow to be exceedingly huge or painful.

You have a blister on your lower eyelid.

You have crusting or scaling of your eyelids.

Your whole eyelid is red, or the eye itself is red.

The redness or swelling extends to the upper eyelid or other portions of your face.

The whites of your eye become red.

You are very sensitive to light or have excessive tears.

Another stye comes back soon after successful treatment of a stye.

Your eyelid bump bleeds.

The doctors that may help to diagnose stye include:

General Physician

Ophthalmologist

Consult with our experienced team of doctors

Book an appointment now

Did you know?

Most people are unaware of the right eye specialist. Know about different eye specialists in detail.

Tap To Know

Treatment Of Stye

A stye is usually a self-limiting condition that resolves itself within a week.

But your eye doctor may recommend treatment, including:

1. Use warm compresses

Apply a warm, damp towel to the affected region for at least 15 minutes four times each day. Massage the afflicted region carefully with clean fingers. It may also aid in the opening of clogged pores, allowing them to drain and repair themselves. Twice daily, use a wet cotton bud to clean the base of the eyelashes. However, do not pinch a stye or any other sort of eyelid lump. Allow it to drain on its own.

Note: If you have a stye carefully brush out extra oils from the edges of your lids. You can use warm water and no-tears baby shampoo.

Explore our wide range of baby skincare shampoo.

Tap here

2. Antibiotic treatment

Your ophthalmologist may prescribe erythromycin ophthalmic ointment, or antibiotic eye drops for 7-10 days.

Systemic antibiotics are sometimes used when local antibiotics are not effective or when the infection is not localized.

3. Use over-the-counter (OTC) pain relief

Take over-the-counter pain medication like ibuprofen or acetaminophen to reduce pain and discomfort.

4. Surgery to drain the area

Surgical incision and drainage may be advised if medicinal treatment does not relieve your stye. This procedure is frequently performed in the doctor's office under local anesthesia.

5. Intense Pulsed Light Therapy (IPL)

This is a form of heat therapy that involves light with specific wavelengths to stimulate the meibomian glands and reduce inflammation around the eyes. Depending on the severity of the meibomitis, several sittings may be required.

Home-care For Stye

There are the following tips that will reduce e the duration of a stye and prevent recurrences:

A stye can be treated and cured quicker when you apply a warm compress to the eye.

Don't wear eye makeup or contact lenses until the area has healed.

Try warm tea bags. It helps reduce swelling around the affected area of the stye.

Avoid popping, squeezing or picking at a stye. Otherwise, it can lead to further irritation and infection, which prolongs the healing process.

Gentle massage and apply light pressure. It can help encourage the stye to drain on its own.

Complications Of Stye

It is extremely rare for any complication to occur with respect to the development of stye. Possible complications are discussed below:

1. Chalazion (meibomian cyst)

A stye occurs when the meibomian gland (which secretes sebum to moisturize the eye) becomes inflamed and congested. Stye formation inside the eyelid on a regular basis may result in cyst formation near the aperture of the meibomian gland.

2. Preseptal or periorbital cellulitis

Since stye is a bacterial infection, if left untreated or just partially treated, it can spread to the surrounding tissues around the eye, including the periorbital tissues.

This type of infection is known as preseptal or periorbital cellulitis, and it causes the skin around the eye to grow red and swollen. Antibiotics are essential to treat this condition.

3. Orbital cellulitis

If the preseptal cellulitis progresses further inward it can cause orbital cellulitis. Given the severity of the illness and the seriousness of the condition, hospitalization and intravenous antibiotics may be necessary. It may require immediate surgery to drain the pus.

Alternative Therapies For Stye

Alternative therapies include:

1. Bloodletting therapy

This technique aids in eliminating “Heat” and Qi/Blood stagnation (a slowing or pooling of the blood due to a disruption of heart qi) that can help recover stye.

2. Acupuncture

Acupuncture is a traditional Chinese medicine technique that involves sticking finely pointed needles in areas of the body known as acupuncture points. Applying gentle pressure using your fingertips on the infraorbital foramen and near the base of the thumb, can help tackle the symptoms of a stye and provide relief from the pain and inflammation. Styes usually resolve on their own, but acupuncture can speed recovery and lessen symptoms. It is also believed that the needles stimulate specific nerves and muscles, which in turn release natural pain-relieving hormones in the body.

Note: To help support the acupuncture treatment, maintaining a healthy simple diet is recommended. Hot, stimulating foods such as coffee and hot peppers are not recommended.

Living With Stye

A stye can significantly impact a person's quality of life, both physically and emotionally.

Here are some of the ways a stye can impact your quality of life:

1. Physical impact

A stye can cause pain, redness, and swelling, making it uncomfortable to open or close the affected eye. This can interfere with daily activities such as reading, working, and driving.

In some cases, a stye may also cause blurred vision or sensitivity to light, further affecting a person's ability to perform tasks.

2. Emotional impact

A stye can lead to self-consciousness and embarrassment, particularly if it is visible to others. People with styes may feel uncomfortable interacting with others or may avoid social situations altogether. Additionally, the discomfort and inconvenience of a stye may lead to feelings of frustration and irritability.

While a stye is usually a minor condition that resolves on its own, seeking prompt treatment and practicing good eye hygiene can help to prevent styes and minimize their impact on daily life.

Frequently Asked Questions

Are styes contagious?

Can a stye turn into a chalazion?

How long does it take for a stye to leave?

How many times a day should I treat a stye?

Can styes keep coming back?

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Sunburn

Overview

Sunburn is a prevalent skin condition that arises when the skin is subjected to excessive ultraviolet (UV) radiation from the sun or artificial sources like tanning beds.

It mainly impacts the outer layer of the skin and is characterized by redness, pain, inflammation, and in severe cases, blistering and peeling. Sunburn serves as a clear indication of skin damage and escalates the risk of developing skin cancer.

Appropriate measures of sun protection, such as avoiding sun or seeking shade, particularly during peak sun hours (10 a.m. to 4 p.m.), wearing protective clothing and wide-brimmed hats, and using a broad-spectrum sunscreen with a high sun protection factor (SPF), can significantly decrease the likelihood of getting sunburned.

Keep in mind that sunburn can occur even on overcast days, as UV radiation can permeate cloud cover and reflect off surfaces. Therefore, it is vital to remain vigilant and take precautions whenever you are exposed to the sun. Nurturing and protecting your skin today will guarantee a healthier and happier skin in the future.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Skin

Mimicking Conditions

Rosacea

Acne

Stasis dermatitis

Seborrheic dermatitis

Lupus erythematosus

Cellulitis

Infections such as herpes simplex virus (HSV) infection

Photosensitive drug eruption

Phototoxic reactions

Polymorphous light eruption

Solar urticaria

Necessary health tests/imaging

Physical examination

Treatment

Cool compresses

NSAIDs: Ibuprofen, naproxen sodium

Topical creams: Aloe vera, 0.5%-1% hydrocortisone cream

Specialists to consult

General physician

Dermatologist

Symptoms Of Sunburn

The symptoms of sunburn usually start developing within a few hours after exposure and may vary in severity. The full impact of a sunburn may take up to 24 hours or more to become apparent.

Common symptoms of sunburn:

Skin color changes, ranging from pink to red and even purple

Redness

Warmth

Tenderness,

Pain and/or itching

Swelling

Peeling and flaking

Blistering

Symptoms of severe sunburn:

Nausea

Fevers

Chills

Types of Sunburn

Here are some types of sunburn based on their severity:

1. Superficial (First-degree) sunburn

This is the mildest form of sunburn and affects only the outermost layer of the skin (epidermis).

It typically causes redness, pain, mild swelling and causes negligible tissue damage. The area that has been impacted may exhibit a sensation of warmth when touched.

This type of burn does not necessitate medical intervention, and its consequences could potentially be reversed within a span of 1 to 2 days.

2. Partial-thickness (Second-degree) sunburn

This type of sunburn goes beyond the epidermis and affects the deeper layers of the skin (dermis).

It is characterized by more intense symptoms such as blistering, severe redness, swelling, and pain.

This kind of burn requires medical treatment to heal the damaged area and may take longer to heal than first-degree burns.

3. Full- thickness (Third-degree) sunburn

Severe sunburns are often referred to as sun poisoning.

They occur when the sunburn is extensive and affects the full thickness of the skin.

Symptoms can include intense pain, blistering, swelling, severe redness, headache, fever, chills, nausea, and dizziness. These types of burns are more vulnerable to infections.

Sun poisoning requires medical intervention.

Causes Of Sunburn

Sunburn occurs when the skin is exposed to an excessive amount of UV rays (in the form of UV-A and UV-B rays) emitted by the sun, leading to a radiation burn. This exposure triggers the production of melanin in the outer layer of the skin, causing the skin to tan as a protective response against harmful UV radiation.

UV radiation is classified into three categories based on its wavelength, each having distinct effects on the skin:

1. UV-A rays: These rays have the ability to break down collagen in the skin and damage the cells responsible for generating new skin cells. As a result, they contribute to roughness, dryness, blotchiness, wrinkles, and sagging. Additionally, high doses of UV-A radiation can lead to sunburn, harm the genes within skin cells, and increase the risk of developing skin cancer.

2. UV-B rays: This type of radiation is even more hazardous than UV-A. It causes tanning, burning, premature aging, and significant damage to the skin, thereby significantly increasing the likelihood of developing skin cancer.

3. UV-C rays: Fortunately, the Earth's atmosphere absorbs nearly all UV-C radiation, which is the most dangerous type, before it reaches the ground.

Risk Factors For Sunburn

The primary factors that contribute to the risk of sunburn include the duration of skin exposure to UV rays and the level of intensity.

Here are some other common risk factors:

Skin tone: Individuals with light skin are more prone to sunburn compared to those with deeper skin tones. Lighter skin has less melanin, which provides some natural protection against UV radiation. Having blue or green eyes and blond or red hair also increases susceptibility to sunburn.

Outdoor activities: Engaging in outdoor activities for prolonged periods especially between 10 am and 4 pm when the sun's rays are at their strongest, without sun protection increases the risk of sunburn. This includes activities like sunbathing or sitting in the sun, working outside, socializing, vacationing, transportation, hiking, swimming, sports etc

Environmental factors: Factors such as ozone depletion, high altitude, and clear skies with decreased cloud coverage can intensify UV radiation, thereby increasing the risk of sunburn.

Certain Medications: Medications such as some antibiotics, diuretics, acne medications, and exfoliating agents can heighten skin sensitivity to the sun, making individuals more prone to sunburn. It is essential to be aware of any potential side effects and consult a doctor for guidance.

Sunscreen effectiveness: If enough sunscreen is not applied regularly, it may not provide enough protection from UV radiation, increasing the risk of sunburn.

Are you making these common sunscreen mistakes?

Read Along

Diagnosis Of Sunburn

Minor cases of sunburn typically do not necessitate a visit to the doctor. Nevertheless, if the sunburn is severe and accompanied by other symptoms, it is crucial to promptly seek medical assistance.

Your doctor will assess the affected area and inquire about your symptoms, medications, exposure to UV rays, and past experiences with sunburn. In certain situations, they may advise you to consult a specialist in skin disorders or a dermatologist for comprehensive recovery.

Celebs affected

Gwyneth Paltrow

The actress and businesswoman has admitted to getting sunburned. She emphasizes the importance of using sunscreen and protecting the skin from the sun's harmful rays.

Hugh Jackman

The actor, known for his role as Wolverine in the X-Men movies, has shared his battle with skin cancer due to sunburn. He has undergone multiple surgeries to remove basal cell carcinomas from his nose and has been an advocate for sun protection.

Prevention Of Sunburn

To prevent sunburn, you can take the following preventive measures:

1. Use sunscreens generously and regularly

Using the right sunscreen product is your first step in lowering the chances for sunburn.

The information regarding sunscreens with the use of various scientific terms can be overwhelming. The following points can help you decipher these terms as well as help you choose the right sunscreen.

A. Types of sunscreen

There are broadly two types of sunscreens:

1. Chemical (organic) sunscreens: These sunscreens contain ingredients that absorb UV radiations and convert them to a very low level of heat.

UV-A filters

Benzophenones (UVB and UVA2 absorbers) - Oxybenzone, Sulisobenzone, Dioxybenzone

Avobenzone or Parsol 1789 (UVA1 absorber)

Meradimate (UVA2 absorber)

UV-B filters

PABA derivatives – Padimate O

Cinnamates – Octinoxate, Cinoxate

Salicylates – Octisalate, Homosalate, Trolamine salicylate

Octocrylene

Ensulizole

Newer generation broad spectrum (UVA + UVB) filters

Ecamsule (Mexoryl SX)

Sila Triazole (Mexoryl XL)

Bemotrizinol (Tinosorb S)

Bisoctrizole (Tinosorb M)

2. Physical (inorganic) sunscreens: These sunscreens function by reflecting, scattering or absorbing UV radiation. Their opaque nature gives a “whitening effect” which is an inherent disadvantage. However, this demerit can be minimized by the use of microfine particles. Examples include:

Zinc oxide

Titanium oxide

Iron oxide

Calamine

Talc

Kaolin

B. Sun protection factor (SPF)

Sunscreens are assigned a sun protection factor (SPF), which is a number that rates how well they filter out UV-B rays. Higher numbers indicate more protection. A broad-spectrum sunscreen that blocks both UV-A and UV-B rays should be used with a SPF 30 or more.

C. Protection factor (PA+)

PA stands for the protection grade of UV-A. It measures the ability of sunscreen to block UVA rays.This is an important distinction because SPF (sun protection factor) measures only UVB protection while the PA rating only measures UVA protection.

This is what each PA rating means:

PA+ = Some UVA protection.

PA++ = Moderate UVA protection.

PA+++ = High UVA protection.

PA++++ = Extremely High UVA protection.

Different skin types need different sunscreens. How to find the right sunscreen that suits your skin type?

Tips to choose wisely!

Tips to use sunscreen effectively

How much to use: An FTU o Fingertip Unit is used to measure the amount of cream thatcovers the end of the finger to the first crease of a finger. For the face and neck, use 2.5 FTU.To cover the other exposed parts of the body, you need an ounce of sunscreen, which issufficient to fill a shot glass.

When to apply: Always apply sunscreen around half an hour before going out because it takes at least 30 minutes for the chemicals in sunscreen to get absorbed and start working.

When to reapply: If you are going out, playing sports or exercising outdoors, it is advised to re-apply the sunscreen every 2 hours. The same rule applies when you go swimming.

How to store: Usually, it is recommended to store in a cool, dry place, away from sunlight. Also, do remember to close it properly after every use.

When to discard: Do not use sunscreen that has passed its expiry date or if there are any visible changes in the sunscreen such as a change in color, smell or consistency. It is advised to buy a new one every year.

Still, looking for the right sunscreen? Watch our doctor discuss how to choose the best sunscreen for yourself.

Click Here

2. Seek shade

Minimize your exposure to direct sunlight, particularly between 10 a.m. and 4 p.m., as these are the hours when the sun's rays are most powerful.

Follow the shadow rule as a guide: if your shadow is shorter than your height, it indicates that the sun's rays are at their strongest, and you should seek shelter in the shade under an umbrella, tree, or any available form of protection.

3. Wear protective clothing

The following measures should be kept in mind while wearing clothes for the best sun protection:

Wear lightweight clothing

Use wide-brimmed hats

Wear long-sleeved shirts and long pants

Use clothes made from tight woven fabric

Use thoroughly dry clothes

Prefer darker-coloured clothes. They prevent more rays overall from reaching your skin. Within the same color, more saturated hues outperform paler ones.

To assess sun protection provided by clothing, the ultraviolet protection factor (UPF) is used, similar to the SPF rating for sunscreens. UPF measures a fabric's ability to filter both UVA and UVB rays. For good sun protection, seek clothing with a UPF rating above 15.

INTERESTING HAT FACTS!

What level of sun protection do hats offer? It's worth noting that the level of protection provided by hats depends on the width of their brims.

A brim width exceeding 7.5 cm provides an SPF of 7 for the nose, 5 for the neck, 3 for the cheeks, and 2 for the chin.

A brim width ranging from 2.5 to 7.5 cm offers an SPF of 3 for the nose, 2 for the neck and cheeks, and 0 for the chin.

A brim width less than 2.5 cm provides an SPF of 1.5 for the nose, with minimal protection for the chin and neck.

4. Wear sunglasses

Sunglasses not only protect the eyes but also protect the soft skin around the eyes. They should be used while moving out under the sun.

5. Be cautious of reflective surfaces

The presence of water, sand, snow, and similar reflective surfaces can amplify the impact of UV radiation. Such surfaces can reflect the harmful rays emitted by the sun, thus elevating the risk of sunburns.

6. Be mindful of the UV index

Check the UV index for your location before heading outside. The UV index provides information on the intensity of UV radiation and can help you plan outdoor activities accordingly. When the UV index is above 8, avoid stepping out. If the UV index is between 3 and 7, follow all sun protection steps before stepping out.

7. Avoid tanning beds and lamps

A tanning bed is a device that emits ultraviolet radiation to give people a tan. These beds produce stronger UV rays even than sunlight.

Steer clear of tanning beds, which can increase skin cancer risk and accelerate wrinkling. If you desire a tan appearance, consider using a self-tanning product in conjunction with sunscreen.

8. Stay hydrated

Drink plenty of water to stay hydrated, especially when spending time outdoors in the sun. Sunburn can dehydrate your body and increase the risk of heat-related illnesses.

9. Be mindful of certain medications

Certain medications such as specific types of antibiotics, anti-inflammatories, antifungals, blood pressure medications, and chemotherapies, acne treatments, and some herbal remedies can increase your skin's sensitivity to sunlight.

Check with your doctor or read the medication labels for any warnings about sun exposure.

Prevention of sunburn in children

The best way to prevent sunburn in children over 6 months of age is to follow these A, B, C’s of sun safety rules:

Avoid: Avoid being in direct sunlight during the peak hours of the day when the sun is the strongest and can harm the skin the most.

Block: Ensure the safeguarding of the skin by using sunscreen that has a sun protection factor (SPF) of 30 or above. Apply it half an hour prior to stepping outside and consistently reapply it throughout the day.

NOTE: Keep in mind that sunscreen should not be used on infants younger than 6 months.

Explore our extensive range of sunscreens

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Cover up: Keep your kids safe by wearing protective clothing like long-sleeved shirts and wide-brimmed hats when you're out in the sun. Choose clothes with a tight weave to block out as much sunlight as possible. Also, make sure to keep babies under 6 months old away from direct sunlight at all times.

You think your lips do not need sunscreen?

Studies show that most sunscreen users don’t protect their lips. However, the delicate skin of lips need more protection by application of an SPF lip balm or lip sunscreen alone or under your usual lipstick or gloss.

Shop SPF lip products

Doctor To Visit

Sunburns usually heal on their own. However, it is important to consult a doctor if you experience severe sunburn which is not improving within a few days along with any of the following symptoms:.

Large blistering or extensive skin peeling

Signs of infection such as increased pain, redness, warmth, swelling, or pus-filled blisters

High fever (>101°F), chills, nausea, vomiting, dizziness, or confusion

Sunburns that affect an area of the body greater than 15%.

Intense and enduring pain lasting beyond 48 hours.

Dehydration

Sunburn in an infant below the age of 12 months.

The doctors you can visit include:

General physician

Dermatologist

A dermatologist can provide medical treatment and advice for sunburn, including prescribing medications or recommending topical treatments to relieve pain, reduce inflammation, and promote healing.

If you notice any symptoms discussed above, seek medical advice immediately, and consult our trusted team of doctors.

Consult Now

Treatment Of Sunburn

Although sunburn is often a temporary condition, it's important to take appropriate measures to alleviate the symptoms and promote healing. Here are some steps you can take to treat sunburn:

1. Cooling relief: To ease minor sunburn, cooling baths and the gentle application of cool wet cloths on the burned area are the first line of action.

Here are some tips for soothing sunburn:

Use cold, wet compressions on the affected area. Avoid direct ice application as it can harm the skin.

Take a cool bath or a very gentle shower. Set the water to a cool temperature that's just below lukewarm (not extremely cold).

If blisters are forming, opt for a bath instead of a shower to prevent popping them.

Avoid using soap, bath oils, or detergents while bathing.

After bathing, let your skin air dry or pat it gently with a towel. Avoid rubbing.

Repeat the cool baths/showers as needed for relief.

2. Moisturize skin while it is damp: Use a gentle, fragrance-free moisturizer or aloe vera gel to soothe the sunburned skin. Avoid using heavy creams or oil-based products, as they can trap heat and irritate the skin further.

3. Topical applications for relief: Apply a suitable anti-inflammatory paste-like aloe vera or low-dose (0.5%-1%) hydrocortisone cream to soothe irritated and sunburned skin, reduce the burning sensation and swelling and speed up healing.

Tips for application:

You can use gels or lotions that contain aloe vera, or you can cut a chunk off the aloe vera plant itself.

Using the pads of your fingers, gently apply aloe to the sunburned area. Do not "rub it in".

Leave it a bit gooey and moist on top of the burn, as this helps prevent drying out of skin and becoming more irritated.

Reapply as often as required.

Note: Do not use hydrocortisone cream on young children. Ask your healthcare provider for advice if you have any doubts or concerns about using this cream.

4. Take over-the-counter pain relievers: Nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen sodium can help reduce pain, swelling, and inflammation associated with sunburn.

5. Blister management: If blisters develop, avoid popping them unless necessary. They act as a natural barrier against infection and help the skin heal. If a blister does break on its own, clean the area gently and apply an antibiotic ointment to prevent infection.

Here are some guidelines to follow when dealing with blisters:

Apply aloe vera or low-dose (0.5%-1%) hydrocortisone ointment on blisters.

Cover blisters with a loosely-wrapped gauze bandage.

Change the bandage daily or when it gets wet or dirty.

Wear loose cotton clothing over blisters.

Wash your hands with soap and water before touching blisters.

6. Replenish fluids: Sunburn can cause dehydration, so drink plenty of water. Aim for at least 8 glasses (8 ounces/236ml each) per day, or even more.

7. Protect sunburned skin: Protect the sunburned area from further sun exposure until it has fully healed. Further exposure to UV rays will only worsen the condition. If you need to go outside, wear loose-fitting clothing that covers the affected area, use a wide-brimmed hat, and apply a broad-spectrum sunscreen with a high SPF to other exposed areas.

Can sunscreen application reduce Vitamin D levels?

Sunlight plays a crucial role in generating Vitamin D in the skin, accounting for over 90% of its production. Some worry that using sunscreen could hinder Vitamin D production, but studies indicate that regular sunscreen use does not impede Vitamin D production in healthy individuals. However, individuals with photosensitivity disorders should consider screening for Vitamin D levels and may require supplementation. Explore our wide range of vitamin D supplements.

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Home-care For Sunburn

For mild sunburns, the following herbal remedies can help soothe the skin. However, it is always advisable to take consent from your healthcare provider before initiating any of these home remedies:

Aloe vera: Apply pure aloe vera gel to the sunburned area. Aloe vera possesses hydrating and anti-inflammatory qualities, making it effective in soothing and healing the skin.

Moisturizers: Apply a gentle, fragrance-free moisturizer or lotion to keep the skin hydrated. Opt for products that contain beneficial components such as aloe vera, chamomile, or cucumber.

Cold milk compress: Soak a cloth in cold milk and gently apply it to the sunburned skin. The proteins in milk can help soothe the burn.

Essential oils: Essential oils such as peppermint, lavender, chamomile and tea tree oil can all reduce inflammation and cool your skin. Mix a few drops of essential oil with a carrier oil, such as coconut oil, and gently apply it to the sunburned skin.

Oatmeal: Oatmeal can help alleviate itching and inflammation associated with sunburn. Grind oats into a fine powder and mix it with cool water to create a paste. Apply the paste to the affected areas for 15-20 minutes and then rinse off with cool water.

Witch Hazel: Witch hazel has a cooling effect and can help reduce inflammation. Apply pure witch hazel extract to a cotton ball and gently dab it on the sunburned skin.

Baking Soda: Baking soda has antibacterial properties that prevent infections and also help to smoothen the burnt area. Mix half a spoon of baking soda and water. Using a soft cloth, dip it in the solution and gently rub over the affected areas. Rinse off after a couple of minutes.

Gram Flour (Besan): Gram flour or besan can soothe the sunburned skin. You can prepare a thick paste of gram flour and water/rose water. Apply the paste on the affected area or rashes and keep it on for 10-15 minutes. Wash away with cold water.

Raw Potato: A raw potato is a rich source of starchy compounds and helps to reduce the burning sensation of sunburn. Slice a raw potato and place it on the affected area. Leave the potato slice on for 15 minutes and then rinse the face with cold water.

Papaya: Papaya is a rich source of antioxidants and enzymes that have healing abilities and helps to treat sunburns and rashes. Slice the papaya and mash it. Apply the paste on the affected area for a few minutes and let it dry. Wash it with cold water.

Coconut Oil: Renowned for its moisturizing qualities, coconut oil can be applied to sunburned areas for skin soothing and relief. Opt for organic and unrefined coconut oil for best results.

Explore our wide range of coconut oils.

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Complications Of Sunburn

Sunburn can lead to several complications, especially if it is severe. Here are some of the potential complications of sunburn:

1. Sun stroke: Severe sunburn can cause a condition called sun poisoning or sunstroke. Symptoms may include fever, chills, nausea, vomiting, headache, dizziness, and dehydration. Sun poisoning requires medical attention.

2. Infections: When the skin is damaged due to sunburn, it becomes more susceptible to bacterial or fungal infections. Scratching the affected area or popping blisters can also introduce bacteria and increase the risk of infection.

3. Premature skin ageing: Repeated sunburns can cause long-term damage to the skin, including premature aging, wrinkles, dark spots, and a rough or leathery texture.

Even tanning without experiencing a sunburn can result in skin damage and premature aging.

4. Skin cancer: Sunburn damages the DNA in skin cells, which can increase the risk of skin cancer, including both melanoma and non-melanoma types. Melanoma is the most dangerous form of skin cancer and can be life-threatening if not detected and treated early.

5. Eye complications: Prolonged exposure to the sun's ultraviolet (UV) rays can lead to various eye problems such as

Photokeratitis, commonly known as snow blindness, is a temporary condition characterized by the inflammation of the cornea due to intense exposure to UV rays.

Cataracts, a condition where the lens of the eye becomes cloudy, can also be caused or exacerbated by UV exposure.

The scorching sun can cause sunburns and its associated complications. Right sun protection is key!

Tips to protect your skin this summer!

Read Here

Living With Sunburn

Living with sunburn can significantly impact one's quality of life in several ways, such as

Physical discomfort: Sunburns can make daily activities difficult due to pain, itching, and inflammation, affecting tasks like dressing, bathing, and sleeping.

Limited mobility: Severe sunburns limit mobility and hinder daily activities, exercise, and work.

Impact on appearance and emotional and psychological effects: Sunburns can negatively affect appearance, leading to self-consciousness, lower self-esteem, and reduced confidence, impacting social interactions and overall well-being.

Sleep disturbances: Sunburns can disturb sleep, leading to fatigue, irritability, and poor concentration.

Increased Sensitivity: Sunburned skin becomes more sensitive to touch, heat, and clothing, which can limit daily activities and social interactions.

To mitigate the impact on quality of life, it is crucial to practice proper sun protection measures, including using sunscreen, wearing protective clothing, seeking shade, and avoiding excessive sun exposure.

Additionally, managing pain and discomfort with appropriate over-the-counter remedies, staying hydrated, and applying soothing creams or aloe vera can help alleviate some of the symptoms. Seeking medical attention for severe sunburns or complications is also advisable.

Burns cause pain and anxiety, even during recovery.

Complementary therapies that may help alleviate such pain and anxiety include:

1. Massage Therapy: Massage therapy involves the manipulation of soft tissues in the body, such as muscles and skin, using various techniques. When applied to burn patients, it can help improve blood circulation, reduce muscle tension, and promote relaxation. This can lead to pain relief and a decrease in anxiety levels.

2. Hypnosis: Hypnosis is a state of focused attention and increased suggestibility that allows individuals to access their subconscious mind. In the context of burn pain, hypnosis can help manage pain perception by redirecting attention, promoting relaxation, and reducing anxiety and distress. It can also help individuals develop coping mechanisms and enhance their overall well-being.

3. Therapeutic Touch: It is a gentle touch therapy promoting relaxation and a sense of calm. This therapy aims to rebalance and harmonize the body's energy, which can help reduce pain and promote relaxation and healing. It may also enhance the overall sense of well-being and emotional stability in burn patients.

4. Transcutaneous electrical nerve stimulation (TENS): TENS is a non-invasive treatment that involves controlled, low-voltage electrical stimulation of the skin to relieve pain at specific points on the body. By stimulating these points, it can help release endorphins (natural pain-relieving chemicals), improve blood circulation, and modulate the nervous system. This can result in pain relief and a reduction in inflammation and swelling associated with burns.

Frequently Asked Questions

Does repeated sunburn raise the risk of developing skin cancer?

How is the UV index related to sunburn?

What skin type is more prone to sunburn?

What should I look for before using any sunscreen?

Is a high-number SPF better than a low-number one?

Are sunburn scars permanent?

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Syphilis

Also known as Lues, Lues venerea, Pox and Syph

Overview

Syphilis is a sexually transmitted disease (STD) caused by the bacteria treponema pallidum. Symptoms of syphilis can be grouped into three stages. In primary syphilis, symptoms appear after 10 days to three months after one has been exposed to infection. The first sign is a small painless sore called a chancre found on the genitals, rectum, or mouth. In secondary syphilis, the chancre disappears but the rash spreads from the trunk to the whole body. The last stage is tertiary syphilis which begins after years of an initial infection. Some complications of syphilis are numbness, blindness, paralysis, and heart disease.

Syphilis can be prevented by having safe sex, avoiding multiple sexual partners and promoting sex education. Syphilis is mainly treated with antibiotic therapy such as penicillin G. However, in cases of penicillin allergy, penicillin desensitization or use of other medications like doxycycline, tetracycline or ceftriaxone is recommended.

Key Facts

Usually seen in

Individuals between 20 to 29 years of age

Gender affected

Both men and women

Body part(s) involved

Genitals

Rectum

Anus

Mouth

Brain (neurosyphilis)

Prevalence

Worldwide: 10.6 Million (2018)

Mimicking Conditions

Connective tissue disease

Lupus vulgaris

Chancroid

Herpes simplex infection

Donovanosis

Traumatic injury

Psoriasis

Tinea corporis

Necessary health tests/imaging

The treponemal test

The non-treponemal test

VDRL test

Direct testing

Treatment

Benzathine Penicillin G

Tetracycline

Doxycycline

Ceftriaxone

See All

Symptoms Of Syphilis

The symptoms of syphilis are common for both men and women. It is usually unrecognizable for some time and can be passed to others without knowing it. The symptoms of syphilis change with time and stage.

Generally, syphilis can be categorised in three stages namely:

Primary syphilis

Secondary syphilis

Tertiary syphilis

1. Primary syphilis

The first symptoms of syphilis usually develop 2 to 6 weeks after one has been exposed to the bacterium. The most common symptom is the appearance of a small, painless sore called a primary chancre. The sores are painless therefore one can overlook them without realizing they have an infection. The sore is typically seen on the penis, vagina, or around the anus or sometimes appears on the mouth and the lips.

Usually a single painless lesion (primary chancre) occurs, but multiple lesions can be seen in a minority of patients.

Regional lymph node swelling accompanies the primary syphilitic lesions. The nodes are firm, painless and appear within 1 week of the onset of lesion. Inguinal lymphadenopathy (swollen lymph nodes in the groin or lower extremities) is bilateral and may occur with anal as well as with genital chancres.

These sores disappear after two to six weeks, but lymphadenopathy may persist for months. If the condition is not treated, it moves on to the second stage.

2. Secondary syphilis

These symptoms develop a few weeks after the initial symptoms have passed. The secondary stage usually includes lesions involving the skin and mucous membranes along with generalized non-tender lymphadenopathy. The healing primary chancre may still persist in some of the cases, more frequently in people with concurrent HIV infection.

The symptom of secondary syphilis are:

A blotchy red rash develops anywhere on the body but usually develops on the palms of the hands and soles of the feet

White patches in the mouth

Severe necrotic lesions may appear, more commonly in HIV infected individuals

Swollen glands

Headache, tiredness, and joint pain

Involvement of hair follicles may result in patchy alopecia (hair loss) of scalp hair, eye brows, or beard.

Signs and symptoms that may accompany or precede secondary syphilis include sore throat, fever, weight loss, malaise, anorexia, headache, and meningismus (symptoms similar to meningitis without inflammation of the membranes lining the brain). Eye symptoms include pupillary abnormalities, optic neuritis, & uveitis.These symptoms may disappear within a few weeks, and can again come and go after some time.

Secondary syphilis is often mistaken for other conditions such as:

Pityriasis rosea

Lichen planus

Psoriasis

Note: Because the symptoms of syphilis can be so nonspecific, people experiencing these may ignore them. For this reason, syphilis has been known as the “great imitator.”

Latent phase: During the latent phase, a person experiences no symptoms, even though the person is infected. Early latent syphilis is limited to the first year after infection, whereas late latent syphilis is defined as that of >1 year’s duration or of unknown duration. During the first year, the infection can be passed on to the other partner through physical close contact. However, after a couple of years, one cannot pass the infection. Without treating the disease, it can be passed to the most dangerous stage called the tertiary stage.

Tertiary stage

The symptoms of tertiary syphilis appear after years of initial infection.

The symptoms are manifested based on the part of the body affected such as the brain, nerves, eyes, and heart.

People with tertiary syphilis may experience vision problems or blindness, meningitis, stroke, dementia, heart problems, and co-ordination problems.

Syphilis is still treatable at this stage but the damage caused cannot be reversed.

Congenital syphilis

Babies born to women who have syphilis can become infected during pregnancy or birth. Most newborns with congenital syphilis have no symptoms, although some show a rash on the palms of their hands and the soles of their feet.

Later signs and symptoms may include deafness, teeth deformities, and saddle nose, where the bridge of the nose collapses.

Neurosyphilis

At any stage of infection, syphilis can invade the nervous system and it is called neurosyphilis. Signs and symptoms of neurosyphilis can include:

Severe headache

Trouble with muscle movements

Muscle weakness or paralysis (not able to move certain parts of the body)

Numbness

Changes in mental status (trouble focusing, confusion, and personality change)

Dementia (problems with memory, thinking, and/or making decisions)

Are condoms effective against preventing STDs?

According to the CDC, the correct and consistent use of a condom is around 97% efficient in offering protection against certain sexually transmitted diseases (STDs). Here’s more on the use of condoms to prevent STDs.

Click To Know!

Causes Of Syphilis

Syphilis is caused by a bacterium called Treponema pallidum. The only known natural hosts for T. pallidum are humans. Routes of transmission of syphilis are:

The most common route of transmission is through sexual contact with the infected person.

It can also enter the body through minor cuts in the skin or mucous membrane or direct unprotected contact with an active lesion.

Infected mothers can pass it to their babies during pregnancy or birthing.

Less common modes of transmission include blood transfusion and organ transplantation.

Risk Factors For Syphilis

The risk of acquiring the infection is high, if you:

Engage in unprotected sex.

Have sex with multiple partners.

Have human immunodeficiency virus (HIV) infection.

Have sexual contact with someone having syphilis.

Engage in sexual activity with someone from a region of the high prevalence of syphilis.

Note: The chances of getting an infection increase if a man has unprotected sexual contact with other men.

Diagnosis Of Syphilis

The doctor will ask about your symptoms and health history. A physical examination is done to confirm certain risks that make your chances of infection higher.

1. Physical examination

The doctor will examine the genitals. For men, it involves examining the penis, foreskin, and urethra and for women, it involves the internal examination of the vagina. The other parts of the body are also examined for the appearance of any rashes.

2. Blood tests

If someone is detected with syphilis, then his/her body produces antibodies against the syphilis bacteria. Serological tests for syphilis can be classified into two types: treponemal and nontreponemal.

The treponemal test is useful in detecting an antigen or antibody of the T. palladium bacterium and includes the fluorescent treponemal antibody absorbed test (FTA-ABS) and the T. pallidum particle agglutination test (TPPA), both of which are more sensitive for primary syphilis than the non-treponemal tests.

A positive result can be indicative that the person can have the infection or used to have it before. A negative result does not always prove that the person is free of infection as the antibodies are not detectable after three months of infection.

The non-Treponemal test or lipoidal tests looks for indirect indications of the infection like the cardiolipin (released when treponema damages the cells). When cardiolipin is found in the sample, it is indicative of an active infection.

3. Venereal Disease Research Laboratory (VDRL) test

This is a screening test for syphilis. It measures antibodies that the body has produced at the time of infection. This test in combination with specific antibody testing also checks whether the person is having an active infection or not. This minimizes the risk of complications and the spreading of disease.

4. Direct testing of chancre

The following tests can be done directly from a chancre:

Dark field microscopy

Direct fluorescent antibody (DFA)

Polymerase chain reaction (PCR)

DFA uses antibodies tagged with fluorescein, which attach to specific syphilis proteins, while PCR uses techniques to detect the presence of specific syphilis genes. These tests are not as time-sensitive, as they do not require living bacteria to make the diagnosis.

5. Cerebrospinal fluid (CSF) evaluation

Diagnosis of neurosyphilis depends on a combination of CSF tests like CSF cell count, protein, or reactive CSF-VDRL in the presence of reactive serologic test (nontreponemal and treponemal).

Get tested if you are sexually active or have come in contact with an infected person with our sexually transmitted diseases panel.

Book Test Here!

Prevention Of Syphilis

There is no vaccine for syphilis. However, to prevent the spread of syphilis following measures can be adopted such as:

Having protected physical contact by using condoms. Condoms can reduce the risk of contracting syphilis only if it covers the sores.

Promoting sex education among the population. Mainly among the teenagers and high-risk population like laborers, truck drivers, and migrants.

Avoiding recreational drugs and alcohol, which can inhibit safe sexual practices.

Abstaining from sexual contact or being in a mutually monogamous relationship with a person who is tested and does not have any infection.

Specialist To Visit

In most cases, the best place to visit is a sexual health clinic also called a genitourinary medicine clinic (GUM). They tend to have easier access to tests and treatments for syphilis.

If a person develops symptoms like rashes, sores on the moist areas like genitals, mouth, throat, or anus then that person should visit a doctor and confirm the presence of syphilis or any other infection. The doctors to visit are:

General physician

Dermatologist

Gynecologist

Infectious disease specialist

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Treatment Of Syphilis

The treatment of syphilis depends on the stage of the disease.

Early syphilis

Penicillin G benzathine is the most widely used agent for the treatment of early syphilis. Preventive treatment is also recommended for individuals who have been exposed to infectious syphilis within the previous three months.

Penicillin G benzathine cures >95% of the cases of early syphilis, although clinical relapse can occur especially in HIV infected patients.

Secondary or tertiary syphilis

If the CSF examination is normal or not examined, the recommended treatment is Penicillin G benzathine. If the CSF abnormalities are found, then they should be treated as a case of neurosyphilis. The same is the treatment option for late syphilis or syphilis of unknown duration.

Neurosyphilis

Penicillin G benzathine, even at high doses does not kill the treponema concentrations in CSF and should not be used for the treatment of neurosyphilis.

Both symptomatic and asymptomatic neurosyphilis should be treated with aqueous penicillin.

Pregnancy

Parenteral penicillin G is the recommended therapy for syphilis during pregnancy. Pregnant women with syphilis at any stage who report penicillin allergy should be desensitized and treated with penicillin.

Syphilis in penicillin-allergic patients

A 2 week (for early syphilis) or 4 weeks (for late syphilis) course of therapy may be considered with doxycycline or tetracycline. Ceftriaxone has also been found to be effective for early syphilis.

Jarisch-Herxheimer reaction

The Jarisch-Herxheimer reaction is an acute febrile reaction frequently accompanied by headache, myalgia, and fever that can occur within the first 24 hours after the initiation of any syphilis therapy.

It is a reaction to treatment and not an allergic reaction to penicillin.

Patients should be informed about this possible adverse reaction and how to manage it if it occurs.

The Jarisch-Herxheimer reaction occurs most frequently among persons who have early syphilis, presumably because bacterial loads are higher during these stages.

Antipyretics can be used to manage symptoms; however, they have not been proven to prevent this reaction.

The Jarisch-Herxheimer reaction might induce early labor or cause fetal distress in pregnant women; however, this should not prevent or delay therapy.

Management of sex partners

Person who has had sexual contact with someone who receives a diagnosis of primary, secondary, or early latent syphilis <90 days before the diagnosis should be treated presumptively for early syphilis, even if serologic test results are negative.

Person who has had sexual contact with someone who receives a diagnosis of primary, secondary, or early latent syphilis >90 days before the diagnosis should be treated presumptively for early syphilis if serologic test results are not immediately available and the opportunity for follow-up is uncertain. If serologic tests are negative, no treatment is needed. If serologic tests are positive, treatment is based on evaluation and stage of syphilis.

Long-term sexual partners of people who have late latent syphilis should be evaluated for syphilis and treated on the basis of the findings.

Did you know?

There are condoms for women as well. Understand the difference between male and female condoms.

Tap To Read!

Home-care For Syphilis

1. Talk and understand the situation

Understanding the condition of the person is the first step in managing the disease. Caring can involve several skills such as emotional support, dealing with medical equipment, and recognizing the warning signs if the disease worsens. Caring for someone with syphilis involves different things depending upon the infection.

2. Take medication

When syphilis is treated in the early stages it is easy to cure. Help the patient in making routines and following the treatment.

3. Encourage treatment

If an individual is diagnosed with syphilis, have periodic blood tests and follow-ups. Make sure that the person is responding to the penicillin treatment.

4. Support the patient

Finding out you have syphilis can be upsetting. Listen to your loved ones and reassure them that it is a manageable health condition.

5. Eat a balanced diet

To recover from the condition and side effects related to the medications a healthy diet is beneficial and rest to cope with the stress.

Is syphilis not curable?

Syphilis is a curable disease. However, early treatment is the key because if left ignored, the bacteria can cause irreparable damage. So do not ignore its symptoms and consult the right doctor at the right time.

Consult Now

Complications Of Syphilis

Syphilis causes damage to internal organs during the latent and tertiary stages. Tertiary syphilis causes various complications like:

Mental disorders

Loss of vision

Bone damage

Liver damage

Nervous system breakdown

Sores on the skin

Syphilis has a greater risk of contracting HIV infection because of the existence of open sores

Birth defects like mental retardation, stillbirths, and premature death, if the infection spreads from mother to the unborn child during pregnancy

Late-stage syphilis, if left untreated, can be life threatening

Frequently Asked Questions

Can a person with syphilis pass it on to their baby?

Can Treponema pallidum infect the brain?

How common is syphilis?

Can you get syphilis again after treatment?

How can you reduce the risk of getting syphilis?

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Schizophrenia

Also known as Psychosis, Mental Illness, Mental Disorder

Overview

Schizophrenia is a mental disorder that affects a person’s thoughts, emotions, and behaviors. It can significantly interfere with the ability to think rationally, control emotions and make decisions. Some of the common symptoms of schizophrenia include delusions, hallucinations, altered behavior, thought process, alterations in speech, and mood changes. The type and severity of these symptoms can vary over time. There may be periods of intermittent worsening and remission of symptoms.

The treatment for Schizophrenia primarily aims to control the psychotic symptoms with antipsychotic drugs and provide supportive care to the patient. There are many misconceptions regarding the disease, and patients battling Schizophrenia face a lot of social stigma. But thanks to the increase in awareness and improved treatment options, patients are able to lead a better quality of life at home and close to their loved ones.

Key Facts

Usually seen in

Individuals between 16 to 30 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Brain

Prevalence

Worldwide: 20 Million (2018)

Mimicking Conditions

Bipolar disorder

Major depressive disorder

Post-traumatic stress disorder

Autism spectrum disorders

Substance abuse

Temporal lobe epilepsy

Necessary health tests/imaging

CT Scan (Head)

MRI Brain

Treatment

Conventional antipsychotics or first-generation antipsychotics: Chlorpromazine, Haloperidol & Fluphenazine

Atypical antipsychotics: Aripiprazole & Ziprasidone

Long-acting injectable antipsychotics

Nutritional supplements: Vitamin B Complex

See All

Symptoms Of Schizophrenia

Schizophrenia is a chronic mental disorder that affects how a person thinks, feels, behaves, and interacts with his/her surroundings. Symptoms such as mood changes, alterations in behavior, altered thinking, and abnormal social functioning often appear gradually before a major episode of psychosis or hallucinations. The symptoms of Schizophrenia can vary in type and severity over time, with alternating periods of worsening of symptoms and remission in symptoms.

The symptoms of Schizophrenia can be broadly classified into the following subtypes:

1. Psychotic symptoms

Delusions: False beliefs with no base in reality, even when there is evidence to the contrary. For example, a person with schizophrenia has thoughts such as someone out there wants to hurt him/her even when no such threat exists.

Hallucinations: Hearing, seeing, or feeling things that do not exist. For a person with schizophrenia, these altered experiences feel absolutely real.

Abnormal or disorganized behavior: A person with schizophrenia may behave abnormally, and the behavior spectrum can range from childlike silliness to unpredictable rage and agitation.

Abnormal motor behavior: A person with schizophrenia often does not make eye contact, lacks facial expressions, makes bizarre postures and unnecessary or excessive movements.

Disordered thinking and speech: Often people with schizophrenia are unable to communicate effectively and may use meaningless words or out-of-context replies to questions.

2. Negative symptoms

These are symptoms that affect a person's ability to function normally. In this, a person may typically -

Neglect personal hygiene

Lose interest in everyday activities

Lack the ability to experience pleasure in everyday life

Show reduced ability to express emotions

Be unable to effectively communicate thoughts and struggle to frame words.

3. Cognitive symptoms

This subset of symptoms affects memory, concentration, and attention. This includes:

Difficulties in processing information to make decisions

Learning new things

Remembering information

Did you know?

Interestingly, men tend to experience their first episode of schizophrenia in their late teens to early 20s, whereas women typically experience their first episode in their late 20s or early 30s.

Consult NOW

Causes Of Schizophrenia

There is no single established cause of schizophrenia. It is likely to occur due to a complex interaction between genetic factors (such as having a family history) and certain alterations in brain structure and function. Environmental factors, such as exposure to certain toxins, neuro-viruses, substance abuse or stressful surroundings, may also contribute to the condition.

Risk Factors Of Schizophrenia

Schizophrenia is quite prevalent, however, it is difficult to estimate the exact number of people with schizophrenia due to the complexities involved in diagnosing the illness and overlap with other psychiatric disorders. As of 2019, 20 million people in the world are affected by schizophrenia and 3 out of every 1000 Indians suffer from it.

The definite cause of schizophrenia is not yet known. However, certain factors increase a person’s risk of developing schizophrenia, such as:

Family history of schizophrenia; however, no single gene is yet identified which can be linked directly to the disease.

Pregnancy and birth complications.

Exposure to toxins or viruses that affect brain development in early life or before birth.

Consumption of psychoactive drugs during teen years or early adulthood.

Alterations in the brain structure and function.

Alterations in the interaction of chemical messengers called neurotransmitters.

Did you know?

Environmental and social factors play a role in increasing risk of schizophrenia. Although not much talked about, studies have revealed that environmental stressors such as childhood trauma, social isolation, and minority ethnicity are linked to this mental disorder. Keep a tab on your stress with our range.

Order Now!

Diagnosis Of Schizophrenia

Schizophrenia is usually suspected when a person has a major episode of psychosis and has been displaying other symptoms of schizophrenia. Diagnosis involves ruling out other psychiatric illnesses and disorders occurring due to substance abuse or medications.

Establishing a diagnosis of schizophrenia involves the following:

1. History and clinical examination

A physician usually performs a detailed examination, reviews the patient’s history, looks for characteristic schizophrenia symptoms, finds out social and occupational dysfunction, verifies the onset of symptoms to rule out other potential causes, and screens health-related complications. It is essential to rule out other conditions that may mimic the symptoms of Schizophrenia before confirming the diagnosis.

2. Lab tests and imaging studies

The following tests may be prescribed to evaluate the overall health status, screen for potential substance abuse, and study brain functioning.

CT Scan (Head) - to study any structural changes in the brain.

MRI Brain - an in-depth study to identify if any pathology in the brain is causing symptoms, such as brain tumors.

Alcohol Screen Blood - to rule out alcohol intoxication as a cause of the psychotic symptoms.

Alcohol Screen Urine - to rule out alcohol intoxication as a cause of the psychotic symptoms.

Drugs of Abuse Panel - 9 Drug Panel - to rule out psychotic drug abuse as a cause of the psychotic symptoms.

Complete Blood Count (CBC) - to evaluate general health status.

Comprehensive Health CheckUp - to evaluate overall health status.

3. Psychiatric evaluation

A detailed psychiatric evaluation comprising a study of the patient’s mental status, thoughts, moods, delusions, hallucinations, and family and personal history is essential to diagnose the disease.

The diagnosis of schizophrenia may be considered if signs and symptoms, such as delusions, hallucinations, disorganized thoughts and speech, abnormal behavior, lack of emotions, lack of attention, etc., began more than 6 months ago and have been in an active phase for at least one month. Also, diagnosis of schizophrenia can be confirmed only when all other factors, such as substance abuse, alcohol abuse, other psychiatric disorders like bipolar disorder, have been ruled out.

DSM-5 guidelines for diagnosis of schizophrenia

The American Psychiatric Association has laid down criteria for diagnosis in the Diagnostic and Statistical Manual of Mental Disorders, also known as DSM - 5. which states that a diagnosis of schizophrenia can be made if:

Criterion A: At least two of the following (at least one must be 1, 2 or 3) indications for at least 1 month: 1. Delusions, 2. Hallucinations, 3. Disorganized speech, 4. Grossly disorganized or catatonic behavior, 5. Negative symptoms

Criterion B: Level of functioning has to be lowered significantly and for long term compared to the previously achieved level

Criterion C: Signs of the disturbance persist for at least 6 months, must include criterion A symptoms for at least 1 month

Criterion D: Schizoaffective disorder and depressive or bipolar disorder with psychotic symptoms ruled out

Criterion E: The disturbance is not caused by substance use or medical conditions

Criterion F: If a patient has a history of autism spectrum or communication disorders from childhood, schizophrenia diagnosis can be made in case of prominent delusions/hallucinations and other required symptoms of schizophrenia are present for at least 1 month

Celebs affected

Parveen Babi

Parveen Babi, a well known Bollywood actress, struggled with Schizophrenia through much of her career

John Nash

Late mathematician and professor John Nash is known to have suffered from schizophrenia. His struggles with the disease were also depicted in the 2001 film ‘A Beautiful Mind’.

Specialist To Visit

Patients exhibiting symptoms of schizophrenia are generally incapable of making informed health-related decisions. Thus, their family or caregivers must approach their primary healthcare physician if they suspect or observe any unexpected symptoms which last for a prolonged period of time.

The primary healthcare physician can then refer the patient to specialist doctors for detailed evaluation and treatment. Such patients may be referred to:

Psychiatrist

Psychologist

Neurologist

For an active episode of psychosis, treatment at a hospital may be essential.

Treatment Of Schizophrenia

Treatment with antipsychotic medications can help alleviate symptoms and reduce the chances of unexpected complications. Lifelong treatment is essential even if the symptoms seem less or controlled.

The medications consist primarily of first or second-generation antipsychotic drugs. Other medications such as antidepressants or anti-anxiety drugs, or a combination of these drugs are also used to treat this condition.

1. Conventional antipsychotics or first-generation antipsychotics:

Also known as typical antipsychotics or first-generation antipsychotics, these drugs help to control psychotic symptoms of schizophrenia such as delusions and hallucinations. They work by blocking the action of the neurotransmitter dopamine in the brain.

They can potentially cause frequent and significant neurological side effects such as movement disorders. They are significantly cheaper than the newer second-generation antipsychotics and this may be an important consideration in long-term treatment.

Examples include:

Chlorpromazine

Haloperidol

Fluphenazine

2. Atypical antipsychotics or second generation antipsychotics

These are newer antipsychotic medicines with fewer body movement-related side effects but can affect other body mechanisms contributing to their side effect profile than the traditional first-generation antipsychotic medications. They work by blocking the receptors for neurotransmitters like serotonin (stronger blocking) and dopamine (moderate blocking).

Common examples are:

Aripiprazole

Ziprasidone

Sulpiride

Asenapine

Clozapine

3. Long-acting injectable antipsychotics

Certain formulations of typical or atypicals are also available as long-acting intramuscular injections that need to be given every 2-4 weeks. This is useful in patients who are resistant to taking daily pills and can help with adherence.

4. Nutritional supplements

Taking Vitamin B Complex and Omega-3 fatty acid supplements like fish oil capsules can help ease the symptoms in Schizophrenic patients. Vitamin B complex is essential for normal functioning of the nervous system. Omega-3 fatty acid supplements contain DHA and other fatty acids which are important for brain health.

Did you know?

A ketogenic diet can help in schizophrenia. A study by Włodarczyk A, et al suggested that a gluten-free or a low-carb ketogenic diet may help ease symptoms of schizophrenia. Ketogenic diet helps increase the levels of a neurochemical named GABA. Increased levels of GABA are beneficial for the brain and can help with schizophrenic symptoms. Explore our range of ketogenic products.

Tap To Order!

Living With Schizophrenia

Living with someone who has been diagnosed with schizophrenia may be challenging for the family and the caregivers as the patient needs constant care and support. However, here are a few tips that can help you to take care of someone with the condition.

1. Understand the condition

Understanding and accepting what your family member or relative is going through is the first step in managing the disease. Information about the condition will help the caregivers understand the importance of therapy and recognize warning signs if the disease worsens.

2. Stay focused on goals of therapy

The therapy goals are different for each patient and are adjusted to suit individual requirements. Managing the condition is an ongoing process. Help your loved ones adjust to the therapy and encourage them to take responsibility towards their goals.

3. Help the patient abstain from vices

Alcohol and recreational drugs worsen the symptoms of Schizophrenia and make the condition difficult to treat. Hence, the family or caregivers need to ensure that the patient does not indulge in such activities.

4. Try relaxation and stress management techniques

It is not unusual for the family or caregivers to be stressed and anxious along with the patient themselves. Learning relaxation techniques and stress management will help cope with the disease.

5. Join schizophrenia support groups

Connecting with other people facing similar challenges may help a person come to terms with the disease. There are a few societies in India working in the field of mental health and wellness, offering support to those diagnosed with life-changing mental health disorders like schizophrenia.

Mental illnesses are quite common these days. Just being there with someone who needs help is one of the simple ways to help a patient. Need more help?

Here are 6 ways you can help your loved ones struggling with mental illness.

Click To Read

Complications Of Schizophrenia

If left untreated, Schizophrenia may severely hamper a patient’s quality of life and can potentially cause complications like:

Suicidal thoughts, suicide attempts, and suicide

Anxiety disorder

Depression

Drug and alcohol abuse

Aggressive behavior

Social isolation

Severe cases may need hospitalization for treatment.

Did you know?

The risk of schizophrenia is around 10% if a person has a first-degree relative with the condition and around 3% if they have a second-degree relative. If both parents suffer from schizophrenia, then there is a 40% chance that the kid might suffer from the condition.

Consult Now!

Alternative Therapies For Schizophrenia

1. Psychosocial interventions

In addition to medication, psychological therapy helps normalize the patient’s thought patterns and also helps cope with stress and anxiety. Social rehabilitation helps the patient interact with society and participate in daily activities. These are important interventional programs in managing a patient with schizophrenia.

2. Cognitive behavior therapy (CBT)

This type of psychological therapy helps teach the patient coping skills to manage their difficult conditions. The therapy focuses on the cognitive component. This helps the patient to change their thinking about a particular situation and the behavioral component which further helps them to change their reactions to any situation.

3. Electroconvulsive therapy

For adults who do not respond well to drug therapy, electroconvulsive therapy, or shock therapy (ECT) may be considered. In this, small amounts of electric currents are passed through the brain to help regulate electrical activity in the brain.

4. Deep brain stimulation (DBS)

Similar to electroconvulsive therapy, this therapy is useful in patients resistant to standard treatment. This is a type of elective surgical procedure in which tiny incisions are made near the brain to implant some electrodes in the patient’s brain areas. These electrodes generate mild electrical impulses which are thought to regulate abnormal electrical activity of the brain and improve the symptoms.

5. Ayurveda in schizophrenia

Ayurveda treatment for Schizophrenia follows a holistic approach, combining natural medicine, massage, diet, and lifestyle regulation. Ayurvedic herbs may be beneficial when used in adjunction with antipsychotic medication. However, no studies have been proved yet on the effectiveness of Ayurvedic herbs to treat or manage this condition.

Frequently Asked Questions

Are all psychotic patients schizophrenic?

Can schizophrenia be completely cured?

Does shock therapy help with schizophrenia?

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Sciatica

Also known as Lumbosacral radicular syndrome, Ischias, Nerve root pain, and Nerve root entrapment.

Overview

Sciatica is a serious condition that results from pressure on the sciatic nerve, the largest nerve in the human body, formed by the union of 5 nerves from the lower part of the spine. The most common cause of sciatica is related to discs like disc herniation or bony overgrowths. Causes not related to the disc may include cancer, infections, or compression of the blood vessels.

Individuals with sciatica experience pain, numbness, pricking or stabbing sensation, and muscle weakness in the sciatic nerve distribution. Sciatica pain often is worsened by twisting, bending, or coughing. Sciatica may be triggered by improper posture, too long standing or sitting in the same place, obesity, and increased height.

This condition is usually seen in older adults. Women are more commonly affected by men. Severe injury to the nerve can cause a drop foot effect, i.e. difficulty lifting the front part of the foot. Other complications may include loss of bowel and bladder control.

Treatment generally varies depending on the severity and cause of the condition. Various management protocols include conservative treatment like staying active, painkillers, acupuncture, epidural steroid injections, spinal manipulation, and physical therapy. Surgery may be required in severe cases.

Key Facts

Usually seen in

Adults between 35 to 55 years of age.

Gender affected

Both men and women but more common in women

Body part(s) involved

Hips

Buttocks

Legs

Prevalence

India: 1-5% (2022)

Mimicking Conditions

Herniated lumbosacral disc

Muscle spasm

Nerve root impingement

Epidural abscess

Epidural hematoma

Tumor

Pott's Disease, also known as spinal tuberculosis

Piriformis syndrome

Necessary health tests/imaging

Imaging tests: X-ray, CT scan, MRI, Electromyography (EMG)

Treatment

Anticonvulsant medications: Gabapentin and Pregabalin

Tricyclic antidepressants (TCAs): Amitriptyline

SNRIs: Duloxetine and Venlafaxine

Opioid analgesics: Tramadol and Morphine sulfate (MST)

Surgery: Microdiscectomy and Laminectomy

See All

Symptoms Of Sciatica

The sciatic nerve is the largest nerve that branches from the lower back through your hips, buttocks, and down each leg. Sciatica presents itself with pain along the pathway of the nerve, including the lower back, buttock, and the back of the thigh and calf. The symptoms include:

Unilateral leg pain

Pain in the lower back

Radiating pain to foot or toes

Numbness and burning in the distribution of the nerve

Increased pain in keeping the lag straight

Decreased range of motion of the hip joint.

Causes Of Sciatica

Sciatica symptoms occur when there is pathology anywhere along the course of the nerves. Sciatica develops in many ways; among them, the most common are the following:

Herniated discs: This condition occurs when the soft center of a spinal disc pushes through a crack in the more rigid exterior casing of the spine.

Degenerative disc disease: It is a natural aging process that acts as a precursor to disc herniation.

Lumbar (lower back) spinal stenosis: It is the narrowing of the sciatic nerve

Isthmic spondylolisthesis: This condition results from the vertebra slipping forward on the sacral, pinching the nerve root as it leaves the spine.

Piriformis syndrome: This occurs when your piriformis muscle (muscle in the gluteal region of the lower limbs) compresses the sciatic nerve and results in swelling and redness.

Malignancy (cancer): Metastatic (spreading) bone or soft tissue cancer, sciatic nerve cancer, hemangioblastoma (type of brain tumor)

Infection: That can lead to abscess formation and inflammation of the disc.

Vascular compression: Compression of the blood vessels can lead to the formation of a pseudoaneurysm (occurs when blood walls of the blood vessels are injured).

Bony compression: Overgrowth of bones in the sciatic nerve distribution can put pressure on it.

Gynecological cause: Studies have shown that uterine fibroid and endometriosis (overgrowth of the inner lining of the uterus) can also cause sciatica.

Did you know?

Sciatica in COVID-19 patients is not uncommon.

Studies have suggested that sciatic neuropathy can be seen in patients being treated for COVID-19 and that they need prolonged rehabilitation.

Click Here To Know More

Risk Factors For Sciatica

Sciatica may be caused due to reasons related to the disc or non-discogenic causes. However, your chances of getting sciatica increase with the following factors:

Age

As you age, the changes in your spine can lead to bony overgrowths and herniated discs, the most common causes of sciatica.

Genetic predisposition

Studies suggest that lumbar disc disorders, characterized by disc herniation, have a vital genetic component that can lead to sciatica.

Occupation

Particularly if associated with physical activity, especially flexion/torsion of the trunk, arms frequently raised above shoulder height, and driving motor vehicles.

Incorrect walking posture

While walking, your shoulders should be back, down, and relaxed, as improper posture can compress your lumbar discs and cause sciatic nerve irritation.

Jogging

It can predispose you to pain if you have a history of back or lumbar problems. Research shows that joggers have a lower risk for incidental sciatic pain but a higher risk for persistent symptoms.

Smoking

Studies demonstrate that smoking is a modest risk factor for lumbar pain and clinically verified sciatica.

Are you trying to quit smoking?

Know more about tips that can help you with it.

Read This Now

Obesity

Studies show that being overweight and obese increases the risk of lumbar pain and sciatica in both men and women.

Check out our widest range of weight management products to help you achieve your weight loss goals.

Explore Now

Tall height

This risk factor is relevant for old age groups only. If you are tall, you may be at a higher risk of developing sciatica.

Mental stress

Sciatica is linked to feeling overwhelmed or under pressure, and stress can exacerbate musculoskeletal conditions, including nerve pain.

Read about 5 relaxation techniques to keep stress and anxiety at bay.

Tap Now

Diagnosis Of Sciatica

Sciatic pain can mimic any other nerve pain, and it is essential to diagnose it correctly for the proper treatment. Sciatica is mainly diagnosed by the following:

Medical History

A complete history is required to determine the localization, severity, loss of strength, sensibility disorders, duration, course, influence of coughing, rest, or movement, and consequences for daily activities.

Patients generally mention radiating pain in the leg with sensory symptoms like numbness, burning, or tingling. They may be asked to show the distribution of the pain and whether it radiates below the knee.

Physical examination

It largely depends on neurological testing. The most applied investigation is the straight leg raising test or Lasègue’s sign. Lasègue’s sign is positive if the angle to which the leg can be raised (upon straight leg raising) before complaining of pain is <45°.

Note: Patients with sciatica may also have lower back pain, which is usually less severe than leg pain.

Imaging tests

Imaging may be indicated at this stage only if indications or “red flags” like infections, cysts, tumors, or fractures, rather than disc herniation. These tests include:

X-ray: Radiographs of the spine may reveal any overgrowth of bone that can be pressing on a nerve.

CT scan: A non-contrast computed tomography (CT) scan may be performed to evaluate fracture if plain radiographs are negative. CT is also done to assess any soft tissue anomalies.

MRI: Magnetic resonance imaging (MRI) is indicated if the pain is persistent for more than 6-8 weeks to rule out any neurologic deficit is present or a mass effect is suspected.

Electromyography (EMG): It is a minimally invasive diagnostic test that evaluates how well the electrical signals between nerves and muscles are working. It is done to determine the severity of nerve damage.

Book your tests for a hustle-free experience

Click Here

Celebs affected

Salman Khan

Bollywood actor Salman Khan is apparently suffering from sciatica. A source close to the khan family said “The thing that is on top of our mind is not his heart but sciatica. There are days when bhai cannot shoot because of severe pain in the legs and lower back. He needs to go through detailed therapy and for that, he would have to stay at the facility for a few days”.

Prevention Of Sciatica

Prevention is always the best course of action for any disorder. The best strategies for preventing sciatica include:

Avoid prolonged rest

Too much rest can aggravate sciatica pain. Stay active as much as possible. Here are a few tips that can help you with it:

Use the stairs instead of an elevator

Make sure to get up and move every 30 minutes

Switch to a standing desk with an adjustable height

Add simple stretches that you can do while sitting on your office chair

Go for regular, short walks

See a physical therapist and make exercise a part of your daily routine

Exercise regularly

Beneficial exercises to prevent sciatica include walking, swimming, pilates, and yoga. It strengthens the abdomen and back muscles that support the spine.

Sleep in the correct posture

One strategy is to lie flat on the back and bend the knees slightly while keeping the buttocks and heels flat against the bed. You can also practice stretching before sleeping and using a firm mattress to support your back.

Burn that extra fat

Obesity is one of the critical risk factors in the development of sciatica. Losing weight can help relieve sciatica and prevent it in the long run.

Want to lose weight the right way?

Read more about weight loss tips that can work for you.

Click Now

Be mindful of your postures

When sitting or standing, keep your back straight and shoulders back to relieve the pressure on the back. Sitting in the same position or habitual slouching while working at the desk for a long time can also harm your back.

Lift weights with the proper technique

A sudden lifting injury can herniate your disc, impinging or irritating a sciatic nerve root. We often tend to lift objects improperly, keeping the back straight while rising with the hips and legs.

Say no to smoking

We all know the terrible effect that smoking has on our bodies. Studies show that abstaining from smoking can reduce, but not eliminate, the excess risk of developing sciatica.

Try out an extensive range of smoking cessation products to eliminate this deadly habit.

Buy Now

Specialist To Visit

Sciatica is a disorder of the nerve. The doctors who can diagnose and treat sciatica include:

Neurologists

Neurosurgeons

Orthopedic surgeons

A neurologist and neurosurgeon are specialists who treat diseases of the brain and spinal cord, peripheral nerves, and muscles. An orthopedic surgeon is a doctor with special training in diagnosing and treating injuries and conditions of the musculoskeletal system.

When to see a doctor?

See a doctor immediately if:

The pain persists for more than a week or worsens

Numbness or weakness in the leg

Loss of bowel or bladder control.

If you or your loved ones are experiencing any such symptoms, don’t hesitate and seek advice from our trusted team of doctors.

Consult Now

Treatment Of Sciatica

While sciatica may not be a life-threatening disease, it can severely affect the quality of life, taking a toll on the mind and body. Various treatment options of sciatica include:

Conservative management

This consists of explaining the cause of the symptoms and reassuring the patients that symptoms usually diminish over time, even without specific measures. Advise them to stay active and continue daily activities with yoga or stretches to relieve the pain.

Pharmacological management

If there is a lot of pain, certain medications are prescribed to provide relief. These include:

1. Anticonvulsant medications: Research supports the use of anticonvulsants that can relieve pain caused by damaged nerves. These include:

Gabapentin

Pregabalin

2. Tricyclic antidepressants (TCAs): TCAs are the most studied antidepressants for the treatment of pain related to the nerves. Amitriptyline is most commonly used for management of sciatica.

3. SNRIs: Serotonin and norepinephrine reuptake inhibitors (SNRI) are antidepressants that help relieve depression symptoms and are also used for anxiety disorders and nerve pain. The drugs used in sciatica include:

Duloxetine

Venlafaxine

4. Opioid analgesics: These are used for pain relief and include:

Oxycodone

Tramadol

Morphine sulfate (MST)

5. Epidural steroid injections: These can temporarily relieve sciatica and help a patient progress with rehab and exercise.

Surgery

Surgical intervention for sciatica focuses on removing herniated discs and, eventually, part of the disc to eliminate the suspected cause of sciatica. Treatment is aimed at easing the leg pain and corresponding symptoms, not reducing the back pain.

Studies suggest that cauda equina syndrome (compression of a collection of nerve roots) is an absolute indication for immediate surgery. Elective surgery is the choice for unilateral sciatica. Surgeries include:

Microdiscectomy: This is a minimally invasive surgical procedure performed on individuals with a herniated lumbar disc.

Laminectomy: It is a surgery that creates space by removing bone spurs and tissues associated with arthritis of the spine.

Epidurioscopy with adhesiolysis

Epidural endoscopic adhesiolysis is a minimally invasive technique for accurately placing the drug injection (generally a local anesthetic) into the epidural space. Studies demonstrate that this technique alleviates pain and reduces sensory nerve dysfunction in patients suffering from sciatica.

Understand sciatica better as our expert explains its causes, symptoms and treatment options.

Watch This Now

Home care For sciatica

Management of sciatica needs care and maintaining the posture right. Some of the home remedies that can prove beneficial in alleviating the pain include:

Use hot and cold packs

Applying ice packs lessens the pain, numbs the area, and decreases inflammation. It is suggested in acute cases when sciatica flares up. A handy tip while using an ice pack is to alternate it with a heat pack once the acute pain subsides.

Browse our exclusive range of hot and cold therapy products online to get instant relief from the pain.

Fill Your Cart Now

Support your back

Wear a lumbar or hip brace for short durations, as it can help stabilize and support the lumbar tissues. Lumbar braces limit excessive spinal movement and can help relieve pain from nerve root endings.

Buy products to support your back and enhance your posture.

Tap Here

Take out time for stretching

The pain from sciatica generally benefits from a stretching routine that targets the hips and hamstrings that relieves overused or inflamed muscles.

Apply topical pain relieving creams

Topical gels, creams, or patches that contain painkillers or even numbing gels can provide fast and effective pain relief. These medications penetrate your tissues and act locally. Some of the drugs include:

Methyl salicylate

Menthol

Complications Of Sciatica

Sciatica results from pressure on the sciatic nerve, and potential complications of unresolved sciatic nerve compression include:

Increased pain in the nerve distribution over time

Weakness in the affected leg

Burning or prickling sensation in the affected leg

Decreased or loss of bowel or bladder function

Permanent nerve damage.

Alternative Therapies For Sciatica

Complementary or alternative therapies are quite helpful in managing pain related to sciatica. However, always consult your doctor before starting anything new. Some of the beneficial treatments include:

Physiotherapy

An essential component of conservative treatment is physiotherapy, which aims to promote physical and psychological health for the patient, mainly due to disc problems. Physical therapy generally includes mild stretching and pain relief modalities, conditioning exercise, and an ergonomic program.

Acupuncture

Acupuncture is a form of alternative medicine in which thin needles are inserted into the body at specific points to provide pain relief. Studies suggest that acupuncture therapy is an effective non-drug therapy for sciatica as it allows physicians to facilitate individualized treatment decisions regarding managing sciatica.

Is acupuncture effective in managing chronic pain?

To Know More, Read This

Chiropractic therapy

It is a form of alternative medicine used to diagnose, treat, and prevent mechanical disorders, especially of the spine. A chiropractor is a trained person who treats physical problems by pressing and moving the bones in a person’s back, which might be able to help relieve sciatica pain.

Living With Sciatica

Sciatica is a common condition that is a significant cause of work absenteeism and a major financial burden to industry and health service providers. Remember, time heals everything, and you can learn to manage pain with time. Some of the things to keep in mind if you are suffering from sciatica include:

Do not sit or stand in the same position for more than 20 minutes

Avoid exercises that stretch your hamstrings (muscles from at the back of the thighs from hips to the knee)

Always warm up before lifting heavy weights

Avoid rowing machines in the gym as they can strain the lower back

Do not stress your back by bending over too often

Stay away from complete bed rest

Make sure your office chair is comfortable

Avoid twisting the motion of your spine

Try not to lift heavy objects

Avoid long car trips

Learn to manage stress efficiently

Frequently Asked Questions

How does sciatica pain feel?

Can one experience sciatica on both legs?

Does sciatica develop over time, or does it occur suddenly?

What is the typical recovery time after spinal surgery?

Are there any complications of spinal surgery?

Is rest mandatory if one has sciatica?

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Sepsis

Also known as Septic infection, Blood poisoning, Septic poisoning and Septicemia

Overview

Sepsis or septicemia is a life-threatening condition where the body starts to damage its tissues as a response to an infection. Sepsis might cause sepsis shock leading to a sudden drop in blood pressure, severe organ failure, or even death.

The risk of sepsis is higher in infants and older adults. People with compromised immunity due to conditions like diabetes, chronic kidney or liver disease are more susceptible to sepsis.

Treatment of sepsis includes antibiotics, intravenous fluids, and vasopressors (drugs constricting blood vessels). Patients with sepsis might also require supportive care such as oxygen or a breathing machine. Early and aggressive treatment increases the chances of recovery from septicemia. In most cases, people suffering from sepsis need treatment in the intensive care unit of a hospital.

Key Facts

Usually seen in

Adults over 18 years of age

Gender affected

Both men and women

Body part(s) involved

Blood

Stomach

Intestine

Lungs

Kidneys

Liver

Central nervous system

Prevalence

Worldwide: 20% of all-cause deaths in hospitals (2017)

India: 213 per 100000 people (2020)

Mimicking Conditions

Pulmonary embolism (PE)

Pancreatitis

Bowel obstruction

Colitis

Vasculitis

Diabetic ketoacidosis (DKA)

Toxin ingestion

Adrenal insufficiency

Thyrotoxicosis

Malignant hyperthermia

Distributive shock

Necessary health tests/imaging

Blood tests: Complete blood count (CBC), Liver function test & Kidney function test

Imaging tests: X-ray, Ultrasound, CT, & MRI

Treatment

Antibiotics: Ceftriaxone, Meropenem& Cefotaxime

Vasopressors: Norepinephrine & Dopamine

Surgery: Pus drainage and amputation

See All

Symptoms Of Sepsis

Sepsis progresses through three stages, sepsis, severe sepsis and septic shock. One can even get sepsis while recovering from an illness in the hospital. The symptoms depending on the stage include:

Symptoms of sepsis

Fever above 101 F

Increased heart rate

A confirmed infection in the body

Increased breathing rate of more than twenty breaths per minute

Symptoms of severe sepsis

Organ failure due to tissue damage

Discolored skin or a hemorrhagic rash in the skin

Bone marrow suppression leading to decreased platelet counts

Difficulty in breathing

Abnormal heart functions causing cardiomyopathy (heart disease leading to difficulty in pumping blood to the body)

Reduced body temperature leading to chills

Weakness and dizziness

Confusion or disorientation

Slurred speech

Symptoms of septic shock

Decreased urination

Clammy and sweaty skin

Respiratory failure

Heart failure

Stroke

Death

Rush to the hospital as soon as you notice symptoms of sepsis.

Sepsis or septicemia is a life-threatening disease. Severe sepsis or septic shock can turn fatal if blood pressure levels fall drastically. Therefore, do not wait at home when you notice any symptoms of an infection. Read about step-by-step preparation for medical emergencies.

Click Now!

Causes Of Sepsis

The most common cause of sepsis or septicemia is a bacterial infection. Other common causes of sepsis are fungal, viral, or parasitic infections in your body. The infection might occur anywhere in the body, but some of the common sites where infection could lead to sepsis include:

The lungs: Lung infections such as pneumonia might lead to sepsis in some patients. Sepsis through the lungs can be fatal if not treated on time.

The abdomen: An infection in the appendix (appendicitis), infection of the abdominal cavity (peritonitis), gallbladder infections, liver infections, or bowel problems might lead to mild or severe sepsis.

The urinary tract: An infection in the kidneys or bladder can also lead to sepsis. This kind of blood infection occurs mostly in patients who have a urinary catheter to drain urine. Urosepsis might cause nausea, vomiting, pain in your lower spine, and abnormal white blood cell count (either too high or too low). Urosepsis can be life-threatening if not treated on time.

Read more about urinary tract infections (UTIs).

Click Now!

The skin: Sometimes bacteria might penetrate the skin through open cuts or wounds. They can also enter through intravenous catheters when they are inserted into the body to give or drain fluids. Cellulitis, which is an inflammatory condition of the skin, can also lead to skin sepsis.

Risk Factors For Sepsis

Several factors increase the risk of sepsis, some of which include:

1. Infancy: Infants are at high risk of developing sepsis because of infantile birth disorders.

2. Old age: Older people are more susceptible to infections because of weaker immunity. Moreover, older people commonly suffer from diseases such as diabetes or lower respiratory infections, leading to sepsis.

3. A weak immune system: A weak immune system, irrespective of age or gender can also lead to the development of sepsis. Cancer patients who take chemotherapy have a weakened immune system which increases their chances of developing sepsis.

4. Uncontrolled diabetes: Patients who suffer from diabetes mellitus are at a high risk of developing sepsis. Infections are prone to get severe in these patients.

5. Chronic kidney or liver ailments: Patients with chronic kidney disease who undergo regular dialysis are more likely to develop infections and sepsis.

6. Hospitalized patients: Patients with extended hospital stays or who get admitted to the intensive care unit are prone to contracting an infection that might turn into sepsis.

7. Insertion of invasive devices: Breathing tubes or intravenous catheters can potentially increase the risk for infection, including healthcare-acquired infections (HAIs), which can lead to sepsis.

Keep open wounds clean and covered to prevent sepsis!

Have you ever thought about how infectious open wounds can be? Open wounds anywhere on the body can turn infectious. Therefore, regularly clean them, apply antibiotic ointments and keep them covered to avoid any accumulation of dust particles. Read about first-aid for cuts and bruises.

Click Here!

Diagnosis Of Sepsis

The doctor will conduct several tests to diagnose the actual cause of sepsis when the body exhibits symptoms of an infection. These diagnostic tests include:

Blood tests

Blood tests are conducted to test the evidence of an infection, any blood clots, electrolyte imbalance, impaired liver or kidney function, and lower oxygen levels. These include:

Complete blood count (CBC)

Serum concentrations of electrolytes

Liver function test

Kidney function test

Lab tests

Certain lab tests are conducted by collecting samples of urine, respiratory secretions, and wound secretions.

Detection of procalcitonin in the blood is used to diagnose sepsis at an early stage. Procalcitonin is a protein produced by the thyroid gland under normal conditions. Its level rises in the blood in response to microbial infection or an injury to the body.

Know More!

Imaging tests

The following imaging tests are done to locate the exact source of the blood infection:

1. X-ray: Lung infections are identified through x-rays.

2. Ultrasound: Infections in the gallbladder and kidney are identified through ultrasound images. This procedure uses sound waves to create images of the organs on the monitor.

3. Computerized tomography (CT): This procedure gives cross-sectional images of the body's internal organs. It works by taking x-ray images from various angles and then combining them. It is an advanced form of testing and gives almost perfect images of liver, pancreas, and other abdominal organs to locate the source of the sepsis.

4. Magnetic resonance imaging (MRI): This procedure is used to produce 3D images of the body's internal organs. The technology uses sound waves and a magnet to produce images. MRI is used to identify sepsis in bones and soft tissues.

Get your lab tests done with us, where patient comfort and safety are the utmost priority.

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Celebs affected

Chris Young

Chris Young, an American singer, survived sepsis in the year 2013. His sepsis was caused a bacterial infection resulting from a cut on his leg.Lily Allen, a British singer had developed sepsis after a miscarriage and has recovered from it.

Lilly Allen

Lily Allen, a British singer had developed sepsis after a miscarriage and has recovered from it.

Prevention Of Sepsis

Sepsis patients mostly have some underlying health condition that needs frequent medical monitoring. Doctors can prevent the occurrence of sepsis by educating the patients and warning them about the signs of sepsis. For eg. diabetic patients are at a high risk of developing sepsis, therefore doctors should make it a point to ensure that diabetic patients thoroughly check their feet for wounds that could cause infections. One should also take the following steps as prevention against sepsis:

1. Get vaccinated

Around thirty percent of sepsis cases are caused by pneumonia. Therefore, annual flu shots can prevent respiratory infections, which lead to sepsis. Many deaths can be prevented if older adults get their annual flu shots on time.

2. Clean open wounds properly

Open wounds can lead to skin sepsis, especially in diabetic patients. Therefore, it is essential to clean any dirt with soap and water and always cover open wounds. Diabetic patients need to maintain foot hygiene and prevent any foot infections.

3. Avoid infections

Many patients develop sepsis in the hospital while staying in the intensive care unit. Therefore, doctors or healthcare providers must take steps to prevent the occurrence of any such infections. Doctors, nurses, and visitors should maintain hygiene, like washing their hands before touching the patient to avoid any kind of infection.

4. Know the symptoms

One must know the symptoms of sepsis to avoid any complications. Sepsis is characterized by fever, chills, shortness of breath, diarrhea, vomiting, rash, pain, rapid heart rate, confusion, and disorientation.

5. Do not delay

Sepsis is a life-threatening condition. If an infection or symptoms of sepsis persist and are getting worse, act fast. Get medical care immediately without any delay.

6. Get the right treatment

If it is suspected that infection has turned into septicemia, the medical team will try to identify the source of infection and start IV fluids and specific antibiotics.

Worried about respiratory infections in this weather? Learn how to prevent the spread of respiratory infections.

Read Now!

Specialist To Visit

Sepsis is a life-threatening disease. It cannot be treated at home and requires immediate hospitalization and life support systems such as breathing machines and oxygen cylinders. Therefore, in case of any symptoms of sepsis, one should visit the hospital immediately.

Specialists who help to manage sepsis are:

Primary care provider (PCP)

Emergency medicine doctor

Infectious disease specialists

Primary care providers (PCP) prevent, diagnose, and treat diseases. An emergency medicine doctor treats patients admitted to the emergency department. Infectious disease specialists are doctors who treat severe sepsis or septic shock.

If you are facing such an issue, or want to get your queries answered, seek advice from our world-class professionals.

Consult Now!

Treatment Of Sepsis

Immediate and aggressive treatment increases the chances of survival in sepsis. Treatment in time is essential to prevent a septic shock. Patients with sepsis require lifesaving measures such as oxygen and breathing machines. The following treatment options are adopted to stabilize patients with sepsis symptoms. They include:

A. Antibiotics

Broad-spectrum antibiotics are initially given as they are effective against a wide variety of bacteria. After conducting all the relevant blood tests, antibiotics targeting particular bacterias that are causing the infection are given. These antibiotics include:

1. Ceftriaxone (Rocephin): It is used to control several life-threatening bacterial infections such as pneumonia, meningitis, and E. coli. It is also given to prevention of infection or sepsis after surgery.

2. Meropenem (Merrem): It is an intravenous antibiotic used to treat sepsis arising out of intra-abdominal infections.

3. Cefotaxime (Claforan): It is an intravenous antibiotic used to treat sepsis that may arise from a urinary tract infection, pneumonia, meningitis, or cellulitis.

4. Ampicillin and sulbactam (Unasyn): This combination treats a wide spectrum of bacterial infections that might include skin sepsis.

5. Levofloxacin (Levaquin): This antibiotic is used to treat bacterial infections in the kidney and prostate. It is also used to treat skin infections and pneumonia.

B. Intravenous fluids

Intravenous fluids are administered as soon as possible to prevent severe sepsis or septic shock. Crystalloid fluids are the most commonly used intravenous solutions given to patients with sepsis and septic shock.

C. Vasopressors

If the blood pressure doesn’t increase even after intravenous fluids, vasopressor medications are started. The function of vasopressors is to constrict the blood vessels to increase blood pressure. Norepinephrine and dopamine are the most preferred vasopressors used in the treatment of sepsis or septic shock.

D. Supportive care

Supportive care includes oxygen, a machine to help breathe properly, and dialysis if the kidneys are adversely affected.

E. Surgery

Surgery might be considered if the source of the infection is pus (abscesses), dead tissues (gangrene), or infected tissues. If there is a soft tissue abscess leading to sepsis, it should be drained as soon as possible.

Control diabetes to prevent the occurrence of sepsis.

Diabetes can increase the risk of infections. Diabetic patients can develop diabetic neuropathy, which leads to infection and pain. Open wounds can also become infectious if the sugar levels are high. Hence, it is very important to manage diabetes. Here are some tips on how it can be managed with diet.

Click Now!

Home-Care For Sepsis

Sepsis is life-threatening for all age groups, but it is potentially dangerous for infants and older people. Sepsis can be treated with early diagnosis and proper treatment. But sepsis has several long-term side effects, which require special care even after discharge from the hospital. Therefore, home care is an important part of the recovery from sepsis. Follow certain measures to look after your loved one at home:

1. Complete the antibiotic course

Do not miss antibiotics and consume them as directed by your doctor. An incomplete antibiotic course could lead to reinfection. A professional caregiver who can look after the patient at all times can be appointed.

2. Prevent infection from recurring at home

Keep the surroundings clean. Personal hygiene should be maintained at all costs, and wounds should be cleaned and covered at all times. The site of the surgery should be cleaned and dressed regularly.

Sepsis might lead to permanent side effects, which might cause loss of mobility or cognitive function. Some people might even lose arms, hands, or legs because of limb amputation. Therefore, appoint a caregiver if needed to help the sepsis patients get around and carry on with daily activities.

3. Stay hydrated

Sepsis patients should consume plenty of fluids to avoid dehydration.

4. Stop smoking

Sepsis patients should not smoke or consume other tobacco products in the recovery period at home as it can lead to reinfection and delayed recovery.

5. Eat a well-balanced diet

A healthy diet is very important for sepsis patients recovering at home. They should be given a nutritious diet as advised by the doctor. Foods such as nuts, soy, tofu, fatty fish, etc can be consumed for quick recovery. The doctor might advise restrictions on certain food items, which must be avoided at all costs.

Did you know?

A well balanced and healthy diet can take you a long way. Understand how you can reap all the benefits from a diet.

Click To Read!

Complications Of Sepsis

Sepsis can have serious complications, which include:

1. Acute respiratory distress syndrome (ARDS): If sepsis occurs from respiratory infections, respiratory organ dysfunction may be caused due to the lack of oxygen flow to the lungs. It could lead to complications like acute respiratory distress syndrome (ARDS).

2. Thrombosis: Sepsis might lead to microvascular thrombosis (blockage of blood vessels by blood clots) and low blood pressure. As a result, tissue oxygenation is impaired.

3. Organs dysfunction/failure: Sepsis could lead to blockage of blood vessels because of microvascular thrombosis or blood clotting which might lead to organ dysfunction or even failure.

4. Brain damage: The brain is the first organ that might get affected. During sepsis, the body produces nitric oxide, which affects the normal functioning of the brain.

5. Endocarditis: A serious complication of sepsis is endocarditis or damage to the valves of the heart. It could also lead to heart failure.

6. Gangrene: Sepsis might lead to gangrene or tissue death of toes and fingers, which might require amputation.

7. Weakened immune system: The immune system might become weak, which raises the risk of reinfections.

8. Septic shock: Symptoms of septic shock include all the symptoms of severe sepsis with extremely low blood pressure levels along with decreased urination and clammy, sweaty skin. Septic shock leads to respiratory or heart failure, stroke or even death.

Did you know?

Severe COVID-19 can lead to sepsis. As a viral infection, COVID-19 can lead to sepsis. Moreover, people with COVID-19 are more vulnerable to infections caused by bacteria or other pathogens. The body’s reaction to the additional infection could lead to sepsis.

Read More!

Alternative Therapies For Sepsis

Sepsis is a life-threatening condition. It requires immediate hospitalization and, in severe cases, life support systems like oxygen and breathing machines. Sepsis can affect all your internal organs such as the lungs, kidneys, abdomen, brain, urinary tract, and even skin and bones. Even wounds from surgery might turn infectious and lead to septicemia.

Home remedies for sepsis are not scientifically proven, but you can try the following home remedies to prevent the initial spread of infection or after discharge from the hospital. It is always advisable to consult your healthcare provider before using any home remedies:

1. Vitamin C: Vitamin C strengthens the immune system and helps the body to fight against infections.

Vitamin C (also known as ascorbic acid) is an essential nutrient that plays a critical role in several bodily functions in a lot of constructive ways.

Read More!

2. Turmeric (Haldi): Turmeric has been used since ancient times as an effective means to treat infections. Studies have shown that this home remedy can play an important role in controlling sepsis. It is an anti-inflammatory agent which can reduce pain, redness, and swelling.

3. Garlic (Lahsun): Garlic has extraordinary anti-inflammatory and anti-bacterial properties. It is a storehouse of anti-fungal properties. Studies suggest garlic can play an active role in recovering from sepsis.

4. Honey (Shahad): Honey can strengthen the immune system. Honey and garlic are a great combination for boosting immunity and recovering from an infection.

5. Lobelia and slippery elm: Lobelia and slippery elm can be applied externally to skin infections or wounds which can turn infectious. These herbs are beneficial in treating bacterial infections. A paste of lobelia and slippery elm can be applied to the wound for quick recovery.

6. Potato (Aloo): Potato juice can be applied externally to wounds to control inflammation from sepsis.

Living With Sepsis

Many survivors of sepsis are affected with post sepsis syndrome or PSS. The patients suffer from physical and psychological side effects for quite a long term.

The physical effects of post-sepsis syndrome include:

Fatigue or lethargy

Difficulty in breathing

Difficulty in sleeping

There might be reinfections within the first few weeks of recovery from sepsis

Poor or reduced appetite

Hair loss

Skin rash

Swelling of limbs

Reduced function of organs like the kidney, heart, and liver.

The psychological effects of post-sepsis syndrome include:

Panic attacks

Depression

Memory loss

Hallucinations

Flashbacks

Concentration problems

Reduced mental functioning

Post-traumatic stress disorder (PTSD)

Doctors and healthcare professionals must be able to recognize the symptoms of post-sepsis syndrome. Timely recognition of symptoms leads to better treatment. Here are a few things that can help you to manage post sepsis syndrome or PSS:

Survivors of sepsis who are undergoing psychological problems like depression or reduced mental functioning should seek counseling, neuropsychiatric assessment, and cognitive behavioral therapy.

If sepsis survivors suffer from physical side effects such as reduced organ functioning or lack of sleep, they should seek physical therapy and neurorehabilitation.

Rest is the best medicine for all ailments. Survivors of sepsis should take ample rest to regain their lost strength and vitality. The body undergoes a lot of pain during a sepsis or septic shock. Therefore, it will take time to regain normalcy.

Survivors should not isolate themselves in the recovery period. They should not stay in crowded places as it increases the risk of infection. But they should always have someone to talk to, like family or friends.

To regain strength, the body needs a nutritional diet. A balanced diet should be given to survivors of sepsis, but according to the doctor's guidelines.

Always remember to stay in touch with the doctor, especially in the initial few weeks after recovery. Any kind of discomfort of post sepsis syndrome symptoms should be immediately conveyed to the doctor or healthcare professional.

Frequently Asked Questions

How large a problem is sepsis?

What is the difference between sepsis and septic shock?

How can anyone get sepsis?

Is sepsis contagious?

Are some people at higher risk of sepsis?

How can I prevent sepsis?

Are you prone to sepsis if you had it before?

Does sepsis ever leave your body?

What is the life expectancy of someone with sepsis?

What are the three stages of sepsis?

Does sepsis come on suddenly?

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Sinusitis

Also known as sinus infection, rhinosinusitis

Overview

Sinus infection or sinusitis occurs when the air-filled spaces in the skull called sinuses get inflamed or swollen. According to a survey by The National Institute of Allergy and Infectious Diseases (NIAID), an estimated 134 million Indians suffer from chronic sinusitis. These numbers are surprisingly double the number of people with diabetes in India.

The human body has four pairs of sinuses. In a healthy person, each sinus is lined by a membrane that produces mucus. This is a thin, watery fluid that flows freely from the sinuses into the upper part of your nose. However, when sinuses get inflamed by some viral, bacterial infection, allergens or irritants, the mucus gets thick and sticky and cannot flow into the nose. This results in fluid build up in the sinuses, causing pressure, pain and other symptoms.

Home care tips like application of warm compress on your face, use of saline nasal drops, maintaining adequate hydration of the body, steam inhalation and use of a humidifier can provide great relief from symptoms of sinusitis. In case of severe or prolonged symptoms, it is always advisable to visit a doctor for a proper diagnosis and treatment plan. Treatment usually involves use of antibiotics, antiallergics, decongestants and medications for pain relief.

Key Facts

Usually seen in

Children below 15 years of age

Adults between 25 to 64 years of age

Gender affected

Both men and women

Body part(s) involved

Sinuses

Nose

Head

Prevalence

Worldwide: 14.7% (2019)

Mimicking Conditions

Rhinitis

Upper respiratory infection

Maxillary toothache

Tension headaches

Vascular headaches

Brain abscesses

Epidural abscesses

Meningitis

Subdural empyema

Necessary health tests/imaging

CT Scan (PNS Coronal)

MRI(PNS)

Microbial cultures

Nasal endoscopy

Tests for Allergies

Biopsy

Treatment

Antibiotics: Amoxicillin, Trimethoprim-sulfamethoxazole, Cefuroxime, Ciprofloxacin, Sulfamethoxazole, & Metronidazole

Decongestants: Naphazoline, Oxymetazoline, Adrenaline, Oxymetazoline+Sorbitol & Phenylephrine

Antihistamines: Cetirizine, Chlorpheniramine & Clemastine

Pain relief medications: Paracetamol & Ibuprofen

Nasal corticosteroids: Fluticasone, Fluticasone propionate, Triamcinolone, Budesonide & Beclomethasone

Oral or injected corticosteroids: Prednisolone & Prednisone

Other options: Saline nasal irrigation, Heat pads on & Vaporizers

Surgery

See All

Causes Of Sinusitis

Your sinuses are hollow spaces or cavities within the bones of the skull that connect to the nose through small, narrow channels. Sinuses are located behind the forehead, nasal bones, cheek bones, and in between the eyes. They contain mucus, which is a thin liquid that traps and moves away any germs, dust, pollutants and allergens entering the body through the nose. They also help to keep the air you breathe in, warm and moist.

Healthy sinuses are filled with air. Sinusitis or inflammation of sinuses happens when fluid builds up in these air-filled sinuses, allowing germs to grow and cause an infection. The causes of sinusitis can include various pathogens, environmental factors to irritants which are:

Allergens

Irritants (animal dander, polluted air, smoke, and dust)

Bacteria

Viruses

Fungi

Types Of Sinusitis

The different types of sinusitis classified according to the timespan of symptoms are:

1. Acute Sinusitis: Symptoms usually last for 4 weeks or less. Cases mostly begin with symptoms of common cold such as a runny nose and facial pain. They are usually caused by viral or bacterial infections, or sometimes even seasonal allergies.

2. Subacute Sinusitis: Symptoms last from 4 to 12 weeks. This condition commonly occurs due to bacterial infections or seasonal allergies.

3. Chronic Sinusitis: Symptoms last more than 12 weeks despite medical treatment, and can continue for months or even years. They are often mild in severity. Bacterial or fungal infection, persistent allergies or structural nasal problems can usually cause this condition.

4. Recurrent Sinusitis: Characterised by several attacks of sinusitis within a year.

Symptoms Of Sinusitis

Depending on which sinus is involved, sinusitis causes pain along with a feeling of pressure:

In the forehead

Over the cheek

In the upper jaw and teeth

Behind the eyes

At the top of the head

Other common symptoms that can be seen along with the pain include:

Blocked nose

Nasal discharge

Mucus dripping down the throat (post-nasal drip)

Sore throat

Cough

Bad breath

Reduced sense of smell and taste

Fever

Frequent headaches

Fatigue

Pain in upper jaw and teeth

Ear pain

Is it a cold or sinus infection?

As the symptoms of both cold and sinus infection are mostly similar, people often get confused between the two. However, both are different conditions. Here are some differences between them which will help you in gauging which one you have.

1. Time duration

This is the first and foremost sign of sinusitis. If you suffer from a common cold you may have a runny nose for 1-2 days, followed by a stuffy nose for 2-4 days. Post this, you may start to feel better. But if you have sinus infection, then the symptoms may stay for around seven days or more.

2. Nasal discharge

Another potentially helpful sign of sinusitis is the color of the nasal discharge.

Note: A viral infection may produce a colorful discharge. However, bacteria produce greenish or yellow mucus.

3. Sinus headaches

The pressure and swelling in the sinus cause a headache. Sinus pain can also lead to dental pain, pain in the jaws and cheek and ear pain.

4. Pain in the sinuses

Pain is a very common symptom of sinusitis. The inflammation and swelling in the sinus cause a dull pressure, which leads to pain in your forehead, upper jaws, and teeth, either side of the nose, or between the eyes. This may gradually lead to a headache.

5. Throat irritation and cough

The sinus blockage may cause irritation in the throat. This can also lead to a persistent cough, which gets even more annoying when you are lying down to sleep.

REMEMBER! The main difference is the duration of symptoms. You will most probably recover from a cold within 5-10 days. But, sinusitis can make you feel run down for 4 weeks (acute sinusitis) or for over 3 months (chronic sinusitis).

Risk Factors Of Sinusitis

Sinusitis is mostly seen in children younger than 15 years of age than in adults as the sinuses in kids are not fully developed. However, even adults in the age group of 25 to 64 years can suffer from sinus infections due to the triggers. Some of the common triggers or factors that increase your risk of sinusitis include:

Respiratory tract infections. Infections of the respiratory tract like common colds may produce too much mucus which can block the opening of the sinuses.

Nasal polyps or nasal bone spur can block the opening of nasal passages or sinuses.

Deviated nasal septum in which the thin wall in the nose that separates the nostrils is displaced to one side thereby blocking or limiting the sinus passages.

Seasonal allergies from dust, pollen etc.

Conditions that prevent cilia (move back and forth to help the mucus move out of the sinuses) from working properly like dehydration, drying medications like antihistamines, and lack of sufficient humidity in the air.

Respiratory diseases such as cystic fibrosis which causes impaired mucus transport.

Smoking including passive or secondhand smoke.

Enlarged adenoids.

Dental infection.

Changes in barometric pressure during air travel or scuba diving.

Patients with nasogastric or nasotracheal tubes.

Weakened immune system from HIV or chemotherapy.

Diagnosis Of Sinusitis

In most cases, sinusitis can be diagnosed based on the physical examination done by your general physician. This is usually based on your symptoms which also includes the duration and the severity. In some cases, your doctor might also ask you to get some tests done which includes:

1. CT Scan (PNS Coronal) or MRI (PNS)

Images taken using CT or MRI can show details of your sinuses and nasal area. These might pinpoint a deep inflammation or physical blockage, such as polyps, tumors or fungi, that's difficult to detect using an endoscope. This is why a coronal CT scan or MRI is recommended for the diagnosis of sinusitis.

2. Microbial cultures

This test is requested in order to know the cause of the sinus infection in case of a bacterial or fungal infection. It is mostly advised in chronic sinusitis and in cases where the condition fails to improve or worsen even after treatment.

3. Nasal endoscopy

In this, a thin flexible tube (commonly known as an endoscope) with a light is inserted through the nose to check the inside of the sinuses.

4. Tests for Allergies

If your doctor suspects that the condition might have been triggered due to an allergy, then allergy testing might be advised. It is a simple skin test which helps to detect the allergen that causes a flare-up. It is a quick and safe test that can help you to know about any specific allergen which can trigger a flare-up.

5. Biopsy

Although rare, your doctor might advise a biopsy if he/she suspects fungal sinus infection which can even penetrate through the bone. This can only be determined through tissue biopsy or bone biopsy based on the severity and the cause.

Celebs affected

Malaika Arora

According to various reports online, Malaika Arora had to undergo a nasal surgery for the deviated nasal septum to treat sinusitis in the year 2011.

Prevention Of Sinusitis

You can lower your risk of suffering from sinus infections as well as relieve the early symptoms of sinusitis by following some simple tips and tricks that not only help to keep your nasal passages clear but also improve your overall ability to fight the infection. Here are some of the best ways to prevent sinusitis and stay healthy according to the CDC.

1. Always keep your hands clean

A proper hand hygiene ritual is the single most important and least expensive means of reducing the prevalence of infections. It also helps you to prevent the spread of germs and infections to others and prevent you from getting sick.

2. Be safe with vaccinations

The role of vaccines in lowering your risk of infections cannot be underestimated. It is always recommended to receive the flu vaccine and pneumococcal vaccine which help you to prevent seasonal flu and pneumonia respectively. It not only boosts your immune function but also helps you to fight infections.

3. Avoid people who have colds or other upper respiratory infections

It goes without saying that people who suffer from viral infections or colds are at a high risk of spreading the infections to others. As these infections can trigger sinusitis, it is highly recommended that one should avoid close contact with people who have cold or other upper respiratory infections to be on a safer side.

4. Stay away from triggers

If your sinusitis is triggered by smoking then it is wise to avoid smoking including secondhand smoke. The same rule applies to triggers such as seasonal allergies, dust, etc which are known to trigger a sinus infection.

5. Avoid dry environments

As dry air can make things worse for your sinuses, it is recommended to use a humidifier in your home (in particular, by your bed). This is because humidity in air can help prevent nasal passages from drying out and thus, lower your risk of infections. Also, remember to keep humidifiers clean to prevent any growth of mold.

Specialist To Visit

If you observe/experience any signs and symptoms of sinusitis, then it’s time to make an appointment with your doctor. Initially, you can visit a general physician and depending on the severity of the diseases or the cause of it, your doctor may refer you to a specialist such as:

Otolaryngologist or ENT specialist

Internal Medicine specialist

Infectious disease specialist

Allergist or Immunologist

Head and neck surgeon in case of any surgery

Treatment Of Sinusitis

The treatment of sinusitis is based on the cause and severity of the condition. Some of the common treatment options for sinus infection include:

1. Antibiotics

If you suffer from bacterial sinus infections, then antibiotics are the most preferred and effective treatment that is recommended. Based on the symptoms and severity of the infection as well as the type of the antibiotics, it can be recommended from one week upto two weeks and beyond if there are any complications. In case of chronic infections, the treatment duration might be prolonged as well. However, do not self-medicate as it can increase the risk of antibiotic resistance. Some of the commonly recommended antibiotics include:

Amoxicillin

Trimethoprim-sulfamethoxazole

Cefuroxime

Clindamycin

Ciprofloxacin

Sulfamethoxazole

Metronidazole

2. Decongestants

These medications help treat sinus infections by causing the swollen nasal passages to shrink. This in turn helps in the proper flow of drainage from the sinuses. These are available in the form of pills, nasal sprays as well as topical ointments. Examples of the commonly used decongestants for sinusitis are:

Naphazoline

Oxymetazoline

Adrenaline

Oxymetazoline+Sorbitol

Phenylephrine

3. Antihistamines

If the cause of the sinus infection is an underlying allergic reaction or due to an allergen, then antihistamines are the preferred medications. These medications work by blocking the inflammation that causes the allergic reaction and help to fight the symptoms. These also help to treat swollen nasal as well as sinus passages, improving the condition. Examples include:

Cetirizine

Chlorpheniramine

Clemastine

4. Pain relief medications

As the name suggests, pain relief medications help in treating headaches which often accompany sinus infections. These are also known to help improve the symptoms and are mostly given along with other medications to treat the infection. Examples include:

Paracetamol

Ibuprofen

5. Nasal corticosteroids

These are available as nasal sprays which help to prevent and treat inflammation. Some of the common examples of medicine which belong to this class are:

Fluticasone

Fluticasone propionate

Triamcinolone

Budesonide

Mometasone

Beclomethasone

6. Oral or injected corticosteroids

These medications are used to relieve inflammation from severe sinusitis, especially if you also have nasal polyps. Commonly used corticosteroid is:

Prednisolone

7. Other options

Saline nasal irrigation with nasal sprays or solutions reduces drainage and rinses away irritants and allergies. Additionally, use of heat pads on the inflamed area to soothe the pain or vaporizers to improve flow of mucus from the nose and relieve the symptoms is also recommended.

8. Surgery

If drug therapies fail to show any improvement in your condition, then surgery may act as a last resort. It is mostly done in people suffering from sinusitis caused due to underlying anatomical defects. An otolaryngologist (ENT Surgeon) is the right doctor who can fix defects in the bone separating the nasal passages, remove nasal polyps, and open up closed passages.

Home-care For Sinusitis

Most sinus infections usually get better on their own without antibiotics by taking proper self-care measures. Talk to your doctor about the best treatment in your case. Here are a few tips to help you feel better.

Apply a warm compress on your face to soothe sinus pain.

Use saline nasal drops daily to clear off any extra mucus and keep the nasal passages moist.

Use a Neti pot or saline squeeze bottle to flush the sinuses.

Keep yourself hydrated to thin the mucus.

Inhale steam or take a long hot shower to open up your sinuses.

Use a humidifier at home or workplace.

Keep your head elevated while sleeping.

Avoid extreme and sudden changes in temperatures and suddenly bending forward with your head down.

Take anti-allergic medicines and decongestants only when prescribed.

Complications Of Sinusitis

Sinusitis can be diagnosed based on the symptoms and it can be treated effectively with use of medications such as antibiotics, decongestants, antihistamines and painkillers. However, if left untreated, it can lead to frontal or sphenoid sinusitis which can not only make it difficult to manage the symptoms but also leads to difficulty in swallowing & breathing.

Serious complications of chronic sinusitis are rare but may include:

Abscess: collection of pus in the sinus cavity.

Eye complications: If your sinus infection spreads to your eye, it can cause orbital cellulitis which is an infection of the tissue surrounding the eyes that can result in reduced vision or rarely loss of vision.

Infections: Very rarely, people with chronic sinusitis may develop infections like meningitis (a life threatening infection that can cause brain and spinal cord damage) or osteomyelitis (bone infection).

Alternate Treatment For Sinusitis

Blocked sinuses are mostly a result of a bout of common cold or allergic conditions. More often than not, the sinuses can be freed using prescription drugs or nasal sprays. The nasal sprays can have side effects and it is best to limit their use. You can try simple and effective home-made remedies which often work better than these sprays and pills. Here are a few remedies that you can give a try:

1. Carom (Ajwain) seeds

Add one tablespoon of carom seeds (ajwain seeds) to a pot of boiling water. Place the bowl under your face and cover your head and neck with a towel so that the steam directly hits your face and does not escape. Take deep breaths to clean your sinuses. You can also add peppermint oil or sage leaves to the water and inhale for 5-10 minutes.

2. Turmeric (Haldi)

The quintessential Indian spice, turmeric contains an active compound curcumin which is a very potent anti-inflammatory agent besides being a powerful antioxidant. Chewing a raw turmeric root on an empty stomach will loosen the accumulated mucus in the sinuses and let the blood vessels breathe easily thereby easing the blockage.

3. Garlic (Lehsun)

It is one of the most powerful natural antibiotics and helps relieve blocked sinuses when the cause is an infection or allergy. Its active component, Allicin, not only cures the blockage but even prevents it. Have a raw garlic clove on an empty stomach every day.

4. Tulsi

Tulsi or holy basil is a revered Ayurveda medicine that boasts of a range of health benefits. Having a few raw tulsi leaves and honey on an empty stomach boosts the immunity and fights conditions like sinus infections, common cold and blockage of sinuses.

5. Eucalyptus (nilgiri) oil

Eucalyptus oil is known for its decongestant and anti-inflammatory properties and provides instant relief from blocked sinuses. Add 3 to 5 drops of eucalyptus oil to boiling water in a large pot. Use a towel to cover your head and slowly inhale the steam through your nose for no more than 2 minutes at a time. Keep your eyes closed. Do it 2 times a day. Or else, just pour 1-2 drops of the oil on a clean handkerchief and inhale a few times.

6. Salt water

Warm some water and add salt. Take a teaspoonful of the lukewarm water and snort it in with either your left or right nostril. It will come out through the other nostril. Do this a couple of times on each side and your clogging will reduce considerably. Use a Neti pot if you own one.

Living With Sinusitis

Living with sinusitis is knowing the right ways to prevent recurrence of the condition, relieving the symptoms and preventing attacks in case you do not have the infection yet. Here are a few tips on living with sinusitis:

1. Avoid foods that can trigger a reaction

Dairy products, refined sugars and processed foods should be limited or avoided as these foods tend to increase mucus production and trigger sinusitis.

2. Boost your immune system

People with weak immune systems are known to be at higher risks of suffering from the condition. People with weak immunity should take supplements and nutrients like vitamin C, multivitamin, zinc etc.

3. Avoid allergens & smoking

If someone has indoor allergies it is recommended to avoid triggers like animal dander and dust mites. Smoking is never recommended, but if you do smoke, strongly consider a program to help you quit, as smoke can also trigger allergies and prevent removal of mucus by the nose.

4. Dealing with the symptoms

Relieve sinusitis symptoms by following simple home remedies like using a humidifier, taking steam inhalation, using saline drops and staying hydrated.

5. Take doctor’s advice

Sinusitis should be taken seriously, and requires medical intervention, especially if the infection is chronic. It also helps to get treatment for other underlying infections that may be triggering sinusitis.

Frequently Asked Questions

What are sinuses?

What causes sinus infection?

How do you know if you have sinusitis?

How do you know if you have a sinus infection or a cold?

What is the difference between acute and chronic sinusitis?

How does a respiratory infection spread?

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Sjogren’s Syndrome

Also known as Sicca syndrome, Mikulicz's disease, Dacryosialoadenopathia atrophicans, Gougerot-Houwer-Sjogren syndrome, Gougerot-Sjogren syndrome, Keratoconjunctivitis sicca, Keratoconjunctivitis sicca-xerostomia, Secreto-inhibitor-xerodermostenosis and Sjogren-Gougerot syndrome

Overview

Sjogren's syndrome is an autoimmune disorder that decreases the amount of moisture produced by the eyes and saliva by salivary glands. It is named after Swedish eye doctor Henrik Sjogren, who first described the condition.

The condition is more common in women and most people who are diagnosed are over the age of 40, but it can develop at any age. Sjogren's syndrome is often associated with other immune system disorders like rheumatoid arthritis and lupus (an autoimmune condition causing inflammation of joints, skin, kidneys, blood cells, brain, heart, and lungs). This syndrome is identified by its two most common symptoms namely dry eyes and dry mouth (also called xerostomia).

Some individuals may be first diagnosed with a rheumatic disorder (such as rheumatoid arthritis or systemic lupus erythematosus) and can later develop the dry eyes and dry mouth (characteristic of Sjogren's syndrome). In general, almost half the people with Sjogren syndrome also have another autoimmune disorder.

The treatment mostly focuses on relieving the symptoms and complications due to dry eyes, dry mouth, and other other symptoms.

Key Facts

Usually seen in

Individuals above 40 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Most common: Mouth and eyes

Less common: Lungs, kidneys, liver, lymph nodes, and nerves

Prevalence

Worldwide: 0.01-3% (2017)

Mimicking Conditions

Immunoglobulin G4-related sclerosing disease

Necessary health tests/imaging

Schirmer test

Cornea and conjunctiva examination

Salivary analysis

Biopsy of minor salivary gland

Additional tests

Complete blood count (CBC)

Chemistry panel

Chest radiography

Protein electrophoresis

Antinuclear antibodies test

Antibodies against Ro/SSA and La/SSB autoantigens

Rheumatoid factor

Viral testing: Hepatitis C virus & Human T-lymphotropic virus 1

Antibody against thyroid antigens

Thyroid function

Treatment

Dry eyes and eye inflammation: Artificial tears, Eye gel, Eye drops & Punctal occlusion

Dry mouth and its related symptoms: Pilocarpine & Cevimeline

Other symptoms: Ibuprofen, Prednisone, Hydroxychloroquine, Immunosuppressants & Antifungals

See All

Symptoms Of Sjogren’s Syndrome

Sjogren’s syndrome can affect the whole body and can cause inflammation of organs like the kidneys or lungs. The symptoms of Sjogren's syndrome include:

Dryness of the eyes, mouth, and skin

Dryness of the vagina

Tiredness/fatigue

Pain in the muscles and joints

Swelling of the salivary glands

Rashes on the skin, especially after sun exposure

Dry nasal passages and throat along with a dry cough

Acid reflux

Swelling of the glands around the face and neck

Trouble sleeping

Poor concentration and memory problems

Numbness, tingling, and weakness, especially in the extremities

Shortness of breath or trouble breathing

Muscle weakness

Note: The reason for dryness of the mouth (also called xerostomia) can be due to several other causes and not just Sjogren’s syndrome.

Read More!

Types Of Sjogren's Syndrome

Sjogren’s syndrome is classified into two forms, namely:

1. Primary form: In this type, the syndrome is not associated with any type of rheumatic disease. This form develops as a result of any other health condition.

2. Secondary form: This form is associated with other rheumatic diseases, such as rheumatoid arthritis, systemic lupus erythematosus, scleroderma (hardening and tightening of the skin), polymyositis (muscle weakness affecting both sides of the body), or psoriatic arthritis (arthritis associated with psoriasis - red patches of skin topped with silvery scales).

Causes Of Sjogren's Syndrome

Sjogren’s syndrome is mostly thought to be an autoimmune disease, in which the immune system attacks the healthy cells instead of the diseased ones as a result of some triggers. In this syndrome, the immune system attacks the ophthalmic glands in the eyes and salivary glands in the mouth.

Though the exact cause of the syndrome is still unclear, Sjogren's syndrome is thought to be a result of a combination of genetic and environmental factors. According to several researchers, many genes affect the risk of developing Sjogren's syndrome, but that development of the condition may be triggered by something in the environment as well.

In particular, viral or bacterial infections can activate the immune system, and cause the development of Sjogren's syndrome in susceptible individuals.

Risk Factors For Sjogren's Syndrome

Though the explicit cause of this syndrome is still not clear, several kinds of research suggest the abnormal functioning of the immune system causing damage to the healthy cells and tissues. There can be several factors playing a prominent role in it like the environmental and genetic factors. An individual developing Sjogren's syndrome has most likely inherited the risk from one or both of their parents, along with certain environmental impacts like a viral or bacterial infection.

Some of the common traits most commonly in people that act as risk are:

1. Age: Generally seen in individuals over the age of 40, but it can affect younger individuals, including children.

2. Gender: Several types of research have been done to understand the gender predilection of Sjogren's syndrome. Women are 10 times more likely to develop this disease than men and it may be due to the effect of sex hormones on a woman’s immune system.

The role of the hormone estrogen that drops after menopause is said to be the major risk factor in the development of this disease in women.

3. Rheumatic disease: The risk of developing Sjogren's syndrome is more in individuals who already have a rheumatic condition such as lupus, rheumatoid arthritis, scleroderma, polymyositis, or psoriatic arthritis.

About half of all individuals with Sjogren's syndrome have been diagnosed with another autoimmune disorder.

4. Genes: Scientists are beginning to identify the genes that can be related to Sjogren's syndrome by analyzing large samples of DNA from the patients suffering from the disease. There are several different genes that have been identified which can increase the risk of developing Sjogren's syndrome.

Did you know?

Rheumatoid arthritis can affect the quality of life and it is different from osteoarthritis. Read to know more myths and facts about rheumatoid arthritis.

Read Now!

Diagnosis Of Sjogren’s Syndrome

The major manifestation of Sjogren's syndrome is oral and ocular (eye) dryness. In clinical practice, patients who present with these symptoms should be assessed for it with the following tests:

1. Schirmer test

It is done to estimate the functioning of the lacrimal glands to measure the production of tears. A wetting paper strip of ≤ 5 mm is placed under the lower lid for 5 mins, after which the paper is removed and checked for its moisture content.

2. Cornea and conjunctiva examination

This test is done to check for any punctuate or filamentary keratitis lesions, which is a typical feature of keratoconjunctivitis sicca. It is done using a rose bengal or lissamine green stain.

3. Salivary analysis

It is done to estimate the production of saliva from an unstimulated salivary gland. The value is considered normal if there is > 1.5 ml in 15 minutes.

4. Biopsy of minor salivary gland

This is done to assess the presence of lymphocytic infiltrates around salivary gland epithelium which is a hallmark of Sjogren's syndrome.

5. Past medical history

If the patient has any pre-existing autoimmune disease, along with dry eyes and dry mouth, it can be concluded that the patient has developed secondary Sjogren’s syndrome.

Along with these, other investigations that may be done include:

Complete blood count (CBC): It is a group of tests done to get information regarding the blood cells like red blood cells (RBC), white blood cells (WBCs) and platelets.

Chemistry panel: They help evaluate the body's electrolyte balance and the status of several major body organs.

Chest radiography: Chest x-ray uses a very small dose of ionizing radiation to produce pictures of the inside of the chest.

Protein electrophoresis: Protein electrophoresis is a test to measure specific proteins in the blood.

Antinuclear antibodies test: This test looks for antinuclear antibodies in the blood to detect any autoimmune disorder.

Antibodies against Ro/SSA and La/SSB autoantigens: This test is done to detect autoantibodies directed against Ro/SSA and La/SSB autoantigens generally indicative of patients with Sjogren's syndrome.

Rheumatoid factor: Rheumatoid factors are proteins and high levels of it in the blood are most often associated with autoimmune diseases such as rheumatoid arthritis and Sjogren's syndrome.

Viral testing for:

Hepatitis C virus can cause liver inflammation, sometimes leading to serious liver damage.

Human immunodeficiency virus (HIV) is a virus that attacks the body's immune system leading to acquired immunodeficiency syndrome (AIDS).

Human T-lymphotropic virus 1 was the first oncogenic human retrovirus to be discovered causing adult T-cell leukaemia/lymphoma and HTLV-1-associated myelopathy or tropical spastic paraparesis (a progressive nervous system condition).

Antibod against thyroid antigens:These antibodies play a key role in the diagnosis of autoimmune disorders.

Thyroid function: Thyroid function is a group of tests that are done together to detect or diagnose thyroid disease and consist of thyroid stimulating hormone (TSH), thyroxine (T4), and triiodothyronine (T3).

Once the diagnosis is established, additional investigational tests like cryoglobulins, complement levels, and immunofixation can be done in patients with peripheral purpura, peripheral neuropathy, salivary gland enlargement or in situ demonstration of salivary gland lymphoma. Along with these, upper endoscopies, bone marrow biopsy, and computed tomography scans of the neck, thorax, and abdomen should be performed to detect any potential development of lymphoma.

Did you know?

Sjogren's patients are at a higher risk of developing blood cancers like non-Hodgkin B cell lymphoma, hence they should be monitored closely. Know more about blood cancer.

Click To Read!

Prevention Of Sjogren’s Syndrome

Since the actual cause for any autoimmune condition is still unknown, it is difficult to prevent it. Although Sjogren’s syndrome can be prevented to some extent by monitoring the risk factors and consulting the doctor to understand, if the patient is suffering from any other rheumatic condition like:

Lupus

Rheumatoid arthritis

Scleroderma

Polymyositis

Psoriatic arthritis

Celebs affected

Venus Williams

After winning her first round in the U.S. Open tennis tournament she withdrew from play and announced that she had Sjogren's syndrome. "I had issues with Sjogren's for a while, it just wasn’t diagnosed,” Williams said. She now has become an activist for the disease.

Carrie Ann Inaba

Carrie Ann Inaba is a well-known judge on ABC's competition show "Dancing with the Stars" was diagnosed with Sjogren's syndrome. As an awareness ambassador for the Sjogren's syndrome foundation, she spreads hope and comfort to others with the condition.

Specialist To Visit

Sjogren’s syndrome comes with a varied amount of symptoms. These doctors diagnose and manage oral symptoms like dryness of the mouth, dental caries, periodontal disorders, eye diseases and any other rheumatic diseases that are related to the syndrome. They are:

Dentist

General physician

Ophthalmologist

Rheumatologist

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Treatment Of Sjogren’s Syndrome

Once the diagnosis is done, the doctors will develop a comprehensive treatment plan that will depend on the extent and severity of the symptoms. Most symptoms can be treated with over-the-counter products whereas some may require prescription medications or minor surgical procedures.

While some individuals may only experience dry eyes and dry mouth, there will be systemic symptoms such as difficulty in concentrating, memory lapses, fatigue, and joint pain. In some cases, the disease can also affect the blood vessels and internal organs like the lungs and the kidneys. The treatment for various symptoms is discussed below:

Dry eyes and eye inflammation

Dry eyes are the most common symptoms of this syndrome. Mild to moderate cases are managed by the following:

Use of artificial tears during the day and a gel at night.

Hot compresses and eyelid cleansers along with gentle eyelid massage to relieve blocked oil glands in the eyelids, in case of blepharitis (eyelid inflammation).

Eye drops prescribed by an ophthalmologist.

In certain severe cases of dry eyes, the doctor might suggest a minor surgical procedure called punctal occlusion. This procedure consists of the insertion of tiny plugs into the tear duct by the ophthalmologist to block them. It is done to sustain tears in the eyes longer, which will help keep them moist.

Dry mouth and its related symptoms

There are a lot of over-the-counter options that are available to relieve the symptoms of dry mouth. They are:

Sugarless candy

Sugar-free gum

Artificial saliva products such as a spray or lozenge

If this does not help, the patient may consult a dentist or a general physician to get prescribed medications like:

Pilocarpine: Pilocarpine stimulates certain nerves and glands in the body thereby increasing the production of saliva, tears, sweat, digestive juices, and other secretions.

Cevimeline: Cevimeline also helps to increase the secretions of the exocrine glands.

Other symptoms

Individuals with Sjogren’s syndrome often experience joint pain due to rheumatic disorders. They may require medications such as:

Ibuprofen (nonsteroidal anti-inflammatory drugs or NSAIDs)

Prednisone (low-dose steroids)

Hydroxychloroquine (disease-modifying anti-rheumatic drug )

Immunosuppressants

Antifungals

What if your eyes do not produce enough moisture?

Every time you blink, your eyes get washed by tears that contain water, oil, and mucus. It keeps your eyes moisturized and lubricated. Know more about the management of dry eyes.

Click To Read!

Home-care For Sjogren’s Syndrome

Sjogren’s syndrome may lead to a variety of symptoms that can affect the general well-being, but most of the symptoms are manageable with simple home care measures or lifestyle changes.

Tips to protect eyes and relieve the symptoms

Dryness of the eyes is a very common symptom of Sjogren’s syndrome. The patient affected with it often feels a burning sensation or like there is something in the eyes. Here are a few options to help reduce tear evaporation by protecting the eyes from wind, air, and airborne particles.

Wear wraparound sunglasses or goggles

Add shields to the sides of their glasses

Avoid windy, dry, or smoky places

Reduce reading, watching TV, or looking at screens for a long time

Tips for dryness of the mouth

Dry mouth is another most common symptom of this syndrome, which can increase your risk of cavities. It can also make it more difficult to speak or swallow. Some of the tips to help relieve the symptoms are:

Chew sugar-free gum

Try sucking on candies

Keep sipping water during the day

Use artificial saliva products such as a spray or lozenge

Quit smoking

Avoid caffeine

Limit alcohol use

Decrease the sugar intake

Take over-the-counter saliva substitutes or oral lubricants

Maintain good oral hygiene by:

Always brushing and flossing after every meal or snack.

Consulting a dentist at least twice a year.

Using fluoride toothpaste, a fluoride rinse, or getting a professional fluoride treatment after a dental cleaning.

Individuals with Sjogren’s syndrome are at a higher risk of contracting fungal infections of the mouth; they can be treated with antifungal medications or medicated troches that slowly dissolve in the mouth.

If the patient wears oral dentures, it has to be made sure dentures are disinfected every night.

Tips for other symptoms

Sjogren’s syndrome can have an effect on the whole body. Some individuals have vaginal dryness, dryness of the lips, fatigue, rashes on the skin, or joint pain. Sjogren’s syndrome can also cause inflammation of other organs like the kidneys or lungs. Some of the measures that can help in aiding against these symptoms are:

For dry lips: Use petroleum jelly and lip balms every 2 hours.

For vaginal dryness: This is seen in women after menopause. Products like vaginal moisturizers, estrogen cream, Vitamin E oil, hyaluronic acid suppositories, and vaginal lubricants can be helpful. Applying sufficient artificial lubrication to both partners during intercourse can help prevent the pain.

For dry skin: This can be managed easily by using body lotions regularly and throughout the day, especially after baths or showers.

For blocked nasal passages or dry nose: Try saline nasal sprays and treat any other causes of congestion such as allergies and sinus infections, before they worsen.

For acid reflux: This generally happens due to a lack of saliva that helps reduce the acidity of the stomach. It can be managed with dietary modifications and non-prescription medications.

Complications Of Sjogren’s Syndrome

The most common complication of Sjogren's syndrome is the involvement of the eyes and mouth. Here are some of the common complications of the syndrome:

Dental cavities

Dry mouth

Yeast infections

Gum diseases

Vision problems

Corneal damage due to dry eyes

Light sensitivity

Blepharitis (inflammation of the eyelids)

Some of the less common complications that might affect the other parts of the body like lungs, liver, kidney, lymph nodes, or nerves are:

Pneumonia

Bronchitis

Kidney disorders

Hepatitis

Liver cirrhosis

Lymphoma

Peripheral neuropathy (numbness, tingling, and burning in your hands and feet)

Inflammation in lung, kidney and liver

Vasculitis (an inflammation of the blood vessels)

Lymph node swelling

Interstitial lung disease

Cystic lung disease

MALT lymphoma (belongs to a group of non-Hodgkin lymphomas called marginal zone lymphomas)

Loss of pregnancy

Neonatal lupus syndrome

Parotid tumors

Alternative Therapies For Sjogren’s Syndrome

The basic management of Sjogren’s syndrome involves lifestyle modification and use of alternatives to relieve the common symptoms like dry eyes and dry mouth. Along with home remedies and self-care, there are a few options in alternative medicine that can provide relief. They are as follows:

1. Chinese herbal medicine

Studies have analyzed chinese herbal medicine (CHM) for the treatment of primary Sjogren’s syndrome (PSS). These studies suggest that CHM can be given either as a sole treatment or in conjunction with conventional therapy to improve lacrimal and salivary gland function. This option is considerably safe and further research has been going on to determine the exact efficacy of this therapy.

2. Herbs and supplements

The fundamental aim of this therapy is to “calm” the immune system and prevent it from causing further damage. Some of the herbs and supplements that can help alleviate the symptoms of Sjogren’s syndrome include:

Cysteine

Evening primrose oil

Gamma-linolenic acid (GLA)

Omega-6 fatty acids

Sulphur

3. Diet

There is no special diet for Sjogren’s syndrome unless the doctor suggests something specific. There are a few things that can be added and avoided to manage the symptoms. They are:

Avoid alcohol, spicy or acidic food items that may cause irritation in the mouth

Use sugar-free lozenges (xylitol) to help keep the mouth moist

Add sauces, olive oil, or dressings to lubricate food

Consume water or any drink alongside the food

Use a drinking straw to make swallowing easier

Add cucumber to diet to increase fluid intake

The best option is to follow a balanced diet which contains fresh fruit and vegetables and has levels of fats and sugar. Some foods like artificial sweeteners are believed to trigger an inflammatory reaction so they must be avoided.

Living With Sjogren’s Syndrome

Proper management of Sjogren’s syndrome helps to alleviate symptoms and also prevent complications. People with this syndrome can live full lives with proper self-care and the care of knowledgeable healthcare professionals. Here are a few things that can help in the management of the symptoms:

Monitor any development of severe complications, like lymphoma, vasculitis, and pulmonary, kidney, and liver disease

Lookout for any kind of pain or redness in the eyes and get it evaluated promptly, as this may signal an infection or corneal damage

Follow proper protocols for dry mouth such as regular use of fluoride and maintenance of oral hygiene

Get dental care at regular intervals to reduce the risk of cavities and other dental problems

Visit the physician regularly for general health screening and to know about preventative medicine

Pay close attention to any abnormal or persistent swelling in the glands around the face or neck, under the arms, or in the groin areas, as that might be a signal for lymphoma

Use moisturizing products to tackle the dryness of the skin and vagina

Give importance to diet and exercise for general well-being

Frequently Asked Questions

What is the prognosis of people living with Sjogren’s syndrome?

Is weight gain associated with Sjogren’s syndrome?

Does Sjogren’s syndrome affect ears?

Is there any relation between hair loss and Sjogren’s syndrome?

When to see a doctor?

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Sleep apnea

Also known as OSA syndrome. Sleep apnoea syndrome, Obstructive apnoea, Sleep-disordered breathing, Obstructive sleep apnoea hypopnoea syndrome

Overview

Sleep apnea is a common sleep disorder characterized by repeated pauses in breathing during sleep causing one to snore loudly or create choking noises while trying to breathe.

It is primarily caused by the relaxation of throat muscles, leading to a temporary blockage of the airway during sleep.

Sleep apnea can also affect the quality of your sleep, leading to excessive daytime fatigue, difficulty concentrating, and irritability. The other symptoms include loud snoring, choking or gasping during sleep, and waking up with a headache, or dry mouth.

It can affect people of all ages, including children, but it is more common in middle-aged and older individuals. Other risk factors include obesity, nasal congestion, and excessive tissue in the throat.

The main treatments for sleep apnea include using a machine called continuous positive airway pressure (CPAP), wearing oral appliances, and making lifestyle changes such as losing weight and avoiding alcohol and smoking.

Key Facts

Usually seen in

Children between 2 to 6 years of age

Adults between 30 to 69 years of age

Gender affected

Both men and women but more common in men.

Body part(s) involved

Soft palate

Tonsils

Uvula

Tongue

Prevalence

Worldwide: 1 billion (2022)

Mimicking Conditions

Asthma

Central sleep apnea

Chronic obstructive pulmonary disease

Depression

Gastroesophageal reflux

Hypothyroidism

Narcolepsy

Periodic limb movement disorder

Necessary health tests/imaging

Sleep study: Polysomnogram, home sleep apnea test

Blood tests: HbA1c, CRP, Thyroid profile, and EPO levels.

Pelvic ultrasound

Treatment

Breathing devices: Bi-level positive airway pressure (BiPAP), Auto-adjusting positive airway pressure (APAP), Nasal expiratory positive airway pressure (EPAP), Adaptive servo-ventilation (ASV).

Oral devices: Mandibular advancement devices and Tongue retaining devices.

Surgery: Uvulopalatopharyngoplasty (UPPP), Maxillomandibular advancement (MMA), and Adenotonsillectomy.

Hypoglossal Nerve Stimulation (HNS)

See All

Symptoms Of Sleep Apnea

Sleep apnea manifests through various symptoms, affecting sleep quality. These include:

1. Night-time symptoms

Loud snoring

Tossing and turning during sleep

Waking up feeling the urge to urinate

Breathing through the mouth while sleeping

2. Daytime symptoms

Dry or sore throat

Excessive daytime sleepiness

Trouble with memory or impaired intelligence

Impotence or decreased sex drive

Waking up feeling tired

Headaches upon waking

3. Symptoms of sleep apnea in children

Breathing through the mouth during sleep

Coughing or choking

Night sweats

Sleepwalking or night terrors

Sleep talking

Bedwetting

Restless sleep and sleeping in unusual positions

Daytime sleepiness or behavior/learning problems

Did you know?

One of the studies shows that sleep apnea is the leading cause of excessive daytime drowsiness in adults. Discover effective ways to enhance your night's sleep by adopting these simple habits, even if you're dealing with sleep apnea.

Read Here

Types of Sleep Apnea

There are two types of sleep apnea, categorized on the basis of the cause of breathing disruptions. They include:

1. Obstructive sleep apnea (OSA)

It is the most common type of sleep apnea that occurs when the airway is blocked during sleep, making it difficult to breathe. The blockage can be caused by the tongue, tonsils, uvula, excess throat tissue, or relaxed throat muscles.

2. Central sleep apnea (CSA)

It is a less prevalent type of sleep apnea that is linked to central nervous system function. It is caused by a breakdown in communication between the brain and the muscles that control breathing.

Did you know?

Obstructive Sleep Apnea (OSA) is the most common type of sleep Apnea. Studies have shown that the prevalence of central sleep apnea is low, however, the prevalence of CSA tends to increase with age and is higher in the elderly population above 65 years of age. Get your share of quality sleep with our widest selection of products.

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Causes Of Sleep Apnea

Obstructive sleep apnea (OSA) occurs when the upper airway becomes partially or entirely obstructed during sleep. This is because upper airway muscles (i.e. back of the throat) get relaxed and your airway narrows or closes as you breathe in.

This blockage restricts the flow of air, leading to breathing pauses that can last for seconds to minutes and you might snore, snort, choke, or gasp. These pauses cause a drop in blood oxygen levels, leading to brief awakenings to restore normal breathing.

These breathing disruptions happen repeatedly during sleep and make it hard to reach the deep, restful phases of sleep.

Is it normal to snore while sleeping?

Listen to our expert decode sleep apnea for you.

Watch this video

Risk Factors For Sleep Apnea

There are several both non-modifiable and modifiable risk factors that can contribute to the development of OSA. They include:

A. Non- modifiable risk factors

Excessive throat tissue: Generally people with obstructive sleep apnea may have excess throat tissue, which can restrict their airway during sleep. Obesity, large tonsils, or a thick neck can all contribute to an increase in soft tissue in the throat.

Structural abnormalities: Individuals with a deviated septum, enlarged tonsils, a small jaw, or a large tongue may be more prone to airway blockages during sleep.

Age: Obstructive sleep apnea is more common in middle-aged and older individuals (above 60 years).

Gender: Men are at a higher risk than women, especially in the earlier stages of adulthood. It affects around 13% of men and 6% of women. Nevertheless, the risk for women increases after menopause.

Family history: Having family members with the condition increases the likelihood of developing sleep apnea.

Certain medical conditions: Such as hypertension, diabetes, congestive heart failure, and hormonal disorders like polycystic ovary syndrome (PCOS), are associated with an increased risk of OSA.

Acromegaly: It is a condition in which the body produces an excessive amount of growth hormone (GH). People with acromegaly might experience OSA because they have macroglossia (enlarged tongue) and could develop central sleep apnea as a result of altered respiratory control.

B. Modifiable risk factors

Obesity: Excess body weight is a significant risk factor for obstructive sleep apnea. Fat deposits around the upper airway can cause it to narrow, making it more likely to collapse during sleep.

Manage sleep apnea by maintaining a healthy weight. Try our well-curated range of weight management products to help you achieve your weight loss goals.

Buy Now

Alcohol and sedative use: Consuming alcohol or certain sedatives can relax the muscles in the throat, making it more likely for the airway to collapse during sleep..

Nasal congestion: Difficulty breathing through the nose has been related to an increased risk of OSA.

Get rid of a stuffy nose with our extensive range of nasal decongestants and sprays.

Shop Now

Muscle relaxant drugs (such as opioids): Long-term use of prescribed opioid-based pain medicines can cause problems with how your brain controls sleep increasing your risk of sleep apnea.

Changes in your hormone levels: People who have low levels of thyroid hormones or high levels of insulin or growth hormone have a higher risk of sleep apnea.

Smoking: Smoking can cause inflammation and fluid retention in the upper airway, leading to airway blockages and contributing to sleep apnea.

Check out our smoking cessation products to get rid of this deadly habit.

Try Now

Diagnosis Of Sleep Apnea

The diagnosis of OSA typically involves the following steps:

1. Physical examination and medical history

Physical examination may be conducted by your doctor to assess factors such as obesity, enlarged tonsils, or other anatomical abnormalities.

Your doctor will also ask about your medical history, including your symptoms, sleep patterns, and any underlying medical conditions that may contribute to OSA.

2. Sleep study

A sleep study is essential to diagnose obstructive or central sleep apnea. Tests to detect sleep apnea are:

Polysomnogram: During this test, multiple sensors are hooked to your body to monitor various parameters including brain activity, eye movements, muscle activity, heart rate, and oxygen levels, to evaluate sleep quality and breathing abnormalities.

Home sleep apnea test: This measures your heart rate, blood oxygen level, airflow, and breathing patterns to detect any abnormalities. The results are interpreted by your doctor.

Here are a few things that need to be considered before you do a home sleep test.

Read Here

Once the diagnosis of OSA is confirmed, the healthcare professional will determine the severity of the condition based on the number of apnea and hypopnea events per hour of sleep. This is known as the apnea-hypopnea index (AHI).

Note: \* Apnea: Apnea is when airflow stops for a period of 10 seconds or longer.

\*Hypopnea: Period of shallow breathing that lasts for at least 10 seconds and causes a drop in the oxygen level in your blood.

3. Blood tests

It is done to check certain hormone levels to rule out any endocrine disorders. The tests include:

HbA1c: This blood test measures average blood sugar levels over the past 2-3 months, and it is done for sleep apnea to assess the risk of diabetes and its impact on the condition.

Thyroid profile: It is a blood test that assesses thyroid hormone levels, and it may be done for sleep apnea to identify any underlying thyroid dysfunction, which can contribute to sleep disturbances.

EPO levels: Erythropoietin levels are a blood test used for sleep apnea to assess oxygen levels and potential causes of chronic low oxygen, which can be associated with the condition.

4. Pelvic ultrasound

It is done to examine the ovaries and detect cysts, and rule out PCOS.

Finding it difficult to get all the tests in one place? Well, we have you covered.

Book tests with Tata 1mg

Celebs affected

Badshah

Famous Bollywood singer, Badshah has revealed in one of the shows, that he has suffered from sleep apnea. He also opened up about his weight loss journey due to sleep apnea.

Ram Kapoor

Well-known television actor Ram Kapoor, revealed his struggle with sleep apnea. In one of the conferences, he said “ A few years back when I went through a medical check-up, I got to know about the disease sleep apnea. My doctor suggested getting a check-up since I am overweight and my snoring increased. I think we should take our sleep seriously for a healthy lifestyle."

Shaquille O’Neal

The former NBA superstar and sports analyst was diagnosed with sleep apnea at Harvard Medical School’s Division of Sleep Medicine. He revealed that he uses a continuous positive airway pressure (CPAP) machine to manage the condition.

Prevention Of Sleep Apnea

While some risk factors, such as genetic predisposition, cannot be altered, there are several measures you can take to reduce the likelihood of developing or worsening sleep apnea. They include:

1. Maintain a healthy weight

Manage your weight as obesity can predispose to sleep apnea. Try to stay active, eat healthy to keep your weight in check.

Obesity can lead to several other diseases. Learn more about the health hazards associated with obesity.

Read this now

2. Avoid alcohol and other sedatives

Alcohol and sedatives relax the muscles in the throat and can cause sleep apnea. Limit or avoid their consumption, especially close to bedtime.

3. Break up from smoking

Smoking contributes to airway inflammation that can lead to sleep apnea.

Want to know how quitting smoking can benefit your overall health?

Read This

4. Address nasal congestion

If you have chronic nasal congestion or allergies, seek appropriate medical treatment to improve nasal airflow. You can use a nasal dilator, or saline spray, to keep nostrils open.

Learn how to use the nasal the right way.

Watch now

5. Manage underlying medical conditions

Conditions such as hypertension, diabetes, and hypothyroidism can increase the risk of OSA. Consult with your doctor to manage these conditions effectively.

6. Stay away from allergens

Reducing exposure to allergens such as pollen and mold can help alleviate sleep apnea by preventing allergic rhinitis, which narrows the airways and worsens symptoms.

Here are 7 natural ways to combat sleep apnea.

Learn more

Doctor To Visit

Specialists who can help you with obstructive sleep apnea (OSA) symptoms and issues include:

General Physician

Sleep specialist

Cardiologist

Otolaryngologist

Dietitian

Pulmonologist

Neurologist

A general physician can assist with sleep apnea by conducting initial evaluations, referring patients for sleep studies, and coordinating treatment plans for the condition.

A sleep specialist is one who is specialized in diagnosing and treating sleep disorders, including sleep apnea.

A cardiologist is one who specializes in cardiovascular diseases and can assist with sleep apnea by identifying its impact on cardiovascular health and recommending appropriate treatment measures.

An otolaryngologist is one who specializes in disorders of the ear, nose, and throat and manages conditions related to the upper airway in sleep disorders.

A pulmonologist is one who is specialized in the diagnosis and treatment of lung and respiratory conditions and can provide expertise in managing breathing problems during sleep.

A neurologist is one who is specialized in disorders of the nervous system, including sleep-related neurological conditions.

When to see a doctor?

Here are some indications of when you should see a doctor:

Chronic loud snoring

Excessive daytime sleepiness

Symptoms such as an unexplained sore throat or morning headaches

Insomnia (difficulty falling or staying asleep)

Witnessed stoppages of breathing during sleep

Waking up with choking, gasping sounds, or shortness of breath

If you are facing such an issue, seek advice from our professionals.

Book an appointment

Treatment Of Sleep Apnea

The treatment of obstructive sleep apnea (OSA) depends on the severity of the condition. Here are some common approaches to treating OSA:

1. Breathing devices

Positive airway pressure (PAP) uses a continuous positive airway pressure (CPAP) device. This device sends a constant stream of air into a sleeper’s airway to keep it from collapsing.

It involves wearing a mask over the nose or nose and mouth while sleeping. The mask is connected to a CPAP machine that delivers a continuous flow of air, keeping the airway open.

There are other types of PAP devices, such as

Bi-level positive airway pressure (BiPAP) - This device provides higher pressure while breathing in and a lower pressure while breathing out. BiPAP is sometimes used for individuals who have difficulty tolerating CPAP.

Auto-adjusting positive airway pressure (APAP)- This device provides different pressure levels throughout the night. This device automatically adapts to your breathing patterns and sets a pressure that is most suitable.

Nasal expiratory positive airway pressure (EPAP)- In this treatment, valves are placed in the nostrils before sleep that uses a person’s natural breathing to create air pressure that keeps the airway open.

Adaptive servo-ventilation (ASV)- It provides air pressure levels that constantly adapt to a sleeper’s needs. It is used in individuals with central sleep apnea who cannot tolerate CPAP.

2. Oral devices

Certain oral devices are custom fit that you typically wear in your mouth while you sleep such as:

Mandibular advancement devices: It helps keep the airway open by repositioning the jaw and tongue during sleep.

Tongue retaining devices: This device keeps the tongue forward to prevent it from blocking the upper airway.

3. Surgery

Surgery may be considered in cases where other treatments have failed or for individuals with specific anatomical abnormalities contributing to OSA. Surgical options include:

Uvulopalatopharyngoplasty (UPPP): Removal of the uvula (a small piece of flesh hanging from the top inside of the mouth, right above the throat) or excess tissue from the throat.

Maxillomandibular advancement (MMA): Repositioning of the upper and lower jaws to enlarge the airway.

Adenotonsillectomy: Removal of tonsils and adenoids (soft areas located at the rear of the nose and throat).

Tracheostomy: It may be considered as a surgical option when other treatments have not been effective in managing severe, life-threatening sleep apnea. During this procedure, a surgical opening is created in the neck, and a metal or plastic tube is inserted to provide a new airway for breathing.

4. Hypoglossal Nerve Stimulation (HNS)

This treatment consists of an implanted medical device and remote control. The device works by stimulating the hypoglossal nerve (the nerve that supplies the muscles of the tongue) or upper airway dilator muscle during apneas, which controls tongue movement to prevent airway obstruction.

Home care For Sleep Apnea

Some home remedies, that can help with sleep apnea include:

1. Chamomile: It can be beneficial as it contains compounds that aid in relaxing muscles and nerves, promoting sleepiness.

How to use it?

To prepare a chamomile tea, simply add two tablespoons of chamomile to hot water and steep for five minutes.

2. Lavender: It is renowned for its anxiety-reducing properties and individuals with sleep apnea, struggling to fall asleep, might find lavender essential oil beneficial.

How to use it?

Try diffusing lavender essential oil in the bedroom or use a few drops on a cloth placed near your pillow to enjoy its calming effects and potentially improve sleep quality.

3. Honey (Shahad): It alleviates sleep apnea, as its anti-inflammatory properties can potentially reduce airway blockages caused by swelling.

How to use it?

Soothe your throat with a teaspoon of honey before going to sleep.

Other tips to follow

Get some steam in to open up your airways.

Maintain regular sleep hours

Exercise regularly

Eat a well-balanced diet and cut down on inflammatory food

Incorporate a high-fiber diet into your everyday routine

Change your sleeping position and try to sleep on your side.

Elevate your head up while sleeping

Snoring is a common feature of sleep apnea. Here are some natural remedies to ease snoring.

Read Here

Complications Of Sleep Apnea

Sleep apnea can lead to various complications and health risks if left untreated. Some of them include:

1. High blood pressure: Repeated episodes of interrupted breathing can cause blood pressure to rise, increasing the risk of cardiovascular problems.

2. Heart disease: Sleep apnea increases the risk of heart conditions, including coronary artery disease, heart attacks, heart failure, and abnormal heart rhythms due to disruptive blood flow. It can also increase the risk of stroke due to the disruption of oxygen supply to the brain during apnea episodes.

3. Type 2 diabetes: Sleep apnea has been linked to insulin resistance and glucose intolerance, increasing the risk of developing type 2 diabetes.

4. Mental health changes: Sleep disturbances can impact daily functioning and can contribute to mood disorders like depression and anxiety.

Here are some natural ways to combat depression.

Read Here

5. Obesity: It increases the risk of developing sleep apnea, and sleep apnea, in turn, can contribute to weight gain and difficulty losing weight.

Read about 5 weight loss tips that can work for you.

Click Here

6. Complications during pregnancy: Sleep apnea in pregnant women can increase the risk of complications such as gestational diabetes, high blood pressure (preeclampsia), and preterm birth.

7. Daytime fatigue and impaired concentration: Frequent interruptions in sleep due to apnea episodes can lead to excessive daytime seepiness, fatigue, and difficulty concentrating.

8. Increased risk of accidents: Individuals who have obstructive sleep apnea (OSA) or central sleep apnea (CSA) frequently experience feelings of exhaustion increasing the likelihood of being involved in a car accident or making other serious errors.

Know how disturbed sleep can affect your overall health.

Read now

Alternative Therapies For Sleep Apnea

Complementary and alternative therapies can be used as adjuncts to traditional treatment approaches for snoring and sleep apnea. However, it's important to consult your physician before you start any of them. They include:

1. Positional therapy

It involves training a person to sleep in a different position. Sleeping on your back increases the likelihood of your tongue and soft tissues blocking the airway during sleep.

2. Orofacial therapy

As per studies, it has been found that exercises for your mouth and facial muscles, also called orofacial therapy, may help treat sleep apnea in children and adults. This therapy improves your tongue's posture and strengthens the muscles that regulate your lips, tongue, upper airway, and face.

3. Acupuncture

It involves the insertion of thin needles into certain areas of the body. It may help promote relaxation, reduce snoring, and one of the studies shows it potentially improves sleep quality in some individuals.

4. Yoga and breathing exercises

Certain yoga postures, along with deep breathing exercises (pranayama), can help strengthen the muscles involved in breathing and promote relaxation. These practices may have a positive impact on snoring and mild cases of sleep apnea.

Understand the other 12 health benefits of yoga.

Know more

Living With Sleep Apnea

Obstructive sleep apnea (OSA) can significantly impact various aspects of your life. By following these concise steps, you'll be actively managing your sleep apnea and optimizing your overall well-being. They include

Stay connected with your doctor: Keep in touch with your primary care doctor or sleep specialist, sharing any ongoing symptoms or treatment challenges to adjust your sleep apnea management plan.

Care for your treatment devices: Properly clean and maintain your PAP device or mouthpiece to maximize treatment effectiveness and minimize unwanted side effects.

Avoid risky activities: Be cautious of daytime sleepiness. If you have untreated sleep apnea, steer clear of tasks like driving or operating heavy machinery when feeling drowsy.

Explore different sleeping positions: I. Elevate the head of the bed by four to six inches, or elevate your body from the waist up with a foam wedge or use a special cervical pillow.

Try humidifiers: These are devices that add moisture to the air. Dry air can irritate both your respiratory system and your body. A humidifier can help open up your airways, promote smoother breathing, and reduce congestion.

Shop for humidifiers here

Buy Now

Sleep apnea in children

Pediatric Obstructive sleep apnea (OSA) is a fairly common childhood disorder, affecting 1 to 5% of all children. It is associated with adverse health consequences such as heart health, impaired growth, learning difficulty, behavior problems, hyperactivity, etc.

Tips for Parents

Consult a pediatrician or sleep specialist for a proper diagnosis and treatment plan

Follow the recommended treatment

Ensure a consistent sleep schedule and create a comfortable sleep environment

Watch for signs of improvement or worsening of symptoms

Encourage a healthy lifestyle with regular exercise and a balanced diet

Educate family members and caregivers about the condition and its management

Provide emotional support and reassurance to the child during the treatment process.

Frequently Asked Questions

Can children develop sleep apnea?

How is sleep apnea different between adults and children?

Does sleep apnea cause headaches?

Does everyone who snores has sleep apnea?

Can sleep apnea be completely cured, or is it a lifelong condition?

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Sore throat

Also known as Pharyngitis

Overview

Sore throat is marked by pain, itchiness or irritation of the throat, which is mostly caused by a virus but can also be caused by a bacteria. Moreover, environmental factors like pollutants, smoking & seasonal or food allergies can also cause sore throat. A painful throat can simply come along with a cold or runny nose but sometimes, it can be a sign of some underlying problems such as respiratory tract infections.

In most cases, a sore throat usually goes away on its own. But to relieve the pain from a sore throat, you could take over-the-counter medicines or throat lozenges. If you get a persistent cough along with sore throat, you can try a cough syrup based on the type of your cough. However, antibiotics are not required to cure a sore throat in most cases. So stop taking antibiotics for sore throat & consult your doctor, if your symptom fails to improve or worsens.

One of the best & simple ways to prevent a sore throat is to stay away from people suffering from respiratory infections & practise good hand hygiene such as washing hands. You can even try home remedies such as drinking hot water or gargling to soothe sore throat at home.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Throat

Prevalence

Worldwide: 10-30% (2007)

Mimicking Conditions

Epiglottitis

Retropharyngeal abscess

Peritonsillar abscess

EBV (obstruction in or near pharynx)

Infectious mononucleosis

Kawasaki disease

Group A streptococcal infection

Necessary health tests/imaging

Throat culture

Treatment

Analgesics: Paracetamol, Ibuprofen & Aspirin

Cough syrups

See All

Symptoms Of Sore Throat

A sore throat means that your throat hurts, feels irritated or scratchy. You may feel mild discomfort or burning pain in the throat and sometimes even difficulty in swallowing or talking. Your throat might become red. In some cases, white patches can be seen in your throat (mostly on tonsils), which are common in case of strep throat (a bacterial infection).

In addition to sore throat, you can also experience other symptoms such as:

Fever

Nasal congestion

Runny nose

Sneezing

Cough

Chills

Bodyache

Headache

Loss of appetite

Red and swollen tonsils

Note: The symptoms might vary based on the causes of the sore throat.

Is my sore throat due to COVID-19?

Sore throat is one of the initial symptoms of COVID-19 that may appear 2 to 14 days after exposure to the coronavirus. COVID-19 shares many symptoms with the flu or common cold. Here’s how to distinguish between the two, although it can be difficult to tell the difference between the two just based on symptoms. If you have just a sore throat with no other symptoms, it’s less likely to be COVID-19. But with other symptoms like fever, cough, loss of taste and smell, or difficulty in breathing, it is possible that you have COVID-19. Mild cases of COVID-19 are quite similar to cold. But if you have a mild case of COVID-19, you could spread the coronavirus to someone who suffers a worse infection. Hence you need to be very vigilant. Testing can confirm the diagnosis of COVID-19. Think your sore throat is lingering on? Get yourself checked now.

Consult Now!

Causes Of Sore Throat

Some of the common causes of sore throat are:

Viral infections

Viral infections cause the majority of sore throats. These mostly include:

Common cold

Flu or influenza

Infectious mononucleosis or glandular fever

Measles

Chickenpox

Mumps

Herpangina

Hand, foot and mouth disease (HFMD)

Croup

COVID-19

Bacterial infections

Many bacterial infections can cause a sore throat. The most common bacteria to cause sore throats are:

Streptococcus pyogenes (group A streptococcus) which causes strep throat.

Arcanobacterium haemolyticum causes sore throat mainly in adolescents and is sometimes accompanied by a red rash.

Less common causes of bacterial sore throat are chlamydia, gonorrhea and corynebacterium.

Allergies

Allergies to pet fur or tiny pieces of skin shed by animals, molds, pollen, grass and dust can also cause sore throat.

Dry air

Dry indoor air can reduce moisture in the mouth and make the throat feel rough and scratchy. Indoor air is mostly dry in the winters due to use of heaters.

Irritants

Air pollution, cigarette or tobacco smoke, secondhand smoke, cleaning products and other chemicals, spicy foods, and hot liquids can also irritate the throat.

Sinusitis

Sinus infections can cause post-nasal drip in which mucus runs down the back of the throat. This infected mucus can cause a sore throat.

Injury

Injuries like hit or cut to the neck, can cause pain in the throat. A piece of food or some external particle stuck in the throat can also irritate it.

Overexertion

Repeated use of vocal cords can strain the throat muscles. Yelling, talking loudly or talking or singing for long periods without a break, can cause sore throat.

Gastroesophageal reflux disease (GERD)

It is a condition in which the stomach acids move back up into the food pipe. When the acid reach the throat, they can irritate it and cause sore throat.

Medications

Certain antibiotics, chemotherapy, or other immune-compromising medications can cause sore throat due to growth of the yeast candida.

Throat cancer

In rare cases, cancerous tumors of the throat, tongue or voice box can also a sore throat.

Did you know?

Pollution can also cause symptoms like runny nose, itchy skin, and burning sensation in the eye, etc. Don’t let that worsening air quality hurt your health. Get tested for toxic elements.

Book Test Here!

Risk Factors For Sore Throat

Although anyone can suffer from sore throat, the following risk factors increase the chances of infection such as:

Children and adolescents are more susceptible to develop sore throat

Close contact with someone who is sick especially due to respiratory infections

Viral and bacterial Infections spread faster in close quarters, child care centers, classrooms, offices or airplanes

Cold and flu seasons

Regular exposure to cold environment

Chronic respiratory illness

Allergies

Exposure to any irritants at home or workplace

Profession requiring overuse (shouting) of voice like teachers & fitness instructors

Drugs such as angiotensin converting enzyme (ACE) inhibitors & chemotherapy drugs as well as long term use of steroids

Habit of snoring

Smoking or exposure to secondhand smoke

Weakened immunity due to poor diet, stress or conditions such as human immunodeficiency virus (HIV) infection & diabetes

Diagnosis Of Sore Throat

Your doctor will ask you a few questions about your symptoms followed by a physical examination of your throat. He/she might check the back of your throat for redness, swelling and white patches. Your doctor might also feel the sides of your throat to check for the presence of swollen glands.

If your doctor suspects strep throat, a bacterial infection, then a throat swab or culture will be advised to diagnose it. In some cases, your doctor might also recommend some additional tests to know the exact cause of the sore throat.

Throat swab: In this, a sterile swab is rubbed over the back of the throat to get a sample of secretions and sent to the lab for testing. Rapid antigen tests, although not sensitive, can detect strep bacteria quickly.

Throat culture: Your doctor may send a throat culture to a lab to test for strep throat if the antigen test comes back negative.

Celebs affected

Lizzo

In an Instagram post that she subsequently deleted, Singer Lizzo wrote: “Got strep at the worst time ever. It's nobody's business but I'd prefer you all not to criticize me for wearing a face mask and doing what I was supposed to do to protect the people in my home.”

Prevention Of Sore Throat

A sore throat can be prevented by following some simple and effective steps.

1. Practice good hand hygiene

You should wash your hands properly with clean water and soap. You should scrub your hands for at least 20 seconds and work on hands from back, front, between your fingers and clean your nails properly. In order to keep your hands clean you should wash your hands thoroughly when you:

Touch your eyes, mouth, and nose

Are near a person who is having any type of infection

Use toilets and bathrooms

Cough, sneeze or clean your nose.

Eat food

2. Avoid close contact with sick people

As viral infections are the common cause of sore throat, it is advised to stay away from people who suffer from sore throats, colds or any other upper respiratory infections. Do not share food, drinks, or utensils. Also, it is wise to wear a mask as it helps to prevent the spread of respiratory infections.

3. Avoid smoking and exposure to secondhand smoke/irritants

There are numerous health complications associated with smoking & sore throat is one of them. If you are a smoker, it is wise to quit smoking. You can try nicotine replacement therapy which is available in the form of patches & gums. Also, stay away from people who smoke as exposure to secondhand smoke can also up the risk of sore throat.

4. Eat healthy food

Make sure you have a healthy diet loaded with vitamins, minerals & antioxidants. Try to eat as much of home cooked food as possible & avoid oily, spicy & salty foods. Stay hydrated by drinking loads of fluids such as buttermilk, fruit juices, coconut water or plain water. It is best to drink lukewarm water or boiled water as it helps to keep your throat clean & healthy.

5. Boost your immunity

A strong immunity is undoubtedly one of the simple & effective ways to prevent infections. In addition to staying hydrated & eating a healthy diet, it is important to boost your immunity. Add lots of fresh fruits and vegetables to your diet as it provides essential nutrients such as vitamins, minerals, and antioxidants, which strengthens your immune system and helps you to fight diseases. You can even try dietary nutritional supplements to boost your immunity and prevent infections.

6. Exercise

Regular exercise or light workouts can help you stay fit and increase your immunity and hence fight sore throat.

7. Get adequate sleep

Without the required sleep, the immune system eventually becomes weaker leading to more frequent occurrence or slow recovery from sore throat.

Throat infections are quite common in children. Here are a few tips to prevent it.

Click To Read!

Specialist To Visit

Most cases of sore throat, especially the ones caused due to a viral infection, get better on its own within a week or a few days. But if you suffer from bacterial infections like a strep throat, then do get in touch with your doctor to treat it.

You should seek medical care if you or your children show symptoms like fever (>101°F), watery eyes, red and swollen tonsils, body ache and red spots at the back of the roof of the mouth.

Match your symptoms with this checklist to know if you need to see a doctor for your painful throat:

The sore throat gets better as the day goes on

It hurts to the point that you’re having to change their diet

The sore throat is accompanied by high fever (102°F or higher)

If there is a rash, headache, stomach ache, or vomiting

If you experience trouble in breathing or pain while breathing

If you have earache or pain in the neck along with sore throat

If you see blood in saliva or phlegm

If none of the above are happening, chances are high that your sore throat will be fine in a day or two

Your family doctor or general practitioner can help you to diagnose the condition & provide the right treatment for sore throat. You can also see specialists such as:

ENT specialist

Infectious disease specialist

Consult India’s best doctors online from the comfort of your place.

Book Appointment!

Treatment Of Sore Throat

While sore throat caused due to viruses is usually self-limiting and no antibiotic treatment is needed; a bacterial cause may need prompt medical care.

1. Analgesics or pain relief medications

You can take over-the-counter (OTC) medications to relieve pain. These include:

Paracetamol

Ibuprofen

Aspirin

Note: Never give aspirin to children as it can lead to Reye’s syndrome, a rare but very serious illness in kids that affects the liver and brain.

2. Cough syrups

In some cases, use of throat lozenges & cough syrups are also known to provide relief from sore throat.

3. Other drugs

If your sore throat is caused due to an underlying stomach problem such as gastrointestinal reflux disease (GERD), then medicines recommended include:

Antacids such as aluminum hydroxide, magnesium hydroxide & calcium carbonate

Proton pump inhibitors: omeprazole, pantoprazole & rabeprazole

H2 blockers: famotidine & ranitidine

Antibiotics For Sore Throat: Yes Or No?

Mostly, a sore throat goes away in a week without the need of an antibiotic. But if your sore throat lasts longer than 1-2 weeks or you have a temperature higher than 100.4 °F or any other unusual symptom, then you might need an antibiotic. Your doctor may prescribe antibiotics if you or your kid tests positive for bacteria streptococcus pyogenes.

Usually, all antibiotics start showing its effect within 24 to 48 hours of administration. It is very important to complete the course of antibiotics which may last for 2 weeks. You should continue the medications even if the symptoms disappear in order to finish the antibiotic course.

Antibiotics are meant for treating bacterial infections. Since most sore throats are viral, using an antibiotic will not cure the condition. Taking antibiotics for viral infections will not only be costly but will also cause unwanted side effects like diarrhea & vomiting. Misuse and overuse of antibiotics leads to antibiotic resistance, a phenomenon that reduces or eliminates the effectiveness of antibiotics.

Home-care For Sore Throat

Here are some simple ways to help relieve a sore throat:

Avoid foods that are salty, spicy, acidic (like orange juice), or sharp (like potato chips) as it can irritate the throat of your child.

Stick with bland and soft food which makes it easy for the food to pass through the throat without irritating the throat.

Use a humidifier at home or workplace to help keep the throat moist.

You could try steam inhalation to help relieve congestion.

Suck on cough drops (like lozenges) to help lubricate and soothe irritated tissues of the throat.

Keep yourself hydrated with plenty of fluids as higher intake of liquid will not only keep you hydrated but also moisten your throat which makes it easier to swallow food.

Include foods such as warm soup, and soft veggies in your diet because such foods are comforting and easy to swallow.

Sip on warm liquids like warm water, lukewarm lemon water or herbal tea to soothe the throat and lessen the irritation.

Take proper rest because it is the only effective way which can be helpful for regaining the lost strength when sick.

To relieve the pain from a sore throat, you could take over-the-counter medicines such as paracetamol or you can try throat lozenges.

If your kid has a sore throat, avoid sending him/her to school for one to two days in order to prevent the spread of infection to other children in school.

If you get a persistent cough, try a cough syrup based on the type of your cough.

Gargle with warm water to relieve sore throat.

Dissolve half a teaspoon of salt in ~250 ml of warm water and gargle with it, around the back of the throat, 3-4 times daily. It moistens the throat and relieves pain and scratchiness thereby soothing and providing relief. Get relief from that painful throat naturally with our special range of products.

Explore Now!

Complications Of Sore Throat

Sore throat caused due to bacteria (strep throat) can cause various health complications, if left ignored. Although not common, strep throat can cause serious complications if the bacteria spreads to other parts of the body. Some of the complications that can result include:

Sinusitis (infection of the sinuses)

Ear infection

Abscesses or pockets of pus around the tonsils

Swollen lymph nodes in the neck

Chest infection

Rheumatic fever (a heart disease)

Post-streptococcal glomerulonephritis (infection of the kidneys)

Alternative Treatment For Sore Throat

You can try some home remedies to soothe pain & irritation caused by a sore throat. Some of the common home remedies include:

Ginger (Adrak): Ginger has anti-inflammatory and antimicrobial properties. It also boosts immunity to help fight infections that cause sore throats. You can consume it in the form of raw ginger root, ginger candy or lozenge, ginger tea or ginger supplement pills and capsules.

Honey (Sehad): Mix 2 teaspoons of honey with equal quantity of ginger juice. Add this to a glass of warm water and drink it every morning. This concoction helps to expel mucus thereby providing relief for cough and sore throat.

Note: Don't give honey to children younger than one year of age.

Garlic (Lehsun): Garlic has natural antibacterial properties. It contains allicin, which is known for its ability to fight off infections. Suck on a clove of garlic to soothe your sore throat or consume it along with ginger in the form of tea. Taking a garlic supplement on a regular basis can also help to prevent sore throat.

Turmeric (Haldi): Turmeric is an excellent remedy for sore throat. You can mix half a teaspoon of turmeric and half teaspoon of salt into a cup of hot water and gargle with it. You can also add half a teaspoon of turmeric in a cup of milk to combat sore throat. It is advised to warm milk mixed with turmeric slowly over the flame and consume this drink once a day.

Chamomile (babunah ke phul) tea: Infuse the tea bag into a cup of boiling water, let it stay there for five minutes and as it is. You can add a small quantity of honey or sugar for an improved taste.

Licorice (mulethi) tea: Drink tea made from one teaspoon crushed licorice (mulethi) & one teaspoon jaggery powder steeped in one cup of boiling water for 3-5 minutes. You can even gargle with licorice water to fight sore throat & cough.

Frequently Asked Questions

How long can a sore throat last?

How do I get rid of a sore throat quickly?

When is a sore throat serious?

How does a sore throat feel?

What drink helps a sore throat?

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Spondylosis

Also known as Cervical Spondylosis, Lumbar Spondylosis, Osteoarthritis of the Spine, Degenerative Disk Disease

Overview

Spondylosis is a degenerative disease of the spine that affects the intervertebral discs and joints. With age, the body experiences normal wear and tear of the joints, cartilages, ligaments, and other soft tissues. When these changes occur in the spine, it leads to spondylosis.

Spondylosis can be broadly divided into cervical spondylosis (spondylosis of the neck) and lumbar spondylosis (spondylosis of the lower back). Pain and stiffness in the spine is the most common symptom of spondylosis. Occasionally, spondylosis may cause more severe neurological symptoms, such as radiating pain, tingling, numbness, or even partial or complete paralysis.

A healthy lifestyle with regular exercises can help prevent the pain and stiffness that occur due to spondylosis. Spondylosis can be successfully treated using a combination of oral and topical analgesics, muscle relaxants, physiotherapy, and exercises.

Key Facts

Usually seen in

Adults above 50 years of age

Gender affected

Both men and women

Body part(s) involved

Spinal cord

Spinal nerves

Intervertebral discs

Mimicking Conditions

Spondylolisthesis

Prolapsed intervertebral disc

Lumbar stenosis

Tumour in the spinal cord

Paraspinal muscle spasm

Necessary health tests/imaging

X-Ray cervical cpine AP & lateral

X-Ray lumbar spine AP & lateral

MRI screening of whole spine

CT scan head

CT myelography

Bone densitometry whole body

Calcium

Vitamin D (25 - OH)

NCV upper limb

NCV lower limb

Treatment

NSAID analgesics: Ibuprofen, Diclofenac & Paracetamol

Opoid analgesics:Tramadol & Tapentadol

Bone and joint care medications: Hyaluronic acid, Glucosamine & Chondroitin

Muscle relaxants: Cyclobenzaprine, Tizanidine & Cyclobenzaprine

Medications for nerve symptoms: Pregabalin, Gabapentin & Duloxetine

Corticosteroids: Prednisolone

Vitamin & mineral supplements

Topical analgesic and rubefacients

Surgical management

Specialists to consult

Orthopedic surgeon

Neurologist

Physiotherapist

Symptoms Of Spondylosis

Age related wear and tear of the spine's intervertebral discs and joints cause a degenerative disease of the spine known as Spondylosis. There are two types of spondylosis based on the area affected:

Cervical spondylosis - affects the intervertebral discs and joints of the neck region, more precisely the first seven vertebrae of the spine. The symptoms of cervical spondylosis are as follows:

Pain and stiffness of the neck

Radiating or sharp shooting pain in the upper limbs

Tingling and/or numbness in the upper limbs

Dizziness

Vertigo or sensation of feeling off-balance

Grinding noise in the neck when the neck is turned sideways

Lumbar spondylosis - affects the intervertebral discs and joints of the lower spine. It mostlt affects the last five vertebrae of the spin and the sacrum bone. The symptoms of lumbar spondylosis are as follows:

Pain and stiffness of the lower back

Radiating or sharp shooting pain in the lower limbs and buttocks

Tingling and/or numbness in the lower limbs

Inability to stand or walk for longer durations

Problems in Balancing the body

Causes Of Spondylosis

There are a few factors that are responsible for developing spondylosis, such as:

1. Age-related degenerative changes

With age, our human body experiences wear and tear of the joints, cartilages, ligaments, and other soft tissues. These degenerative changes occur in the spine as well in the form of desiccation or drying up of the gel present in the intervertebral discs, rendering them stiff. These changes can also cause the formation of osteophytes (which are extra bony protrusions), leading to pain and stiffness.

When the spinal cord is affected due to the reduced disc space, compression of the joints and osteophytes, neurological symptoms are also seen.

2. Heredity

Genetic factors are likely to influence the formation of osteophytes and degeneration of discs. This is likely attributed to polymorphism (changes in two or more variants of a gene sequence) in genes, causing inflammation in the joints.

3. Lifestyle and environmental factors

A poor posture, lack of exercise, and obesity can fasten wear and tear of joints and thereby cause spondylosis. Occupational hazards involving lifting heavy weights or any history of trauma to the spine, can also lead to spondylosis.

Did you know?

Text neck, also known as turtle neck syndrome, is a 21st century syndrome caused by continuous strain on the neck due to repeated stress from looking down at mobile screens or tablets for long. Here’s more on what is text neck and tips to prevent it.

Click To Read!

Risk Factors For Spondylosis

Spondylosis is very common as age progresses. There are certain risk factors that may predispose you to develop spondylosis. These are:

1. Age above 50

2. Female gender

3. History of trauma/injury to the spine/neck

4. History of heavy weight lifting

5. Poor posture

6. Lack of exercise

7. Smoking

8. High intensity athletic activities

Diagnosis Of Spondylosis

Following evaluations are performed by the doctor to confirm the diagnosis of spondylosis:

1. History and physical examination

The doctor will require all the details related to any past experience of the onset of your symptoms. Thorough, physical examination may also be required to check joint stiffness, muscle spasms, muscle strength. The doctor may also conduct a neurological exam to evaluate the spine.

2. Imaging studies

X-Ray cervical spine AP & lateral - to study the abnormalities, such as bone spurs, that indicate cervical spondylosis.

X-Ray lumbar spine AP & lateral - to study the bony changes in the lower back.

MRI screening of whole spine - to evaluate in details of soft tissues such as cartilage, nerve roots, muscles, spinal cord, and disks. This test can show spinal compression or herniated disk more clearly than X-rays. An MRI can help identify the source and location of pain.

CT scan spine - to rule out other possible causes of neurological symptoms like vertigo, headaches, etc.

CT myelography - to study whether the spinal cord is affected, if yes then to what extent. These tests provide more details on how and to what extent cervical spondylosis may be affecting your nerves.

Bone densitometry whole body - to check for concomitant osteoporosis, a condition where the bones lack calcium and become brittle and weak.

3. Other tests

Serum calcium - to check for calcium deficiency which plays an important role in bone and joint pains.

Vitamin D (25 - OH) - to check for calcium deficiency which plays an important role in absorbing calcium in the body.

Nerve compression studies - NCV Upper Limb and NCV lower limb for cervical and lumbar spondylosis, respectively. These help to evaluate nerve damage when symptoms, such as tingling and radiating pain, are present.

Electromyography - measures the electrical activity in your nerves as they transmit messages to your muscles when the muscles are contracting and at rest.

Did you know?

Your neck pain could also mean cervical spondylosis. It is a condition that is known to occur as a natural process of aging, especially in people above 65 years of age. In most cases, it remains asymptomatic until late but can present with neck pain. Don't ignore neck pain and consult a doctor.

Book Appointment NOW

Prevention Of Spondylosis

While spondylosis is an age-related condition that occurs as a result of degenerative changes and wear and tear of the spine, a few things can help prevent the occurrence of serious symptoms of spondylosis, such as:

Following a healthy diet rich in calcium, Vitamin D, and other minerals.

Enough exposure to the morning sunlight to ensure a sufficient level of Vitamin D in the body.

Regular exercise to maintain strength and mobility in the cervical and lumbar spine.

Avoiding routine heavy weight lifting.

Following correct ergonomics during weight lifting.

Avoiding sudden jerky and twisting movements of the spine.

Specialist To Visit

When symptoms of neck pain or back pain start becoming bothersome, it is essential to seek medical care. The doctors who can help with spondylosis symptoms include -

Orthopedician

Neurologist

Physiotherapist

Orthopedicians focus on reparing injuries to musculoskeletal sysytem of the spine including bones, joints, ligaments and tendons. Neurologists can help you manage neurological symptoms, such as tingling, numbness in the upper or lower limbs, weakness of upper or lower limbs, vertigo, and headaches. A physiotherapist can help with corrective exercises to increase strength and mobility in the spine and reduce pain.

Celebs affected

Shilpa Shetty

Famous Bollywood actress Shilpa Shetty suffers from cervical spondylosis. She is well known for her yoga and fitness videos.

Treatment of Spondylosis

The primary aim of the treatment of spondylosis is to provide pain relief and address other troublesome symptoms. Following medications are useful in the treatment of cervical and lumbar spondylosis.

1. Medical management

NSAID analgesics

This class of medicines helps relieve pain and inflammation. These medicines must always be consumed with meals as taking them on an empty stomach may irritate the gastric lining. Examples include:

Ibuprofen

Diclofenac

Paracetamol

Opoid Analgesics

Also known as narcotic medications, these may be required when the pain is intense and is not relieved by the first line of medication. These potentially habit-forming tablets must be taken only when prescribed by the physician. These include:

Tramadol

Tapentadol

Bone and joint care medications

This class of medicines help in lubrication and reducing joint friction for easier joint movements. Examples include:

Hyaluronic acid

Glucosamine

Chondroitin

Muscle relaxants

These help relieve the painful spasms and stiffness associated with spondylosis. Examples include:

Cyclobenzaprine

Tizanidine

Cyclobenzaprine

Thiocolchicoside

Medications for nerve symptoms

These are useful in providing relief from radiating pain, tingling, and numbness in the upper and lower limbs. Examples are:

Pregabalin

Gabapentin

Duloxetine

Corticosteroids

This may be prescribed for a short duration or even as an injection to address resistant pain symptoms. Medicines that belong to this class include prednisolone. A short course of oral prednisone might help ease the pain. If your pain is severe, steroid injections may be helpful.

Here’s more on oral corticosteroids: Dos and don’ts to follow

Vitamins and mineral supplements

Nutrients like calcium and Vitamin D play a particular important role. A walk in the morning sun would be one of the best ways to raise Vitamin D levels. Dietary intake of dairy products, fish, broccoli, kale, legumes, tofu are useful in raising calcium levels.

Topical analgesic and rubefacients

Topical analgesics include NSAID preparations, rubefacients, cooling therapy preparations and heat pads. Topical rubefacients presumably reduce pain by increasing local blood flow.

2. Surgical management

Patients with advanced forms of spondylosis with very severe symptoms, who do not get relief with medications and physiotherapy, may require surgical treatment to remove the desiccated disc or other parts of the vertebrae. This will relieve compression from the spinal cord and help mobilize the intervertebral joint. If their neurological signs and symptoms such as weakness in their arms or legs worsen, they might need surgery.

The surgery might involve:

Removing a herniated disk or bone spurs

Removing part of a vertebra

Fusing a segment of the neck using bone graft and hardware

Home-care For Spondylosis

Spondylosis is an age-related degenerative condition that can cause pain and stiffness in the spine. Along with the medications, the following home care tips can help manage symptoms and provide relief to some extent from the disease.

1. Avoid lifting heavyweights.

2. Take a wholesome, balanced diet rich in calcium and other minerals.

3. Follow the exercise routine suggested by the doctor or physiotherapist.

4. Application of topical analgesic preparations helps relieve pain and stiffness.

5. Hot fomentation (method: applying moist heat to the affected area) or ice pack can also help to provide some relief.

6. Use cervical and lumbar supports, such as a cervical collar or lumbosacral belt to support the spine. This can limit neck/back movement and help strained muscles rest and recuperate. However, wearing a brace for too long can lead to muscle atrophy (wasting away). Hence, they should be worn only for a short duration.

7. Change the mattress and sleeping pillow if not proper. Use the ones that offer good support and stabilize the spine.

A good sleeping position is one that helps you to maintain the natural curve of the spine when you sleep. Want to know the best and the worst sleeping positions?

Click Here To Read

Only drinking milk may not help you meet your RDA of calcium

Despite being considered as one of the best dietary sources of calcium, milk hardly meets the recommended daily allowance (RDA) of calcium. On average, an Indian adult needs around 600 mg of calcium per day. But, 100 ml of milk (cow, buffalo) can only provide ~120 mg of calcium. So, to meet your daily requirement, you may need to take calcium-rich foods or supplements.

Tap to Explore!

Complications Of Spondylosis

In some cases, spondylosis may cause severe and irreversible neurological complications of spondylosis, such as cervical myelopathy, which causes a varying degree of weakness and disability. It can lead to paralysis, such as quadriplegia, a serious condition in which the body below the neck is paralyzed. It may also cause paraplegia, paralysis of both legs.

Surgery for spondylosis may also cause complications like nerve injury, post-surgery kyphosis or altered posture, etc.

Alternative Therapies for Spondylosis

Along with medicines and topical analgesic preparations, various other treatment options are helpful in managing spondylosis. Here is a list of options to help you manage the symptoms:

1. Exercise and yoga

Regular exercises and yoga focused on strengthening the spinal musculature and improving mobility help manage the pain and stiffness caused by spondylosis.

2. Physiotherapy

Physiotherapeutic modalities, such as Interferential Therapy (IFT), Transcutaneous Electrical Nerve Stimulation (TENS), are very useful and offer pain relief even from nerve pain. These rehabilitation exercises focus on core strengthening of the spine, improving the overall strength of the spine.

3. Acupressure and acupuncture

Neck pain and back pain due to spondylosis may respond to acupuncture or acupressure therapy on the peripheral trigger points.

4. Ayurveda

There are various Ayurvedic preparations in the form of oils and liniments such as camphor oil, menthol oil, sesame oil, etc. that can be applied locally at the site of pain. They provide relief from the symptoms.

5. Homeopathy

Homeopathic preparations, such as Rhus Toxicodendron, Calcarea Carbonica, Kalmia Latifolia, and Paris Quadrifolia, are known to improve pain and other troublesome symptoms of patients with spondylosis.

6. External orthoses support

Cervical collars and lumbosacral belts offer much-needed support to the degenerative spine and are useful in alleviating pain caused due to spondylosis. They may also help prevent or slow down further deterioration.

Are you starving your bones? Take this quick survey to know how healthy your bones are.

Click Here

Living With Spondylosis

Spondylosis can be a considerable source of worry due to constant and prolonged pain. Patients with spondylosis are often unable to enjoy an active lifestyle due to the pain and stiffness. The quality of life is highly defined by the severity of the pain and patients may become susceptible to anxiety and depression due to the nature of the disease.

If you suffer from spondylosis, you must take adequate care of your spine to prevent further worsening. Follow all the precautions as advised by your doctor and take your medicines on time. Do not engage in activities that require you to lift weights, such as carrying large amounts of groceries, water buckets, etc. Modify your household chores so that you do not require forward bending. Exercise regularly as advised by your physiotherapist.

Frequently Asked Questions

Is spondylosis curable?

What exercises should I do if I have spondylosis?

Does a belt help reduce back pain?

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Stress

Also known as Pressure, Tension and Strain

Overview

Stress is the body’s natural reaction in case of danger or challenge. It causes the body to flood with hormones that prepare its systems to evade or confront danger. This is commonly referred to as the fight-or-flight mechanism. The body produces larger quantities of chemicals called cortisol, epinephrine, and norepinephrine. These cause an increase in blood pressure, heightened muscle preparedness, sweating, and alertness.

Stress is generally caused by triggers and everyone has different stress triggers. Work stress tops the list, according to surveys. Some of the main sources of stress apart from work include finances, relationships, parenting, and day-to-day inconveniences.

While stress itself is a normal part of life, recurring stress can interfere with daily activities and overall well-being. Long-term stress can affect the whole body and can cause other serious issues for example anxiety, depression, and cardiac problems. Stress can manifest itself in different ways including excessive worrying, inability to sleep at night, and body aches.

If one feels stress is starting to interfere with their daily activities, it’s time to reach out for help. The treatment of stress mainly comprises managing the condition, knowing the triggers, and starting therapies along with lifestyle modifications.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Musculoskeletal system

Respiratory system

Cardiovascular system

Endocrine system

Gastrointestinal system

Nervous system

Reproductive system

Mimicking Conditions

Acute stress disorder (ASD)

Post-traumatic stress disorder (PTSD)

Obsessive-compulsive disorder (OCD)

Psychotic disorder

Treatment

Therapy/counseling: Cognitive behavioral therapy, Acceptance and commitment therapy, Psychodynamic therapy & Positive psychology therapy

Medications: Sleeping pills and tranquilizers for sleep

Specialists to consult

Psychiatrist

Integrative medicine specialist

Life coach

Types Of Stress

A study outlined four main varieties of stress that are experienced in many different situations from workplace to home. They are especially relevant to the life of a student. They include:

1. Time stress: It occurs when you feel worried about time, and more specifically when you don’t have enough time to accomplish all necessary tasks.

2. Anticipatory stress: This kind of stress is seen before a test, assignment, or presentation.

3. Situational stress: This type is usually experienced in an upsetting or alarming situation that one cannot control like the present situation of COVID-19.

4. Encounter stress: It is when one feels anxious about seeing certain people, either alone or in a group.

Levels of stress

1. Acute stress: This type of stress is generally short-term and can be positive or more distressing, which is encountered in day-to-day life.

2. Episodic acute stress: Episodic acute stress is when acute stresses happen on a frequent basis because of repeatedly tight work deadlines. It can be seen in professionals with high-stress jobs such as healthcare workers. There are 2 main personality types that frequently present with episodic acute stress.

Type A personalities: These individuals are outgoing, ambitious, rigidly organized, highly status-conscious, impatient, anxious, proactive, and concerned with time management. Type A personalities are often high-achieving "workaholics" and have a need to get things done that might actually become overwhelming.

The "worrier": The worrier presents with almost incessant negative thoughts causing episodic acute stress on physical and mental health. These negative binge thinkers also tend to be over aroused and tense, but are more anxious and depressed than angry and hostile. Their thoughts are frequently filled with “What if….” statements.

3. Chronic stress: This type is long-term and seems never-ending and inescapable. It can stem from traumatic experiences, childhood trauma, personal issues with the spouse, or work pressure.

Did you know?

Eustress is a type of stress that is fun and exciting. It's associated with surges of adrenaline and is a positive type of stress generally seen during activities like skiing or racing to meet a deadline. Read more about adrenaline and its effects.

Click Here!

Symptoms Of Stress

Long-term or chronic stress affects the mind and can cause wear and tear on the body. This can lead to physical, emotional, and behavioral symptoms. They include:

Physical symptoms

Body aches

Headaches

Nausea

Indigestion

Constipation

Diarrhea

Chest pain

Palpitations (feeling like the heart is racing)

Exhaustion

Dizziness

High blood pressure

Muscle tension

Temporp-mandibular joint problems (due to jaw clenching)

Weak immune system

Involuntary twitching or shaking

Irregular or missed periods

Getting sick more often than normal

Reduced libido

Emotional symptoms

Feeling overwhelmed

Racing thoughts

Difficulty in concentrating

Being irritable

To be constantly worried, anxious, or scared

Lacking self-confidence

Expereincing troubled sleeping patterns

Behavioral symptoms

Being extremely emotional

Snapping at people

Feeling tired all the time

Avoiding things or people

Eating more or less than usual

Drinking or smoking more than usual

Being agitated all the time

Experiencing sexual problems

Change in eating habits

Nail biting

Pacing

Abnormal failure or delay to complete everyday responsibilities

Significant change in school or work performance

Unusual desire for social isolation

Frequent lying

Trouble getting along with other people

What happens to your body when you are stressed?

According to the American Psychological Association, stress is any uncomfortable emotional experience accompanied by predictable biochemical, physiological, and behavioral changes.

Read To Know!

Causes Of Stress

Stress can be caused by different things and seen during different stages of life. Outcomes related to stress can vary according to personal and environmental factors. Events caused by stress have a major influence on mood, sense of well-being, behavior, and health.

Stress during childhood or adolescence

The most widely studied activities that can cause stress in children and adolescents are:

1. Violence

Studies have shown that many young people develop behavioral, emotional, or learning problems when they are mistreated by an adult, victimized by bullies, criminally assaulted, or witness domestic violence. The lesser-known adverse effect of experiences like violence exposure can lead to hidden physical alterations inside a child’s body that may affect life-long health in a negative way.

2. Abuse

This can be in the form of sexual, physical, or emotional abuse. In the most severe cases, abused children may exhibit many of the signs of post-traumatic stress disorder (PTSD). There is also growing evidence that individuals who were abused or neglected as children may be sensitive to stress.

3. Divorce/marital conflict

According to studies, adult offspring of divorced parents report more current life stress, family conflict, and lack of friend support compared with those whose parents did not divorce.

4. Exam stress

Kids feel stressed and pressured by family members and schools during exams and it is normal. But exam stress can cause the child to feel anxious or depressed, and this might affect their sleeping or eating habits.

Note: Childhood stress is emerging as one of the common health concerns among today’s children. With the compulsive need to excel, emphasis on competing in every aspect of life, and peer pressure, children are predisposed to varying degrees of stress.

Understand childhood stress: The triggers, symptoms, and how parents can help.

Read Now!

Stress during adulthood

Many things can cause stress. You might feel stressed because of one big event or situation in your life or it might be a build-up of lots of smaller things. Some of the most common causes of stress in adults are:

1. Personal causes

Some of the common causes include:

Difficulties in our personal lives and relationships

Unexpected life changes like moving house, having a baby, or starting to care for someone

Daily life minor inconveniences like misplacing keys or forgetting to bring an important item

Financial difficulties like debt or struggling to afford daily essentials

Health issues of oneself or close family members

Pregnancy and children

Housing problems like maintenance or tenancy

Feeling lonely and unsupported

Stress while driving or being late

Note: Driving induced stress is a serious health concern, which leads to depression, anxiety, and heart-related diseases. More and more people succumb to it daily due to increased time spent in the vehicle.

Learn about ways to de-stress while driving.

Click Here!

2. Professional causes

Stress may sound like a common factor related to the workplace, but the pressure leads to stress when there is little or no help and support from supervisors and colleagues. Work-related stress is often caused by the design of the job and the working system of an organization like poor management, and lack of support within the organization. Workplace stress includes:

Being unhappy in the job

Having a heavy workload or too much work pressure

Long working hours

Poor work management

Unclear expectations of your work

No involvement in the decision-making process

Working under dangerous conditions

Risk of termination

Having to give speeches in front of colleagues

Discrimination or harassment at work

Did you know?

A study conducted on ‘The Mental Health Status of Employees in Corporate India,’ showed that one out of every two employees in corporate India suffer from anxiety and depression. The triggering cause of this mental illness was prolonged ongoing work stress. Read about how to destress at the workplace.

Click Now!

Risk Factors For Stress

A stressor is an event or situation that causes stress. The reactions to stressors are highly influenced by genetics, early-life environment, and trauma, and contribute to differences in stress reactivity in different individuals. Risk factors for stress include:

Psychological factors

These are characteristics or facets that influence an individual psychologically and/or socially. Such factors can describe individuals in relation to their social environment and how these affect physical and mental health. Some of the psychological factors that increase the risk of developing stress include:

Low self-esteem

Decreased confidence

Personality types

Loneliness

Thinking too much

Lifestyle factors

Lifestyle plays a very important role in the development of stress. A healthy lifestyle can not only help one feel better, but it can also reduce the risk of some diseases, lengthen the lifespan, save money, and benefit in many other ways. Here are certain lifestyle choices that can act as a risk factors for stress:

Not exercising enough

Eating too much junk food

Not getting enough sleep

Smoking

Drinking too much alcohol

Note: While a direct link between stress and heart disease has not been determined, people who are stressed on a daily basis often act in ways that increase their risk for developing heart disease.

Find out how stress can affect your heart.

Read Now!

Effects of stress

Stress symptoms can affect the body, thoughts and feelings, and behavior. The susceptibility to stress varies from person to person. The factors that influenced the susceptibility to stress are genetic vulnerability, coping style, type of personality, and social support. Stress can have an effect on the whole body thus producing illness. Research shows that stress can alter the tissue morphology and mechanism of hormones. Effects of chronic stress on different organ systems and its relation with other diseases include:

Stress and immune response

Our immune system is an area that is susceptible to stress. There is a relationship between the brain, the nervous system, and the immune response. Several studies have shown that chronic stress exerts a general suppression of the immune system.

Cytokines that play a crucial role in mediating the immune system are produced by stress-stimulated immune cells that convey feedback to the nervous system, further modulating the release of stress hormones in the brain. During chronic stress, the neuroimmune axis can be overstimulated and breaks down, thus causing neuroendocrine/immune imbalances that can cause chronic low-grade inflammation, acting as a precursor to various illnesses.

Stress and gastrointestinal disorders

Gastrointestinal diseases such as peptic ulcer (PU) and ulcerative colitis (UC) are known to be greatly influenced by stress. Certain stressful life events have been associated with the onset of symptom exacerbation in other common chronic disorders of the digestive system such as functional gastrointestinal disorders (FGD), inflammatory bowel disease (IBD), and gastro-esophageal reflux disease (GERD).

Stress and cardiovascular disorders

Psychological stress is a significant risk factor for coronary heart disease (CHD) and CHD mortality. Studies have found a positive relationship between life stress and myocardial infarction (heart attack) and sudden death. Myocardial infarction is reported to have a higher prevalence of four stress factors such as stress at work and at home, financial stress, and major life events in the past year.

Stress and cancer

The relationship between breast cancer and stress has received particular attention. However, more research is needed to find if there is a relationship between psychological stress and the transformation of normal cells into cancerous cells. One area that is currently being studied is whether psychological interventions can reduce stress in cancer patients, thus improving immune function and possibly even prolonging survival.

Stress and psychiatric disorders

A lot of research has been done to find the relation between recent life events contributing to the onset of psychiatric illness. The association between stressful life events and psychiatric illness is through this disease. Although the evidence to support this hypothesis is not conclusive, it is stronger than the association with physical or medical illness. Recent life events are held to have a major etiological role in neuroses (mental illness), the onset of neurotic depression (mixed depressive illness) and acts as a precipitating factor in schizophrenic episodes (losing touch with reality).

Pandemic-related stress is real!

The COVID-19 pandemic has created a variety of stressors, some of which have been linked to intense stress reactions, such as posttraumatic stress (PTS)-like symptoms. Learn tips to take care of mental health during the COVID-19 pandemic.

Click To Read!

Stress as a precursor of anxiety and depression

Stress is a common trigger for anxiety and it's important to catch anxiety symptoms early to prevent the development of an anxiety disorder. Symptoms of anxiety are usually an over-concern with the lack of control over one’s circumstances, either at work or in personal life.

Depression is widely accepted and is linked to stress. The usual symptoms are upset sleep patterns, fatigue, increased consumption of alcohol, muscle aches, and pains, poor self-esteem, or lack of self-worth, among a variety of others.

Stress and other medical conditions

Asthma: Stress can enhance an allergic inflammatory response. In asthma, both external and internal factors are involved and the internal factor is most affected by the acute effects of psychological stressors.

Rheumatoid arthritis (RA): RA involves the body turning on itself (an autoimmune response), it was hypothesized that a self-destructive personality may manifest itself; several investigators have found personality differences between RA sufferers and others.

Migraine: These headaches are the result of constriction and dilatation of the carotid arteries of one side of the head. These are supposed to be triggered by stressful events.

Diabetes: There is evidence that emotionally stressful experiences are associated with endocrine disorders such as diabetes mellitus. Additionally, children who had stressful life events stemming from actual or threatened losses within the family occurring between the ages of 5 and 9 had a significantly higher risk of developing type I (juvenile) diabetes.

Diagnosis Of Stress

There is no specific test to diagnose stress. Diagnosis of stress may include a personal and family health history, blood and urine tests, and other assessments to rule out various medical conditions.

A thorough, stress-oriented, face-to-face medical interview is currently the most practicable way to diagnose stress and its effects. It remains for future research to develop a cleaner methodology to diagnose this complex yet very common disorder.

Prevention Of Stress

In today’s world, stress has become a part of daily life. Preventing stress may look like an impossible task but trying these daily strategies can help prevent it to a greater extent.

Not letting feelings, or emotions hamper the mood

Managing work and tasks efficiently to avoid build-ups

Taking good care of your body by eating right, exercising and getting enough sleep

Staying positive, practicing gratitude, and acknowledging the good parts of the day or life

Accepting that you can’t control everything

Finding ways to let go of situations that cannot be changed

Learning to say “no” to additional responsibilities when busy or stressed

Staying connected with people who keep you calm, make you happy, provide emotional support

Balancing responsibilities with other activities you enjoy

Knowing the triggers and avoiding them efficiently

Did you know?

Numerous foods contain nutrients that may help you reduce stress. Read about how to incorporate some of these foods and beverages into your diet to naturally promote stress relief.

Click Here!

Specialist To Visit

A psychiatrist will provide treatment for stress through medication. But if you want to understand the underlying cause then the following professionals can help:

Integrative medicine specialist

Life coach

Seek medical attention if you feel overwhelmed with thoughts, are using drugs or alcohol as your coping mechanism, or have thoughts about hurting yourself.

If you are noticing any of the symptoms, seek advice from our world-class professionals.

Consult Now!

Treatment Of Stress

Stress is a normal part of life, and it can be good stress or bad stress. Bad stress comes with both physical and emotional reactions to certain triggers that can cause worry and tension. Stress usually fluctuates from situation to situation and challenging circumstances can act as stressors. More than the treatment, it is how you manage it. The methods in the management of stress include:

Therapy/counseling

Stress can take its toll on anybody, but correct therapy can help one manage it better. There are certain therapies that aim to prevent future stress as well. Here are the most commonly used therapies for stress and related mental health conditions:

1. Cognitive-behavioral therapy (CBT)

CBT is the most common type of therapy available to manage short-term stress, as it addresses thought patterns and behaviors. The aim of this therapy is to help the patient identify their stressors, and come up with healthier responses to reduce the impact of their triggers.

This therapy is not just used to help people with stress, but it has shown beneficial results in treating patients with anxiety disorders as well.

2. Acceptance and commitment therapy (ACT)

This therapy aims to work on long-term chronic stress and helps people move past challenges and create their own version of quality life. Acceptance and commitment therapy changes how people respond to stress.

3. Psychodynamic therapy

This therapy is used on a more long-term basis and aims to help one identify thought patterns that may dictate behavioral responses. It may be best suited for stress caused by long-standing issues which are intertwined with other mental health condition such as anxiety and depression.

4. Positive psychology therapy

Positive psychology is a scientific field of study that is useful for stress because it is based on the perspective of “what works” instead of focusing on “what is wrong”. This therapeutic approach helps identify the patient’s character strengths as well as plan and take positive action to improve their life.

5. Behavioral therapy

It is similar to CBT with its focus on changes in behavior. But unlike CBT, behavioral therapy is more focused on one's actions, rather than their thoughts.

Behavioral therapy tends to work best for long-term triggers of stress, including traumatic events, as well as conditions such as anxiety, phobias, and attention-deficit hyperactivity disorder (ADHD).

Click To Know!

6. Exposure therapy

This therapy is traditionally used to treat phobias, PTSD, and anxiety disorders. Exposure therapy is beneficial if the person has any mental health condition that causes them to avoid certain situations, objects, people, and places.

7. Group therapy

This type of therapy is used in dealing with extremely stressful events like natural disasters, child loss, divorce, and more. A trained therapist leads sessions and the group setting allows the person to feel empowered and less alone.

Medication

There is no specific medication for stress, but there are medications that can help alleviate or manage some of the signs and symptoms of stress. They are:

Sleeping pills or minor tranquilizers for sleeping troubles

Antidepressants for anxiety along with stress

Specific medication to treat any symptoms of stress like irritable bowel syndrome (IBS) or hypertension (high blood pressure).

Home-care For Stress

Worry, stress, and anxiety can trigger a host of health problems, but there are things one can do to overcome this. Mild to moderate stress levels can be managed with certain lifestyle modifications like:

1. Understand what is causing stress

It’s important to know the triggers and not to ignore physical warning signs such as tense muscles, tiredness, headaches, or migraines. Think about what’s causing your stress.

2. Make a plan

Doing too many things at a time or doing nothing at all can cause the work to build up leading to stress. Prioritizing things and reorganizing life can help manage everything.

3. Give importance to supportive relationships

Find close friends or family who can offer help and practical advice and provide support in managing stress.

4. Reduce smoking and drinking

Smoking and drinking may seem to reduce tension but it can make it worse. Alcohol and caffeine can increase feelings of anxiety.

Planning to quit smoking? Explore our smoking cessation range.

Click Here!

5. Eat healthy

A healthy and well-balanced diet can improve mood and can keep other disorders at bay as well. Getting enough nutrients (including essential vitamins and minerals) and water can help in the betterment of mental wellbeing.

6. Exercise regularly

Physical exercise can help manage the effects of stress by producing endorphins that boosts the mood. Walk for 15-20 minutes three times a week to stay healthy and fit.

7. Practice self-care

Relax and take some time out to indulge in self-care such as doing meditation, getting a foot massage, or anything that you love to do. But ensure to strike a balance between your responsibilities.

8. Get proper sleep

Sleep is an important factor that can affect stress levels. Reducing caffeine intake, making a “to-do” list for the next day or listening to music before going to bed can help sleep better.

9. Be positive

Try to keep a positive approach in life, find joy in small things and be grateful to your near and dear ones.

Note: It is important to take it easy and not stress about everything, be it at home or at work.

Learn how to effectively handle work stress.

Click Here!

Management of workplace stress

Work stress tops the list of causes of stress, especially the journey in the corporate sector can feel like a roller coaster ride. It can lead to losing self-control and just working with the flow, often neglecting the impact of these levels of stress. But, it can be managed efficiently by the following:

Reduce the job stress by taking care of yourself

Get all the support needed

Rest properly and adequately

Connect with your inner self

Organize and prioritize the tasks

Delegate responsibilities wherever possible

Complications Of Stress

If stress becomes chronic it can lead to various mental and physical health issues such as:

Anxiety: It is the brain's way of reacting to stress and alerting the person of potential danger ahead.

Depression: It is a mood disorder that causes a persistent feeling of sadness and loss of interest and can interfere with daily activities.

Bipolar disorder: A disorder associated with episodes of mood swings ranging from depressive lows to manic highs.

Insomnia: It is a common sleep disorder that can make it hard to fall asleep, and hard to stay asleep.

Phobias: A phobia is an anxiety disorder defined by a persistent and excessive fear of an object or situation.

Post-traumatic stress disorder (PTSD): It is a mental health condition that's triggered by a terrifying event, either experiencing it or witnessing it.

Post-traumatic stress disorder (PTSD) is a real illness that makes you feel stressed and afraid even after the danger is over. It affects your life and the people around you. Read more about PTSD.

Click Now!

Burnout syndrome: Burnout is not simply excessive stress. Rather, it is a complex physical, mental, and emotional reaction to constant levels of high stress. This syndrome is also called labor stress and can be characterized as being physical and emotional exhaustion of workers.

Chronic fatigue syndrome: Also called myalgic encephalomyelitis (ME), it is characterized by feelings of extreme fatigue, depression, and a general disappointment with life, which can last for several months or years.

Obsessive-compulsive disorder (OCD): It causes repeated unwanted thoughts or sensations (obsessions) or the urge to do something over and over again (compulsions).

Heart disease: Stress may lead to high blood pressure, which can pose a risk for heart attack and stroke.

Erectile dysfunction: It is defined as difficulty getting and keeping an erection. Stress and anxiety can interrupt how your brain sends messages to the penis to allow extra blood flow leading to this condition.

Alternative Therapies For Stress

Stress management is a wide spectrum of techniques and psychotherapies aimed at controlling a person's level of stress, especially chronic stress. The main purpose is to motivate and improve everyday functioning. Some of the ways to manage stress include:

Mind-based interventions

Mindfulness-based stress reduction (MBSR) is a therapeutic technique in which an instructor guides participants in weekly activities like meditation and yoga in order to reduce stress levels. This technique generally uses yoga and meditation that can help those with anxiety, depression, chronic pain, addiction, immune disorders, high blood pressure, and more.

Acupuncture

It relieves stress by promoting the movement of Qi in the body, according to Traditional Chinese medicine (TMC). According to TCM, the energy that usually flows smoothly throughout the body can become stuck or scattered due to stress or disease. This can lead to muscle tension and acupuncture can help with that.

Aromatherapy

This can reduce the perception of stress, decrease levels of cortisol and increase contentment. Lavender aromatherapy has shown promising results in promoting sleep in infants and adults. Different aromatherapy scents bring different effects on people.

Here are some essential oils to calm your mind and body.

Read To Know!

Hypnotherapy

This is an effective method for coping with stress and anxiety. In particular, hypnosis can reduce stress and anxiety before a medical procedure, for example, breast biopsy.

Massage

It releases feel-good hormones and relieves stress by lowering the heart rate, and increasing relaxation. Receiving a massage is beneficial to increasing the feeling of contentment and well-being as emotions such as anxiety and depression can be reduced once stress levels are decreased.

Tai Chi

The researchers found that tai chi provided the same benefits for managing stress-related anxiety as exercise as it includes meditation and focused breathing. Some researchers also noted that tai chi may be superior to other forms of exercise for reducing stress and anxiety.

Meditation and relaxation techniques have not gained as much popularity as yoga has in recent times. This majorly is because most people believe stress to be an uncontrollable part of modern life or do not give mental health its due attention.

Read about 5 relaxation techniques to fight stress and anxiety.

Read Now!

Virtual reality

Researchers have taken the first steps toward developing a VR application for stress management, specifically an underwater virtual world that can be used for paced breathing techniques. Also, viewing computer-mediated forms of nature through slideshows of images or videos affects physio-psychological processes reducing stress levels. The VR effects that has the results include:

Resting in the forest

Different types of forest

A water landscape

Natural environment containing some facilities

Note: The COVID-19 pandemic has disrupted everyday living, leaving many in a state of psychological distress. While nature offers solace to promote mental health, the pandemic has reduced access to it. VR offers a safe alternative to experiencing nature.

Living With Stress

Like many other issues surrounding mental health, stress is often misunderstood or stigmatized. Here are some tips to cope with stress in a better way.

1. Do not procrastinate

In the age of social media, it is quite common to spend a lot of time on digital media which makes it difficult to strike a healthy balance between work and relaxation. This in turn can affect your productivity both at work and at home. In addition to restricting the use of social media, take tasks only that you can handle and prioritize your work to be on track with your work schedule.

2. Know the stressors

The best way to manage stress is to know what is causing it and then work on it. For example, if a busy schedule is making you anxious, sit down and prioritize things, or if attending a traditional university isn't going to fit with your scheduling needs, consider transferring to an online university that may be a better fit.

3. Manage academics by organizing

Organization is very important in academic life for dealing with stress. Stress can be managed with great efficiency by keeping academic notes organized, turning in assignments on time, and keeping track of all deadlines.

4. Eat, sleep and exercise regularly

A nutritious diet, enough sleep and daily exercise can beat stress to a large extent. A person has to be well-rested and healthy for the body to perform all the stress-relieving actions.

5. Do what you love

Take a break between classes, homework, work, and other obligations, and read your favorite book or watch a movie. You may not be able to drop everything on your to-do list at once, but don’t hesitate to spend some time doing anything that makes you happy.

6. Talk to your loved ones

Surround yourself with people who you like to spend time with and enjoy their company. Talking to someone who makes you feel comfortable can relieve a great deal of stress.

7. Get professional support

Don’t hesitate to reach out for help from a professional. Trained psychologists or psychotherapists are generally the best types of mental health professionals for stress-related therapies. Their mission is to help you identify triggers of stress while collaboratively developing a plan with you to manage them. Psychotherapists are also referred to as “talk therapists.”

Excess stress takes a severe emotional toll and can lead to serious health consequences that affect the immune, cardiovascular and nervous systems. Read more about effective ways to cope with chronic stress.

Click Here!

Tips for parents and caregivers

It is natural for children to worry when scary or stressful events happen in their lives. Monitor what children see and hear about stressful events happening in their lives. Here are some suggestions to help children cope up with stress.

Maintain a normal routine

Watch and listen to your children

Be alert for any change in your child’s behavior

Reassure your child about his or her safety and well-being

Make sure your child gets plenty of sleep, eats right, exercises daily, and keeps a normal routine

Take breaks from the news, internet, and conversations about any disaster

Teachers and school personnel should create opportunities for students to communicate freely

Tips for employers and HR professionals

Managers and employers play a vital role in shaping the future of employees as they are the support pillars who can make or break any situation for them. HR can help organizations create a culture that respects people’s personal lives and their obligations outside work. Following are some tips that create a good working environment for the employees.

Managers should improve communication with employees

All employees should be motivated to give suggestions

The HR should coach and train managers on having reasonable expectations from employees

Encouraging an informal form of communication through lunch meets, get-togethers, chit-chat or gaming session at the workplace

Incorporating wellness programs to improve overall employee health and cut back on stress and sick-day losses.

Frequently Asked Questions

How long can stress last?

Who is most affected by stress?

Is all stress bad?

Can one gain or lose weight due to stress?

What is the best advice to cope with stress?

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Bronchitis

Also known as Airways inflammation, Chest cold

Overview

Bronchitis is an inflammatory reaction of the lining of the bronchial tubes (or airways). As it is a respiratory condition, it presents with symptoms such as frequent coughing with or without mucus, fatigue, fever and wheezing or whistling sound while breathing.

Bronchitis is broadly classified into acute (if onset is recent) or chronic (if present for long) forms. Acute bronchitis is often caused by a mild infection such as seasonal viral flu or may be due to allergic reasons. Whereas smoking and exposure to air pollutants for a long time are the most common causes of chronic bronchitis. Chronic bronchitis is associated with a severe respiratory disease known as a chronic obstructive pulmonary disease (COPD).

Acute bronchitis, if mild, can be managed with home remedies, OTC products, and anti-allergic medications but consultation with a doctor or immediate intervention may be required in severe cases. Chronic bronchitis is an ongoing illness that requires lifelong treatment to keep the symptoms suppressed and is a cause of considerable morbidity and mortality in the long term.

Key Facts

Usually seen in

Children below 15 years of age

Adults above 60 years of age

Gender affected

Both men & women

Body part(s) involved

Respiratory system

Bronchioles

Prevalence

Worldwide: 3.4%–22.0% (2015)

Mimicking Conditions

Lung cancer

Allergic rhinitis

Congestive heart failure

Occupational lung diseases

Lung aspiration

Necessary health tests/imaging

Complete blood count (CBC)

Sputum examination routine

Pulmonary function tests

X-Ray chest PA view

HRCT chest - plain

Erythrocyte sedimentation rate (ESR)

C-Reactive protein (CRP)

Treatment

Antipyretics: Paracetamol

Bronchodilators: Salbutamol and Ipratropium bromide

Antitussives and expectorant syrups

Lozenges

Antibiotics

See All

Symptoms Of Bronchitis

The bronchioles and bronchi present in the respiratory system consist of airways or tubes that carry the air inhaled by the nose to the lungs. After inhalation, air enters the nose, crosses the larynx and enters the trachea. The trachea first divides into the two airways known as the right bronchus and the left bronchus. These bronchus further divide into many small bronchioles and ultimately supply air to the right and the left lung, respectively. Any inflammation occurring in the bronchi is known as bronchitis.

Bronchitis can be acute or chronic and the symptoms may vary slightly based on the type.

Symptoms of acute bronchitis

Symptoms of acute bronchitis last for a week or two and usually do not cause any lingering effects. Following symptoms are seen with acute bronchitis:

Persistent cough

Coughing up sputum, which may be colorless or yellowish. Occasionally, it may be greenish or blood-tinged sputum.

A runny or a stuffy nose

Sore throat

Chest pain or tightness

Wheezing or whistling sounds may be heard during breathing

Dyspnoea or breathlessness while performing activities or at rest

Fever, chills, weakness, and body aches

Dizziness and confusion

Low levels of oxygen

Symptoms of chronic bronchitis

When the symptoms of acute bronchitis last for a longer time and recur frequently, it may be a case of a condition known as chronic bronchitis, an ongoing illness. Chronic bronchitis is characterised as a productive cough which may continue for a minimum of three months for two or more consecutive years.

Chronic bronchitis, if left unattended, might lead to emphysema (a type of respiratory disease) which in turn can cause chronic obstructive pulmonary disease (COPD), a serious respiratory disorder that can also be life-threatening.

Causes Of Bronchitis

Causes of acute bronchitis

Infections: Acute bronchitis can be caused by viral or bacterial infections of the respiratory tract. The same viruses that cause the common cold or the flu can also cause acute bronchitis. Viruses and bacteria can enter your body if you are in close proximity to a patient who has an ongoing respiratory illness. When a patient coughs or sneezes, millions of tiny droplets laden with microorganisms get released into the air. If you inhale such contaminated air, you may also get infected.

Inhalation of irritant substances: Inhaling dust particles, smoke, and industrial pollutants such as tiny fibers, asbestos granules, acid fumes, etc. may also cause inflammation in the airways and lead to acute bronchitis.

Seasonal changes: For some people, seasonal changes can also increase the risk of acute bronchitis due to allergic reactions. It is seen that during the winter season most people experience an episode of acute bronchitis every year.

Causes of chronic bronchitis

Air pollution: Living in polluted areas and constantly breathing in polluted air can lead to the development of chronic bronchitis.

Industrial exposure: Working in industries that continually expose a person to tiny fibers, dust, smoke, acid fumes, etc., which irritate the lungs may cause chronic bronchitis.

Smoking: Smoking for a longer duration, actively or passively (exposed to smoke when someone else is smoking), is one of the causes of chronic bronchitis.

Did you that Tobacco smoke is a toxic mix of more than 7,000 chemicals and compounds?

Smoking has a direct effect on the respiratory system, more significantly on the lungs. It is basically a toxic mix of more than 7,000 chemicals and compounds. These compounds reach the lungs quickly every time you smoke or inhale them. This over time damages the cells of other parts of the body. But smoking usually affects the lungs the most.

Click Here To Know!

Risk Factors For Bronchitis

You have a higher chance of getting bronchitis if you:

Are a smoker

Have a family history of respiratory diseases

Work in an industry that exposes you to lung irritants

Have asthma or allergic diseases

Have a weak immune system

Suffer from repeated bouts of severe acidity (gastric reflux)

Diagnosis Of Bronchitis

Acute bronchitis is commonly caused by respiratory viruses. In most cases, it is a self-limiting illness that resolves within 8 to 10 days. Doctors do not usually suggest any investigations for a single episode of acute bronchitis as the diagnosis is mostly based on the patient’s history and clinical symptoms. Laboratory investigations and imaging studies may be needed when symptoms are severe or recurrent and do not resolve within 8 to 10 days.

Laboratory investigations

1. Blood tests: Blood tests like Complete Blood Count (CBC), Erythrocyte Sedimentation Rate (ESR), C-Reactive Protein (CRP), etc., may be required to evaluate if the patient is suspected of having a severe infection or inflammation.

2. Sputum analysis: This has a limited role in diagnosing a case of acute bronchitis. Viruses are the most common cause of acute bronchitis, and they are not sufficiently detected in a sputum analysis. A sputum examination routine is required when a patient is suspected of having add-on infections or pneumonia (complications of acute bronchitis).

3. Pulmonary function testing: Pulmonary Function Tests are tests that study the functioning of the airways and are used to determine their sensitivity to bronchodilator medications. They are an important diagnostic tool to evaluate chronic bronchitis and COPD.

Imaging studies

X-Ray chest PA view and HRCT chest - plain are used to visualize the lungs and the airways to help establish a diagnosis for respiratory symptoms.

Celebs affected

Leonard Nimoy

Leonard Nimoy, famous for his role as Spock in the Star Trek movie series, had chronic bronchitis and COPD.

King Edward VII

King Edward the VII of England was a chain smoker and was known to have chronic bronchitis.

Prevention Of Bronchitis

Although bronchitis can affect anyone and it is not possible to prevent it entirely, certain precautions and lifestyle modifications can help prevent frequent episodes of bronchitis.

Do not smoke or be around people when they are smoking

Wear a mask when you are exposed to dust, smoke, or other lung irritants

Wash your hands frequently, and do not touch your eyes, ears, and mouth repetitively

Get yourself vaccinated yearly with the flu vaccine

In most cases, you do not produce noticeable amounts of phlegm unless you are sick or suffer from any respiratory problem. But the presence of phlegm (known as sputum) could indicate the presence of an allergen, irritant or infection in your lungs or sinuses. Moreover, the color of the phlegm can give you an idea about your health problem.

Do you know how to differentiate the different colors of the mucus and know what each color means?

Click Here Read!

Specialist To Visit

Acute bronchitis often resolves on its own, and the symptoms will clear off in a week or ten days. You may seek medical advice from a doctor if you have troublesome symptoms not relieved with home remedies or OTC preparations. If you have a cough for most days of the year, you must consult a

General physician

Respiratory specialist (Chest physician/pulmonologist)

If you experience severe symptoms during an episode of acute bronchitis, it may suggest an underlying secondary infection in the lungs which may require immediate medical attention. The symptoms include:

High fever

Chills

Breathlessness at rest

Low oxygen levels

Bad taste in the mouth

Cough with blood-tinged or greenish sputum

Consult India’s best doctor online from the comfort of your place. Click to book an appointment.

Consult Now!

Treatment Of Bronchitis

The treatment for bronchitis is mostly based on the type and severity of the condition. Some of the most common treatments suggested include:

1. Physiotherapy and pulmonary rehabilitation

Physiotherapy exercises for postural drainage effectively loosen the secretions in the chest and help with easy expulsion of mucus. Pulmonary rehabilitation exercises comprise breathing techniques and with time gradually progress to aerobic exercises to help improve a patient’s lung capacity and strengthen their respiratory system. Pulmonary rehabilitation is an important part of chronic bronchitis and COPD management.

2. Acute bronchitis treatment

The treatment for acute bronchitis is mostly symptomatic and consists of:

Antipyretics like paracetamol preparations are used to control the fever.

Bronchodilators like salbutamol and ipratropium bromide help improve breathing.

Antitussives and expectorant syrups help reduce cough and chest congestion. Antitussives help suppress cough whereas expectorants help to easily expel the mucus.

Lozenges provide a soothing effect by reducing the coughing sensation.

Antibiotics (rarely) may be given if your doctor suspects an additional bacterial infection.

3. Chronic bronchitis treatment

Chronic bronchitis is an ongoing illness that requires additional treatment to the above-listed symptomatic treatment of coughing. The treatment may include:

Antitussive medications which are used to treat the chronic cough associated with chronic bronchitis and COPD.

Bronchodilators such as salmeterol and tiotropium and steroid medicines like fluticasone and beclomethasone are prescribed for inhalation to relieve airway inflammation seen in chronic bronchitis and COPD.

Patients with a severe disease may require supplemental oxygen at home to combat the hypoxia (absence of sufficient oxygen to the tissues).

Home Care For Bronchitis

If you have a flare-up of acute bronchitis or are suffering from chronic bronchitis, you can do the following to get relief from symptoms:

Drink plenty of fluids like warm water, herbal teas, and clear soups.

Take sufficient rest. If you can't sleep at night, use an extra pillow to prop up your head to prevent mucus from settling in the back of your throat.

Perform steam inhalation as it humidifies the nasal passages and airways and helps loosen chest congestion.

Using a cold or warm mist humidifier in the bedroom can help clear the mucus.

Gargling with salt water can help break mucus that irritates the throat. Spit it out after gargling. You can repeat it many times a day to soothe your throat.

You can use a saline nasal spray or drops to help with nasal stuffiness.

You can suck on lozenges (small medicated tablet for cough) or a mixture of honey and lemon to help with a sore throat and cough. Do not give lozenges to children without consulting a doctor.

Quitting smoking is one of the key lifestyle modifications advised to patients who smoke. Smoking cessation helps prevent disease from worsening.

Complications Of Bronchitis

Bronchitis, whether it is acute or chronic, may cause severe activity limitations and lead to:

Asthma

COPD

Emphysema

Empyema

Pneumothorax

Pneumonia

Lung collapse

Chronic hypoxia

Respiratory failure

Death

Alternative Therapies Of Bronchitis

Home Remedies For Bronchitis

1. Honey: It has antiviral as well as antibacterial properties and is useful in the treatment of bronchitis. Honey helps soothe the throat and moreover, it also builds a strong immune system.

Tip: Add half a teaspoon of honey with a pinch of black pepper, fresh ginger paste, and 1-2 clove powder. Consume this paste to ward off the burning sensation of the throat.

2. Ginger: It has immune-building and anti-inflammatory properties that not only help treat cold but also sore and inflamed bronchial tubes.

Tip: It’s safest to use ginger in a natural form, rather than in capsules or supplements. Prepare a mixture by adding one teaspoon each of pepper, dried ginger, and cloves. Add a little amount of this mixture in milk or honey and have it thrice a day to get relief.

3. Turmeric: To get relief from cough associated with bronchitis, turmeric is the best natural remedy. The anti-inflammatory properties of turmeric resolves excess mucus, which ultimately provides relief. Turmeric also increases antioxidant activity, meaning that it may help reduce irritation and boost your immunity.

Tip: Mix 1/2 teaspoon of powdered turmeric with 1 teaspoon of honey to make a paste. Consume the paste 1 to 3 times per day while symptoms last.

4. Garlic: Garlic is one of the most important home remedies to treat acute bronchitis. Results of a study published in 2016 show that garlic effectively inhibited the growth of infectious bronchitis virus.

Tip: Take three fresh garlic bulbs, peel, and chop them properly. Add the chopped pieces to a glass of milk. Boil the milk for some time and drink it warm before going to sleep.

5. Salt water: Gargling salt water may help break up mucus and reduce pain in your throat. This helps in soothing the irritated throat.

Tip: Add some salt in warm water and stir it well. Now, gargle with this warm salt water 3-4 times a day.

6. Pineapple: Pineapple contains bromelain, which is a natural and powerful anti-inflammatory that can help in expelling mucus and gives relief in bronchitis and other respiratory infections.

7. Orange juice: Oranges are rich in vitamin C and it is suggested to consume plenty of vitamin C to build a strong immune system. To treat bronchitis, fruit juices are the best home remedies to soothe the inflamed throat.

Tip: Orange juice can also be used with almonds to alleviate a sore throat. Finely crushed almonds can be added to orange juice and drink this at night.

Ayurveda

There are various herbal remedies which are used to alleviate the symptoms of cough, such as sucking on a clove, taking powdered preparations from medicinal herbs, and condiments like long pepper, dried ginger, turmeric, etc. Formulations, such as Sitopaladi Churna, Karpuradi Churna, etc., are also used to alleviate dry cough. Vyaghriharitaki Avaleha, Bharangyadi Avaleha, and Vasavaleha are found to be useful in chronic bronchitis and childhood asthma.

Homeopathy

Although there is little evidence, homeopathy preparations like Belladonna, Chamomilla, Antimonium Tartaricum, Nux Vomica, Kali Sulphuricum, etc. have been in use to treat cough, cold, and other symptoms of bronchitis.

Living With Bronchitis

Acute bronchitis does not majorly interfere with the patient’s lifestyle as the symptoms do not continue for long and resolve without any long-term effects. However, chronic bronchitis may impart a major impact on a patient’s quality of life.

A chronic bronchitis patient may not be able to perform strenuous physical activities as he or she may get breathless. As the disease progresses, the symptoms worsen and the chances of respiratory failure are high.

A COPD patient may often need oxygen supplementation at home, and their other physical activities may be severely limited. The quality of life of the patient with chronic bronchitis declines as the severity of the disease increases.

Frequently Asked Questions

Is bronchitis a serious disease?

Why do I get coughs and colds every year?

What home remedies can help with cough?

What are pulmonary function tests?

How long does it take to recover from bronchitis?

Can bronchitis turn into pneumonia?

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Testicular cancer

Also known as Germ cell tumour

Overview

Testicular cancer is a medical condition in which the testicles (or testes) are affected by cancerous cells. The testicles are part of the male reproductive organ and are present as two small egg-shaped glands. These glands are held in a scrotum or sac that lies below the penis. The testicles are responsible for producing the sperm and male sex hormones.

Testicular cancer is rare in occurrence when compared to other cancers. Testicular cancer accounts for merely 1% of malignancies found in men. It can occur in men of all ages but it is most commonly seen in the age group of 15 to 44 years. It usually affects only one testicle.

Testicular cancer is fairly treatable and can be cured when detected early. Depending on your exact diagnosis and staging of cancer, your doctor can advise you surveillance, surgery, radiation, or chemotherapy. Some patients may require more than one treatment modality for completely curing testicular cancer.

Key Facts

Usually seen in

Adults between 15 to 44 years of age

Gender affected

Men

Body part(s) involved

Testicles

Metastasis to lymph nodes, lungs, brain & bones

Mimicking Conditions

Testicular torsion

Epididymitis

Hydrocele

Spermatocele

Necessary health tests/imaging

Clinical examination

Ultrasound

Blood tests: Serum alpha-fetoprotein (AFP), Lactate dehydrogenase (LDH) & beta-human chorionic gonadotropin (beta-hCG)

Imaging tests: CECT abdomen & CECT chest

Biopsy

Treatment

Surgery: Radical inguinal orchiectomy & Retroperitoneal lymph node dissection

Chemotherapy: Bleomycin, Cisplatin, Etoposide & Ifosfamide

Radiation therapy

Symptoms Of Testicular Cancer

Testicular cancer can cause several symptoms that affect your health. It is possible to experience more than one symptom at the same time.

Feeling a lump or swelling in either testicle

Feeling of heaviness in the scrotum

Collection of fluid in the scrotum

Experiencing pain or discomfort in one testicle or the scrotum

Testicular atrophy (shrinking of the testicles)

Experiencing a dull ache in the abdomen or groin region

Enlargement or tenderness of the breasts

Lower back pain

Swelling of one or both legs or shortness of breath due to a blood clot. For some young or middle-aged men, developing a blood clot may be the first sign of testicular cancer

Shortness of breath, chest pain, and blood in sputum or phlegm can be symptoms of later stage of testicular cancer due to spread to lungs

Headaches and confusion in case the tumour spreads to the brain

Here are some common signs and symptoms that could be suggestive of cancer.

Click To Know!

Types Of Testicular Cancer

There are two types of testicular cancer:

Seminoma: This kind of tumour occurs in all age groups. In the case of the elderly who develop testicular cancer, the cell type is more likely to be seminoma. In general, seminomas do not tend to be as aggressive as a nonseminoma. They are usually limited to the testicles and are less likely to spread to other parts of the body.

Nonseminoma: Nonsemina is a tumour that has a tendency to develop in the earlier stages of life. Later it grows in size and spreads rapidly in the body. Nonseminoma tumours tend to involve the lymph nodes. There are different types of non-seminoma tumours including embryonal carcinoma, yolk sac tumour, choriocarcinoma, and teratoma.

Causes Of Testicular Cancer

It's not exactly clear what leads to the development of testicular cancer. Typically, healthy cells in our body undergo division and growth to maintain optimal body function. However, sometimes these cells may develop some abnormalities. Such mutations can cause the previous healthy cells to start diving and growing out of control. These cancerous cells continue dividing despite the body not needing them.

Slowly these cancerous cells start getting accumulated and start taking the space and nutrients available for healthy cells. This results in a cancerous mass that can be felt as a lump in the testicle. There are some particular cells in the testicles that produce immature sperm.

Some researchers have found that most testicular cancer cells have an extra pair of chromosome number 12. They have also detected the presence of some other chromosomes or an abnormal number of chromosomes in some testicular cancers.

Experts are studying these chromosomes and the DNA further to find more about the genes that get affected and lead to the development of testicular cancer.

Risk Factors For Testicular Cancer

The following factors are associated with a high risk of testicular cancer.

Age group of 15 to 44 years

Failure of testicle to descend from the abdomen into the scrotum (cryptorchidism)

Personal history of a testicular cancer

Family history of a testicular cancer

Incidence is highest in white race, most rapidly increasing in Hispanic population and lowest amongst African-american individuals

Infertility or having difficulty conceiving a baby

Abnormal testicular development in conditions like Klinefelter syndrome

Congenital defects like hypospadias (abnormality of the penis) and inguinal hernia (a lump in the groin)

Issues before birth related to mother’s pregnancy such as abnormal bleeding and estrogen, or hormone therapy

HIV infection or AIDS

Did you know?

Taller men could be at a higher risk of an aggressive form of prostate cancer. According to the study, British scientists found that every 10 cm increment in height increased the risk of developing high-grade prostate cancer by 21% and the risk of death by 17%. Here’s more about the link.

Click To Read!

Diagnosis Of Testicular Cancer

Your doctor will consider your symptoms and carry out some tests to rule out the diseases that mimic the symptoms of testicular cancer. In several cases, men are able to discover the presence of testicular cancer by themselves when they unintentionally discover a lump in their testicles. Your doctor can determine whether a lump is cancerous or not.

1. Clinical examination

Your doctor will perform an examination of affected testis and the contralateral normal testis to look for any abnormality. Many tumours will have a hard consistency, while some tumours may show testicular atrophy.

The doctor will also examine the abdomen, neck, upper chest, armpits, and groin for any evidence of enlarged lymph nodes, to evaluate any spread of cancer.

The breasts and nipples are also examined for any growth.

The legs are examined for swelling from blood clots in veins in the legs, pelvis, or abdomen.

2. Ultrasound

A testicular ultrasound is an examination modality that uses sound waves that helps in creating an image of the scrotum and testicles. A doctor or health provider uses a handheld probe and moves it over the scrotum to take the ultrasound. This in turn creates a digital image on the screen that can be viewed by the doctor. An ultrasound test helps in determining the size, nature, location of the lump and identifying whether the lump is filled with fluid or is solid in nature. It will also help your doctor determine the presence of lumps inside or outside the testicle.

3. Blood tests

Your health provider may also request some blood tests depending on your signs and symptoms. This will help in determining the levels of tumour markers present in the blood. Tumour markers are compounds that normally occur in the body. But, in the case of certain ailments such as testicular cancer, these markers are elevated in the blood. The final diagnosis will be given by your doctor based on your results and other tests.

Bloods tests to measure the levels of tumour markers such as serum alpha-fetoprotein (AFP), lactate dehydrogenase (LDH) and beta-human chorionic gonadotropin (beta-hCG) are recommended in patients suspected of testicular cancer.

AFP is elevated in 60-70% of patients with non seminoma. AFP is not produced by seminomas, hence an increased level of AFP is a sign that the tumour is not a pure seminoma. A falsely elevated AFP may be seen in patients with liver disease or a condition called hereditary persistence of AFP in which patients may have baseline AFP levels that are mildly elevated.

Beta- hCG may be elevated in both non seminomas and seminomas. However, beta-hCG levels above 1,000 IU/L generally indicate that the cancer is a non-seminoma and not a seminoma. False positive elevation of hCG may be seen secondary to hypogonadism or use of marijuana.

LDH is a nonspecific marker mainly used to help in the assessment of how much chemotherapy to give for metastatic non-seminoma. Many other cancers and non-cancerous conditions can increase LDH levels and it is not used to diagnose testicular cancer in particular.

Although elevation of serum tumour markers support the diagnosis of a testicular cancer, it should be remembered that most patients with seminoma and upto a third of patients with non seminomas do not have elevated levels.

The levels of these markers are measured before a biopsy is taken that helps in determining testicular cancer.

4. Imaging tests

CECT abdomen: It is usually done for the evaluation of the abdominal area. Presence, size and location of a tumour along with associated lymph nodes can be evaluated.

Chest X-ray: A chest x-ray is used to ascertain any metastasis to the lungs. If a more detailed picture of the lungs is needed, the doctor may recommend a CECT of the chest. However, in many cases, an x-ray is preferred as it uses less radiation.

CECT chest: It should be performed in case of metastasis to the lung or if lung nodules are identified on chest x-ray.

5. Surgical removal of testicle (orchidectomy or orchiectomy)

Surgical removal of the affected testicle is done to examine it in the laboratory. In most cases, only one testicle is removed, as both testicles are rarely affected by cancer at the same time.

For most types of cancer, a biopsy is done by removing and examining some tissue from the tumour. However, biopsy from the testicle is not done because it has a risk of causing the cancer cells to spread to the lymph nodes.

Wondering which doctor to visit for male health problems? Here’s everything about different male health specialists and what they do.

Click To Read!

Prevention Of Testicular Cancer

Unfortunately, currently, researchers have not found a way to prevent testicular cancer. However, early diagnosis can prevent the spread of cancer and present a good prognosis. Men are advised to perform a testicular self-examination (TSE) once a month.

Performing a TSE can be done while taking a shower or warm bath. A warm bath will help the scrotum to relax, making it easier for you to detect the presence of unusual lumps.

To do the examination, use both of your hands to examine each testicle. Use your index and middle fingers and place them underneath your testicles while placing your thumb on the top.

Now gently roll each testicle between your fingers and thumb. Your testicles can feel different in size which is quite normal. As you move your testicles between your fingers lookout for the epididymis. This structure is a tube that stores and transports sperm and feels like a cord on the top and back of your testicle. Do not confuse it with a lump.

You will be able to feel the presence of lumps since they can be the size of peas or bigger in size. They are often painless in nature.

In case you feel a lump or observe a change in the size of your testicle, contact your doctor for a medical opinion.

Did you know?

Some of the common cancers can be prevented with vaccines. There are currently no vaccines able to prevent all cancers. However, vaccines against some viruses have proven extremely effective, thereby providing a certain degree of protection against cancers caused by these viruses. Click to know which vaccines are approved for cancer prevention in India.

Read Article Here!

Specialist To Visit

You should visit a doctor if you are experiencing symptoms such as a lump in your testicles, swelling of a testicle or increase in the size of the testicle. These symptoms might indicate the possibility of testicular cancer. You can consult the following doctors for diagnosis:

General physician

General surgeon

Urologist

Oncologist

If you are a bit reluctant to visit a doctor personally, you can even consult a doctor online.

Book Appointment Here!

Treatment Of Testicular Cancer

Testicular cancer can be treated based on the type and staging of cancer. It also depends on several other factors that include your overall health and personal preferences. There are several ways through which testicular cancer can be managed and treated.

The staging of testicular cancer is based upon understanding the pattern of spread. One staging classification that is used is the TNM system:

Stage I: Tumour (T) is limited to the testis

Stage II: Tumour has spread to the lymph nodes (N) in the back of the abdomen (retroperitoneum)

Stage III: Metastasis (M) of the cancer has happened, i.e. it has spread to other parts of the body such as lungs, liver, brains, and bone.

For testicular cancer, an S is also added to the TNM system. Serum tumour marker (S) indicates any elevation of serum tumour markers like AFP, beta-hCG, and LDH.

1. Surgery

Radical inguinal orchiectomy: It is the foremost treatment option for testicular cancer at nearly all stages and types. This procedure is done by a surgeon who will make an incision in the groin region and remove the involved testicle through the opening. According to your choice, a prosthetic and saline-filled testicle can be inserted into the scrotum to make up for the removed testicle. In the early stages of testicular cancer, this surgery can be enough and often the only treatment needed for testicular cancer.

Retroperitoneal lymph node dissection: It is another surgery that is done by making an incision in your abdomen. In this surgery, your surgeon will do their best to avoid injuring nerves that surround lymph nodes. However, in some cases, it may be unavoidable and hence comes with some level of risk. Damage to the nerves can lead to difficulty with ejaculation; however that won't prevent you from having an erection.

Sometimes surgery can be the only treatment option for testicular cancer. In such cases, your doctor will recommend a schedule of follow up appointments. These appointments are usually carried out every month for the initial few years. The frequency of the appointments decreases later and you will be required to undergo blood tests and CT scans. Your doctor may recommend other procedures that will allow them to check for signs that can indicate the return of cancer.

2. Radiation therapy

Radiation therapy is a treatment modality that uses high powered energy beams that work as an effective treatment to kill cancer cells. During a radiation therapy appointment, the patient is asked to lie flat on a table. A large machine that emits the energy beam moves around the body and aims the beam at precise points. Radiation therapy is often recommended for patients who have the seminoma type of testicular cancer and can also be recommended after surgery done to remove a testicle.

Radiation therapy can lead to some side effects including nausea and fatigue. It can also cause some level of skin erythema and irritation near the abdominal and groin areas. In some cases, radiation therapy can lead to a temporary decline in the levels of sperm count and can also affect fertility. Before the radiation therapy, you can talk to your doctor about the side effects and methods of managing the same. Several men opt to preserve their sperm before beginning radiation therapy.

3. Chemotherapy

Chemotherapy treatment is a treatment modality that uses strong medicines that are effective in killing cancer cells. These drugs circulate around the body and aim at destroying cancer cells that may have travelled from the original tumour. According to the stage of testicular cancer, chemotherapy may be your only treatment option or a patient can be advised chemotherapy prior to or post a lymph node surgery.

Commonly used chemotherapeutic agents in treatment of testicular cancer are:

Bleomycin

Cisplatin

Etoposide

Ifosfamide

Serum tumour markers are monitored throughout the treatment and usually normalise during or after treatment.

Cisplatin-based chemotherapy is associated with side effects like myelosuppression (bone marrow is not able to make enough blood cells), nausea, vomiting and hair loss. Bleomycin may be associated with pulmonary fibrosis (lung tissue becomes damaged and scarred). Your doctor can recommend various medications or other treatment options that can help in managing the side effects of chemotherapy.

Talk to your doctor about the risks and benefits of the treatment and about the various options that can allow you to preserve your sperm prior to beginning chemotherapy.

4. Bone marrow transplantation

Bone marrow transplantation, also known as stem cell transplantation, is the latest state of the art treatment modality. In this procedure, the bone marrow is taken from the patient and treated with drugs to do away with the cancer cells. The marrow is then frozen. The patient is given high-dose chemotherapy with or without radiation therapy to destroy the remaining marrow. The marrow earlier removed from the patient is thawed or warmed and injected into a vein of the patient to replace the marrow that was destroyed.

Celebs affected

Lance Armstrong

Lance Armstrong is a famous athlete who has vocally spoken about his experience with testicular cancer.

Tom Green

Tom Green is a comedian and actor who was diagnosed with testicular cancer in 2000.

Home-care For Testicular Cancer

It generally takes about two weeks or two months to recover from an orchiectomy that allows doctors to remove the affected testicle. It is important to follow the post-op instructions given by your doctor during your recovery time.

You will be advised to avoid lifting anything over ten pounds for the first few weeks of the surgery.

You will also be asked to refrain from engaging in any kind of sexual activity until you have recovered.

Activities such as exercising, running or playing sports should be avoided for nearly four weeks post-surgery.

You will be asked to maintain a schedule of follow up appointments to minimise the risk of testicular cancer returning. There is a small risk that cancer may return or grow in the other testicle. Hence, it is vital that patients maintain follow-up appointments and learn how to perform self testicular examinations. The duration of your follow up care may alter based on your diagnosis and diseases prognosis your follow up care.

Complications Of Testicular Cancer

Untreated testicular cancer can lead to certain complications such as:

1. Excessive female hormone

In some cases, testicular cancer can lead to the increased production of another hormone known as human chorionic gonadotropin or hCG. This hormone is also known as the “pregnancy hormone”. In some cases, the excessive production of hCG can lead to the abnormal enlargement of breast tissue in men. This condition is known as gynecomastia. Some other types of testicular cancer can lead to the development of gynecomastia due to an increase in the levels of another female hormone known as estrogen.

2. Metastasis or spread of cancer

There can be several complications in case testicular cancer is undiagnosed or left untreated for a long duration of time. This can result in the spread of cancer from the original tumour to other parts of the body.

The site to which the original tumour spreads is known as a secondary or metastatic tumour. In the case of metastasis, a patient can present with several symptoms based on the location of the metastatic tumour. These symptoms will include lower back pain, swollen lymph nodes, or swelling and pain in the lower extremities.

Retroperitoneum is the most commonly involved site in metastatic disease. Most blood borne metastasis occurs after the lymph node involvement. Lungs are the most common organ involved by blood borne metastasis. If the secondary tumour is present in the lungs, it can result in shortness of breath, coughing up of blood or the presence of chronic cough. Symptoms such as headaches or confusion can be seen if a secondary tumour spreads to the brain.

3. Late effects of chemotherapy

Patients treated with cisplatin based chemotherapy have increased risk of development of hypertension, hyperlipidemia, metabolic syndrome, and cardiovascular events. Patients treated with high cumulative dose of etoposide may experience some risk of developing other cancers like acute myeloid leukaemia (AML), typically 2-3 years after therapy.

Alternative Therapies For Testicular Cancer

Testicular cancer requires orthodox medical treatment. However, some patients feel that a complementary approach via alternative therapies can help in the management of the side effects caused during the treatment.

1. Acupuncture

Acupuncture has proven to be a successful alternative therapy form in patients that have testicular pain. It involves the insertion of needles through the skin at specific points on the body. Acupuncture can also provide relief for patients who have epididymitis (inflammation of the epididymis present at the back of the testicle).

2. Aromatherapy

Aromatherapy uses a mix of essential oils for massages that can make a person feel relaxed. Often patients feel that alternative therapies such as aromatherapy help them cope with the treatment of cancer and allow them to feel relaxed.

Living With Testicular Cancer

Being diagnosed with testicular cancer can cause stress and anxiety in men. This medical condition directly affects the quality of life, and patients struggle with the concept of cancer itself. Some men also face a decreased sperm count or experience difficulty in ejaculating, leading to embarrassment. However, timely diagnosis and treatment can help you in managing the signs and symptoms linked with testicular cancer.

Learn about testicular cancer

Learning about testicular cancer can help you make comfortable decisions regarding your treatment choice. It is better to empower yourself with the knowledge of what’s about to happen than to fear the unknown. Pen down the questions that you would like to ask your doctor at the next appointment. You can also use reputable sources of information to read more about the condition and the treatment options available for the same.

Take care of yourself

Preparing for the treatment of testicular cancer can seem like a daunting task. To do so you need to take care of yourself and your body. Eat a healthy diet that is well balanced. Increase the number of fruits and vegetables you intake and get plenty of rest every night. Try to practice meditation and eliminate sources of stress from your life prior to the treatment. Talk to your doctor about strategies that can help your body prepare for the treatment.

Join support group

Dealing with testicular cancer can be isolating even if you have friends and families. In such times it is often helpful to talk to people who have gone through the same experience. There are several support group forums available online that include cancer survivors.

Take the help of your loved ones

Undergoing chemotherapy can be tough. Take help from the people near you for accompanying you to the doctor's appointments or to the treatment centre. Talking to people who love you during the course of the treatment can help you cope with the fear of cancer.

Frequently Asked Questions

How will testicular cancer affect my sex life?

What is the prognosis for testicular cancer?

What are the chances that testicular cancer will occur in the second testicle?

How long does it take for an adult to heal from orchiectomy?

What are the treatment options for recurrent testicular cancer?

Does having a family history of testicular cancer increase the chances of getting it?

What is the most significant risk factor for testicular cancer?

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Tetanus

Also known as Trismus and Lockjaw.

Overview

Tetanus, commonly known as lockjaw, is a nervous system disorder characterized by muscle spasms, particularly of the jaw and neck. This infection is caused by the bacteria called Clostridium tetani, which is found in the soil. Tetanus symptoms usually emerge about 7 to 10 days after the initial infection. However, this can vary from 4 days to about 3 weeks, and may, in some cases, may take months.

Open wounds that are soiled, sharing contaminated needles and deliveries in unhygienic conditions are the main risk factors for getting tetanus. Most cases occur in people who did not complete their primary tetanus vaccination schedule or did not receive any booster shot within the previous decade.

Tetanus is a deadly and highly debilitating condition that fortunately can be prevented by timely vaccinations. The tetanus vaccines should be given to children. Primary vaccination schedule consists of 5 tetanus shots given as part of diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccination in children between 2 months to 6 years.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Jaw and neck muscles

Prevalence

Worldwide: 73000 (2019)

Mimicking Conditions

Localized infections

Hysteria

Neoplasms

Malignant hyperthermia

Stimulant drugs

Dystonic drug effects

Serotonin syndrome

Stiff person syndrome

Treatment

Early wound care

Human tetanus immune globulin (TIG)

Medicines to control muscle spasms: Diazepam, Pancuronium, Baclofen, Magnesium sulfate

Antibiotics: Metronidazole, penicillin G, cefuroxime

Hospitalization and supportive care

Specialists to consult

General physicians

Toxicologist

Neurologist

Pulmonary medicine specialist

Anesthesiologist

Symptoms Of Tetanus

The most common sign of this infection is tightening of the jaw muscles. Tetanus infection can lead to serious health problems, including being unable to open the mouth and having trouble swallowing and breathing. Other symptoms include:

Jaw cramping

Sudden, involuntary muscle spasms often in the stomach

Painful muscle stiffness all over the body

Trouble swallowing

Seizures (jerking or staring)

Headache

Fever and sweating

Changes in blood pressure and heart rate

Did you know?

Spasm progressively extends to the facial muscles causing the typical facial expression of fixed sarcastic grimace and anxious expression called “ risus sardonicus”.

Causes Of Tetanus

Tetanus is caused by a toxin produced by Clostridium tetani bacteria spores found in dust, animal feces, and soil. When these spores enter a deep flesh wound, they transform into bacteria that release a lethal toxin known as tetanospasmin.

The toxin damages the muscles, specifically the motor neurons that control muscle function. This causes muscle spasms and stiffness, which is a major symptom of tetanus.

Tetanus cases are frequently seen in people who have never been immunized or in adults who have not received their 10-year booster shot. Tetanus is not a contagious disease and thus cannot be passed from person to person.

Other ways:

Tetanus bacteria can also infect someone’s body through breaks in the skin caused by:

Clean superficial wounds (when only the topmost layer of skin is scraped off)

Surgical procedures

Insect bites

Dental infections

Compound fractures (an exposed broken bone)

Chronic sores and infections

Intravenous (IV) drug use

Intramuscular injections (shots given in a muscle)

Types Of Tetanus

Tetanus is a vaccine-preventable disease acquired through environmental exposure to the spores of Clostridium tetani. There are four forms of tetanus, based on clinical findings. They include:

1. Generalized tetanus

It is the most prevalent kind (more than 80% of reported cases). Typically, the head and neck muscles are the first to become tight and spastic, with the rest of the body eventually being affected. The full recovery from these spasms may take several months, and they can persist for up to 4 weeks.

2. Localized tetanus

It is an uncommon form of the disease in which patients have persistent contraction of muscles in the same body part as the injury. These contractions could last for several weeks before fading down gradually.

3. Neonatal tetanus

It is a type of tetanus that manifests within a week of birth in newborn babies. In case the mother is not immune, neonatal tetanus affects newborns who are not protected by their own immune system or antibodies from the mother.

Note: The newborn should receive human tetanus immunoglobulin (TIG) without delay. Also, it can be prevented by immunizing the mother before or during pregnancy or by ensuring a clean delivery in a sterile environment..

4. Cerebral tetanus

It is also called cephalic tetanus which involves muscles of the face and larynx. It only affects the head's nerves and muscles. The most frequent cause of cephalic tetanus is head trauma. It is extremely uncommon, making up around 1% to 3% of tetanus cases.

Did you know?

A history of diphtheria or tetanus vaccinations is believed to be associated with less severe manifestations of COVID-19. Read more about the importance of vaccination in preventing many diseases.

Click Here

Risk Factors For Tetanus

Tetanus usually occurs in persons who are not immunized, partially immunized, or fully immunized but lack adequate booster doses. The risk factors for neonatal tetanus include the following:

1. Contaminated cuts or wounds

Tetanus bacteria are more likely to infect certain breaks in the skin through feces (poop), or saliva (spit) and wounds caused by an object, like a nail or needle, breaking the skin.

2. Unvaccinated mother

Vaccination helps protect babies during this time when they are most vulnerable, women should get the tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) during each pregnancy.

3. Delivery in contaminated areas

Obstetric tetanus, which occurs during pregnancy or within 6 weeks of the end of pregnancy. It happens following the contamination of wounds with Clostridium tetani spores during pregnancy or the use of contaminated tools during deliveries or abortions.

4. Septic cutting of the umbilical cord

Neonatal tetanus occurs when non sterile instruments are used to cut the umbilical cord or when contaminated material is used to cover the umbilical stump.

5. Family history

A history of neonatal tetanus in a previous child increases the risk for neonatal tetanus in subsequent children.

6. History of immunosuppression

Individuals who are on medications for autoimmune conditions or post-organ transplant have low immunity which can increase their chances of tetanus infections.

7. Sharing contaminated needles

Skin punctures by contaminated needles (such as those used to inject illegal drugs or to tattoo or do body piercing) can also lead to tetanus.

Got inked? Watch this video to learn about various precautions to follow after getting tattoos.

6. Diabetes

Patients who have diabetes and chronic wounds are more prone to tetanus than the other populations.

Did you know?

Overall, diabetics are more likely to contract tetanus than non-diabetics. Do not let diabetes impact your quality of life.

Check out our diabetic care range

Diagnosis Of Tetanus

No confirmatory laboratory testing is available; the diagnosis is made clinically. Other things to help confirm the diagnosis include:

1. History

When there is a history of a prior tetanus-prone injury and insufficient tetanus immunization, tetanus should be suspected in particular. Tetanus can be identified by a patient's recent history of trauma, wounds, scrapes, and punctures as well as by a doctor looking for specific symptoms and indicators.

2. Spatula test

The spatula test is a simple diagnostic test. Touching the throat with a spatula in normal patients elicits a gag reflex and efforts to expel the spatula; a negative result. If tetanus is present, a reflex spasm occurs, and the patient bites the spatula; a positive result.

Prevention Of Tetanus

Vaccination and good wound care are the cornerstones in the prevention of a tetanus infection. They are discussed as follows:

1. Vaccination

The only way to prevent a tetanus infection is by getting vaccinated on time. The tetanus vaccine shot is usually given in the deltoid muscle. The tetanus vaccine is given as part of the following vaccines:

Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine: Contains full doses of diphtheria, tetanus, and pertussis (whooping cough) vaccines.

Diphtheria and tetanus (DT) vaccine

Tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) vaccine: Contains a full dose of the tetanus vaccine and a lower dose of diphtheria and whooping cough vaccines.

Tetanus and diphtheria (Td) vaccine

Tetanus Toxoid (TT) vaccine

Note: DTaP/DT are only given to babies and children younger than 7 years whereas Tdap/Td/TT are given to adolescents and adults.

Who should take tetanus vaccination and when?

Children

Children between 2 months to 6 years should get 5 DTaP shots. Three doses at 6, 10 & 14 weeks and two booster doses at 16-24 months and 5-6 years of age respectively.

Children who had a very bad reaction to DTaP can receive DT vaccine. However, they will not receive any protection against whooping cough.

Children 11-12 years should get 1 booster shot of Tdap.

Adults

Adults over 18 years who did not receive primary immunization, three doses of Td vaccine are indicated. Two doses are administered at least 4 weeks apart, and the third dose is given 6-12 months after the second dose. The Tdap vaccine can substitute any one of the Td doses.

Adults who have completed their primary vaccination schedule, should get TT or Td shot every 10 years till the age of 65. One dose of Tdap vaccine may be administered in place of Tt/Td vaccine.

Pregnant women

The national immunization schedule in India recommends the 2 doses of TT/Td regardless of the immunization status of pregnant women. There should be a minimum gap of 4 weeks between the two doses. Tdap vaccination can also be considered instead of the second dose of TT/Td injection.

If a mother received 2 TT/Td doses in the last pregnancy and gets pregnant within 3 years then only one booster dose is recommended.

Contraindications of Tetanus vaccination

History of a severe adverse reaction to any vaccination ingredient.

If within seven days following vaccination and without apparent explanation, suffered encephalopathy (such as coma, diminished level of consciousness, or persistent seizures).

History of Guillain-Barré syndrome (GBS)

Immunization is one of the most effective tools to prevent severe infections in kids as well as adults. Know more about 7 vaccinations to protect against deadly diseases.

Read now

2. Appropriate wound care

You need to take proper care if you get any cut, wound or injury especially if it is contaminated.

Here are a few tips that you need to follow if you have a minor wound or injury:

Control bleeding: Use a clean tissue, piece of gauze, or clean cloth to apply direct pressure to the cut or wound until bleeding stops. To aid in reducing bleeding, try to elevate the arm or leg above the heart if possible.

Maintain hygiene: First of all, wash your hands before cleaning and dressing the wound. Once the bleeding has stopped, a saline solution, bottled water, or clear running water should be used to rinse the wound.

Cover the wound: Use a sterile bandage after using an antibiotic cream to lower the chance of infection. To keep the wound clean and dry, change the bandage frequently as it will keep harmful bacteria out.

Change the dressing: Replace the bandage at least once every day, or whenever the dressing is soiled or wet, and change the dressing. You can use an antibiotic ointment.

Manage adverse reactions: If you observe any rash or wound getting worse due to antibiotic use or if you are allergic to the adhesive used in bandages switch to adhesive-free dressings or sterile gauze and paper tape.

Watch this informative video to know more about how to manage wounds efficiently.

Specialists To Visit

The following specialists help to reduce morbidity and mortality associated with tetanus:

General physician

Toxicologist

Neurologist

Pulmonary medicine specialist

Anesthesiologist

A toxicologist helps to rule out any poisoning and to determine if any substance is toxic or harmful.

A neurologist is a doctor who treats diseases of nerves and in the case of tetanus, they treat seizures.

A pulmonary medicine specialist can help when there is respiratory compromise and can help with providing ventilation.

An anesthesiologist is to administer drugs, such as baclofen.

When to see a doctor?

You are not sure about completing your tetanus vaccination schedule.

You haven't received a tetanus injection in the last ten years.

Not sure when the last tetanus vaccination was taken.

You are injured outdoors.

The wound has been in direct contact with soil.

The wound has dirt or debris that won’t come out.

A deep puncture wound, an object in the wound, an animal bite, or a severe cut.

Do not wait until things get out of hand. Seek advice from our trusted team of world-class doctors.

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Treatment Of Tetanus

Tetanus is a medical emergency and its management comprises the following:

1. Early and aggressive wound debridement

It is advisable to surgically debride any wounds that are present. It's essential to clean your wound with sterile or clean water and an antiseptic solution to get rid of any dirt, debris, or foreign objects that could harbor bacteria.

Always keep your first aid kit handy in case of an emergency.

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2. Antimicrobial therapy

Although they are always advised, antibiotics probably only have a little part to play in the treatment of tetanus. It is crucial to note that without proper wound debridement, appropriate antibiotic therapy may fall short of eliminating C. tetani. Drugs used are:

Metronidazole

Penicillin G

Cefuroxime

3. Human tetanus immune globulin (HTIG)

Neutralization of unbound toxins with Human tetanus immune globulin is given. All patients with suspected tetanus should immediately receive both passive (with TIG) and active (tetanus toxoid–containing vaccines).

4. Drugs to control muscle spasms

Generalized muscle spasms are life-threatening since they can cause respiratory failure, lead to aspiration, and induce generalized exhaustion in the patient.

Note: Long-term muscle contractions result in abrupt, strong, and painful muscle group contractions. It's known as tetany. This is called tetany. These are the episodes that can cause fractures and muscle tears.

There are several drugs that may be used to control these spasms which include:

Benzodiazepines (like diazepam)

Pancuronium

Antispasmodics (like baclofen)

Magnesium sulfate

5. Hospitalization and supportive care

People with severe tetanus need to stay in an intensive care environment. As sedatives inhibit breathing you might need to stay under ventilation temporarily.

Nutritional support should also be initiated early. As the energy demands in tetanus can be extremely high due to repeated spasms, excessive sweating, muscular contractions etc.

Heparin or any other anticoagulant should be administered early in order to prevent blood clotting in veins.

Tetanus often begins with mild spasms in the jaw muscles, which eventually can affect your chest, neck, back, and abdominal muscles. Hence, physical therapy is suggested as soon as spasms have stopped.

6. Vaccination during recovery

Tetanus disease does not provide immunity against tetanus. Active immunization should be initiated or continued with a tetanus toxoid-containing vaccine as soon as the person’s condition has stabilized.

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Complications Of Tetanus

Serious health problems that can happen because of tetanus include:

● Laryngospasm: It is uncontrolled/involuntary tightening of the vocal cords that may lead to interference with breathing.

● Fractures: Fractures of the spine or long bones may result from involuntary muscle movements.

● Hypertension and/or abnormal heart rhythm: Hyperactivity seen in tetanus may lead to hypertension. It can also cause abnormal heart rhythm.

● Nosocomial infections: These are infections that are acquired while getting medical care but were absent at the time of admission. They are also known as healthcare-associated infections (HAI).

● Pulmonary embolism: It refers to a blood clot that has passed through the bloodstream from another part of the body and blocked the major artery of the lung or one of its branches.

● Aspiration pneumonia: It is a lung infection that develops when things like saliva or vomit accidentally go into the lungs.

● Death: Tetanus can be fatal in some cases.These mostly include people 60 years of age or older and those who have never received a vaccination.

Did you know?

There has been a 96% reduction in tetanus cases since 1988, largely due to scaled-up immunization programmes.

Read more on tetanus toxoid vaccination.

Alternative Therapies For Tetanus

A few alternative therapies that have shown some promise in the management of tetanus include:

1. Botulinum toxin

Botulinum toxin, also called “miracle poison,” is a neurotoxin produced by the bacterium Clostridium botulinum. Studies show that other than immunization, the administration of this toxin is a treatment approach that has been used in recent years to reduce rigidity and spasms in tetanus patients.

2. Vitamin C

Research suggests that vitamin C might play an important role in preventing tetanus and reducing mortality. It also acts as an antioxidant, helps wound healing and enhances immunity.

Check out our broad range of vitamin C supplements to fill any gaps in your diet.

Browse Here

Living With Tetanus

Tetanus can have various adverse effects on the patient's lifestyle, depending on the severity of the symptoms. The challenge or ease of living with tetanus varies for each survivor, subject to the availability of medical care and rehabilitation opportunities and their family and social support. Various forms of rehabilitation and support include:

Physical therapy can also be used to help with muscle rigidity and spasms, increase mobility and movement and maximize function and quality of life.

Cardiopulmonary physical therapy can be used to help in the prevention of respiratory complications.

Emotional and caretaking are also required by the person dealing with tetanus. A helping hand or support from the family on the emotional ground can do wonders in recovery.

Caregivers play a very important role in the overall disease outcome of the patient diagnosed with tetanus. The different roles of the nurse and include the following responsibilities:

Recording medical information.

Creating care plans to suit the individual needs of the patient.

Combative wound care and infection control.

Providing emotional support so that the patient does not feel alone.

Frequently Asked Questions

How does a person contract tetanus?

Does the protection from tetanus vaccination last forever?

How long does a tetanus shot last?

What will happen if I forget to take a tetanus shot after being cut by a rusty metal?

What is a booster dose or booster vaccine or booster shot?

Is there a cure for tetanus?

How long does it take to show signs of tetanus after being exposed?

What if I miss a dose of tetanus toxoid?

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Thalassemia

Also known as Cooley’s anemia, Alpha thalassemia and Beta thalassemia

Overview

Thalassemia is a blood disorder that affects many people across the world. It is an inherited disorder which means it is passed on from parents to their children. It is a condition in which a person has less than the usual amount of hemoglobin (an oxygen-carrying protein) in their body.

The primary cause of thalassemia is a mutation in the DNA of the cells that limit the production of alpha or beta chains in the hemoglobin. Depending on which chain is affected, two types of thalassemia may arise - alpha thalassemia or beta-thalassemia. Thalassemia may also be characterized on the basis of its severity. A person with mild symptoms of thalassemia is known to have thalassemia minor. However, a person with moderate or severe symptoms may be considered as thalassemia major. A person may also be a carrier of thalassemia even if they do not show any symptoms of the disease.

For people with a thalassemia minor, regular screening and intake of necessary supplements may be enough. However, people with thalassemia major may require frequent blood transfusions or bone marrow transplants.

Although a genetic disease, thalassemia can be prevented in a child by the parents undergoing specific blood tests before conceiving giving birth. Adopting a healthy lifestyle and following a well-balanced diet can also help manage this condition well.

Types Of Thalassemia

Alpha-thalassemia

In alpha-thalassemia, the severity of the condition depends on the number of mutated genes you receive from your parents. In case you inherit:

One mutated gene - You are a carrier of thalassemia and may not show any symptoms.

Two mutated genes - You will show mild signs of thalassemia.

Three mutated genes - You will show moderate to severe signs of thalassemia.

Beta-thalassemia

Two genes are required for producing the beta-globin chain. In case you inherit:

One mutated gene - You may show mild symptoms of thalassemia. This condition is known as thalassemia minor. However, there is a 50% chance that you may not show symptoms if only one gene is damaged. In this case, you will be a thalassemia carrier.

Two mutated genes - Your symptoms may be moderate to severe. This condition is referred to as thalassemia major. Babies born with thalassemia major are generally healthy at birth but may show signs and symptoms within 2 years.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Blood

Prevalence

Worldwide: 5% (2021)

India: 0.6-15% (2019)

Mimicking Conditions

Sickle cell anemia

Iron deficiency anemia

Hemolytic anemia

Sideroblastic anemia

Erythropoietin deficiency

Vitamin B-12 deficiency

Necessary health tests/imaging

Complete blood count (CBC)

The Mentzer index

Blood smear

Iron studies

Prenatal testing

Hemoglobin electrophoresis

Treatment

Supplements: Folic acid, Vitamin D & Calcium

Iron chelation therapy: Deferoxamine, Deferasirox & Deferiprone

Blood transfusions

Bone marrow transplant

Hemoglobin inducer drugs: Hydroxyurea & Thalidomide

Gene therapy

See All

Symptoms Of Thalassemia

Symptoms of thalassemia generally occur during childhood or late adolescence. For people with thalassemia minor, the symptoms may not be visible. However, people suffering from thalassemia major may experience a wide range of symptoms. The severity of the symptoms may also vary and depend on the type of thalassemia.

Some of the common signs and symptoms of thalassemia include:

1. Weakness or fatigue

It is caused as the hemoglobin cannot carry enough oxygen to various parts of the body. The muscles do not receive enough oxygen and reduce the amount of energy produced by the body.

2. Pale or yellowish skin

Some people with thalassemia may have extremely pale or yellowish skin as this condition reduces red blood cells in the body.

3. Weak and brittle bones

Another common symptom of thalassemia is weak bones. An increase in the amount of iron in the body may reduce or interfere with the absorption of calcium and Vitamin D. This may lead to weak and brittle bones over time.

4. Dark urine

In people with thalassemia, there may be an increase in the breakdown of red blood cells in the body. This may lead to an excess release of bilirubin from the cells, which may cause your urine to become darker.

5. Deformities in the face or skull

In some cases, thalassemia may lead to an expansion in the bones, which in turn may cause the bones in your face to widen.

6. Growth failure

Anemia can cause the growth of a child to slow down. Puberty may also be delayed in children with thalassemia.

7. Iron overload

People with thalassemia can get an overload of iron in their bodies, either from the disease itself or from frequent blood transfusions. Too much iron can result in damage to the heart, liver, and endocrine system, which includes glands that produce hormones that regulate processes throughout the body. The damage is characterized by excessive deposits of iron. Without adequate iron chelation therapy, almost all patients with beta-thalassemia accumulate potentially fatal iron levels.

8. Infection

People with thalassemia have an increased risk of infection. This is especially true if the spleen has been removed.

9. Enlarged spleen

The spleen aids in fighting infection and filters unwanted material such as old or damaged blood cells. Thalassemia is often accompanied by the destruction of a large number of red blood cells and the task of removing these cells causes the spleen to enlarge. Splenomegaly can make anemia worse, and it can reduce the life of transfused red blood cells. Severe enlargement of the spleen may necessitate its removal.

Causes Of Thalassemia

Every person has three types of blood cells in their body - red blood cells (RBCs), white blood cells (WBCs), and platelets. The red blood cells consist of an iron-rich protein known as hemoglobin, which is responsible for providing oxygen from lungs to other parts of the body.

Thalassemia occurs when there is a mutation in the gene that controls the formation of red blood cells. The hemoglobin in our body has two kinds of protein chains - alpha-globin and beta-globin. If mutations in the gene cause either of the alpha protein chain or the beta protein chain to be abnormal, it may stop the production of red blood cells in the body. There won't be enough cells to carry oxygen to various organs, and your body may not function properly.

The reduction in the number of alpha chains leads to alpha-thalassemia and the reduction in the number of beta chains causes beta-thalassemia. Children generally inherit these mutations from their parents.

Both α- and β-thalassemias are often inherited in an autosomal recessive manner. Cases of dominantly inherited α- and β-thalassemias have been reported, the first of which was in an Irish family with two deletions of 4 and 11 bp in exon 3 interrupted by an insertion of 5 bp in the β-globin gene. For the autosomal recessive forms of the disease, both parents must be carriers for a child to be affected.

Risk Factors For Thalassemia

As thalassemia is passed on from parents to children, the factors that may increase the risk of having thalassemia are:

Family history: If either your parents or close relatives suffer from thalassemia, you are at a greater risk of developing it.

Belonging from a certain ancestry: Thalassemia is mostly found in African Americans and Southeast Asians.

Diagnosis Of Thalassemia

If you experience any thalassemia symptoms such as fatigue, then it is wise to consult a doctor. It may also be advised to consult a doctor if you're pregnant and either you or your partner have thalassemia or are carriers.

Your doctor might do some physical examination followed by a few thalassemia tests to evaluate the severity of your child's condition. The tests include:

Complete blood count (CBC)

In this test, the doctor evaluates the number of red blood cells in your body. They will also be able to detect the amount of hemoglobin in the cells and determine their shape and size.

The Mentzer index

The index is calculated from the results of a complete blood count. If the quotient of the mean corpuscular volume (MCV, in fL) divided by the red blood cell count (RBC, in millions per microLiter) is less than 13, thalassemia is said to be more likely. If the result is greater than 13, then iron-deficiency anemia is said to be more likely.

Blood smear

In this test, a trained professional examines a sample of your blood under the microscope. This test helps detect any abnormal cells in the blood.

Iron studies

These tests measure the body's iron storage capacity and usage. It may include tests for determining unsaturated iron-binding capacity, iron-binding capacity, and percent saturation of transferrin.

Prenatal testing

This testing is carried out during pregnancy to determine whether a baby has thalassemia or not before birth. Tests used to diagnose thalassemia before birth are:

Chorionic villus sampling: In this test, a tiny sample of the placenta is evaluated to find out whether the baby suffers from the condition or not.

Amniocentesis: Generally done during the 16th week, this test examines the fluid surrounding the fetus.

Hemoglobin electrophoresis

This test helps identify different types of hemoglobin present in the blood. It helps detect the abnormal type of hemoglobin and diagnose different types of anemia.

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

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Celebs affected

Amitabh Bachchan

The popular bollywood film star is also a thalassemia minor patient. He has joined hands with several celebrities to spread awareness about Thalassemia across India.

Zinedine Zidane

The famous French footballer and coach was also diagnosed with Thalassemia minor very early in his career. Despite the fatigue and challenges that come with the disease, he has gone on to win many matches and establish a successful career.

Pete Sampras

A popular American Tennis Player, Pete Sampras has thalassemia minor.

Prevention Of Thalassemia

As thalassemia is an inherited condition, it may be challenging to prevent it. However, there are not many ways to manage the condition and reduce its implications on your health excepy for genetic screening.

One of the sure-shot ways to prevent the passing of thalassemia from parents to offspring is through genetic screening. If either or both of the partners are a carrier of the gene that causes thalassemia, genetic screening may help determine whether the baby is affected by it or not. There are several types of prenatal tests available that can be taken in the early or later stages of pregnancy to check whether your baby is safe or has thalassemia, major or minor.

Large scale awareness campaigns are being organized in India by both the Government and non-government organizations in favor of voluntary premarital screening to detect carriers of thalassemia and marriage between both carriers is strongly discouraged.

Did you know?

If you or your partner are unaware whether you have thalassemia minor or are carriers of this gene, a premarital genetic screening may help detect and decrease the chances of having a baby with thalassemia. A 2009 study revealed that premarital screening in family members followed by prenatal diagnosis is the best way to control thalassemia in developing countries like India.

Specialist To Visit

The intensity of the symptoms of thalassemia may vary depending on the type of thalassemia. Most doctors can predict whether a baby has thalassemia if either parent has thalassemia majors or are carriers.

For people who are carriers or have thalassemia minor, medical treatment may not be required. However, children or adults with thalassemia major may need to visit their doctor regularly to manage the disease. Even a gynecologist and genetic counselor can help you diagnose or prevent the transmission of thalassemia to your child by conducting prenatal testing.

Specialists that can help manage thalassemia include:

General physician

Hematologist

Pediatrician

Consult India's best doctors here from the comfort of your home.

Consult Now!

Treatment Of Thalassemia

People who have thalassemia minor and show mild symptoms may not require any treatment. However, for people with moderate to severe thalassemia, the following treatments may be required:

1. Vitamin supplements

Vitamin supplements may be required in addition to the regular treatments available to manage thalassemia successfully. For thalassemia minor patients, only vitamin supplements may be recommended to manage the condition.

Folic acid is the most common vitamin recommended to people with thalassemia. It helps build healthy red blood cells and is prescribed to people alongside transfusions and iron chelation therapy.

Apart from this, your doctor may also prescribe Vitamin D and calcium supplements to avoid osteoporosis and build stronger bones.

2. Iron chelation therapy

The hemoglobin present in the red blood cells consists of a high amount of iron. Thus, frequent blood transfusions may result in a build-up of excess iron in the body. This may lead to an iron overload and cause damage to the heart, liver, and other organs of the body.

Even for people who don't have frequent transfusions, an iron overload may still occur. Your doctor may recommend iron chelation therapy to maintain your health and eliminate the excess iron from your body.

Doctors use three common medicines for iron chelation therapy which include:

Deferoxamine: It is an injectable that is administered overnight to the patient. This therapy may take time and lead to various side effects.

Deferasirox: It is a pill that needs to be taken once daily. It may cause side effects such as nausea and vomiting; however, they are generally short-lived.

Deferiprone: This is a medication that is given by mouth. Nausea, vomiting, and diarrhea are relatively common with its use. It is available in both Europe and the United States. It appears to be the most effective agent when the heart is significantly involved.

3. Blood transfusions

Blood transfusion is considered the best treatment for people with thalassemia major. In this treatment, healthy red blood cells with high hemoglobin are transferred into your body using an intravenous (IV) line. This procedure usually takes around 1 to 4 hours.

Red blood cells (RBCs) usually live only up to 120 days. Hence, you may require frequent blood transfusions to manage your condition.

However, if you have beta-thalassemia intermedia, transfusions may be required occasionally. For example, when you have severe anemia or have contracted an infection.

4. Bone marrow transplant

Bone marrow transplant, also known as stem cell transplant, may be considered for your treatment if you have a severe case of thalassemia. Bone marrow is a spongy tissue present inside your bone. The stem cells in the bone marrow are responsible for producing red and other types of blood cells.

A bone marrow transplant is the only effective way to treat thalassemia. For children, it may also eliminate the need for frequent blood transfusions. This procedure requires receiving stem cells from a compatible donor, which are then infused inside your body. Success rates have been in the 80–90% range. Mortality from the procedure is about 3%.

Graft-versus-host disease (GvHD) is one relevant side effect of bone marrow transplantation. Further research is necessary to evaluate whether mesenchymal stromal cells can be used as prophylaxis or treatment for GvHD.

5. Hemoglobin (Hb) inducer drugs

Thalassemia patients who do not respond well to blood transfusions can take hydroxyurea or thalidomide, and sometimes a combination of both. Hydroxyurea is the only FDA approved drug for thalassemia. Patients who took 10 mg/kg of hydroxyurea every day for a year had significantly higher hemoglobin levels, and it was a well-tolerated treatment for patients who did not respond well to blood transfusions. Another hemoglobin-inducer includes thalidomide, although it has not been tested in a clinical setting. The combination of thalidomide and hydroxyurea resulted in hemoglobin levels increasing significantly in transfusion-dependent and non-transfusion dependent patients

6. Gene therapy

Gene therapy is being studied for thalassemia.The procedure involves collecting hematopoietic stem cells (HSCs) from the affected person's blood. The HSCs then have a beta-globin gene added using a lentiviral vector. After destroying the affected person's bone marrow with a dose of chemotherapy (a myeloablative conditioning regimen), the altered HSCs are infused back into the affected person where they become engrafted in the bone marrow where they proliferate. This potentially results in a progressive increase in hemoglobin A2 synthesis in all subsequent developing red blood cells, with resultant resolution of the anemia.

While one person with beta thalassemia has no longer required blood transfusions following treatment within a research trial, it is not an approved treatment as of 2018.

Did you know?

People with thalassemia need regular blood transfusions, which may lead to an iron overload in the body. Consuming food items high in iron, like certain green leafy vegetables and fruits, may increase the amount of iron in the body and cause problems.

Home-care For Thalassemia

Diet plays a key role in the management of thalassemia. Here are some dos and don'ts you need to follow to help your body manage thalassemia:

Do’s

Eat foods rich in calcium such as milk and other dairy products.

Consume a well-balanced diet that is low in sugar and carbohydrates.

Ask your doctor about the additional vitamin supplements that you may need to consume.

Don’ts

Avoid intake of iron supplements.

Avoid intake of foods rich in iron such as spinach, broccoli, dates, and fish.

Avoid engaging in strenuous exercises.

Avoid smoking or consuming alcohol.

Do not take any supplements or medicines without consulting your doctor.

Wash your hands regularly and avoid going near sick people if you've had your spleen removed.

Complications Of Thalassemia

Having thalassemia minor may not lead to any complications. However, if you have moderate to severe thalassemia, certain complications may arise.

Iron overload: Thalassemia may lead to an increase in the amount of iron in the body. A greater amount of iron may cause damage to the heart, liver, or other organs of the body.

Enlarged spleen: As the name suggests, thalassemia may often lead to inflammation and enlargement of the spleen. The spleen is responsible for filtering unwanted red blood cells, and hence, an enlarged spleen may make your anemia worse.

Heart problems: Thalassemia can lead to severe heart issues like abnormal heart rhythms or heart failure, if left untreated or unattended.

Infections: People with thalassemia who have had their spleen removed are at a greater risk of developing numerous diseases.

Delayed growth: Thalassemia may slow down or delay the growth of a child.

Bone deformities: Thalassemia may expand the bone marrow and widen the bones in the face or skull. The expansion may also make the bones more brittle and increase your risk of breaking them.

Alternative Therapies For Thalassemia

Home remedies

Since thalassemia is a genetic condition, no home remedies can prevent or treat it. However, certain home remedies may be helpful in managing this condition by providing the vitamins and minerals needed to optimally manage this condition. Some of them are as follows:

1. Holy basil (tulsi) juice

Tulsi leaves have a variety of properties and are also known to boost the production of healthy cells in your body.

Tip: Take 5 - 6 fresh tulsi leaves and add them into a blender with water. Strain the mixture using a fine mesh into a cup. Drink it regularly in the morning.

2. Sunbathing

The sun is a natural source of Vitamin D. Spending a few hours regularly in the sun may help get the optimal amount of Vitamin D required for healthy bone formation in the body.

Tip: Go for a walk early in the morning between 7 and 10 am to get optimum levels of Vitamin D.

3. Wheatgrass juice

Wheatgrass juice is the juice extracted from the pulp of wheatgrass. Several studies have found that a chlorophyll-like compound in wheatgrass helps absorb iron and discharge it from the body. The juice also does not have any side effects and has proved beneficial in the management of beta-thalassemia.

Tip: Take 4-5 blades of the wheatgrass and add it to the blender with water. Once the mixture is ready, strain the juice out using a fine mesh into a cup. Drink it daily on an empty stomach or in the evening.

4. Giloy

Giloy satva is a traditional herb that may help prevent the symptoms of thalassemia. It helps in blood formation and prevents the complications of this disease.

Tip: Add 1 tablespoon giloy satva extract to hot water. Mix well and drink. It is advised to drink it early in the morning, immediately after waking up.

5. Milk

People with thalassemia may have calcium deficiency and suffer from weaker bones. Hence, milk serves as an excellent source of calcium.

Tip: Drink a glass of milk every day after meals, if you have thalassemia for stronger bones and joints. Remember, not to add any sugar or honey and drink it plain or as advised by the doctor.

Did you know?

Practicing a specific type of yoga may help you manage thalassemia. According to a study published in 2016, practicing Gandhakadi Yoga may help decrease iron overload, increase the lifespan of red blood cells, and provide relief from the signs and symptoms of thalassemia major.

Living With Thalassemia

Thalassemia is a genetic blood disorder. This condition may require making significant changes to your lifestyle to manage it properly. Only a few diet and lifestyle modifications may be required, if you have thalassemia minor or beta-thalassemia intermedia.

However, if you are suffering from thalassemia major, you may need to take medications and additional treatments to manage thalassemia and prevent any long-term complications in addition to diet and lifestyle changes. Also, avoid taking over-the-counter medications or supplements. It is wise to talk to your doctor about the severity of your condition and the proper treatment approach to fight thalassemia and prevent it from worsening.

In addition, here are a few tips that can help you manage and prevent thalassemia.

Avoid foods rich in iron and lead to iron overloads like spinach, broccoli, or other green leafy vegetables. Say no to supplements that contain iron.

Avoid any form of strenuous exercise that may wear you out or put an extra load on your heart.

Do not miss any of your transfusion or chelation therapy appointments. Keep in touch with your doctor and monitor your condition regularly.

Take all your vitamin supplements as recommended by your doctor.

Try getting vaccinated against all major infections such as pneumonia and flu.

Opt for prenatal screening if either you or your partner have a family history of thalassemia.

Remember, thalassemia is a major blood disorder. So consult your doctor, if you experience severe anemia or any other symptoms related to this condition.

Thalassemia vs. sickle cell anemia vs. Cooley’s anemia

Although used interchangeably, these three terms have different meanings.

Thalassemia is a genetic blood disorder that is inherited from either or both parents. In this condition, the body makes an abnormal form of hemoglobin.

Sickle cell anemia is another type of genetic disorder that results in the red blood cells being sickle-shaped. Due to a change in shape, the red blood cells die early, leaving the person severely anemic. The sickle-shaped cells may also block blood flow in the veins and cause pain.

Cooley's anemia is generally used interchangeably with thalassemia. However, it is a subtype of thalassemia. It is another name for beta-thalassemia major and occurs when there is an absence of the beta-globin chain during hemoglobin production.

Frequently Asked Questions

Can thalassemia patients eat meat?

What does thalassemia do to your body?

What vitamin is good for thalassemia patients?

Can people with thalassemia exercise?

Can I take iron supplements if I have thalassemia?

Can thalassemia lead to joint pain?

Can thalassemia affect weight gain?

What happens if a pregnant woman has thalassemia?

Can thalassemia major patients have a baby?

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Thrombocytopenia

Also known as Low platelet count

Overview

Thrombocytopenia is a medical condition in which you have fewer than an average number of platelets in your body. Platelets are blood cells that help in blood clotting by clumping together and plugging the injury site hence, stopping bleeding.

Patients with thrombocytopenia show easy or excessive bleeding, blood in the urine or stools, extreme fatigue, and prolonged bleeding from a wound site. Various causes of thrombocytopenia are medical conditions that lead to increased platelet destruction, decreased platelet production, increased trapping of platelets or dilution of blood.

The treatment for thrombocytopenia depends on the severity of the condition. Generally, mild cases of low platelet count go undiagnosed and may not require any specific treatment. In such cases, your doctor may hold off treatment and simply monitor you for some time. In case of severe symptoms, patients are usually prescribed corticosteroids, other medications, or platelet transfusions. Splenectomy or removal of spleen is usually the last line of treatment and is advised when medications fail to treat low platelet count effectively.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Circulatory system

Brain

Digestive tract

Spleen

Mimicking Conditions

Acute leukaemia

Thrombotic thrombocytopenic purpura

Autoimmune thrombocytopenia

Drug dependant thrombocytopenia

Scurvy

Solar purpura

Amyloidosis

Ductal in-situ carcinoma (DIC)

Vasculitis

Meningococcemia

Necessary health tests/imaging

Complete blood count

Platelet antibodies test

Blood coagulation profile

Liver function tests

Kidney function tests

Vitamin B12 levels

Folic acid levels

Copper levels

Abdomen ultrasound

Bone marrow biopsy

Treatment

Corticosteroids: Dexamethasone & Prednisone

IV immunoglobulins (IVIG)

Rituximab

Thrombopoietin (TPO) receptor agonists: Eltrombopag, Romiplostim & Avatrombopag

Fostamatinib

Blood or platelet transfusion: Random donor platelet concentrates (RDPC) & Single donor platelet concentrates (SDPC)

Splenectomy

Specialists to consult

General physician

Haematologist

Symptoms Of Thrombocytopenia

Thrombocytopenia can cause several symptoms that can affect your day to day life. It is possible to experience more than one symptom at a time.

Getting bruised easily

Prolonged/excessive bleeding from wounds

Superficial bleeding that appears as pinpoint red spots called petechiae

Bleeding from gums or nose

Enlarged spleen

Extreme fatigue

Blood in urine or stool

Heavy menstrual flow

Bleeding inside the gastrointestinal (stomach) tract

Bleeding from the anus

Unusual bleeding after dental work or surgery

Red, brown or purple bruises are called purpura

You need to talk to your doctor immediately, if you observe signs of internal bleeding such as blood in your vomit, stool or urine. This condition can rarely lead to bleeding in the brain when a patient's platelet count becomes excessively low. This can cause symptoms like headaches and other neurological signs.

Low platelet count can also occur due to reasons such as pregnancy. Such cases usually don't result in any symptoms and may go undetected.

Severe cases can result in excessive and uncontrollable bleeding from wounds. These patients require immediate medical attention as continued bleeding might result in hemorrhagic shock or hypovolemic shock which may prove fatal, if left untreated.

Causes Of Thrombocytopenia

The normal range of platelet count is from 150,000 to 400,000 per microliter. Thrombocytopenia means that your body has fewer than the average number of platelets per microliter of circulating blood. Circulating platelets can be reduced for one or more reasons which include the following:

Increased platelet destruction

Decreased platelet production

Increased sequestration or trapping of platelets

Dilution of blood

1. Conditions that cause increased destruction of platelets

The bone marrow is responsible for producing platelets in the body. In some specific conditions, the immune system starts producing antibodies that attack platelets instead of infections. Some causes include:

Autoimmune diseases: In autoimmune diseases, the body's immune system starts to attack healthy cells of the body. One example of this type of autoimmune disease is immune thrombocytopenia (ITP). In ITP, the immune system attacks and destroys its own platelets. The exact cause of this condition is not known. Other autoimmune diseases such as antiphospholipid syndrome, systemic lupus erythematosus, rheumatoid arthritis and sarcoidosis can also cause thrombocytopenia.

Medications: Certain medications such as heparin (anticoagulant medication that prevents clot formation), quinine and valproic acid can sometimes trigger the immune system and result in the formation of anti-platelet antibodies that attack the body's own platelets. Sulfa containing antibiotics and anticonvulsants are some other medications that can cause thrombocytopenia.

Infections: Bacterial infections such as Helicobacter pylori infections, leptospirosis, brucellosis and anaplasmosis can result in low platelet count. Chronic viral infections like hepatitis C and HIV anti-platelets antibodies are present which cause platelet destruction.

Surgery: Platelets can get destroyed when they pass through artificial heart valves, blood vessel grafts, or machines and tubes used for blood transfusions or bypass surgery.

Pregnancy: During pregnancy, some women develop a mild to moderate form of thrombocytopenia when they are close to delivering a baby. Thrombocytopenia during the third trimester is usually mild and resolves soon after delivery. Doctors may continue to monitor platelet count through the remaining pregnancy to prevent the number from dropping further.

Thrombotic thrombocytopenic purpura (TTP): It is a rare blood disorder in which blood clots start developing in small blood vessels in the body. These clots reduce the number of circulating platelets and result in thrombocytopenia.

Disseminated intravascular coagulation (DIC): It is a rare complication of pregnancy, severe infections, or severe trauma. In this condition, the blood clots form suddenly throughout the body that use up many of the blood's platelets.

Hemolysis, elevated liver tests, low platelets (HELLP) syndrome: It is another non-immune thrombocytopenia that may occur during pregnancy.

Hemolytic uremic syndrome: It is a rare disorder caused by shiga toxin-producing organisms (E. coli and Shigella) that leads to a decline in the number of platelets.

2. Conditions that cause decreased platelet production

There are some conditions in which the bone marrow fails to produce enough platelets. The causes include:

Cancers: Leukaemia (blood cancer), lymphoma and myelodysplastic syndromes cause uncontrollable growth of abnormal cells in the bone marrow. These abnormal cells crowd out the healthy cells that are typically present in the bone marrow, including platelets. Thrombocytopenia is a widespread and early presentation in patients with acute leukaemia. Patients who have cancer can also experience low platelet count as a side effect of chemotherapy.

Bone marrow failure: It is seen in aplastic anemia and paroxysmal nocturnal hemoglobinuria which can cause severe reduction in platelet count. Aplastic anemia is a rare condition in which the body stops producing new blood cells. Such individuals often develop a low platelet count and deficiency of red and white blood cells. Paroxysmal nocturnal hemoglobinuria is closely related to aplastic anemia.

Chronic alcoholism: Thrombocytopenia is commonly seen in heavy drinkers since alcohol exposure slows down the production of megakaryocytes, large bone marrow cells that are responsible for producing platelets.

Viral infections: Infections caused by varicella-zoster virus, cytomegalovirus, epstein-barr virus, mumps virus, parvovirus B19, rickettsia, rubella virus, zika virus, hepatitis C virus and HIV can cause reduced platelet production.

Nutritional deficiencies: Lack of Vitamin B12, folate and copper can cause low platelet production.

Toxic chemicals: Exposure to toxic chemicals such as arsenic, benzene, and pesticides can affect the normal production of platelets.

Cirrhosis or scarring of liver: It causes reduced production of thrombopoietin, a hormone which regulates the production of platelets. This leads to reduced production of platelets by the bone marrow.

Congenital conditions: Conditions like Fanconi anemia, gray platelet syndrome, Wiskott-Aldrich syndrome, Alport syndrome, Bernard-Soulier syndrome, platelet-type or pseudo–von Willebrand disease, May-Hegglin syndromes, and Shwachman-Diamond syndrome.

Medications: Over-the-counter medicine such as aspirin or ibuprofen can affect production of platelets. Certain medicines like diuretics, chloramphenicol, methotrexate, interferon, carboplatin, and amiodarone, also cause bone marrow to decrease production of platelets.

3. Conditions that cause increased trapping of platelets

Enlarged spleen can also lead to thrombocytopenia. The spleen is a vital organ that fights off infections and plays a role in filtering any unwanted substances from your blood. Normally, one-third of platelet mass is in the spleen.

The spleen can get enlarged due to medical conditions such as cirrhosis of the liver, a late-stage liver disease that causes permanent damage to the liver. It is also seen in Gaucher's disease, an inherited condition that causes fatty substances to build up in tissues and bone marrow conditions, such as myelofibrosis.

In such cases, the enlarged spleen traps platelets and prevents their circulation into the bloodstream. This results in sequestration (removal) of platelets up to 90% of the spleen's total mass, resulting in thrombocytopenia.

4. Conditions that cause dilution of blood

Dilution of blood in cases of massive blood transfusion and massive fluid resuscitation can cause thrombocytopenia.

Did you know?

Thrombocytopenia is also seen in mosquito borne viral disease known as dengue. Learn more about the symptoms, diagnosis and treatment of dengue.

Click To Read!

Risk Factors For Thrombocytopenia

In adults, women are more likely to develop thrombocytopenia than men. Individuals who are at highest risk for thrombocytopenia are those affected by one of the conditions discussed in causes of thrombocytopenia. These people include:

Having a family history of immune thrombocytopenia (ITP)

Suffering from autoimmune disorders such as lupus or rheumatoid arthritis

Suffering from cancer or being exposed to radiation treatments or chemotherapy

Being exposed to toxic chemicals or have reactions to certain medications

Long term heavy alcohol drinkers

Pregnant women

Is thrombocytopenia seen in COVID-19 infection?

Yes, COVID-19 can induce thrombocytopenia or low platelet count. However, in most cases, the platelet count does not decrease to a level at which bleeding occurs. The exact mechanisms by which the coronavirus affects the platelet count is still under research.

Read More About COVID-19!

Diagnosis Of Thrombocytopenia

History

Obtaining a thorough history helps to identify the cause of thrombocytopenia. The following questions will help your doctor determine the cause and frame a suitable treatment plan.

History of bleeding

Prior blood count testing and baseline platelet count and the recent drop in platelet count

Any potential exposure and symptoms of viral, bacterial or rickettsial infections

Assessment of risk factors for HIV infection

Travel to an area endemic for malaria, dengue, and ebola

Diet history to detect any nutritional deficiencies of Vitamin B12, folic acid or copper

Check for other conditions like systemic lupus erythematosus or rheumatoid arthritis

History of any bariatric surgery or blood transfusion

Review of medications taken or whether a patient is taking over-the-counter medications, quinine-containing beverages, or herbal teas

In the hospitalised patient, assessment for exposure to heparin products

Check for a family history of thrombocytopenia or bleeding disorders

In pregnant women history of headache, visual symptoms, abdominal pain or flu-like symptoms is assesed

Physical examination

If your healthcare provider suspects that you have thrombocytopenia, they will start with carrying out a physical examination.

You will be checked for any signs of bleeding caused by thrombocytopenia which presents as red or purple flat discoloured spots on the skin

Your doctor will also feel your abdomen to check for signs of enlarged spleen and liver

Examination of any enlarged lymph nodes

Blood tests

Complete blood count (CBC) test: The CBC test is a diagnostic tool that evaluates the number of blood cells in your blood. It will allow the doctor to know if you have lower than the average platelet count. Usually, the platelet count of healthy people falls in the range of 150,000 to 450,000 platelets per mL of blood. Platelet indices like mean platelet volume (MPV) and platelet distribution width (PDW) are evaluated to diagnose thrombocytopenia.

Blood smear test: A blood smear test requires a small sample of your blood that is examined under a microscope to check the appearance of your platelets under the microscope.

Platelet antibodies blood test: Your body may be creating antibodies that are attacking platelets instead of infections. To evaluate the presence of platelet antibodies, your doctor may order a platelet antibodies test. This test is often ordered if you present with a bleeding problem. Platelet antibodies can be produced as a side effect of certain drugs such as quinine or other reasons.

Blood coagulation profile: Your doctor may order blood clotting tests such as prothrombin time and partial thromboplastin test. It is a simple blood test that requires a sample of your blood into which some reagent chemicals are added to test the number of seconds it takes for a clot to form.

Other tests: Additional blood test that can help to evaluate the cause of thrombocytopenia include:

Liver function tests

Kidney function tests

Vitamin B12 levels

Folic acid levels

Copper levels

Abdomen ultrasound

In case your doctor suspects that you have an enlarged spleen, you may be asked to get an ultrasound. This test is a diagnostic tool that uses sound waves to visualise your spleen. It can help your doctor determine the size of your spleen.

Bone marrow aspiration and biopsy

The bone marrow aspiration test is done, if you present signs of a disorder that affects your bone marrow. During the bone marrow aspiration test, a needle is used to remove a small amount of fluid from the bone marrow of one of the bones. A clinician will examine the sample under the microscope to check for abnormal cells. A bone marrow biopsy requires the removal of a small sample of bone marrow tissue from the bone using a needle.

Watch this video to know about the complete blood count test & its implications.

Prevention Of Thrombocytopenia

Prevention of thrombocytopenia depends on the cause behind the condition. Usually, you can't prevent a low platelet count, but if you are at risk of developing a low platelet count due to an underlying condition or medical history, you should take prevention measures like:

You can try avoiding heavy drinking since alcohol reduces the development of platelets.

Avoid contact with toxic chemicals, including arsenic and benzene.

If you are taking medications that are known to lower platelet count, talk to your doctor about alternative drugs. Medicines like aspirin and ibuprofen tend to thin the blood and may increase your chances of excessive bleeding.

Viral infections are known to reduce platelet count. Practice basic hand hygiene and wash your hands before eating.

You can also talk to your doctor about getting vaccinated against diseases like chickenpox, measles, mumps and rubella. You should have your children vaccinated for these viruses as well. Talk to your child's pediatrician about these vaccines.

You should avoid activities with a high risk of bleeding or bruising like contact sports.

Celebs affected

Mandy Moore

Mandy Moore is a famous actress who suffered from low platelet count after giving birth to her son.

Specialist To Visit

You should visit a doctor, if you are experiencing symptoms such as quickly getting bruises, reddish or purplish spots on your lower legs, blood in your urine or stool, excessive bleeding from nose or mouth, abnormally excessive bleeding during menstruation, headache, and other neurological symptoms. These symptoms might indicate the possibility of a low platelet count. You can consult the following doctors for diagnosis:

General physician

Hematologist

If you are facing any symptoms, don’t ignore them but consult our healthcare professionals.

Consult Now!

Treatment Of Thrombocytopenia

The treatment plan for low platelet count depends on the cause of thrombocytopenia and the severity of the disorder. Doctors decide the course of action with the primary goal of preventing any disability or loss of life due to thrombocytopenia.

Generally, mild cases of low platelet count go undiagnosed and may not require any specific treatment. In such cases, your doctor may hold off treatment and simply monitor you for some time. Mild low platelet count also tends to improve when the underlying cause behind the condition is treated. If you have a low platelet count because of an infection, the resultant thrombocytopenia will resolve once the disease is treated.

In case you have a low platelet count as a result of an adverse reaction to a drug, your doctor will switch to alternative medicines. Generally, drug-induced low platelet count resolves after the responsible medication is stopped.

Thrombocytopenia due to an immune system condition can be resolved by taking medicines that suppress the immune system.

A) Medications

1. Corticosteroids like dexamethasone or prednisone are often prescribed to raise platelet count. Steroids tend to reduce the rate of platelet destruction and can be administered orally or through the veins.

2. IV immunoglobulins (IVIG) are used for treatment of thrombocytopenia in case you cannot tolerate steroids or if your platelet count drops after completion of steroid treatment.

3. Rituximab helps suppress the immune system to prevent the immune system from attacking its own platelets. This is often prescribed to patients who have persistent ITP.

4. Thrombopoietin (TPO) receptor agonists, also known as platelet growth factors, might be recommended, if treatment with steroids, splenectomy, or rituximab fails to increase the platelet count. These medicines might be prescribed for a long-term. Examples include:

Eltrombopag

Romiplostim

Avatrombopag

5. Fostamatinib is a newer drug used for the treatment of chronic immune thrombocytopenia and those who haven't responded to other treatments

B) Blood or platelet transfusion

Patients who are at a high risk of bleeding or are actively bleeding are treated with blood or platelet transfusions. A needle is inserted to introduce an intravenous line in your body through which you will receive healthy platelets or blood. This procedure is advised for patients with extremely low platelet count since transfused platelets can last only for around three days in circulation. This is a temporary treatment that transiently raises your platelet count.

There are two options for platelet transfusion:

Random donor platelet concentrates (RDPC): RDP is a platelet transfusion method in which platelets are prepared by centrifuging the whole blood collected from four to five donors and pooling the platelets. With the help of this method, the platelet count is elevated to 5000-10000/ul in an adult of approximately 70 kg body weight.

Single donor platelet concentrates (SDPC): SDP is a platelet transfusion method in which platelets are prepared from a single donor by an apheresis machine. A unit of platelet concentrate prepared by this method increases the platelet count by 30000-70000/ul in an adult of 70 kg weight. Single unit SDPC has a platelet content similar to that of 6-8 units of pooled platelets or RDPCs.

C) Splenectomy

Splenectomy is a surgical procedure in which the spleen is removed from the body. This procedure is usually the last line of treatment and is advised when medications fail to treat low platelet count effectively. It is generally recommended for patients who have immune thrombocytopenia. Once the spleen is removed, a low platelet count resolves in more than half of patients who have ITP.

Home-care For Thrombocytopenia

If you have been prescribed medications to manage low platelet count, make sure you take those medications on time. Label your drugs and set the alarm to make sure you have the medicines every day at the same time. Follow all the instructions given to you by your doctor.

Some instructions provided by your healthcare provider may include regularly examining your skin for any scrapes, cuts or bruises.

Use an electric shaver and a soft toothbrush or mouthwash to avoid injuring your face or mouth.

Ensure that your nails are trimmed to avoid accidental scrapes.

If you tend to get constipated, ask your provider for some laxatives to help you pass a motion without strain. Straining while passing motion can cause bleeding in the brain due to increased pressure.

If you have just had a splenectomy procedure, follow post-op instructions given by your doctor closely and monitor your health.

Note: People with low platelet counts are more likely to have bleeding of the nose. In that case, it is advisable to lean ahead and bend forward to prevent clogging of the mouth and throat with blood. Read about the other possible causes and first-aid tips to manage nose bleeds.

Read Now!

Complications Of Thrombocytopenia

People with severe thrombocytopenia are at an increased risk of internal bleeding into the intestines or the brain. Internal bleeding can be fatal and needs immediate medical attention. Signs that can indicate internal bleeding include:

Spotting blood in urine

Dark or tarry, red coloured stools

Severe headache

Other neurological symptoms (in case of bleeding in the brain)

Hemorrhagic shock

Patients who are advised to undergo splenectomy are given different vaccines to help them prevent infection. Spleen in a part of the immune system and removal of the organ leaves a patient more susceptible to catching infections. Formation of blood clots and bleeding are some other complications of splenectomy.

Alternative Therapies For Thrombocytopenia

If you have mild or moderate thrombocytopenia, you can eat certain foods and supplements to raise your platelet count. Severely low platelet count, however, needs medical treatment. Always consult your doctor before taking any supplement to prevent cross interaction of supplements with other medications.

Vitamin C

Vitamin C helps in the grouping of platelets and increases their functional efficiency. It also helps in the absorption of iron and increases the platelet count. Broccoli, tomatoes, cauliflower, mangoes and pineapple are good sources of Vitamin C.

Iron

Iron plays a vital role in the production of healthy blood cells. Iron supplements can increase platelet count in patients with iron deficiency anaemia. Mussels, lentils, beef, and pumpkin seeds are excellent sources of iron.

Papaya leaf extract

Papaya leaf extract can noticeably improve the platelet count in animals. You can consume papaya leaf extract in the form of pills. A study reported increased platelet count in patients with dengue fever when they took papaya leaf juice.

Melatonin

The body naturally produces melatonin, and it primarily helps in improving sleep quality. It is also available in the form of tablets, liquid or lotions. Melatonin has been found to increase platelet levels in patients with thrombocytopenia.

Vitamin B12

It's been reported that a deficiency of Vitamin B12 is linked with low platelets count. Apart from that, vitamin B12 also helps in maintaining the health of blood cells. Food sources such as clams, eggs, and beef liver are rich in Vitamin B12. Along with animal-based products, dairy products are also rich sources of Vitamin B12. However, in some cases, cow milk can interfere with the production of platelets.

Did you know?

Lack of energy, loss of appetite and weight loss can be the possible signs of Vitamin B12 deficiency. Know more signs and symptoms of Vitamin B12 deficiency, a possible cause of thrombocytopenia.

Click To Watch!

Living With Thrombocytopenia

If you have been diagnosed with a mild to moderate level of thrombocytopenia, you may not need any treatment. Constant monitoring and follow-ups as requested by your doctor can be enough to manage the condition. Low platelet count due to medical conditions tends to resolve after the disease is treated. Patients with severe cases of thrombocytopenia may need treatment. Your doctor will work with you and devise a treatment plan that will help you manage your symptoms.

Check for bruises and scrapes

Always remember to check your body for any signs of bruises or scrapes after getting involved in any physical activity that can cause your injuries. Consult your doctor about the activities that are safe for your conditions. Often contact sports such as football, boxing, or martial arts carry a high risk of physical injury, leading to uncontrollable bleeding, in cases of severe thrombocytopenia.

Drink alcohol in moderation

Alcohol slows down the production of platelets in the body. If you have thrombocytopenia, consult your doctor about how much alcohol you can safely consume. Avoiding alcohol is an excellent way of reducing your risk of developing a severely low platelet count.

Exercise caution with OTC medications

We often tend to self medicate with aspirin or ibuprofen when we have pain. However, in patients with a low platelet count, these medications can further decrease the number of platelets and prevent the platelets from working efficiently. Consult your doctor about the medicines you can take safely that won't adversely affect your platelet count.

Use a humidifier

Using a cool-mist humidifier in the home can increase its moisture content. This can further prevent nosebleeds or coughs. Excessive coughing tends to put more pressure on your brain, which can further increase your risk of internal bleeding in patients with low platelet count.

Wear a medical alert identification

Wearing a medical alert bracelet or carrying a card stating that you have a low platelet count can help you get the proper medical treatment in adverse situations.

Frequently Asked Questions

What is a hemorrhage?

What should be avoided in thrombocytopenia?

When does a platelet count recover?

When should I visit the doctor for a low platelet count?

What is aplastic anemia?

How long can you live with thrombocytopenia?

How can I recover from thrombocytopenia?

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Tiredness

Also called Fatigue, Weakness, Low on energy, Sleepy

Overview

A feeling of tiredness can be described as feeling sleepy, weak, low on energy and lacking the motivation to perform daily activities. It can occur due to poor lifestyle habits, psychological factors or some underlying health conditions. Generally, it has been found that women report tiredness more often than men.

Tiredness can be acute and may be relieved with a good night’s sleep. However, when tiredness lasts for several weeks, it can lead to chronic fatigue. It is essential to seek medical care when tiredness starts interfering with day-to-day activities, as it may be a symptom of some underlying health condition.

Along with medications to treat the underlying cause, alternative therapies play an important role in overcoming tiredness. These include meditation techniques, massage, yoga, ayurvedic and some home remedies.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men & women

Body part(s) involved

Whole body

Mimicking Conditions

Sleep apnea syndrome

Fibromyalgia

Necessary health tests/imaging

Complete hemogram

Serum electrolyte

Urine routine and microscopy

Glycosylated hemoglobin (HbA1c)

Thyroid stimulating hormone

Iron studies

ECG

Treatment

Supplements: Vitamin C & Folic acid

Analgesics: Ibuprofen & Diclofenac

Antibiotics

Oral hypoglycemic drugs: Metformin, Glimepiride & Sitagliptin

Beta-blockers, diuretics, or calcium channel blockers

Thyroxine

Anti-anxiety medicines: Fluoxetine & Venlafaxine

Specialists to consult

General physician

Urologist

Diabetologist

Endocrinologist

Oncologist

Hematologist

Cardiologist

Symptoms Of Tiredness

Tiredness can happen to anyone. Tiredness in itself is a symptom best described as -

Feeling sleepy all the time.

Not having enough energy to perform routine activities.

Not feeling refreshed even after taking ample rest.

A lack of motivation or enthusiasm for day-to-day activities.

Feeling drained out or low on energy after performing simple tasks.

Tiredness may also be associated with other symptoms such as -

Headaches

Dizziness

Confusion

Mood-swings and irritability

Breathlessness

Muscle weakness and muscle aches

Causes Of Tiredness

There could be a number of causes which can cause tiredness. These are broadly classified as follows -

Lifestyle factors

Being jet-lagged

Alcoholism and chronic smoking

Drug abuse

Excess caffeine consumption

Increased workload

Heavy exercise

Poor diet and malnutrition

Dehydration

Rotating work shifts

Obesity

Psychological factors

Anxiety disorder or stress

Chronic depression

Eating disorders like anorexia nervosa

Increased stress due to circumstances like the loss of a loved one, unemployment, etc.

Health conditions

Anemia

Pregnancy

Vitamin D deficiency

Hypothyroidism

Diabetes Mellitus

Cancer and chemotherapy

Fever and infections

Sleep apnea syndrome

Heart diseases like ischemic heart disease, heart failure

Fibromyalgia

Chronic fatigue syndrome (CFS)

Arthritis

Multiple sclerosis

Certain medications

Did you know chronic fatigue syndrome (CFS) can decrease your daily activity levels by 40%.

Tired all the time? Do you feel tired even after getting a good night’s sleep? Well, this could be chronic fatigue syndrome (CFS). Your doctor will figure out which symptom is most problematic for you, try to treat that first. Also, you will need new ways to manage your daily activities. Make sure that you do not “push and crash”.

Check Health Drinks!

Risk Factors For Tiredness

You may be at risk for tiredness if you:

Have a poor lifestyle

Suffer from health disorders such as anemia

Are a woman

Are above 60 years of age

Furthermore, the National Institute on Aging lists the following lifestyle habits that can lead to tiredness and fatigue:

Staying up too late

Having too much caffeine

Drinking too much alcohol

Eating junk food

Diagnosis Of Tiredness

When tiredness becomes chronic and starts interfering with day-to-day activities significantly, it is essential to establish a cause for chronic tiredness or fatigue so that it may be appropriately treated. The doctor may ask detailed questions about your lifestyle, history of sleep and try to identify whether tiredness is due to lifestyle or psychological factors.

Along with a detailed history and physical examination, the following tests may be essential to determine if the tiredness is due to any underlying physical disorder:

Complete hemogram and serum electrolyte to screen for overall health, presence of parasitic infections, electrolyte imbalance, etc.

Urine routine and microscopy to check for latent urinary tract infections.

Glucose - fasting blood and glycosylated hemoglobin (HbA1c) to evaluate diabetes mellitus.

Thyroid stimulating hormone to evaluate hypothyroidism.

Liver function test, kidney function test to check the metabolic health of the body.

Iron studies in cases of suspected anemia.

ECG, lipid profile to check cardiac health.

PET CT in cases of suspected malignancy.

Further testing or imaging studies may be essential if a diagnosis cannot be made on these preliminary tests.

Celebs affected

Varun Dhawan

Bollywood actor Varun Dhawan reportedly fainted on the sets of the Bollywood movie Super Dancer 3D due to fatigue and low blood pressure.

Meghan Markle

The Duchess of Sussex Meghan Markle had skipped a two-day royal tour of Zambia as she was suffering from fatigue during her pregnancy.

Prevention Of Tiredness

Most of the time, tiredness can be prevented by making changes in lifestyle and habits. While it is not possible to completely prevent tiredness arising out of health conditions, lifestyle changes may help in reducing the intensity of the symptoms.

Following lifestyle modifications can help prevent tiredness -

Take a wholesome diet rich in protein, vitamins, and minerals. Cut back on processed foods.

Drink plenty of fluids throughout the day, especially during the summer season.

Establish a sound sleep schedule. Do not sleep during the day.

Cut down on caffeinated beverages and alcoholic beverages.

Quit smoking.

Exercise daily, but do not over-exercise. Meditation or yoga can also help.

Specialist To Visit

When tiredness becomes chronic and interferes with basic day-to-day activities in a major way, it is essential to seek medical care. You may first consult with your family physician and in case of underlying health conditions, you may be referred to specialists such as -

Urologist

Endocrinologist

Oncologist

Hematologist

Cardiologist

Excessive tiredness can indicate a lot of health problems which can range from anemia and vitamin deficiencies to diabetes. Here's a detailed explanation on the common health problems that could lead to excessive tiredness and may require you to book an appointment at your doctor’s clinic.

Click Here To Read!

Treatment Of Tiredness

In most cases, the treatment of tiredness is aimed at improving the diet and lifestyle of the patient. This includes eating a diet rich in nutrients, ensuring 8 hours of sleep, exercising to stay active and maintaining overall physical and mental well being. In some cases, psychological therapy is required to improve the symptoms if there is some underlying mental health issue. After evaluation, the doctor may recommend weekly or fortnightly charts to assess improvement in symptoms and change in treatment plan if required.

If these interventions fail to improve the condition, then a combination of lifestyle changes, diet modifications along with the use of medicines is recommended. Medications are usually required to treat the health condition that may be causing the symptoms of tiredness.

Supplements like Vitamin C and folic acid for treatment of anemia

Analgesics like ibuprofen and diclofenac and joint care medications to treat arthritis

Antibiotics to treat the infection and paracetamol formulations to help relieve fever

Oral hypoglycemic drugs like metformin, glimepiride, repaglinide, sitagliptin, or insulin preparations like lispro and glargine to treat diabetes mellitus

Beta-blockers, diuretics, or calcium channel blockers for heart diseases like ischemic heart disease and heart failure

Thyroxine preparations for people with hypothyroidism

Anti-anxiety medicines like fluoxetine and venlafaxine for anxiety

Home Care For Tiredness

If you are constantly tired, it is important to identify what is causing tiredness so that the cause may be addressed and treated accordingly. There are certain things you can do at home that may help combat tiredness -

1. Consume a wholesome and balanced diet rich in vitamins and minerals.

2. Drink plenty of water, fluids like coconut water, buttermilk etc. throughout the day.

3. Do not engage in strenuous activities that may worsen your fatigue, especially if you have health conditions that are causing it.

4. Avoid daytime naps. It is better to get 8 hours of sound sleep at night instead of catching up on sleep in bits and parts.

5. Reduce excessive consumption of caffeinated drinks (especially in the evening) and alcohol.

6. Quit smoking and recreational drugs.

Complications Of Tiredness

Tiredness may worsen and become so severe that it becomes difficult for the person to even get up from the bed to perform activities like grooming or visiting the bathroom. The person may become bedridden and completely dependent on caregivers.

Chronic Fatigue ≠ Chronic Fatigue Syndrome

It is a complicated disorder that causes extreme and long-term fatigue, persisting for at least 6 months or more. It does not go away even after getting prolonged rest and sleep. This does not occur due to any underlying medical condition and is often considered to be imaginary.

Click To Know More!

Alternative Therapies Of Tiredness

Along with medical treatment for underlying health conditions, some alternative therapies can also help in overcoming the feeling of tiredness:

Diet and energy drinks: Consuming a balanced diet rich in essential nutrients and maintaining good hydration are excellent ways of providing energy to your body. Although coffee or other caffeinated drinks may boost energy levels in the morning, they must be consumed in moderation and not later in the day as they may interfere with the sleep schedule.

Meditation: Meditation can help channel and conserve the body’s energy. It may also help overcome fatigue and boost energy levels.

Massage: Gentle body massage has been known to promote relaxation and improve blood flow to various parts of the body. This may help rejuvenate the body and boost energy levels.

Psychotherapy: Counseling and psychotherapy can help when the feelings of tiredness arise from psychological conditions rather than physical disorders. Overcoming anxiety and depression may be the key to resolving the symptoms of tiredness and fatigue.

Exercise and yoga: Light exercises and yoga help boost the body's energy levels and are a great way of combating tiredness. However, care must be taken not to overdo the physical activities as it may lead to overexertion.

Yoga has been practiced since ages now. It offers several benefits to the body other than improving flexibility and posture. Here are a few yoga asanas that will help you fight fatigue and keep you refreshed.

Click Here To Read!

Ayurveda: Certain ayurvedic herbs like Ginseng, Ashwagandha, Shatavari, Licorice, etc., may be useful in overcoming tiredness.

Homeopathy: Homeopathic preparations like Cadmium Sulphuricum, Phosphorus, Lycopodium Clavatum, Nux Vomica, Calcarea Phosphorica, etc., have been found to be useful in combating fatigue due to cancer.

Living With Tiredness

Living with chronic tiredness and fatigue can be challenging and can hamper the quality of life of the patient. Simple day-to-day activities, like grocery shopping or going to work, or simple household tasks, like cooking and cleaning, may drain the energy of the patient and leave them exhausted.

A tired individual may not get a sound sleep at night as they may be taking frequent naps throughout the day. A lack of a good night’s sleep may cause weariness, forcing one to nap again during the day. This leads to a vicious cycle and leaves the person even more fatigued. Certain health conditions that cause tiredness may also have other problematic symptoms that may lead to a poor quality of life.

Owing to our fast paced lifestyles and hectic schedules, we often find ourselves excessively tired throughout the day. Most of the time, excessive fatigue is a result of lack of exercise, inadequate diet, nutritional deficiencies, and lack of sleep. Here are some simple and effective ways to fight fatigue.

Read Now!

Frequently Asked Questions

Why do I feel tired?

Can tiredness be a sign of something serious?

Which food items help boost energy?

Can daily exercise help combat tiredness?

How to overcome tiredness associated with anemia?

How much sleep is essential to overcome tiredness?

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Tonsilitis

Also known as Inflammation of the tonsils and Amygdalitis

Overview

Tonsils are two round, fleshy masses in the back of your throat (pharynx). Tonsillitis is inflammation of the tonsils. It is mostly caused by common viruses, but bacterial infections also can be the cause of infection.

The classic presentation of tonsillitis includes sudden onset of fever and sore throat with inflammation of the tonsils. Children are most commonly affected during their school-going years. Other risk factors include family history, cold weather, diabetes, and air pollution.

The best way to prevent tonsillitis is to wash your hands often, especially before touching your nose or mouth. Also, avoid sharing food, drink, or utensils with someone who is sick.

The management of tonsillitis mainly consists of resting, drinking fluids, and taking medications like painkillers, and antibiotics. In severe or recurrent cases surgical removal of tonsils, called tonsillectomy may be required.

Key Facts

Usually seen in

Children between 5 to 15 years of age.

Gender affected

Both men and women but is more common in women.

Body part(s) involved

Tonsils

Throat

Tongue

Lymph Nodes

Prevalence

World: 1.3% (2022)

Mimicking Conditions

Pharyngitis

Scarlet fever

Retropharyngeal abscess

Epiglottitis

Ludwig angina.

Peritonsillar abscess

Kawasaki disease

CoTonsillitissackie virus

Primary HIV

Ebstein-Barr virus

Herpes simplex tonsillitis

Viral pharyngitis

Oral candidiasis

Necessary health tests/imaging

Throat swab

Rapid antigen test

Complete blood count (CBC)

Treatment

Antibiotics: PenicillinV, Amoxicillin, Cephalexin, Clindamycin, and Azithromycin

Nonsteroidal anti-inflammatory drugs (NSAIDs): Paracetamol and Ibuprofen

Analgesics: Naproxen

Surgery: Tonsillectomy

See All

Symptoms Of Tonsillitis

The symptoms of tonsillitis generally occur suddenly and they may include

Fever (≦ 38℃)

Lymph node swellings

Swelling and redness of the tonsils

White or yellow coating on the tonsils

Sore throat

Mouth ulcers

Difficulty in swallowing

Rashes on the roof of the mouth

Strawberry tongue

Bad breath

Decreased appetite

Fatigue

Note: Typically there is an absence of symptoms of a viral upper respiratory infection like conjunctivitis, runny nose, or cough.

Don’t suffer from these symptoms. Rather, get some relief with our widest range of products to soothe your tonsils.

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Causes Of Tonsillitis

Tonsillitis can be caused by both bacteria and viruses. Common bacteria that cause tonsillitis include beta-hemolytic and other streptococci. Though the role of viruses is uncertain, the most common infective agent in causing tonsillitis is the Epstein–Barr virus. It is present in 50% of children and 90% of adults. Cytomegalovirus is the other virus that can cause tonsillitis.

Want to understand better how respiratory viruses spread?

Watch this video now.

Types Of Tonsillitis

Tonsillitis can be classified based on its duration of onset as follows:

1. Acute tonsillitis

This type of tonsillitis is primarily caused by bacterial or viral infections. It presents with swelling and redness on the tonsils, along with fever, cough, and headache. These symptoms usually last 3 or 4 days but can also last up to 2 weeks.

2. Subacute tonsillitis

It is mostly caused by bacterial actinomyces. This type of tonsillitis can last between 3 weeks and 3 months.

3. Chronic tonsillitis

This is when you have a long-term tonsil infection. An infection that persists for more than a duration over 3 months is known as chronic tonsillitis. The virus usually stays and leads to chronic inflammation.

4. Recurrent tonsillitis

It is caused by bacterial infections, by streptococcus. Tonsillitis is termed recurrent when there are more than 7 episodes in 1 year.

Any infection that recurs more commonly than usual might be because of decreased immunity.

Read more about low immunity

Click Here

Risk Factors For Tonsillitis

Tonsillitis affects the younger age group and is mainly caused due to an infection with bacteria or viruses. Risk factors that can increase your chances of getting tonsillitis include-

1. Frequent exposure to viruses or bacteria

School-age children are usually in close contact with their friends and peers which increases their exposure to viruses or bacteria that can cause tonsillitis.

2. Young age

Studies show that the incidence peak of acute tonsillitis is observed in young children, especially the school-going age, but it may generally occur at any age.

3. Being immunocompromised

A decrease in immunity can be a major risk factor for inflammation of the tonsils causing tonsillitis.

Up your immunity levels with our extensive range of immunity-boosting products.

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4. Environmental pollution

Air pollution can cause a huge rise in swollen adenoids and tonsillitis in children. Also,

sore throat is a common side effect of exposure to polluted air.

Learn more about how to protect your kids from air pollution.

Watch now

5. Colder climates

Cold weather does have an impact on your tonsils as tonsillitis is easy to recur during the change of seasons, especially in winter.

6. Genetics

Studies suggest that genetic inheritance determines the severity of tonsillar damage in pediatric patients with a history of recurrent chronic tonsillitis in both parents.

7. Diabetes

Studies suggest that the chances of infections are more in individuals with diabetes. Infections and problems with the ears, nose, and throat like tonsillitis can be symptoms of diabetes.

Want to master your diabetes?

Check out our diabetes care page and find products specially designed to meet all your needs.

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8. Prolonged use of corticosteroids

Corticosteroids can raise your risk of infections because they have a wide range of effects on the immune system. This can lead to tonsillitis.

9. Obesity

Research suggests that there is a possible link between being overweight or obese and ear infections that can also affect the throat like tonsillitis.

Enlighten yourself now

Diagnosis Of Tonsillitis

Accurately diagnosing tonsillitis is important to reduce the further spread of infection and to limit complications. Diagnosis includes

1. History

A complete history provides important information to determine whether the patient has a sore throat, or whether there is deeper pain in the throat or neck.

2. Physical examination

Diagnosis of tonsillitis is mainly clinical and it is done by:

Carefully looking in the throat at the infection site with light instruments

Checking for any rash in the throat

Observing ‘toxic’ appearance and signs of dehydration

Palpating neck to check swollen lymph nodes

Listening to the voice of patient

Seeing if there is any enlargement of the spleen (can be a symptom of tonsillitis).

3. Laboratory tests

Throat swab: This is a simple test in which doctors rub a sterile swab over the back of your throat to get samples of secretions. The samples are later checked in the lab or the clinic.

Rapid antigen test: It may have low sensitivity in the diagnosis of bacterial tonsillitis but, the results for the presence of infection (positive or negative) are very fast.

Complete blood count (CBC): If the strep throat lab test is negative, then CBC is done to determine the cause of tonsillitis. In this test, the number of different cells is counted by taking small amounts of blood samples from patients.

Booking your lab tests just got easier. Get all the tests done in the comfort and safety of your home.

Find all the tests here

Celebs affected

Noah Centineo

Is an American actor who began his career performing on television. After his tonsillectomy, Centineo wrote on Instagram “Got my tonsils taken out 2 days ago. Goodbye chronic tonsillitis and strep throat. I hope you enjoyed your free stay for the last 7 years."

Miley Cyrus

Miley Ray Cyrus is an American singer, songwriter, and actress. She revealed via social media that she was hospitalized and later it was disclosed that she had undergone surgery for tonsillitis.

Prevention Of Tonsillitis

It can be a little difficult to prevent tonsillitis completely, but there are things you can do to reduce your risk. They include:

Always wash your hands often, especially before touching your nose or mouth

Avoid sharing food, drink, or utensils with someone who’s sick

Replace your toothbrush regularly, especially after infection

Practice good oral care

Keep a safe distance from tonsillitis patients

Cover your mouth with a tissue or the hand when you cough or sneeze

Wash hands after coughing or sneezing

Keep your child at home if they are sick.

Want to know how you can prevent the spread of viral infections?

Click now to read

Doctor To Visit

The symptoms of tonsillitis can range from mild to severe. Doctors that can help you diagnose and treat tonsillitis include:

General physician

ENT specialist

Pediatrician

An ENT specialist, also called an otolaryngologist, is a doctor who has special training in diagnosing and treating diseases of the ear, nose, and throat. A pediatrician is a doctor who deals with the diseases of children.

When to see a doctor?

You should contact your doctor immediately if you have the following symptoms:

Sore throat for four days or more

Fever over 38.33 degrees Celsius (101 degrees Fahrenheit)

Difficulty in swallowing

Difficulty in breathing.

Painful or swollen tonsils.

If you or your loved ones are noticing any of the above symptoms, seek medical help from our trusted team of doctors.

Book your appointment now

Treatment Of Tonsillitis

The treatment of tonsillitis depends on whether the infection is viral or bacterial. Tonsillitis is very common, it can be managed with proper rest and medications. The management consists of the following:

A. Medications

1. Antibiotics: This therapy is indicated for patients with signs and symptoms of the sore throat along with tonsillitis and the laboratory confirmation of bacteria as the pathogen. The drugs include-

PenicillinV

Amoxicillin

Cephalexin

Clindamycin

Azithromycin

2. Nonsteroidal anti-inflammatory drugs (NSAIDs): These medications are given to decrease inflammation and reduce fever. The commonly used drugs include

Paracetamol

Ibuprofen

3. Analgesics: These are a group of medications used to relieve pain. The most commonly used drug to manage pain include:

Paracetamol

Naproxen

Ibuprofen

Note: Certain studies in adults and children show that corticosteroids in combination with antibiotic treatment provide symptomatic relief of pain and faster recovery.

Get your medications online from India’s largest online pharmacy.

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B. Surgery

Tonsillectomy is the surgical removal of the tonsils. Tonsillectomy may be considered after careful consideration of the risks and benefits and a thorough discussion of the options with the patient. It is usually performed when tonsillitis occurs frequently or doesn't respond to other treatments.

Home-care For Tonsillitis

The management of tonsillitis mainly depends on providing symptomatic relief along with a lot of rest. Some home remedies that can help relieve the symptoms include:

1. Gargling with salt water

Rinsing or gargling your mouth with warm salt water can help soothe pain caused by tonsillitis. It can also reduce inflammation, and may even help to treat infections. Just add ½ a tablespoon of salt to a glass of warm water and gargle to see the difference.

2. Using throat lozenges

Lozenges containing licorice as an ingredient have anti-inflammatory properties that can help soothe the discomfort and swelling in the tonsils and the throat.

Get all types of lozenges with just a simple click.

Choose now

3. Drinking warm tea with honey

Studies suggest that raw honey has flavonoids and anti-inflammatory effects. Warm beverages like tea can help to reduce discomfort and adding raw honey may help to treat the infections causing tonsillitis.

4. Trying cold therapy

Cold can be highly effective in treating pain, inflammation, and swelling. Popsicles, frozen drinks, ice chips, and ice cream can be particularly helpful to young children who can’t use other home remedies safely.

5. Getting humidifiers

Humidifiers can help if you are experiencing dry mouth as a result of tonsillitis. Dry air can irritate the throat, and humidifiers can help decrease the discomfort in the throat and tonsils by adding moisture back into the air.

6. Drinking a lot of warm

Drinking warm liquids, including soups, broths, and teas, can help soothe a sore throat. Herbal teas containing ingredients such as honey, pectin, or glycerine may help soothe irritation in the throat.

7. Eating softer food items

For people with tonsillitis, eating hard or sharp foods can be uncomfortable and even painful. Individuals with tonsillitis should try eating softer foods that are easier to swallow.

8. Not straining your voice

Swelling in the throat can cause the voice to become muffled. See a doctor immediately if you have too much pain while talking as it can indicate a complication.

Complications Of Tonsillitis

Tonsillitis, if left untreated can lead to complications like;

Peritonsillar abscess/quinsy: This is the spread of infection beyond the tonsil that may lead to a collection of pus (abscess) within the space between the tonsils.

Airway obstruction: this is a rare complication and requires immediate care, where surgical intervention may be considered an emergency.

Post-Streptococcal glomerulonephritis: it is an inflammatory disorder of the kidneys that can manifest 1–2 weeks after a streptococcal throat infection.

Rheumatic fever: Rheumatic fever is a rare, but serious, complication of untreated or partially treated tonsillitis caused due to streptococcus bacteria.

Scarlet fever: It is an infection caused by group A streptococci bacteria that affects the throat. This is the same bacteria that can cause tonsillitis.

What is the difference between COVID-19 and tonsillitis?

Sore throat is a common symptom of both tonsillitis and COVID-19. However, tonsillitis causes discomfort and inflammation specific to the tonsils area rather than a generalized sore throat.

Get all your questions answered about COVID-19

Alternative Therapies For Tonsillitis

Mild cases of tonsillitis can be managed with certain home remedies and plenty of rest. Some of the alternative therapy that has shown some promising results include:

1. Homeopathy

Tonsillitis is common among children and homeopathy is very safe and highly effective in treating most cases of tonsillitis. Studies have shown that homeopathy has been quite effective in managing acute viral tonsillitis. Belladonna is the most commonly prescribed homeopathic medicine for tonsillitis.

2. Acupuncture

This treatment can help reduce inflammation and provide analgesic pain relief for a sore throat. Studies demonstrate that certain acupoints are used to treat the common cold, influenza, acute tonsillitis, and other respiratory tract infections.

Living With Tonsillitis

Recurrent and acute tonsillitis is very common among children. Managing kids can be quite a task, especially when they are sick. Some of the tips that can help parents in managing their children with tonsillitis include:

Treat their pain and fever

Give them soft and warm foods

Tell them to take plenty of fluids

Try to make them gargle with salt water

Give them throat sprays instead of lozenges

Make them comfortable as much as possible

Be patient with them

Note: Talk to your doctor to understand the reason behind the recurrent infections and get the appropriate treatment.

Read more about 10 things you need to do if your child has a fever

Tap here

Frequently Asked Questions

Is tonsillitis contagious?

What is the duration of tonsillitis?

Can tonsillitis be fatal?

What to expect after tonsillectomy?

Does tonsillitis happen in adults?

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Trigeminal neuralgia

Also known as Fothergill disease, Trifacial Neuralgia, and Tic Douloureux

Overview

Trigeminal neuralgia is a condition that causes inflammation of the trigeminal nerve (the fifth cranial nerve). It causes spontaneous and intense bouts of pain, often described as shooting, electric shock-like in the lips, teeth, jaw, gums, and other areas of the face supplied by the nerve.

Women are affected more often than men. Patients with multiple sclerosis are affected much more frequently by this condition.

The pain occurs in short, unpredictable attacks that last a few seconds to minutes. After the first episode of attacks, the pain may subside for months or years, but there is always the risk that trigeminal neuralgia will recur without any warning. Rarely, when the pain is not well controlled, it may lead to long-term chronic pain.

The outbursts of trigeminal neuralgia can be set off by contact with the cheek during activities like shaving, washing the face, brushing the teeth, eating, drinking, and talking.

The best way to avoid a paroxysm of TN is to prevent a few triggering agents, such as cold wind, hot and spicy foods, and cold drinks. Most people are prescribed medicines to help control the pain, but surgery may sometimes be considered when drugs are ineffective.

Key Facts

Usually seen in

People over age 50

Gender affected

Both men and women but more common in women

Body part(s) involved

Face

Lips

Teeth

Gums

Jaw

Prevalence

World: 12.6/100,000 persons (2020)

India: NA

Mimicking Conditions

Temporal tendinitis

Ernest syndrome (injury of the stylomandibular ligament)

Occipital neuralgia

Cluster headaches/migraines

Giant cell arteritis

Dental pain

Post-herpetic neuralgia

Glossopharyngeal neuralgia

Sinus infection

Ear infection

Temporomandibular joint syndrome (TMJ)

Necessary health tests/imaging

Imaging tests:

Magnetic Resonance Imaging (MRI)

Computed Tomography (CT) scan (head)

Treatment

Medications:

Carbamazepine

Gabapentin

Oxcarbazepine

Baclofen

Pregabalin

Percutaneous procedures:

Radiofrequency lesioning (Rhizotomy)

Glycerol injections

Balloon compression

Surgery:

Microvascular decompression (MVD)

Stereotactic radiosurgery

See All

Symptoms Of Trigeminal Neuralgia

The significant symptoms of trigeminal neuralgia include:

A sudden attack of severe, sharp, shooting pain that lasts for a few seconds to a few minutes.

The pain is often described as an electric shock-like, burning, pressing, crushing, exploding, shooting, migraine-like, piercing, prickling, or a combination.

The pain is usually felt in the teeth, lower jaw, upper jaw, or cheek. The right side of the face is more often affected than the left side.

Usually, the pain resolves completely between the attacks. This is known as a refractory period.

Attacks are generally stereotyped or of the same pattern in an individual patient.

In severe cases of TN, attacks may happen hundreds of times a day, and in some instances, there may be no periods of remission.

Note: Trigeminal neuralgia is also called tic douloureux because extreme pain can cause patients to make a face and move their heads away from the pain. This movement is also referred to as a tic.

The activities that can trigger the symptoms of TN are:

Light touch

Washing the face

Shaving

Head movements

Swallowing

Chewing

Smiling

Talking

A cool breeze against the face

Traveling in a car

Did you know?

Trigeminal neuralgia usually does not occur when the person is asleep, which differentiates it from migraines, which often tend to wake up the person.

Read More About Migraine

Causes Of Trigeminal Neuralgia

Trigeminal neuralgia is caused by compression of the trigeminal nerve, which is the largest nerve inside the skull. This nerve conducts the sensation of pain and touch from teeth, face, and mouth to the brain.

Primary Trigeminal Neuralgia

Primary trigeminal neuralgia is caused by the compression of the trigeminal nerve at the base of the head where it enters the brain stem (the lowest part of the brain). In most cases, the pressure is caused by an artery or vein compressing the trigeminal nerve.

In some cases, the pressure on the nerve wears away its protective outer layer (myelin sheath), which may cause pain signals to travel along the nerve.

Secondary Trigeminal Neuralgia

Secondary TN is when neuralgia is caused by another medical condition or disease. For example:

Cysts

Tumor

Facial injury

Damage caused by the surgery

Viral infections like shingles, chickenpox, and herpes

Risk Factors For Trigeminal Neuralgia

Most often, the cause of trigeminal neuralgia is idiopathic, i.e. the exact cause is not known. However, the following risk factors can increase the chances of developing trigeminal neuralgia:

Age

The risk of TN increases with age. It is higher in individuals between the ages of 50 and 60 years. This is because as one ages the blood vessels harden and brain sags, which leads to the formation of new contacts between nerves and blood vessels.

Sex

Women are more likely to develop trigeminal neuralgia than men.

Systemic conditions

Multiple sclerosis: Multiple sclerosis is a significant risk factor for TN. It is an autoimmune disease that affects the protective myelin sheath of the body's nerves, predisposing to trigeminal neuralgia.

Diabetes: Diabetes can increase the risk of developing trigeminal neuralgia, possibly due to nerve damage caused by hyperglycemia (high blood glucose).

Sarcoidosis: It is a disease characterized by the growth of small collections of inflammatory cells (granulomas) in any part of your body. It has been occasionally associated with trigeminal neuralgia.

Lyme disease: It is an infection that happens when an infected tick bites a human. Rarely, this systemic inflammatory condition can increase the risk of trigeminal neuralgia.

Scleroderma: It is also known as systemic sclerosis, a group of rare diseases that involve the hardening and tightening of the skin. Some people with scleroderma have higher chances of developing trigeminal neuralgia.

Systemic lupus erythematosus (SLE): SLE is an autoimmune disease in which the immune system attacks its own tissues, causing widespread inflammation. In some rare cases of SLE, the immune system tends to attack the trigeminal nerve and lead to TN.

Diagnosis Of Trigeminal Neuralgia

The doctor may consider the following methods to diagnose TN:

Medical history and physical examination

For the diagnosis of trigeminal neuralgia, a complete physical examination and a detailed medical history is required to rule out other causes of facial pain. The medical practitioner will ask about:

Intensity of pain attacks

Duration of pain attacks

Affected areas of the face

There's no specific test for TN; therefore, its diagnosis is usually based on the individual’s symptoms and description of the pain.

An important aspect of diagnosing trigeminal neuralgia involves ruling out other conditions that lead to facial pain like:

Joint pain in the lower jaw

Toothache

Nerve injury

Migraine (a headache that can cause severe throbbing pain or a pulsing sensation, usually on one side of the head)

Imaging Techniques

Magnetic Resonance Imaging (MRI): This test helps in diagnosing the possible cause of facial pain, such as inflammation of the lining of the sinuses, nerve damage caused due to MS, and tumor on facial nerves. An MRI scan can also detect whether a blood vessel is compressing one of the trigeminal nerves.

Computed Tomography (CT) scan (head): Computed tomography (CT) of the head uses special x-ray equipment to help assess and identify tumors or multiple sclerosis, which can cause secondary TN.

Celebs affected

Salman Khan

Salman Khan opened up about suffering from Trigeminal neuralgia in 2001. He shared that at one point, he felt dejected, but he channeled his energies to overcome the ill effects of the condition.

William Gladstone

The former British Prime Minister William Gladstone suffered from symptoms of neuralgia and headache, which were indicative of trigeminal neuralgia. He showed characteristic symptoms of intermittent pain at varying intervals.

Author Gloria Steinem

She survived the pain of an illness that was misdiagnosed for a long time. It was later diagnosed as trigeminal neuralgia.

Did you know?

During a trigeminal neuralgia attack, affected people tend to shield their faces to protect them from being touched. This is an important diagnostic sign because, with many other painful conditions like toothache, the person will hold or press the face to ease the pain. To learn more about toothache or dental pain.

Click Now

Prevention Of Trigeminal Neuralgia

Trigeminal neuralgia is not preventable.

But certain triggering factors can be avoided by taking necessary precautions:

Wind: If the wind is a trigger, a scarf can be worn around the face to protect against it.

Cold drinks: A straw can be used to drink cold water or drinks. This will prevent the liquid from coming in direct contact with the painful areas.

Chewing: Liquidize the meals if you find it difficult to chew the food.

Avoid certain foods: Some foods seem to trigger attacks. It is better to avoid food items like citrus fruits, bananas, and caffeine.

Correct diagnosis and proper management also benefit the patients and lead to a good prognosis.

Specialist To Visit

The best doctor to visit in case of severe and sharp pain in the face is:

Neurologist

A neurologist helps in the proper diagnosis and treatment of diseases of the brain and nervous system.

Want to talk about the symptoms of pain which are making your life uncomfortable? Get a consultation from our team of trusted doctors.

Book Consultation Now

Treatment Of Trigeminal Neuralgia

Management of TN depends on multiple factors, including age, general health, disease severity, and other medical conditions. Medicines can be used to control the pain, or surgery may be considered where drugs have been ineffective for the long term.

Medications

The first-line treatment for patients with TN is pharmacologic therapy. Painkillers like paracetamol are not effective; therefore, an anticonvulsant is prescribed for the treatment.

The most commonly used anticonvulsant drug is carbamazepine. This medicine is usually started at a lower dose and gradually increased to control the pain. The pain is controlled for most people in the early stages of the disease. However, in some patients, the effectiveness of carbamazepine decreases over time.

Another anticonvulsant drug gabapentin, which is most commonly used to treat epilepsy or migraines, can also treat TN.

Other medicines used to treat trigeminal neuralgia include oxcarbazepine, baclofen, and pregabalin.

Percutaneous procedure

Percutaneous procedures are performed through the smallest possible working incision, by inserting a needle or thin tube through the cheek and into the trigeminal nerve inside the skull. X-rays of the head and neck are usually performed to help guide the needle into the correct place.

The various percutaneous procedures to treat trigeminal neuralgia are:

Radiofrequency lesioning (Rhizotomy)

Rhizotomy provides pain relief to approximately 80% of patients with TN, but it’s a temporary solution that usually lasts 1-3 years until the nerve regrows. The surgeon inserts a long needle through the cheek on the affected side of the face and uses heat or a chemical to suppress the pain fibers of the trigeminal nerve.

Glycerol injections

It involves the injection of a small amount of glycerol into the trigeminal nerve to block pain signals to the brain. This method is mostly used in patients who are immunocompromised by other chronic diseases.

Balloon compression

The surgeon will insert a tube, called a cannula, through your cheek up to the trigeminal nerve. A thin, flexible tube with a balloon on one end is then weaved through the needle. This procedure has been known to relieve symptoms for 1-2 years, though it can cause some numbness in the face.

Surgery

Microvascular decompression (MVD)

This is one of the most surgical common procedures used to treat trigeminal neuralgia. It can help relieve pain without intentionally damaging the trigeminal nerve. This surgery reveals the blood vessel that may be compressing the nerve and provides the longest relief from trigeminal neuralgia.

Stereotactic radiosurgery

This procedure delivers a highly concentrated and precise beam of radiation on the trigeminal nerve root to relieve the pain. It’s always recommended that patients receive it no more than two times as a treatment for trigeminal neuralgia.

Alternative Therapies of Trigeminal Neuralgia

Acupuncture

Acupuncture involves the insertion of thin needles along the “trigger points” to provide pain relief. Some precautions must be taken while inserting the acupuncture needles to avoid coming into contact with trigger areas, as this may flare up the symptoms.

Meditation

Meditation therapy can help in alleviating the pain caused by Trigeminal neuralgia. This technique helps slow breathing and relax, which helps ease or prevent stimulation of the trigeminal nerve.

Meditation is amazing for your soul and body. Read how meditation can improve your life.

Tap Here

Aromatherapy

Essential oils of chamomile and lavender can help ease neuropathic discomfort. This therapy does not work for everyone, although for some it can provide relief from the pain of TN.

Check out our extensive range of essential oils.

Shop Now

Complications Of Trigeminal Neuralgia

The pain in Trigeminal Neuralgia can be so severe and exhausting that the patients can develop anxiety and depression, if not properly treated.

Patients treated with anticonvulsant drugs for the long term can have unfavorable drug effects.

Some patients permanently develop facial numbness on the affected side.

The surgical procedures for treatment can pose some intra and postoperative risks.

Living With Trigeminal Neuralgia

Although Trigeminal Neuralgia is not fatal, it causes pain and anxiety, which can ultimately affect the patient's quality of life. A person may find themselves feeling overwhelmed and isolated at times. Caring for mental health, connecting with others, and practicing self-care can all go a long way in preserving the quality of life. Here are a few steps to follow while living with this condition:

Look after mental health

The chronic repetitive and unpredictable shots of stabbing pain can leave people isolated and vulnerable to depression and anxiety, and in some extreme cases, even suicidal thoughts can emerge. Participating in social interactions and engaging in small household work can help divert the mind.

Avoid triggers

While the TN pain attacks are often spontaneous, some people with TN find specific triggers that bring on their pain attacks. Some common triggers include spicy foods, cold beverages, and chewing. If a person finds out his triggers, a conscious effort to avoid them may help alleviate TN pain.

Practice a healthy lifestyle and general self-care

Looking after your overall health through a balanced diet, regular exercise, a consistent sleep schedule, and mental healthcare is crucial. Managing TN is much easier when the rest of the body is cared for by leading a healthy life.

If your loved one has Trigeminal neuralgia, the following pointers can help you extend a helping hand to the patient:

Understanding the severity of the pain the person is going through and being accommodating are the first steps to caring for a loved one with trigeminal neuralgia.

Helping your loved one stay on track with their medications and communicating about the success of the treatment.

Encouraging doctor visits and exploring other treatment options when medications stop working.

Home Care For Trigeminal Neuralgia

There are no highly effective home remedies for trigeminal neuralgia. However, you can try the following after consent from your doctor. They will act as an adjunct to conventional medical treatment:

Hot or cold compression

Taking a hot shower or bath can help relieve the symptoms. Cold compressions, like ice or cold water, can also help relieve painful episodes.

Peppermint

It is used as a pain reliever and helps in relaxing the muscles to control muscle spasms. Peppermint oil can be used alone, by combining it with a carrier oil to minimize pain and irritation caused by trigeminal neuralgia.

Peppermint oil has some amazing benefits to offer to your body. Read more about peppermint oil.

Click Now

Basil (Tulsi)

It is an effective herb that has been used for over 3000 years due to its incredible healing powers. It acts as a stress regulator and inhibits nerve pain in case of trigeminal neuralgia. Essential oil of basil can be applied to the affected area to get instant relief.

Dietary supplements

The addition of vitamins B12 and minerals in the diet can help in alleviating the discomforting trigeminal neuralgia symptoms.

Most Indians are deficient in Vitamin B12. Fill in the gaps in your diet with our extensive range of supplements.

Buy Now

Frequently Asked Questions

What organs are affected by trigeminal neuralgia?

What aggravates the trigeminal nerve?

How do you get instant relief from trigeminal neuralgia?

What is the best painkiller for neuralgia?

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Tuberculosis (TB)

Also known as TB, Koch's Disease

Overview

Tuberculosis is one of the top 10 causes of mortality worldwide. Tuberculosis is caused by a bacterium called Mycobacterium Tuberculosis. Tuberculosis is an infectious disease that primarily affects the respiratory system, but it can also affect other systems, such as the gastrointestinal system, musculoskeletal system, nervous system, etc. It may be present as a latent or an active infection. Active cases can be presented with symptoms like cough, hemoptysis (blood in the sputum), fever, weight loss, etc.

Tuberculosis treatment comprises a combination of drugs and may continue for a long period for complete elimination of bacteria and to avoid resistance against antibiotics used.. Most patients recover completely from the disease. However, vulnerable patients, such as HIV-affected individuals or those with lower immunity, suffer from a severe type of disease.

In 2019, an estimated 10 million people suffered from tuberculosis, of which 2.6 million were Indians. Although the cases of TB in India are high, the Government provides support to all the TB patients with programmes such as NTEP, DOTS and Nikshay patrika, which are aimed to improve treatment with free medicines and support.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but more common in men

Body part(s) involved

Lungs

Intestine

Bones

Brain

Blood

Prevalence

Worldwide: 10 Million (2019)

India: 2.64 Million (2019)

Mimicking Conditions

Pneumonia

Lung cancer

Fungal infection of the lung

Sarcoidosis

Necessary health tests/imaging

CB-NAAT

Mantoux test

Stain AFB (ZN Stain), sputum

Mycobacterium tuberculosis DNA PCR - Qualitative -Sputum

TB Platinum Interferon gamma release assay

Complete Blood Count

Erythrocyte Sedimentation Rate

Treatment

Antibiotics

Isoniazid

Rifampicin

Pyrazinamide

Ethambutol

Amikacin

Streptomycin

Antipyretics & Painkillers

Antitussives

B-complex Vitamins

See All

Symptoms Of Tuberculosis

Pulmonary tuberculosis or TB of the lungs is the most common type of TB. Other types such as the TB of the bones, lymph nodes, brain, kidneys, intestine, and genitals are also seen.

Symptoms of Pulmonary TB

Tuberculosis most commonly affects the lungs and can cause the following symptoms:

Coughing that lasts for more than 2 weeks with or without fever

Fever, especially an evening rise in body temperature

Presence of blood in the sputum

Chest pain

Loss of appetite

Loss of weight

Chronic fatigue

Night sweats and chills

Symptoms of TB other than pulmonary TB :

Occasionally, tuberculosis may also affect other organs, such as bones, stomach, etc., and presents with common symptoms like fever, weight and appetite loss and some specific symptoms related to organ system involved like ::

Bone TB involving the spine can cause back pain and neurological complications like paraplegia where the lower limbs become paralyzed.

Gastrointestinal system disease can cause nausea, vomiting, diarrhea, malabsorption etc.

Tuberculosis of the kidneys can cause blood in the urine.

Infection involving the brain and its covering membrane can cause seizures, headaches, neurological abnormalities, etc.

Here’s everything about TB causes, symptoms & treatment (in Hindi). Watch the video to know more.

Causes Of Tuberculosis

Tuberculosis is caused by a bacterium called Mycobacterium tuberculosis. TB usually spreads from one person to the other through the air. When a person suffering from TB sneezes, coughs or spits, the bacteria gets into the air. Hence, when a person inhales even a few of these bacteria from the air, he/she becomes infected. Although it is contagious, the bacteria grows at a slow rate and requires you to spend considerable time around the person who is sick. This means, it requires close and prolonged contact with a person who has active tuberculosis.

Remember! Tuberculosis cannot spread through a simple handshake or sharing utensils as the bacteria cannot survive for long outside of the human body.

Types Of Tuberculosis

There are 5 different types of tuberculosis based on the type of infection. These include:

1. Latent tuberculosis

Latent tuberculosis does not cause any symptoms as the body’s immune system keeps the infection at bay. In latent tuberculosis, the person carries the bacteria but does not develop any symptomHowever, there is a possibility that the latent infection may reactivate at a later stage in life when the body’s immune defenses go down and may lead to active disease.

2. Active tuberculosis

Active tuberculosis refers to a condition where the bacteria are in an active stage and cause symptoms. Active tuberculosis can be further classified into pulmonary and systemic tuberculosis. Although tuberculosis is primarily a disease of the lungs (pulmonary TB), it may affect other organs in the body, such as bones, lymph nodes, brain, kidneys, intestine, and reproductive system. When active tuberculosis is present in other parts of the body, it is known as systemic tuberculosis.

3. Disseminated tuberculosis

Also known as miliary tuberculosis, this is a severe type of infection where the tuberculosis bacteria spread to the entire body through the bloodstream.

4. Multidrug resistant tuberculosis (MDR TB)

This type of tuberculosis is caused by a bacteria which is resistant to at least two most common and potent drugs used to treat TB namey isoniazid and rifampin.

5. Extensively drug resistant tuberculosis (XDR TB)

This is a rare type of tuberculosis in which the bacteria is resistant to more than two drugs used to treat TB. In addition to isoniazid and rifampin, people suffering from XDR TB are resistant to fluoroquinolones (an antibacterial medicine) and at least one of three injectable second-line drugs used to treat bacteria.

Risk Factors Of Tuberculosis

Although all age groups are at risk of TB, the risk is higher in people who:

Live in or travel to a country with a higher prevalence of tuberculosis such as tropical and developing countries.

Work in places constantly exposed to crowds, such as hospitals, community centers, prisons, etc.

Suffer from malnourishment. It is seen that undernourished people are 3 times more at risk of TB as compared to healthy people.

Suffer from diabetes or are on medicines such as steroids or anti-cancer drug therapy.

Suffer from weakened immunity or are recovering from an illness.

Are infected with HIV/AIDS as the risk of getting tuberculosis is 18 times higher for patients with HIV.

Consume excess alcohol and smoke tobacco products.

Did you know?

Vitamin A deficiency is tied to increased chances of tuberculosis. As per the study, the risk of acquiring tuberculosis was 20 times more in young people aged between 10-19 years of age. The study suggested that people who were vitamin A deficient were at an increased risk (10 times) of contracting tuberculosis from those already infected with the disease. Check out our vitamins and supplements range to fill up your nutritional quota.

Explore Now!

Diagnosis Of Tuberculosis

Along with a detailed history and physical examination, the doctor also orders laboratory tests and imaging studies to confirm a suspected case of tuberculosis. Following tests are used to confirm a diagnosis:

Laboratory tests

Blood Tests

Cartridge based nucleic acid amplification test (CB-NAAT) is a rapid molecular test that helps to detect TB. It not only identifies the bacteria responsible for TB but also helps to find rifampicin resistance bacteria within two hours. It is recommended by WHO as an initial diagnostic test to check for TB in suspected cases of pulmonary and other forms of TB, especially in children.

TB Platinum Interferon Gamma Release Assay is used to check for the body’s immune response to the tuberculosis bacteria.

Other tests such as Complete Blood Count, Erythrocyte Sedimentation Rate are performed to evaluate the body’s response to infection.

HIV 1 And 2 Antibody. As tuberculosis is highly associated with HIV, doctors usually check for the likelihood of HIV exposure when tuberculosis is suspected.

Sputum analysis

Sputum samples are analyzed using tests like stain AFB (ZN Stain), sputum, and Mycobacterium tuberculosis DNA PCR - Qualitative -Sputum. These tests help to check for the presence of tuberculosis bacteria in the sputum. A positive test confirms the diagnosis of tuberculosis.

Skin prick test

This is also known as the Mantoux test. It is a screening test used to determine a person’s risk of TB infection or the risk of the progression of the disease, if infected. For this, a small amount of tuberculin is injected into the skin. If swelling or reaction occurs at the site of injection within 48-72 hours, it is considered a positive test and indicates exposure to the tuberculosis bacteria. False-positive test results are possible if the person has been vaccinated for tuberculosis recently.

Imaging studies

In pulmonary tuberculosis cases, imaging studies like X-Ray chest PA View, HRCT chest - plain are required to evaluate the extent of the disease in the lungs. In extrapulmonary tuberculosis cases, other imaging studies, such as X-Ray dorsal spine AP & lateral view, MRI brain, etc., may be done as appropriate.

Celebs affected

Amitabh Bachchan

Bollywood superstar Amitabh Bachchan suffered from tuberculosis in the year 2000.

Muhammad Ali Jinnah

A famous politician and the founder of Pakistan, Muhammad Ali Jinnah, succumbed to tuberculosis

Prevention Of Tuberculosis

There are two types of preventive measures:

1. Prevent the spread of tuberculosis

As tuberculosis spreads through infected droplets, it is important for a patient with active tuberculosis to follow certain hygiene measures to prevent the transmission of the infection.

Always cover your mouth with a handkerchief when coughing or sneezing to prevent the spread of droplets.

Patients with active tuberculosis must wear a surgical mask in the presence of others to prevent the transmission of droplets.

Wash your hands with soap and water or use hand sanitizers frequently to keep your hands clean.

The room where a patient with active tuberculosis lives must be well ventilated and should be cleaned with a disinfectant every day.

The pasteurization of milk also helps to prevent humans from getting bovine TB.

The last but the most important point is to complete your course of TB treatment because by doing so you not only lower your risk of recurrence/remission but also prevent community transmission of the disease.

2. Vaccines for tuberculosis

In countries where tuberculosis infections are rampant, babies are given the BCG (Bacillus Calmette Guerin) vaccine at birth to provide immunity against the disease.

TB is NOT a genetic disease. To know about other common myths click here!

Read The Article!

Specialist To Visit

If you have symptoms, such as prolonged cough, bloody sputum, fever, unexplained weight loss, you must seek prompt medical care. The specialist doctors who diagnose and treat tuberculosis are:

General physician

Chest physician

Infectious disease specialist

Respiratory specialist or pulmonologist

Consult India's best doctors online with a single click. Book an appointment now!

Click Here!

Treatment Of Tuberculosis

The treatment for tuberculosis depends on the type of infection.

Latent tuberculosis

In India, if you have tested positive for tuberculosis in a screening test, treatment may be recommended only if you belong to the high risk category. The medicines for latent tuberculosis must be taken for a duration of 6 to 9 months as prescribed by a doctor.

Active tuberculosis

Antibiotics are the main treatment options for people suffering from TB. The treatment approach usually involves taking these drugs for a span of several months. These medicines are usually given in combination as part of a regimen to effectively treat tuberculosis. These medicines kill the bacteria causing tuberculosis or prevent its growth.

The first line of treatment for active tuberculosis consists of combination therapy with five antitubercular drugs. Of these, streptomycin is given in the form of an injection, whereas a single tablet consisting of all the four medicines (isoniazid, rifampicin, pyrazinamide and ethambutol) is available. The dose of this combination medicine is based on the weight of the patient.

Easy-to-use combination kits, containing a combination of the first-line antitubercular drugs are also readily available. The treatment continues for 6-8 months even if the symptoms get better, as it ensures complete recovery and prevents the development of drug resistance.

The DOTS regimen (Directly Observed Therapy - Short Term) is followed in India, where the patient has to take the medicine in front of a DOTS agent. This is to ensure adherence to the treatment.

MDR TB and XDR TB

The tuberculosis bacteria are prone to develop drug resistance. Some patients do not respond to the first line of treatment and develop multi-drug resistant tuberculosis or MDR-TB. There are strains of bacteria resistant to most forms of available drugs and cause a severe form of the disease known as extensively drug-resistant tuberculosis or XDR-TB.

Treatment options for MDR and XDR tuberculosis consist of higher dosing of the first line of drugs and a combination of other oral medicines and injections. The course of the treatment is usually 18 months for MDR-TB and 224 months for XDR-TB.

Some of the common examples include:

Amikacin injections

Streptomycin injections

Levofloxacin preparations

Moxifloxacin preparations

Para-amino salicylic acid

Clofazimine preparations

Imipenem injections

Clarithromycin preparations

Bedaquiline

Supportive care

This involves use of medications aimed to improve the symptoms such as fever, cough, and pain. Some of the common class of drugs used for supportive care of TB are:

Anti-fever and analgesic medicines to provide relief from fever and pain.

Antitussive medications to help reduce cough.

Vitamin B supplements given along with antitubercular medicines to help combat neurological side effects like nerve pain and neuropathies caused by antitubercular medicines.

Antacids to prevent gastro-intestinal symptoms

Medicines to reduce uric acid level (hyperuricemia is known to be a side-effect of TB medicines) such as allopurinol and febuxostat are recommended.

In some cases, a herbal medicine/tonic for the liver is recommended as antitubercular medicines can impact the liver.

Did you know?

“TB cannot be cured” is a myth. In reality, it can be cured for lifetime if a proper treatment plan is followed as it is a bacterial disease. The key is to complete the medication course as advised by your doctor as not abiding by the treatment plan can lead to resistance to antibiotics and relapse of the disease. Get the right treatment from the right expert.

Consult Now!

Home Care For Tuberculosis

With active tuberculosis, you can do the following things to care for yourself at home:

Always use a handkerchief to cover your mouth and nose while sneezing or coughing.

Wash your hands frequently with soap and water or use hand sanitizers.

Take a balanced diet rich in vitamins and minerals.

Drink plenty of fluids throughout the day.

Take plenty of rest. Do not engage in any strenuous activities.

Take the entire course of medicines prescribed by the doctor, even if your symptoms reduce or you start feeling better.

Complications Of Tuberculosis

Most patients recover completely from tuberculosis. However, it may cause serious complications, especially in HIV patients and those who suffer from immunocompromised states. Leaving tuberculosis untreated may further lead to:

Miliary tuberculosis or disseminated tuberculosis

Pleural effusion, pneumothorax, empyema - an accumulation of fluids, air, or pus, respectively, in the lungs

Acute respiratory distress syndrome or fluid build-up in the lungs

Paraplegia or paralysis of the lower body due to tuberculosis of the spine

Tuberculous arthritis of hips or knees

Infertility in men and women, in TB of reproductive organs

Seizures and growth retardation, in TB of the brain

MDR TB and XDR TB

Alternative Therapies For Tuberculosis

There is a limited role of alternative therapies in the treatment of tuberculosis.

Chest physiotherapy may help with the removal of secretions from the lung and improve lung function. It uses different types of breathing exercises. It also includes postural drainage, advising patients to sleep in different positions such as sleeping on the back with their head down. These positions are believed to help in removal of secretions in the lung with help of gravity.

Herbal preparations from medicinal plants such as ginger, turmeric, cinnamon, etc., may have a role in providing symptomatic relief from cough.

Check out our Ayurveda page for detailed information about medicinal herbs.

Click Here!

Living With Tuberculosis

Tuberculosis is a disease that is often associated with a stigma as there are many misconceptions surrounding it. However, with recent improvements in available treatments and public awareness campaigns, the stigma of the disease is declining, and more and more people are recovering completely from the disease. In the active phase of the disease, it is advisable to refrain from interacting with many people and avoid crowded places to prevent transmission. Here are a few tips you need to keep in mind if you are on medications for tuberculosis:

Maintain a routine if you are taking medications by yourself like taking medicines at the same time every day, marking off the date on a calendar or using a weekly pill dispenser.

Inform your doctor if you experience any unusual symptoms or side effects of the medications. Your doctor might consider changing the drugs.

Make sure you complete your course of medications. Not finishing the course or stopping the medications mid-way can not only increase the risk of getting sick and spreading the infection again but can also make the bacteria resistant to the drugs.

Do not forget to follow cough etiquettes like covering your mouth when sneezing or coughing and throwing a used tissue in the trash can.

Ask your doctor about the improvement in your condition, the change in medications, lab tests to be taken, and any questions you have related to the condition. This will help you understand the condition & take care of your health

Caregivers should ensure to avoid close contact with the patient, If possible, let the patient share a single room with proper ventilation.

Eat a diet rich in nutrients like vitamins, minerals, and antioxidants. Avoid eating oily, salty and spicy food. Opt for home cooked foods to boost your immunity and stay healthy.

Psychosocial impact of TB

Although TB is quite common in India, there are still a lot of myths and stigma associated with the condition. Also, lack of support from family and community as well as lack of knowledge about the disease in general and its treatment does affect the overall physical as well as mental state of the patient. Moreover, the long duration of the TB treatment and the economic hardships tend to be exhausting for the patient. This when coupled with a negative emotional status of the patient is known to increase the risk of mental problems such as anxiety and depression, which can further impact the treatment.

This can be dealt with proper awareness about the disease by both the patient and the community. For example:

Medicines free of cost are available for all TB patients at Government hospitals.

Latest guidelines, information and programmes about TB can be easily accessed through Nikshay Patrika, a quarterly newsletter by the Central Tuberculosis Division.

DOTS treatment is free of cost and helps prevent failure of the treatment and lowers the risk of MDR-TB by ensuring strict adherence and uninterrupted treatment for TB.

Unlike pulmonary TB, other forms of TB don't spread through close contact. So avoid shunning the patient from your social circle/community but support them to fight the disease.

Reach out to NGOs and community support groups related to TB which can help you support both physically, emotionally and financially.

Frequently Asked Questions

Is tuberculosis deadly?

Can tuberculosis happen twice?

Can I recover completely from tuberculosis?

How long do I need to take the medicines for tuberculosis?

Can tuberculosis affect young individuals?

Can tuberculosis be cured in HIV co-infection?

What is DOTS?

What is NTEP?

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Type 2 diabetes mellitus

Also known as Diabetes mellitus, Adult onset diabetes, Non-insulin dependent diabetes mellitus (NIDDM), Type 2 diabetes mellitus (T2DM), Hyperglycemia and High blood glucose

Overview

Type 2 diabetes is the most common type of diabetes in which the body fails to effectively use insulin. According to the WHO, more than 95% of people with diabetes worldwide suffer from type 2 diabetes. Until recently, type 2 diabetes was thought to be affecting only adults above the age of 40 years. However, due to stress and an inactive lifestyle, even people in their 20s are also at a high risk of diabetes.

Initially, Type 2 diabetes is mostly asymptomatic. Also, the symptoms tend to develop slowly and go unnoticed for a long time which makes it difficult to diagnose the condition. You might be at a higher risk of type 2 diabetes if anyone in your family has diabetes along with other risk factors such as obesity, inactive lifestyle, etc.

The gold standard test to diagnose type 2 diabetes is HbA1c as it gives you an idea of your blood glucose levels over the past 3 months. However, other tests such as fasting glucose and postprandial glucose tests are also commonly used. Once diagnosed, it is important to go for regular health check-ups and manage your diabetes properly because if left uncontrolled, it can impact other organs such as the kidneys, eyes, heart, nerves and legs.

Type 2 diabetes is managed with the help of diet control, exercise and use of oral medications. In cases of uncontrolled diabetes or high glucose levels, your doctor might recommend the use of insulin injections or pens.

Key Facts

Usually seen in

Adults above 20 years of age

Gender affected

Both men and women

Body part(s) involved

Pancreas

Eyes

Nerves

Feet

Heart

Kidneys

Skin

Reproductive system

Prevalence

Worldwide: 462 million (2017)

Mimicking Conditions

Metabolic syndrome

Hypothyroidism

Hemochromatosis

Pancreatitis

Cystic fibrosis

Infections

Cushing syndrome

Necessary health tests/imaging

Glucose-random blood (RBG) test

Glucose-fasting blood (FBG) test

Glucose postprandial blood (PPBG) test

Glycosylated hemoglobin (HbA1c) test

Treatment

Biguanides: Metformin

Sulphonylureas: Glimepiride & Glipizide

Thiazolidinediones: Pioglitazone

Meglitinides: Repaglinide & Nateglinide

Alpha-glucosidase inhibitors: Acarbose & Miglitol

DPP-4 inhibitors: Sitagliptin & Saxagliptin

Incretin mimetics: Exenatide, Liraglutide & Dulaglutide

Insulin: Lispro, Insulin Isophane & Glargine

See All

Symptoms Of Type 2 Diabetes

Type 2 diabetes is initially asymptomatic, which means it does not show symptoms for a long time. Moreover, it progresses at a very slow pace, which makes it difficult for any of the key warning signs to appear early. This is the reason why it is often said that NO symptoms are one of the most common symptoms of type 2 diabetes.

However, there are some symptoms that may indicate type 2 diabetes which include:

Frequent urination

Excessive thirst

Increased hunger

Unexplained weight loss

Blurry eyesight

Lack of energy/fatigue

Delayed healing of cuts and other injuries

Frequent yeast infections

Numbness or tingling in the hands or feet

Areas of darkened skin, usually affecting the armpits and neck

Dry skin

Causes Of Type 2 Diabetes

Insulin is a hormone produced by the pancreas. The pancreas is located below and behind the stomach. Insulin helps to move blood sugar (glucose) into the cells. Glucose is then stored inside the cells and later used for energy.

In type 2 diabetes, the body does not respond correctly to insulin. This is called insulin resistance. Thereby, blood glucose does not get into cells to be stored for energy. When glucose is not able to enter cells, a high level of glucose builds up in the blood. This is called hyperglycemia.

As blood glucose levels increase, the pancreas is triggered to release more insulin. Over a long time, the pancreas is not able to make enough insulin to meet the body's demands. This leads to the symptoms of type 2 diabetes.

Risk Factors Of Type 2 Diabetes

The factors that increase the risk of type 2 diabetes are as follows:

Age: The risk of type 2 diabetes increases with age, especially after 45 years.

Family history: The risk of type 2 diabetes is higher in case parents or siblings have the condition. Also, genetic predisposition of high cholesterol, high blood pressure or cardiovascular disease can also predispose to type 2 diabetes.

Race and ethnicity: People of certain races and ethnicities like African American, Hispanic/Latino, American Indian, Asian American, or Pacific Islander are more likely to develop type 2 diabetes.

Unhealthy eating habits: Eating a calorie-dense diet with processed foods and beverages, and a diet low in whole, nutrient-rich foods, can significantly increase the risk of type 2 diabetes.

Being overweight or obese: Moreover, fat stored in the belly or abdomen region with waist circumference above 40 inches (101.6 centimeters) for a man or above 35 inches (88.9 centimeters) for a woman poses a higher risk of type 2 diabetes.

Sedentary lifestyle: Less physical activity can lead to weight gain and obesity thereby increasing the risk of diabetes.

Blood cholesterol levels: Low levels of high-density lipoprotein (HDL) cholesterol and high levels of triglycerides and low-density lipoprotein (LDL) can predispose to type 2 diabetes.

Prediabetes: In prediabetes, the blood sugar levels are higher than normal, but not high enough to be categorized as diabetes. If left untreated, prediabetes often leads to type 2 diabetes.

Pregnancy related issues: Gestational diabetes (diabetes during pregnancy) or giving birth to a child weighing more than 4 kgs increases the risk of type 2 diabetes.

Polycystic ovary syndrome (PCOS): PCOS which is characterized by irregular menstrual cycle, excessive facial hair growth and obesity also increases the risk of diabetes.

Smoking: The chemicals in cigarettes cause inflammation throughout the body. Additionally, when these chemicals react with oxygen in the body, they cause cell damage, called oxidative stress. Both oxidative stress and inflammation caused by smoking are related to increased risk of diabetes.

Sleep habits: Sleep disturbances can affect the body’s balance of insulin and blood sugar by increasing the demand on the pancreas thereby leading to diabetes.

Stress: Stress can stimulate the release of various hormones, which can predispose to high blood sugar levels.

Anxiety and depression: Psychological problems like depression are known to increase the risk of diabetes.

Diagnosis Of Type 2 Diabetes

The common lab tests include blood tests and urine tests. In addition to that, your doctor might conduct a thorough physical examination to check for signs of any skin problems. Also, imaging tests might also be advised in some cases to check the effect of diabetes on the nerves and other body organs. Psychiatric evaluation can also be recommended in people during the initial stages as most people tend to go through a rejection phase before finally accepting the fact that they have diabetes.

The commonly recommended blood tests used to diagnose diabetes include:

1. Random blood sugar test

The random blood glucose test is done to measure the levels of glucose circulating in the blood. This test is done to diagnose diabetes. You can take this test at any time of the day as it doesn’t need you to fast unlike other tests for diabetes. However, other tests are required to confirm the diagnosis. The test is done as a part of routine preventive health check-up or if you have symptoms of high blood glucose/hyperglycemia. Diabetes is confirmed, if your blood glucose levels are greater than or equal to 200 mg/dl.

2. Fasting plasma glucose test (FPGT)

This is one of the most common tests prescribed for diabetes. It is a blood test that measures the levels of glucose in the blood in the fasting state (empty stomach). Ideally, it is advised to not eat or drink anything (except water) for 8-12 hours before the test. It is the simplest as well as the fastest test to diagnose and monitor diabetes. If your blood glucose levels are greater than or equal to 126 mg/dl, diabetes is confirmed.

3. Postprandial blood glucose (PPBG) test

It is performed to measure glucose levels in the blood after a period of 2 hours from the start of the last meal. It is usually recommended to screen for prediabetes and also monitor treatment efficacy in patients undergoing treatment for diabetes. The test is usually recommended when the blood glucose level falls between 140 and 200 mg/dl.

4. Hemoglobin A1c (HbA1c) test

It is a blood test that measures a person’s average blood glucose level over the past 2 to 3 months. It is ideally used to check how well your diabetes is managed with medication. However, if your fasting and postprandial levels are high, then HbA1c is advised to confirm the diagnosis. HbA1c levels of 5.7% to 6.4% indicate prediabetes whereas levels higher than 6.5% indicate diabetes.

5. Other tests

If diagnosed with diabetes, you may need to undergo several health tests periodically to prevent complications and learn the effects of high glucose levels on other parts of the body. These include:

Blood pressure

Eye examination

Foot examination

Lipid profile

Kidney function test (KFT)

Liver function test (LFT)

Vitamin B12 test

Dental check-up

Celebs affected

Halle Berry

The Academy-award winning American actress Halle Berry was diagnosed with type 2 diabetes due to genetic predisposition but she makes sure to keep her diabetes under control.

Tom Hanks

On the American Talk show "The Late Show" in the year 2013, Oscar winning Hollywood actor Tom Hanks had revealed that he was diagnosed with type 2 diabetes.

Prevention Of Type 2 Diabetes

With simple lifestyle changes such as diet control, staying active, keeping a tab on your weight and staying away from vices, you can lower your risk of type 2 diabetes. Here are a few tips to get started.

1. Make healthy food choices

Taking care of your diet is one of the most essential components to manage and prevent diabetes.

Switch to oils with high volume of monounsaturated fats & polyunsaturated fats like olive oil, canola oil, soybean oil or rice bran oil. Limit intake to one tablespoon a day.

Restrict intake of foods that have a high glycemic index like white breads, white rice, fatty foods, and soda.

Consume foods with low glycemic index like multigrain flour, whole grains, pulses, and non-starchy vegetables.

Limit consumption of fast food.

5 simple rules you must follow to keep your blood glucose level under control.

Click To Know!

2. Watch your weight

Lose weight to attain body mass index (BMI) between 18.5 and 24.9.

Pay more attention to losing abdominal or belly fat as it can increase the risk of type 2 diabetes more than fat on any other part of the body like thighs, hips, and buttocks.

3. Exercise regularly

Regular exercise can lower blood glucose and possibly reduce the amount of medication you need to treat diabetes, or even eliminate the need for medication.

Even if you do not lose any weight, exercise can help keep type 2 diabetes under control.

Start slowly with a low-impact exercise such as walking, swimming or jogging.

Exercise at least three times a week for about 30 to 45 minutes.

Warm up for 5 minutes before starting to exercise and cool down for 5 minutes after exercise.

Be more active throughout the day. Avoid sitting for more than 2 hours at a stretch in a day.

Parking your car far away, opting for stairs instead of the elevator or walking instead of sitting while talking on the phone can be handy tips to increase physical activity.

4. Manage stress better

Stress can make blood sugar levels harder to control.

It is very important to avoid unnecessary stress and indulge in activities that can help you relieve stress such as reading, traveling, sports, and other hobbies.

Mind-body practices such as tai chi & yoga can help in managing stress and thereby preventing diabetes.

You may join a yoga club nearby or dedicate 10-15 minutes every day for meditation.

Here are 6 amazing ways to battle chronic stress effectively.

Click To Read!

5. Get a good quality sleep

Make lifestyle changes to get sound sleep like going to bed and getting up at the same time every night and keeping electronics out of the bedroom.

Sleep problems like sleep apnea can increase the risk of diabetes. If you have trouble sleeping, consult the doctor at the earliest.

6. Quit smoking

Smoking has been found to directly increase the risk of several diabetes complications such as cardiovascular diseases, stroke, eye diseases, nerve damage, and kidney damage.

It has also been found to reduce blood flow to the feet and other body extremities. This can lead to problems in feet and slow down the healing of injuries.

Hence, it is wise to quit smoking to lower your risk of diabetic complications. Talk to your doctor for measures that can help you to quit smoking.

7. Drink in moderation

Excessive drinking can cause unexpected spikes in blood glucose which can significantly affect your overall health, especially if you have diabetes.

Men should consume no more than 2 drinks per day, and women no more than 1 drink per day. And in case you already are diabetic, alcohol can make it worse.

Do not drink on an empty stomach.

Doctor To Visit

If you have been experiencing symptoms such as tingling sensation or numbness of the limbs, feeling excessively hungry or thirsty, or unexplained weight loss, then it is wise to consult following specialists:

Endocrinologist

Diabetologist

If you are already diagnosed with diabetes, then getting a regular health check-up is a must. This is because chronic or uncontrolled diabetes can impact other major organs of the body such as the eyes, legs, nerves, kidneys, and gums. So, if you suffer from any complications due to diabetes, then getting in touch with the respective specialist can help you to manage and prevent these problems. Some of the specialists who can help depending on the complication are:

Nephrologist

Neurologist

Cardiologist

Ophthalmologist

Dentist

Dietician

Consult India's best doctor's online with a single click. Click here to book an appointment.

Consult Now!

Treatment Of Type 2 Diabetes

Diabetes can be treated with medications and injections along with few lifestyle modifications. Based on your blood glucose level, your doctor might recommend medicines/injections to control diabetes. Some of the common types of medicines for diabetes include:

A. Oral antidiabetics

1. Biguanides

This class of drug helps to improve glucose control by suppressing glucose production by the liver, decreasing the absorption of glucose by the intestine and increasing the insulin sensitivity. Metformin is the most commonly used biguanide to treat diabetes.

2. Sulphonylureas

These drugs are known to increase the secretion of insulin by the pancreas to manage diabetes. Some of the common examples of drugs belonging to this class include:

Glimepiride

Glipizide

3. Thiazolidinediones

This class of drugs help control diabetes by increasing insulin sensitivity in the muscles and fat tissues. Examples of this class of drug include:

Pioglitazone

Rosiglitazone

4. Meglitinides

They increase secretion of insulin by the pancreas to treat diabetes. Examples of this class of drugs include:

Repaglinide

Nateglinide

5. Alpha-glucosidase Inhibitors

As the name suggests, this class of drugs inhibit the enzyme alpha glucosidase thereby decreasing the absorption of glucose by the intestine. Some of the commonly available drugs under this class include:

Acarbose

Miglitol

6. DPP-4 Inhibitors

It works by improving the secretion of insulin by the pancreas thereby helping in the treatment of diabetes. Examples of this class of drugs are:

Sitagliptin

Vildagliptin

Saxagliptin

7. Incretin mimetics

This class of oral antidiabetics are known to increase the secretion of the hormone insulin and help in controlling diabetes. Commonly known as glucagon-like peptide 1 (GLP-1) receptor agonists or GLP-1 analogues, this class includes drugs such as:

Exenatide

Liraglutide

Dulaglutide

B. Injectables

This includes insulin (mainly human insulin) which increases the uptake of glucose by the cells and helps to control diabetes. There are 5 different types of insulin available currently which are recommended based on the severity of the condition. These include:

Rapid-acting insulin (Examples: Lispro & glulisine)

Short-acting insulin (Examples: Insulin regular & semilente)

Intermediate-acting insulin (Examples: Lente & insulin isophane)

Long-acting insulin (Examples: Ultralente & protamine zinc)

Ultra long-acting insulin (Examples: Glargine, detemir & degludec)

Home-care For Type 2 Diabetes

A. Diet in diabetes

In the case of diabetes, it is essential to understand the concept of the glycemic index (GI). The glycemic index of a food refers to the effect the food has on the body's blood sugar levels.

Foods are classified as low, medium, or high glycemic foods and ranked on a scale of 0–100. High GI is when the level is greater than 70, and low levels are less than 51. Diet in diabetes should include low GI foods whereas high GI foods should be avoided or limited. While choosing foods with a high GI, limit the portion size and pair them with sources of protein or healthy fat to reduce the impact on blood sugar.

Foods to prefer

1. Vegetables

Vegetables contain a good quantity of vitamins, minerals and are a great source of fiber. Green, leafy vegetables are full of essential vitamins, minerals, and nutrients. They’re also very low in digestible carbohydrates, so they won’t significantly affect blood sugar levels. Some of the examples of green leafy vegetables include spinach, avocados, cabbage, beans, broccoli, and kale.

2. Fruits

There is mixed perception about intake of fruits for diabetes. Some people believe that diabetics should completely cut down fruits from their diet while some think that one can include as much fruits as they want in their diet as it doesn’t have any impact on blood glucose level. However, neither is true. It is best to include fruits as an integral part of your daily meal plan while keeping a tab on the carbohydrate content.

Watch the video to know more about which fruits to eat and which fruits to avoid.

3. Protein-rich foods

Eating a protein rich diet can be very useful as proteins are more slowly broken down by the body than carbohydrates. They exert less effect on blood sugar level and hence can help to feel fuller for longer hours. Foods which are good sources of protein are fish, lean meats, and chicken.

4. Whole grains

Whole grains contain higher levels of fiber and nutrients than refined white grains. Consuming a diet rich in fiber is important for people with diabetes as it slows the process of digestion and therefore, helps keep blood sugar levels stable. A few examples of whole grains to be included in the diet are brown rice, quinoa, millet, buckwheat, and millet.

5. Seeds

Seeds like flax seeds and chia seeds are rich in fiber and low in digestible carbs. The fiber in seeds can lower blood sugar levels by slowing down the rate at which food moves through the gut. It also helps in maintaining glycemic management in people with diabetes.

6. Nuts

Nuts are a great source of fiber and vitamins and can be beneficial for regulating cholesterol. It has been proven regular consumption of nuts may reduce blood sugar levels. A few examples are walnuts, almonds, hazelnuts, and pistachios.

Foods to limit

1. Carbohydrate-rich foods

Carbohydrates are an important dietary part of all meals. However, people with diabetes are benefitted from limiting their carbohydrate intake in a balanced way. Replacing carbs with other alternative options or by pairing them with a healthy protein source are good options.

2. Saturated and trans fat

Saturated and trans fats in fried food and processed/packaged foods including chips, baked foods etc have been linked to a higher spike in blood glucose.

3. Alcohol

People with diabetes are generally advised to limit their alcohol intake to avoid sudden spikes in blood sugar levels.

4. Sugar-sweetened beverages

Sugar-sweetened beverages like soda, energy drinks, coffee, shakes & sweet tea lack important nutrients, and also contain a concentrated amount of sugar in each serving.

5. Excessive salt

Salt is not directly linked to blood glucose levels, but it is important to limit the amount of salt in case of diabetes management. People with diabetes are more likely to be affected by high blood pressure that is due to taking high salt in the diet, which increases the risk of heart disease, stroke, and kidney disease.

Dr. Beena Bansal (MBBS, MD, DM, Endocrinology) tells us about some simple ways to curb our food cravings. Watch the video now!

B. Exercise in diabetes

Aerobic activity is one of the effective exercise options to control diabetes. When done at moderate intensity it raises your heart rate and makes you sweat thereby helping you to maintain an optimum blood glucose level. Try brisk walking, light jogging, swimming or other aerobic exercises to maintain weight and control diabetes.

C. Regular health check-ups in diabetes

Diabetes requires lifelong commitment towards following a healthy lifestyle, taking medicines on time and getting regular checkups to detect any complications.

Check your blood sugar levels at home at least once a week.

Get your HbA1c levels checked at least twice a year.

In addition, make sure that your eyes, kidneys, heart and skin are in optimal health.

Visit an eye specialist once a year to detect any signs of eye damage (diabetic retinopathy).

Get your kidney function tests done at least 2 times a year.

Inspect your feet regularly for any signs of numbness, pain or growth that may lead to ulceration and complications.

Complications Of Type 2 Diabetes

Insulin deficit, if left unchecked over the long term, can cause damage to many of the body’s organs, leading to disabling health complications such as:

Diabetes retinopathy: High blood glucose levels shall put you at an increased risk of eye problems such as blurred vision, cataract, and glaucoma.

Diabetic nephropathy: Excess glucose can cause thickening of blood vessels in the kidneys. This gradually impairs kidney function and increases the pressure on the kidneys and in the long run leads to chronic kidney failure and kidney failure.

Diabetic neuropathy: High blood glucose levels can affect the nerves by impairing the blood flow to the nerves by causing damage to the small blood vessels. This can result in tingling, numbness, pain or eventual loss of feeling that usually begins at the tips of the toes or fingers and gradually spreads upward. Damage to nerves of the heart can result in irregular heart beat. Nerve damage in the digestive system can cause problems with nausea, vomiting, diarrhea, or constipation.

Cardiovascular diseases: High blood glucose levels not only impairs the blood flow to the heart but can also increase the risk of atherosclerosis, which leads to narrowing of arterial walls throughout the body.

Diabetic ulcers: People with diabetes have an increased risk of developing foot ulcers. A diabetic ulcer is often painless, and people might not even know they have them. It is important to examine feet and legs regularly to identify diabetic ulcers and if needed, get prompt treatment.

Recurrent infections: High blood sugar can weaken the immune system. This may make one more susceptible to infections including bacterial and fungal infections.

Delayed healing: Cuts and blisters can become serious infections due to poor healing. Type 2 diabetes also causes poor circulation to the feet, which causes delayed healing of any cut or an infection. This can also lead to gangrene and loss of the foot or leg.

Hearing impairment: Hearing problems are more common in people with type 2 diabetes.

Sleep apnea: Obstructive sleep apnea is common in type 2 diabetes patients.

Dementia: Type 2 diabetes increases the risk of Alzheimer's disease and other diseases that cause dementia.

Erectile dysfunction: In men suffering from diabetes, there is a high chance of developing erectile dysfunction around 10-15 years earlier than non-diabetics.

Alternative Therapies Of Type 2 Diabetes

Ayurveda

The science of Ayurveda manages diabetes through a combination of activities that include exercise (vyayam), dietary regulation (pathya), panchakarma (bio-purification) and medicines. It is best to consult an ayurveda consultant before taking any ayurvedic medicine for diabetes. Some household herbs and spices that you can include in your diet include:

Powdered jamun seeds can be taken with water or buttermilk (chaach).

Methi (fenugreek) seeds are taken with water 15-20 minutes before each meal. Methi has soluble fibers that slow down the digestion and absorption of glucose.

Bael leaves are squeezed to prepare fresh juice that can be taken along with a pinch of black pepper.

Dalchini (cinnamon) in powdered form can be taken with water as it helps in improving sugar as well as cholesterol level.

Concentrated amla juice taken along with bitter gourd juice, helps in releasing more insulin.

Karela (bitter gourd) juice is recommended to be taken every morning.

Homeopathy

Defined as a complementary medicine, homeopathy majorly concentrates on improving the functioning of the pancreas to produce insulin. Homeopathy experts rely on the patient’s history and temperament to devise a constitutional medication. However, it is recommended to use the homeopathic medicines only if prescribed by the homeopath and that too alongside the usual course of medications suggested.

Yoga

It focuses on mindful exercise where a person’s attention is on the body or breathing and eases away worrying or depressing thoughts from the mind. Restorative yoga involves yoga poses and healing through relaxation techniques with conscious breathing and power yoga has been found to benefit for losing weight (a risk factor for diabetics). It has been studied for controlling both the symptom and complication associated with type 2 diabetes mellitus.

Acupuncture

This technique involves the insertion of very thin needles through the skin at strategic points of the body. Acupuncture may be effective in treating not only diabetes, but also in preventing and managing complications of the disease.

Living With Type 2 Diabetes

Learn more about the condition by reading about the condition and its complications online. In case of any doubt, get your queries answered by your expert. This includes knowing when to check blood glucose level, the lifestyle changes to follow, the type of glucometer to use, etc.

1. Know the highs and lows

Diabetes can put them at risk of various health problems right from obesity and heart disease to depression. Hence, learn to accept the fact and ensure you help patients to control blood glucose levels.

2. Go for appointments with the patient

This can help you to know what extra precautions to take and what changes you need to make to ensure the proper management of diabetes.

3. Follow the same diet pattern as the patient

This can not only make you more cautious when it comes to eating healthy but sharing the same fitness plan can help you to ease stress and stay healthy. Lifestyle changes become habits when done together. You can even get diet-related advice through e-consultation.

4. Talk to other caregivers and also let the patient connect with other diabetics

Sharing the experiences can make it easy to deal with diabetes and understand more about the condition. You can reach out to diabetes communities or online support groups for help.

Frequently Asked Questions

Can eating fruits cause diabetes?

How is bitter gourd (karela) juice helpful in diabetes?

Are artificial sweeteners good for people with diabetes?

Can diabetes be cured?

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Typhoid fever

Also known as typhoid fever, enteric fever

Overview

Typhoid is an age-old intestinal infection most commonly caused by the bacteria Salmonella typhi. It is highly prevalent in areas with inadequate access to clean water and sanitation. Transmission of the disease is from human to human. It usually spreads by food and water that has been contaminated with feces of an infected person.

Typhoid is characterized by symptoms like fever, abdominal discomfort, loss of appetite, weakness, rash, headache, constipation or diarrhoea. Typhoid fever is treated with antibiotics and a timely treatment ensures quick recovery in most of the cases. If left untreated, it can lead to life-threatening complications.

Typhoid can mostly be prevented with good hygiene habits and consumption of purified water. Vaccination for typhoid is also available but is only partially effective. They are usually recommended to those travelling to areas where typhoid is endemic.

Key Facts

Usually seen in

Children aged 6 months to 3 years

Adults between 5 and 19 years old.

Gender affected

Both Men and Women, but more common in younger children

Body part(s) involved

Stomach

Intestine

Prevalence

Worldwide: 11–21 million cases annually (2018)

India: 4.5 million cases annually(2021)

Mimicking Conditions

Dengue fever

Malaria

Amebiasis

Leptospirosis

Q fever

Giardiasis

Necessary health tests/imaging

Blood tests

Stool and urine analysis

Widal antigen test (Slide agglutination and Tube agglutination)

Typhi dot tests

Treatment

Antibiotic therapy: Ciprofloxacin, Amoxicillin, Trimethoprim-sulfamethoxazole & Chloramphenicol

Vaccination

See All

Symptoms Of Typhoid Fever

Typhoid is a bacterial infection which affects the intestine. Generally, the signs and symptoms of typhoid fever develop gradually over the period of 10-14 days after exposure to the bacteria. Onset of the disease is usually gradual. The typical signs and symptoms of typhoid include:

Irregular fever that can go up to 104.9 ˚F (40.5 ˚C)

Headache

Pain in the abdomen

Tiredness and weakness

Muscle pain

Loss of appetite/anorexia and weight loss

Constipation or diarrhea

Confusion

Low pulse rate

Rose colored spots on the neck, chest or abdomen

Swollen stomach

Dry cough

Later as the infection progresses a person may show signs of extreme exhaustion and lie still with the eyes half-closed. This is referred to as the typhoid state. Typhoid may prove to be fatal if left untreated, as it can lead to many complications.

Causes Of Typhoid Fever

Typhoid is highly prevalent in areas with inadequate access to clean water and sanitation. That is why developing countries and underdeveloped countries in Africa, South America, and Southeast Asia are known to be endemic for typhoid.

Typhoid fever is caused by the bacteria Salmonella typhi. The bacteria is transmitted through the oral-fecal route by consumption of water or food contaminated by feces of an acutely infected or a chronic, asymptomatic carrier. The various reasons of getting infected could be:

You eat food or drink a beverage that has been touched by a person who is carrier and is shedding Salmonella Typhi in their poop and who has not washed their hands thoroughly after going to the bathroom

Consuming water that has been contaminated with infected fecal matter containing Salmonella Typhi

Contaminated water used to rinse fruits and raw vegetables

Using ice made out of contaminated water

Fruits and vegetables grown in soil contaminated with infected feces

Milk that has been diluted with contaminated water

Who Should NOT take the Typhoid vaccine?

Talk to your doctor before getting vaccinated. If you have the following issues: Have had an allergic reaction after a previous dose of typhoid vaccine, or have any severe, life-threatening allergies. Have a weakened immune system. Are pregnant or breastfeeding, or think might be pregnant. Are taking or have recently taken antibiotics or anti-malarial drugs. Consult our doctors to seek professional help.

Consult Now!

Risk Factors For Typhoid Fever

There are certain factors that can increase the risk of typhoid fever. These include:

Traveling to endemic areas:There are some parts of the world that are worst affected by typhoid.If possible, avoid traveling to these places especially in the peak season of the disease.

Poor Hygiene Habits: Hygiene plays a very important role in preventing a lot of diseases including typhoid. Good hygiene practices like washing hands after using the toilet and before eating food can keep you safe from contracting typhoid.

Consuming contaminated fruits and vegetables: Fruits and vegetables can also get contaminated if they are washed with dirty water or grown in soil polluted by human excreta.

Poor sanitation conditions: Exposure to contaminated environment and proximity to flying insects that can carry germs from feces increases the risk of typhoid.

Coming in close contact with a person having typhoid: Coming in close contact with a person suffering from typhoid

Health care workers: Healthcare workers at the ones at the maximum risk of infections. Since they handle the patients day and night, it is easy for them to contract the disease

Crowded housing with shared toilets: People living in crowded areas with shared toilets are more susceptible to typhoid.

Diagnosis Of Typhoid Fever

If anyone in your family suffers from typhoid or if you experience any signs and symptoms of typhoid fever, it is wise to consult a doctor. Your doctor will do a physical examination and advise a few tests to diagnose the condition. Physical findings in the early stages include abdominal tenderness, enlarged spleen and liver, enlarged lymph nodes, and the development of a rash (also known as rose spots because of their appearance). However, the clinical presentations may vary from person to person.

The laboratory investigations include:

1. Blood tests

This includes tests to detect IgM and IgG antibodies and blood culture tests to detect the bacteria Salmonella typhi.

2. Stool and urine analysis

To check for the presence of the bacteria in the stool and urine samples.

3. Bone marrow culture

This test is also recommended but it is rarely required except in patients who have already received antibiotics and are not getting better. It is one of the most sensitive tests for typhoid fever.

4. Widal antigen test

This test can be done in two ways: Slide agglutination and Tube agglutination.The results are obtained after a longer waiting phase of about 10 days. The conventional widal test detects antibodies to S.typhi from 2nd week of onset of symptoms.

5. Typhi dot tests

Typhi tests serve as a marker for recent infections. It can detect early rising antibodies that are predominantly IgM.

Book your test now, by just sitting back at home.

Book Now!

Celebs affected

Arnold Bennett

He was a famous English novelist, who died in 1931 because of typhoid, after unwisely drinking tap water in a Paris restaurant, despite being advised by the waiter not to do so.

Mary Mallon

Commonly known as Typhoid Mary, she was an Irish born american cook who was identified as the first asymptomatic carrier of the disease in the United States.

Prevention Of Typhoid

Typhoid can be prevented by following good hygiene practices such as:

Drinking only purified or mineral water.

Always wash your hands with soap and water after using restrooms, before eating or cooking food.

Improving sanitation facilities or avoiding common unhygienic toilets.

Maintaining optimum personal hygiene like avoiding sharing towels and other personal care items.

Travelers should avoid drinking untreated water, adding ice to their drinks, roadside, uncooked or unhygienic food.

Two vaccines are available for people travelling to areas where risk of typhoid fever is high. One is given as a single shot at least one week before travel. Other is given orally in four capsules, with one capsule to be taken every other day. Neither vaccine is 100% effective. Both require repeat immunizations because their effectiveness wears off over time.

Specialist To Visit

If you suspect having symptoms of typhoid do not hesitate and reach out to your General physician at the earliest. If you test positive for typhoid you can also consult the following:

Pediatrician (in case of children)

Internal Medicine Specialist

Infectious Disease Specialist

Take our medical professionals advice and learn more about your symptoms.

Consult Now!

Typhoid vaccine is not 100% effective and is not a substitute for being careful about what you eat or drink.

There are two vaccines to prevent typhoid fever. One is an inactivated (killed) vaccine and the other is a live, attenuated (weakened) vaccine. But vaccination is required time and again to safeguard oneself from typhoid, as the efficacy of vaccine wears off over time. Read more about typhoid fever treatment and prevention.

Click Here Now!

Treatment Of Typhoid

1. Antibiotic therapy

Antibiotics are the first line and only effective treatment option for typhoid fever. In most areas, fluoroquinolones are the most effective drug of choice. However, they are increasingly met with resistance. Some of the commonly used fluoroquinolones are:

Ciprofloxacin

Amoxicillin

Trimethoprim-sulfamethoxazole

Chloramphenicol

Due to increased resistance to ciprofloxacin, the newer drugs of choice are:

Azithromycin

Ceftriaxone

2. Vaccination prophylaxis

The vaccine is recommended for those traveling to areas with a high risk of exposure. The World Health Organization Strategic Advisory Group of Experts on Immunization recommended the use of typhoid conjugate vaccines (TCVs) in India. It is given as intramuscular, single-dose vaccines for those above 6 months and older.

3. Miscellaneous treatment

This includes supportive and symptomatic care such as:

Maintaining adequate hydration during diarrhea

Ensuring proper ventilation and oxygenation for respiratory complications

Using analgesics and antipyretics to manage the symptoms

Making sure to use safe drinking water and follow proper hygiene and sanitation

Did you know?

Even after antibiotic treatment, a small number of people who recover from typhoid fever continue to harbor the bacteria. These people, known as chronic carriers, no longer have signs or symptoms of the disease themselves. However, they still shed the bacteria in their feces and are capable of infecting others.

Consult Now!

Home Care For Typhoid

If typhoid fever is diagnosed in its early stages, a course of antibiotic tablets may be prescribed. Most people need to take antibiotics for 7 to 14 days.

Take ample amount of rest.

Drink plenty of fluids like purified water, coconut water, herbal teas, electrolyte solutions and clear soups.

Eat light, healthy, nutrient dense and hygienic food that is easy to digest. A good nutritious balanced diet should should include:

High calorie foods such as boiled potatoes, boiled rice, banana, porridge, etc.

Water rich fruits such as watermelons, grapes, muskmelons, oranges, etc.

Plenty of fluids such as purified water, fresh fruit juices, coconut water, lime water, buttermilk, soups, etc.

Dairy products such as milk, curd, and eggs.

Avoid deep fried, oily and junk food as it can cause stomach pain as well bloating.

High fiber foods such as whole grains and cereals.

Oily foods such as butter, fried foods, etc

Spices such as turmeric, chilies, vinegar, pepper, etc.

Raw vegetables like cabbage, capsicum, radish, etc

Maintain good standards of personal hygiene, such as regularly washing hands and thus reducing the risk of spreading the disease.

Keep in touch with your General Physician if new symptoms develop while being treated at home.

Complications Of Typhoid Fever

Complications caused by typhoid fever usually only happen in people who haven't been treated with appropriate antibiotics. About 1 in 10 people experience complications, which usually develop during the 3rd week of infection.

The 2 most common complications in untreated typhoid fever are:

1. Internal Bleeding in the digestive system

Most internal bleeding that happens in typhoid fever isn't life-threatening, but it can make you feel very unwell. Few Symptoms of internal bleeding are:

Feeling tired all the time

Breathlessness

Pale Skin

Irregular heartbeat

2. Splitting (Perforation) of a section of the digestive system

Perforation is potentially a very serious complication. This is because bacteria that live in your digestive system can move into your stomach and infect the lining of your abdomen. This is known as Peritonitis. The most common symptom of peritonitis is sudden abdominal pain that gets progressively worse.

What will happen if typhoid is left untreated?

If not treated and sometimes even after treatment, there can be serious complications due to typhoid such as

Pneumonia

Meningitis (inflammation of the meninges of the brain)

Osteomyelitis (infection in bones)

Intestinal perforation

Intestinal hemorrhage

Inflammation of the heart muscle (myocarditis)

Inflammation of the lining of the heart and valves (endocarditis)

Inflammation of the pancreas ( pancreatitis)

Click Here Now!

Alternative Therapies Of Typhoid Fever

Home Remedies For Typhoid

1. Banana: Bananas can bring down the fever and treat diarrhea in people having typhoid. The pectin present in bananas is a soluble fiber that helps absorb liquid in the intestines, thus reducing diarrhea. Moreover, bananas have a high content of potassium that balances the lost electrolyte during diarrhea and fever caused by typhoid.

Tip: Eat 2 to 3 ripe bananas daily until your typhoid symptoms subside.

2. Buttermilk: Drinking buttermilk is another excellent herbal treatment for typhoid fever. It is easy on the stomach and aids in recovery.

Tip: Add 2 teaspoons of freshly extracted juice of coriander leaves to 1 cup of buttermilk. Drink this 2 times daily for 1 to 2 weeks.

3. Cloves: Cloves are also helpful for treating typhoid fever. The essential oils in cloves have antibacterial properties, thus helping in fighting the bacteria triggering typhoid fever.

Tip: Add 5 clove buds in plain water and boil it till it remains half of the initial amount, strain, and drink for at least a week.

4. Garlic: The antimicrobial properties of garlic help fight off bacteria that cause typhoid fever. It will also boost your immune system. Moreover, it means that garlic helps eliminate the infection by flushing out and killing the bacteria within your body.

Tip: Eat 2 garlic cloves on an empty stomach for a couple of weeks to help get rid of typhoid fever symptoms.

5. Basil: Basil is another effective treatment for typhoid fever. This herb has antibiotic, immune boosting, and antibacterial properties that can help get rid of the bacteria that cause typhoid fever.

Tip: Add 20 basil leaves and 1 teaspoon of crushed ginger to 1 cup of water and boil it until the solution reduces by half. Pour a little amount of honey and drink this tea 2 or 3 times a day for a few days.

6. Homemade Oral Rehydration Solution (ORS): Fluid replacement is essential to replenish fluid lost through diarrhea and prevent dehydration. ORS will reduce the intensity of typhoid symptoms and aid recovery.

Tip: Mix ½ small spoon of salt and 6 small spoons of sugar in 4 cups of clean drinking water

and drink this solution until complete recovery.

7. Apple Cider Vinegar (ACV): ACV has acidic properties and is a good home remedy for typhoid fever. It brings down a high fever as it draws out heat from the body of the person suffering from typhoid.

Living With Typhoid Fever

Typhoid if diagnosed and treated timely has a very good prognosis. Make sure to complete your antibiotic course as prescribed by your doctor.

Patients suffering from typhoid fever usually complain about gastrointestinal or digestive problems like loss of appetite. Eating small healthy meals spread out during the day can help in maintaining energy levels.

Typhoid disease can also lead to weight loss. Hence a high calorie diet including food like boiled potatoes, sweet potatoes, and bananas can be consumed to help maintain body weight. Also include protein-rich foods such as legumes, cheese, and yogurt in your meals. Avoid meat, spicy food, and deep-fried items as they may be difficult to digest.

High fever and diarrhea are major symptoms of typhoid, and both can lead to dehydration. To maintain the body fluid requirement one should take plenty of fluids like purified water, fresh fruit juices, soups, coconut water etc.

Frequently Asked Questions

Which organ is affected by typhoid?

Can animals spread typhoid fever or paratyphoid fever to people?

Is typhoid a sexually transmitted disease?

Where is typhoid most common?

What does typhoid rash look like?

How long does typhoid stay in your body?

Can someone get typhoid twice?

Can typhoid be cured completely?

What happens if typhoid is left untreated?

How long is typhoid shot good for?

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Bulimia nervosa

Also known as Bulimia

Overview

Bulimia nervosa is a eating disorder characterised by episodes of binge eating a large amount of food at a time followed by self-induced vomiting (purging) to prevent any weight gain. Consuming laxatives or diuretics, fasting, or excessive exercising are other inappropriate methods adopted in the pursuit of weight loss.

While there is no known specific cause for bulimia, family history and psychological as well as sociocultural stressors are thought to contribute to the development of this condition. People with bulimia nervosa usually have low self esteem about their body regardless of their body weight. It can affect people who are underweight, normal weight, or overweight and is more common in women and adolescents.

Bulimia has adverse affects on both physical and mental health. The complications can potentially upset every organ system of the body.

This illness is usually treated through a comprehensive approach that includes nutritional counselling, psychotherapy, family therapy and medications.

Key Facts

Usually seen in

Individuals between 12-25 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Stomach

Intestine

Brain

Kidney

Heart

Mimicking Conditions

Biliary disease

Irritable bowel syndrome (IBS)

Prader-Willi syndrome

Klein-Levin syndrome

Diabetes mellitus

Binge eating disorder

Anorexia nervosa

Major depressive disorder

Borderline personality disorder

Necessary health tests/imaging

Physical exam

Lab tests: Complete blood count (CBC), Serum electrolyte test, Thyroid test, Liver function test, Kidney function test & Urinalysis

Psychological evaluation

Imaging studies: X rays & Electrocardiography (ECG)

Treatment

SSRIs: Fluoxetine, Citalopram & Sertraline

Trazodone

Antiepileptic medications: Topiramate

Treatment of dehydration: Fluid therapy

Treatment of constipation: Polyethylene glycol & Lactulose

Psychotherapy: Family-based therapy (FBT), Cognitive behavior therapy (CBT), Dialectical behavior therapy (DBT), Acceptance and commitment therapy, Interpersonal therapy (IPT) & Nutrition counseling

Specialists to consult

Primary care physician

Nutritionist

Psychiatrist

Gastroenterologist

Symptoms Of Bulimia Nervosa

The typical symptoms of bulimia nervosa include:

Psychological and behavioral symptoms

Being obsessive about food and weight

Fear of gaining weight

Eating large amount of food at once

Loss of control during eating

Trying to lose weight by vomiting, exercising, dietary supplements, herbal products, or fasting after overeating

Restricting calories between binge eating

Self induced vomiting

Peculiar eating habits or rituals

Inappropriate use of laxatives or diuretics

Irregular or absence of menstruation

Anxiety

Depression

Low self-esteem

Feelings of helplessness

Intense unhappiness with self body shape and size

Physical symptoms

Sore throat

Tiredness

Dental problems due to erosion of enamel from vomiting

Swollen cheeks or jaw line

Constipation

Acid reflux

Dehydration

Are you just overeating occasionally or is it an eating disorder?

Find Out Now!

Causes Of Bulimia Nervosa

The exact cause of bulimia nervosa is not known. However, carious causes that are thought to trigger bulimia are discussed below:

Biological causes

Genetics

Genetics plays a very important role in developing eating disorders like bulimia nervosa.One bulimia susceptibility gene is linked to the short arm of chromosome 10. Another gene for bulimia is thought to be on chromosome 14.

Studies supporting this theory suggest that twin siblings have a 50% chance of having an eating disorder if the other twin has the disease.

Neurobiology

Serotonin is a neurotransmitter that affects appetite and mood. Low levels of serotonin in some individuals can trigger eating disorders such as bulimia. These altered serotonin levels can lead to disturbed mood and binge eating.

Psychological factor

The idea of having a perfect body also predisposes the person to develop bulimia nervosa.

Socio-cultural factors

The cultural preferences for being lean due to exposure to social media or other factors that portray a slim body as an ideal symbol can also cause bulimia nervosa.

Did you know?

Emotional eating is addictive in nature and this anxiety-induced hunger takes a heavy toll on the quality of our life. Here are 6 effective ways to get rid of it.

Tap To Know!

Types Of Bulimia Nervosa

According to the behavior, bulimia nervosa can be classified into two major types:

Purging type: In this, patients often use self induced vomiting as a technique to avoid weight gain after binge eating. Other techniques such as excessive use of laxatives and diuretics can also be used in order to prevent weight gain.

Non-purging type: This type is characterized by using other unappropriate means to avoid weight gain such as excessive exercise or fasting.

Risk Factors For Bulimia Nervosa

Age

The chances of bulimia nervosa is high in teenage years due to pressure of having a certain body type.

Gender

This eating disorder often affects females as compared to males. Teen girls between 15 to 19 years of age are at higher risk of developing this disorder.

Family history

People with bulimia are more likely to come from families with a history of eating disorders, physical illness, and other mental health problems. Other illnesses, such as substance abuse, anxiety disorders, and mood disorders are common in people with bulimia.

Early menarche

Early start of menstruation (periods)or menarche can trigger bulimia nervosa due to sexual development which increases the need of attention. It also increases the deposition of adipose tissue in the body which can lead to dissatisfaction and trigger bulimia nervosa.

Obesity

An obese person usually experiences pressure from family and peers to be thin which can trigger symptoms of bulimia nervosa. The increased body weight also triggers other risk factors of bulimia.

Here are 6 health risks of obesity that you need to know.

Read To Know!

Dieting

The excessive calorie restriction for a long period of time can cause negative effects which can lead to binge eating and purging behavior.

Note: Bulimia is very commonly seen in models and actors associated with the fashion or entertainment industry due to the obsession of having a perfect body. Studies suggest that about 40% of models engage in some sorts of eating disorders. 25% of models are reported to use self induced vomiting as a method to avoid weight gain.

Diagnosis Of Bulimia Nervosa

DSM-5 guidelines

The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) includes the following diagnostic criteria for diagnosing bulimia nervosa.

Recurrent episodes of binge eating which is characterized by both of the following:

Eating, in a discrete period of time (e.g., within a two hour period)

Lack of control over eating during the episode

Inappropriate compensatory behavior to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, fasting, or excessive exercise.

Both of the above episodes occur at least once a week for three months.

Self-evaluation depends upon body shape and weight.

Binging or purging does not occur exclusively during episodes of behavior that would be common in those with anorexia nervosa.

There is no perfect test to diagnose bulimia nervosa. However, several tests are performed to check the effect of the disease on the overall health of the body.

Physical exam

It includes assessment of the height, weight and the vital functions of the body such as heart rate, blood pressure, and temperature. Skin and nails are also examined in this condition.

Lab tests

Lab tests do not confirm bulimia, however these tests are useful to determine any underline health illness. Some of the common lab tests include:

Complete blood count (CBC)

Serum electrolyte test

Thyroid test

Liver function test

Kidney function test

Urinalysis

Psychological evaluation

This involves assessment of thoughts, feelings, and eating habits by a therapist or mental health provider. It may also involve filling a psychological self-assessment questionnaire.

Imaging studies

X-rays: These are done to measure bone density and for assessing any stress fractures.

Electrocardiogram (ECG): Self-induced vomiting in bulimia can cause hypokalemia (low level of potassium in blood) which can cause heart problems such as arrhythmias(irregular heartbeat). In such cases, ECG is done to diagnose the activity and function of the heart.

Celebs affected

Richa Chadha

The famous actress Richa Chadha accepted that she developed bulimia nervosa when he came to Mumbai to become an actor. She stated that she started overeating and unable to sleep well.

Lindsay Lohan

Lindsay Lohan, famous fashion model, opened about her journey of bulimia in Vanity Fair 2006. She stated that she was sick and scared. She later recovered from it and now is comfortable in her own skin.

Lady Diana

he late lady Diana suffered from bulimia nervosa and was always candid and honest in describing her struggles with the condition.

Specialist To Visit

Most people with bulimia think that they are normal and don’t accept that they are behaving abnormally. In such cases, following questions may help in diagnosing the condition.

Do you have repeated episodes of binge eating?

Do you feel a lack of control over your eating during an episode?

Do you engage in inappropriate purging behaviors?

Have you experienced binge eating at least once a week for three months?

Does your body weight or shape have a strong influence on your self-image?

Specialists that can help manage this condition include:

Primary care physician

Nutritionist

Psychiatrist

Gastroenterologist

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

Consult Now!

Prevention Of Bulimia Nervosa

There is no sure way to prevent bulimia nervosa because it is affected by several factors. However, following factors may help in reducing the risk of bulimia.

Adhering to lifestyle guidelines such as eating on time, eating a balanced diet, and exercising regularly. Sound and adequate sleep also plays a pivotal role in maintaining overall health.

Developing a healthy attitude towards eating

Having a positive attitude towards body size and shape

Education and awareness about bulimia nervosa

Early treatment in case of any suspicion

Balancing work, social life, adequate rest, and exercise

Maintaining a sound mental health

Did you know?

Depression could be the leading global cause of illness by 2030. Timely and accurate diagnosis followed by an effective treatment is the only way through which we can halt the rapidly increasing numbers. Here are some effective ways to reach out to your close ones coping with mental health issues.

Read Now!

Treatment Of Bulimia Nervosa

The primary goal of therapy is to inhibit the two key symptoms of bulimia nervosa which are binge eating and purging.

Pharmacotherapy

Anti- depression medications

These medications have shown to ease symptoms of bulimia nervosa which includes reducing the frequency of binge eating and vomiting episodes. Some egs include:

Fluoxetine

Citalopram

Sertraline

Trazodone

Anti-epileptic medications

These medications, such as topiramate, have shown a reduction in binge episodes. However, the side effects especially weight loss and cognitive problems should be carefully monitored while using this medication.

Treatment of associated symptoms

Treatment of dehydration

Bulimia nervosa can lead to dehydration, for which advised medical intervention such as saline administration is indicated to compensate for the lost fluid.

Treatment of constipation

Constipation is very common in bulimia nervosa. The treatment includes hydration, exercise and use of dietary fiber. In severe cases, low doses of polyethylene glycol and lactulose are used.

Psychotherapy

Psychotherapy helps the patient understand the issue in a better way and how to cope with it. The various types include:

Family-based therapy (FBT): Also called the Maudsley method, it engages parents/family in the process of restoring the patient to a healthy weight at home.

Cognitive behavior therapy (CBT): This therapy aims to improve mental health, and the primary focus is on addressing the distorted views on self body image.

Dialectical behavior therapy (DBT): This therapy aims at recognizing the triggers and methods to manage the factors causing bulimia nervosa. DBT also helps patients in managing their mental health balance.

Acceptance and commitment therapy: This therapy aims at developing self-motivation rather than changing your thoughts and feelings.

Interpersonal therapy (IPT): This therapy helps patients to recognize and solve problems in their relationships. Improving relationships and mental health has been found to reduce eating disorder symptoms.

Nutrition counseling: A counseling with a nutritionist can help you understand the importance of diet and restoring normal eating patterns.

Home-care For Bulimia Nervosa

Nutritional planning

The effective management of bulimia nervosa requires conscious eating through understanding the calorie intake and dietary needs of the body. Keep a record of what you are eating. A well balanced nutritional planning helps in overcoming the impulsive binge eating and purging.

It is utmost important to make the right and informed food choices and develop sound eating.

Read More!

Yoga

The patients of bulimia nervosa have a lack of physical and mental control over their actions and thoughts of self-image respectively. Yoga is an excellent tool to relieve mental stress and in controlling behavioral symptoms.

Yoga emphasizes the holistic improvement of mind, body and the soul. Here are some of the health benefits of yoga!

Click To Read!

Meditation

It aids in calming the mind and focusing on inner self. It has shown to improve the thought of self image and impulsive behavior such as binge eating.

Emotional self care

Low self-esteem is one of the major risk factors of bulimia nervosa. Self care includes constantly reminding yourself that you are a good & beautiful person, indulging in activities that you love, thinking about the moments of your success. This can actually help in the treatment of mood swings and depression.

Being happy and healthy starts with small, everyday habits and trying some of these can make a huge difference to your life.

Read Now!

Complications Of Bulimia Nervosa

Most of the complications associated with bulimia nervosa are linked to the method used by the patient to eliminate foods from the body. Excessive vomiting and overuse of laxatives can also severely affect the digestive system. Various complications affecting the different body parts are discussed below:

Skin, hair and nails

Most of these complications start to appear when body mass index (BMI) drops below 16. The complications include:

Hair loss

Dry skin

Rapid growth of excessive hair especially on face)

Swelling of the lips

Orange discoloration of the skin due to excess carotene in the sweat

Fragile nails

People of bulimia can develop Russell’s sign due to mechanically inserting the fingers into the mouth to induce vomiting. This sign refers to the abrasions on the back of the hand developed due to repetitive exposure of the hands into the mouth.

Eyes and nose

The repetitive act of self-induced vomiting can cause red patches inside the white (conjunctiva) of the eye. Patients may also experience repeated episodes of nose bleeds due to purging.

Dental

The act of self induced vomiting exposes the oral cavity to gastric acid which can lead to several dental complications. Dental erosions are usually noticed after 6 months of regular onset of self induced vomiting.

Binging on high carbohydrate content food and carbonated beverages can also lead to dental caries. The other dental complications that can develop over a period of time include:

Increased tooth sensitivity

Xerostomia (dry mouth)

Gingivitis (inflammation of the gums)

Gum irritation

Gum bleeding

Sialadenosis (salivary gland hypertrophy)

Throat

The repeated exposure of acidic contents to the vocal cords and surrounding areas can lead to:

Hoarseness in the voice

Difficulty in swallowing

Chronic cough

Burning sensation in the throat

Repeated sore throat

Gastrointestinal

Repeated vomiting can lead to several gastrointestinal complications that include:

Esophagitis

Esophageal erosions

Esophageal ulcers

Barrett’s esophagus (change in the mucosal lining of the esophagus)

Gastrointestinal bleeding

Boerhaave’s syndrome (esophageal rupture) is a rare complication of bulimia nervosa. The syndrome is characterized by chest pain, shortness of breath. Painful yawning can also be seen in patients who have tachycardia (increased heart rate).

Cardiac

Dehydration due to vomiting can cause various cardiac complications. The excessive loss of electrolytes in vomiting can lead to hypokalemia – which is low levels of potassium which also negatively affects the heart. Some of the cardiac complications include:

Sinus tachycardia (electrical signals from the heart’s sinoatrial (SA) node make the heart to beat faster than normal)

Low blood pressure

Orthostasis (low blood pressure while standing)

The use of ipecac as an inducer for vomiting can also lead to several life threatening complications which include:

Ventricular arrhythmias (irregular heartbeats which can lead to syncope and palpitations)

Congestive heart failure

Cardiac death

Lungs

In patients who purge via self vomiting, following complications may develop:

Aspiration of regurgitated food (inhalation of gastric content into the airway)

Pneumomediastinum (presence of air in the space in the chest between the two lungs)

Alternative Therapies For Bulimia Nervosa

Home remedies

Aloe vera: The binge eating and self induced vomiting in bulimia nervosa deprives the body from getting appropriate nutrition. It also causes bloating which makes the patient even more concerned about their body shape. Aloe vera soothes the stomach and also helps in reducing bloating.

Probiotics: Bulimia nervosa causes loss of beneficial bacteria that the body needs to maintain the good health of the gut. Probiotics heals the digestive system and also helps in the cultivation of good bacteria. It also increases the nutrient intake efficiency of the body.

Ginseng: It stimulates the appetite and also boosts mood. It has also shown to relieve anxiety and depression that is closely associated with bulimia nervosa.

Orange (santra): It is an excellent source of Vitamin C that helps in fighting any infection due to low immunity. They also stimulate appetite and help in reducing the desire to binge eat.

Spinach (palak): It is a good source of folic acid that has shown to reduce depression. It also helps in rebuilding the health of the digestive system.

Salmon: This fish is high in omega-3 fatty acid that helps in reducing anxiety and stabilizing mood. It also helps in balancing the metabolism of the body.

Living With Bulimia Nervosa

Bulimia nervosa is a mental disorder and it affects one’s body, mind and soul. Living with bulimia nervosa can be challenging as the person always lives in dissatisfaction with their body image. Along with pharmacotherapy and conscious eating, following tips will also help the patients in speedy recovery.

Focus on your therapy.

Take medications as directed.

Eat when hungry, and stop when full.

Appreciate your body.

Say “no” to diets.

Go for nutritional counseling to learn about healthy eating.

Try yoga and meditation.

Be open and honest about your recovery.

Be aware of the risk of relapse.

Do things that make you happy.

Engage yourself in some activities such as gardening, painting etc when the desire to binge is too high.

Join support groups.

Build a good support system with your parents, partner or friends.

Get enough sleep.

Tips to sleep better!

Proper undisturbed sleep is important for improving your mood, focus and self-control. When you sleep your brain literally recharges, removing toxic proteins that accumulate during the day. This ensures that you wake up alert and clear headed. Here are some habits that can help you get a sound sleep.

Tap To Know!

Frequently Asked Questions

Does bulimia nervosa affect a woman's chances of getting pregnant?

What happens if a woman having Bulimia gets pregnant?

What is the difference between anorexia nervosa and bulimia nervosa?

Do all bulimia patients purge?

How bulimia affects oral health?

How can bulimia nervosa be noticed in your weight change?

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Ulcerative colitis

Also known as Chronic non-specific ulcerative colitis, Colitis gravis, Idiopathic nonspecific ulcerative colitis, and Inflammatory bowel disease (IBD).

Overview

Ulcerative colitis is an inflammatory bowel disease (IBD) that causes inflammation and ulcers in your digestive tract. It is a chronic condition that affects the innermost lining of your large intestine (colon) and rectum.

Individuals with ulcerative colitis generally present with diarrhea and blood in the stools, other symptoms can be stomach cramps, fatigue, weight loss, and fever in severe cases.

It generally affects the middle age group, but children can also be affected by it. The exact cause is still unknown but the use of medications like NSAIDs, antibiotics, and contraceptives along with diet plays an important role in the development of this disease.

Ulcerative colitis is a condition with phases of relapse and remission. Drinking enough water, eating foods that are low in fiber, avoiding certain medications, and staying away from smoking can reduce the risk of ulcerative colitis to a greater extent.

Treatment mainly consists of managing the symptoms and there are several new treatments that can greatly reduce the discomfort and bring about long-term remission.

Key Facts

Usually seen in

Children below 15 years of age and adults between 30 to 40 years of age.

Gender affected

Both men and women.

Body part(s) involved

Colon

Rectum

Prevalence

World: 1.8-8% (2020)

Mimicking Conditions

Crohn's disease

Parasitic colitis

Tuberculosis

Radiation colitis

Colon cancer

Toxic megacolon

Bacterial/viral gastroenteritis

Necessary health tests/imaging

Blood tests: Complete blood count (CBC), Blood urea, Serum electrolytes, C-reactive protein, & Vitamin D profile.

Imaging tests: Colonoscopy, Endoscopy, Abdominal X-ray, CT scan, & MRI.

Stool culture

Biopsy

Treatment

Medications: Mesalamines, Prednisone, Infliximab, Adalimumab, Golimumab & Vedolizumab.

Surgery: Proctocolectomy with ileal pouch-anal anastomosis (IPAA) and Total proctocolectomy.

See All

Symptoms Of Ulcerative Colitis

Ulcerative colitis is a chronic disease affecting the colonic mucosa (inner layer of the large intestine) that most commonly presents with blood in the stool and diarrhea. Almost 15% of patients can initially present with severe forms of the disease. Symptoms include:

Bleeding from rectum

Urgency

Feeling of the need to pass stool

Abdominal pains and cramps

Fever (in severe cases)

Urinary incontinence (loss of bladder control)

Fatigue

Increased frequency of bowel movements

Mucus discharge

Rectal pain

Weight loss

Bowel movements at night

Weight loss (in severe cases)

Involvement of muscles and skin.

Note: Symptoms are similar in kids with ulcerative colitis (pediatric ulcerative colitis) and may also include delayed or poor growth.

Don’t let poor nutrition hamper your child’s growth.

Buy children's nutrition products

Buy Now

Types Of Ulcerative Colitis

Ulcerative colitis can affect different parts of your colon and rectum and the intensity of your condition depends on the amount of inflammation and the area affected. The major types include:

Ulcerative proctitis: In this type, bowel inflammation is limited only to the rectum and typically affects less than six inches of the rectum. Ulcerative proctitis is not associated with an increased risk of cancer.

Left-sided colitis: In this form of ulcerative colitis, there is continuous inflammation that begins at the rectum and extends up to the splenic flexure (a bend in the colon near the spleen).

Proctosigmoiditis: In this form of ulcerative colitis, inflammation is limited to rectum and sigmoid colon (lower end of the colon) only.

Extensive colitis: This type of ulcerative colitis affects the entire colon with continuous inflammation beginning at the rectum and extending beyond the splenic flexure (bend in your colon to meet the stomach).

Causes Of Ulcerative Colitis

Ulcerative colitis generally begins in the rectum and may remain localized or extend proximally, sometimes involving the entire colon (the longest part of the large intestine). But, It rarely involves the entire bowel at once. The exact cause of ulcerative colitis still remains unknown, however, there are numerous risk factors that can lead to its development.

Both Crohn’s disease and ulcerative colitis are characterized by bowel symptoms which can be seen in 25-40% of patients with inflammatory bowel disease.

Manage the symptoms by adding these 6 superfoods.

Know More

Risk Factors For Ulcerative Colitis

Ulcerative colitis is a multifactorial condition and the risk factors include:

1. Age

Studies show that the onset of ulcerative colitis is seen at a younger age, i.e less than 40 years. And the main onset peaks between 15 and 30 years of age.

2. Race

Ulcerative colitis was previously considered to be a disease of Caucasian patients, but studies have documented increased incidences among non-white populations as well.

3. Family history of IBD

Studies suggests that the strongest identifiable risk factor for the development of Inflammatory bowel disease (IBD) is a positive family history. IBD consists of Crohn's disease (causing swelling of the digestive tract) and ulcerative colitis.

4. Medications

Drugs that can increase the likelihood of the development of ulcerative colitis include:

Contraceptive pills: Studies show that the use of combined oral contraceptive pills was associated with the development of ulcerative colitis.

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs): These are pain medications that have been shown to be associated with flare-ups of the disease.

Antibiotics: These have been shown to precipitate flare-ups of the disease for some people.

5. Smoking

Former cigarette smoking is one of the strongest risk factors associated with ulcerative colitis. Studies demonstrate that active smokers are less likely to develop ulcerative colitis compared with former and non-smokers.

Quit this habit before it kills you!

Buy smoking cessation products.

Buy Now

6. Appendectomy

It is a surgery to remove the appendix (a small, thin pouch connected to the large intestine) when it is infected. Research shows that a history of appendectomy in patients with ulcerative colitis is rare.

7. Diet

Though it is a less common risk factor for ulcerative colitis, increased consumption of polyunsaturated fatty acids (a type of dietary fat found in salmon, nuts, etc) may contribute to issues with digestive health that can lead to ulcerative colitis.

8. Childhood hygiene

Low hygiene and exposure to infections may be associated with an increased risk for ulcerative colitis, especially in kids.

Diagnosis Of Ulcerative Colitis

Ulcerative colitis is a chronic illness that is usually detected only at the later stages. Diagnosis consists of the following investigations:

1. Medical history

A thorough history, including travel history to rule out other causes along with detailed drug history and recent antibiotic use should be considered.

2. Laboratory tests

These tests are done to diagnose anemia, thrombocytosis (a condition in which the body produces platelets in excess), low vitamin D and raised inflammatory markers Tests include:

Complete blood count (CBC)

Blood urea

Serum electrolytes

C-reactive protein

Vitamin D profile

Bone profile

Iron serum

Folate test (Vitamin B9)

Vitamin B12 test

Liver function tests

3. Stool cultures

These are done to determine if there are any infections. The stool culture should be negative in case of ulcerative colitis, but bacterial infections such as C difficile can co-exist.

4. Fecal calprotectin

It is a very sensitive marker for inflammation in the gastrointestinal tract, and useful for the differentiation of inflammatory bowel disease (IBD) from irritable bowel syndrome (IBS).

5. Imaging tests

Colonoscopy or proctosigmoidoscopy: It might reveal loss of typical vascular pattern, granularity, friability, and ulceration that involves the rectum.

Sigmoidoscopy: It helps in examining the level and extent of bowel inflammation.A sigmoidoscopy can also be used to remove a small sample of tissue from your bowel so it can be tested in a laboratory.

Endoscopy: It helps in examining the inside of your colon and rectum with a lighted tube inserted through your anus.

Abdominal X-ray: Plain abdominal radiographs are useful for acute onset of ulcerative colitis. They are often entirely normal in inflammatory bowel disease.

CT scan or MRI: These are used for small bowel imaging and can help differentiate between ulcerative colitis and Crohn’s disease.

6. Biopsy

Usually at least two biopsies from each bowel segment for histological assessment is recommended. However, no histological features are diagnostic of ulcerative colitis, but distortion irregularity can suggest ulcerative colitis.

Getting your tests done has never been easier!

Book your tests now

Celebs affected

Amy Brenneman

Brenneman is an American star in the TV drama Judging Amy. She has been a spokesperson for the Crohn's & Colitis Foundation (CCFA) of America, aiming to raise awareness for both UC and Crohn's. "I know firsthand," she said, "how devastating these diseases can be."

Shamita Shetty

The Mohabbatein actor, and tv reality show Bigg boss contestant said in an interview she suffers from a condition because of which she “can’t have normal food”. Therefore, she resorts to gluten-free food.

Prevention Of Ulcerative Colitis

Ulcerative colitis is a form of inflammatory bowel disease that is generally detected only at later stages. By taking certain preventive measures you can decrease your chances of getting ulcerative colitis. These include:

1. Staying hydrated

Proper hydration helps prevent ulcerative colitis. One must drink at least 2L of water every day, along with avoiding coffee, alcohol, and carbonated beverages, which can make your diarrhea worse.

Understand how drinking water can be beneficial for your overall health.

Watch this video now.

2. Making probiotics your friend

Probiotics are nothing but good bacteria that can keep your gut healthy. These can prevent the ‘bad bacteria’ from sticking to the walls of the large intestine thus preventing ulcerative colitis.

Please your gut with our widest variety of probiotic products.

Add to your cart now

3. Giving importance to mental health

Managing your stress can help alleviate the signs and symptoms of ulcerative colitis as stress may cause your regular digestive process to change. Try learning new things or do whatever works for you to keep calm.

4. Adding exercise to your routine

We all know the benefits of being active and exercising can help prevent ulcerative colitis by keeping your bowel healthy and avoiding diarrhea.

Too lazy to sweat?

Here are 7 tips that can help you exercise daily.

Read now

Doctor To Visit

Treating and diagnosing ulcerative colitis may require a comprehensive approach. Specialists that can help include:

Gastroenterologist

General physician

Colon and rectal surgeon

Pediatric gastroenterologist (in kids)

Dermatologist

A gastroenterologist is a doctor specializing in the diagnosis and treatment of disorders of the gastrointestinal tract and related organs.

A colon and rectal surgeon diagnoses and treats various diseases of the small intestine, colon, rectum, and anal canal along with the liver, urinary and female reproductive system.

A dermatologist is a specialist who treats skin diseases.

When to call a doctor?

Seek medical attention immediately if you have the following symptoms:

Persistent and heavy diarrhea.

Blood from your anus

Clots of blood in your stool

Continuous pain along with high fever

Do not take your gut health lightly. If you have any of the symptoms, seek advice from our trusted doctors.

Consult immediately

Treatment Of Ulcerative Colitis

Ulcerative colitis can progress proximally in 10–19% of patients after 5 years, and in up to 28% of patients at 10 years. The primary aim of medical management is to induce and maintain remission.

Staging of ulcerative colitis based on the severity of disease:

The severity of ulcerative colitis can be graded depending upon rectal bleeding. It includes:

Mild: Less than four rectal bleeding episodes per day

Moderate: More than four rectal bleeding episodes per day

Severe: More than four rectal bleeding episodes per day along with systemic features of an illness combined with hypoalbuminemia (a condition in which there is lack of albumin protein that's responsible for keeping fluid in your blood vessels).

Treatment depends on the stage of ulcerative colitis and it consists of:

A. In mild-moderate ulcerative colitis

Mesalamines: These are the first-line therapy for induction of remission in mild-moderate cases of ulcerative colitis. There are different formulations of mesalamine, including oral, suppository, or liquid enema.

Corticosteroids: Second-line therapies for patients who do not respond to mesalamine are corticosteroids. The drugs used are:

Prednisone

Budesonide-multimatrix (MMX)

B. In moderate-severe ulcerative colitis

1. Immunomodulators: These are drugs that modulate the immune system by working on the underlying inflammatory processes. They include:

Infliximab

Adalimumab

Golimumab

Vedolizumab

Tofacitinib

C. In acute severe ulcerative colitis

It is defined as the presence of more than 6 bloody stools per day with increased heart rate, fever, and signs of infection.

Medications include:

Infliximab

Cyclosporine

Steroids.

Get your medications online from India’s largest online pharmacy.

Order Now

D. Maintenance of remission

Most appropriate maintenance treatment for an individual patient is established by several factors, like disease extent and severity, treatment for induction of remission, and failure of previous maintenance treatments. Mesalazine is the basis of treatment for the maintenance of remission in ulcerative colitis.

E. Surgery

Absolute indications for surgery include uncontrolled bleeding, perforation, and colorectal cancer. Surgery is also indicated in acute severe ulcerative colitis and the most commonly performed surgery for ulcerative colitis are:

Restorative proctocolectomy with ileal pouch-anal anastomosis (IPAA): This surgery removes the entire colon and rectum while preserving the seal in the anus for normal bowel functioning and to avoid fecal incontinence.

Total proctocolectomy: It is a surgery to remove all of the colon and rectum that may be indicated if there are intestinal manifestations.

F. The newer agent

Mirakizumab is an antibody currently in a clinical trial for patients with moderate-severe ulcerative colitis. However, additional studies are required to determine the efficacy and dose of mirakizumab.

Home-care For Ulcerative Colitis

Ulcerative colitis needs medical attention, but there are certain home remedies that have been found to alleviate the symptoms. These include:

Aloe vera: Aloe gel has been shown to reduce inflammation. However, you may have to be careful with aloe vera juice, as it has a laxative effect and causes trouble for people having diarrhea.

Buy aloe vera products online.

Click Here

Wheatgrass (Gehun): Studies have shown that wheatgrass juice appeared to be effective and safe for active ulcerative colitis.

Turmeric (Haldi): Studies demonstrate that curcumin (turmeric) is immunomodulatory and is well tolerated without significant side effects.

Pineapple (Ananas): Studies demonstrate an enzyme bromelain, present in pineapple may help ease UC symptoms and reduce the frequency of flares.The enzyme helps in decreasing intestinal inflammation and enhance intestinal cell function.

Ginseng: It is a plant whose roots may be effective in the treatment of UC by reducing inflammation and protecting against cellular damage according to a 2015 study.

Check out the 8 amazing health benefits of ginseng

Tap Now

Note: Along with these, taking care of your general health with regular exercise, adding probiotics and vitamin supplements to your diet, and eating a well-balanced diet are important to manage the symptoms of ulcerative colitis. Read more about 6 easy ways to eat healthily.

Click here

Complications Of Ulcerative Colitis

Ulcerative colitis is a chronic disease with periods of remission and relapse. Here are complications that can occur from ulcerative colitis:

Pelvic abscess: It is pus-filled lesions in the lower stomach due to inflammation.

Enterocutaneous fistulas: These are the abnormal connections between the intestines or stomach and the skin. They occur due to leakage of contents of the stomach or intestines into the skin after bowel surgery.

Bowel obstruction: Studies have shown that early postoperative small-bowel obstruction occurs in up to 15% of patients after surgery for ulcerative colitis.

Pouch prolapse: Research demonstrates that it is a rare but important complication to consider in patients with ulcerative colitis who have undergone a total proctocolectomy.

Poor growth and development: Individuals with ulcerative colitis and undergoing treatment for the same can have poor growth and delayed puberty.

Primary sclerosing cholangitis: Individuals with ulcerative colitis may develop another digestive condition called primary sclerosing cholangitis (PSC). In PSC the bile ducts become progressively inflamed and damaged.

Pouchitis: It is an inflammation in the lining of a pouch created during surgery in the treatment of ulcerative colitis.

Incontinence: Individuals with ulcerative colitis are generally affected by fecal incontinence, i.e. inability to control bowel movement.

Osteoporosis: Individuals with ulcerative colitis are at an increased risk of developing osteoporosis, when the bones become weak and are more likely to fracture.

Sexual dysfunction: Certain medications used to treat ulcerative colitis can impact their sex drive and ability to have sex.

Toxic megacolon: It is swelling and inflammation that spread into the deeper layers of your colon.

Colon or rectal cancer: The risk of cancer in individuals with ulcerative colitis increases by 2% after 10 years of diagnosis.

Leakage from anastomosis: This is a serious complication after ileal pouch-anal anastomosis (IPAA) leading to postoperative sepsis and pouch failure.

Did you know?

Coronavirus can trigger ulcerative colitis. So it is important to evaluate patients with gastrointestinal complaints for COVID-19 infections.

Learn more on COVID-19

Alternative Therapies For Ulcerative Colitis

Ulcerative colitis is a long-standing disease that needs comprehensive care. Along with regular treatments certain complementary therapies can be useful to relieve the symptoms. However, consult your doctor before starting anything new. Alternate therapies that work best for ulcerative colitis include:

1. Hyperbaric oxygen therapy

Studies show that this therapy has proven beneficial in acute severe ulcerative colitis. It is based on the theory that pure excess oxygen delivery might reverse tissue hypoxia (low oxygen levels) and induce healing.

2. Ayurveda

An ayurvedic approach may help in providing relief from symptoms and flare-ups associated with ulcerative colitis as it includes dietary measures to balance the doshas, massages, meditation, and yoga.

Know more about 6 ayurvedic herbs that can improve your digestion.

Read this now

3. Acupuncture

A 2016 study has found out that acupuncture can be helpful in people with IBD and found an improvement in pain relief, and symptoms.

4. Tai chi

Also known as shadowboxing, Tai Chi is an internal Chinese martial art practiced for defense training and health benefits. Studies show that it can improve the quality of life in patients with ulcerative colitis and other inflammatory bowel diseases as it focuses on internal balance and healing from within.

Living With Ulcerative Colitis

Being well-informed about your chronic illness is important as learning all you can about your diagnosis and how it may affect you can take you a long way in managing your condition. Here are a few tips that can help you with ulcerative colitis:

1. Avoid certain medications

Pain killers, such as ibuprofen and naproxen are not usually recommended if you have ulcerative colitis as they can cause ulcers in the stomach and intestines. Also, some contraceptives and antibiotics can flare up ulcerative colitis.

2. Eat smaller meals

Some changes to your diet can help control the condition. The best way to do this is to

eat small meals rather than 3 main meals. This may help control your symptoms.

3. Maintain a food journal

Keeping a food journal helps you document what you eat, and understand what food you can tolerate and what makes your symptoms worse. This way, you can identify problem foods and eliminate them from your diet.

4. Keep a high-fiber diet at bay

Fiber can aggravate symptoms during an episode of ulcerative colitis flare for some people. Eating a diet that is low in fiber can reduce the amount and frequency of the stools you pass. Examples of foods include:

White bread

Cornflakes

White rice

Lean meat and fish

Eggs.

5. Add necessary supplements

Ulcerative colitis can lead to malnutrition as certain foods are not taken well by the body. Also, certain medications used in the treatment of ulcerative colitis can cause folate and vitamin B12 deficiency. Supplements to be added if you have ulcerative colitis include:

Vitamin D

Folic acid

Iron

Vitamin B12

Omega-3 fatty acids

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6. Communicate your feelings

Living with a long-term condition like ulcerative colitis can take a toll on your mental health. Anxiety and stress caused by ulcerative colitis can lead to depression in some cases. The best way to manage it is to communicate with your loved ones about your feelings. You can also try yoga, breathing exercises, and meditation.

7. Ulcerative colitis in kids

Sometimes ulcerative colitis can occur in children below 15 years of age and they may experience physical, emotional, and social problems because of the disease. This increases the importance of proper management and treatment. Children can experience the following mental symptoms:

Mood swings

Teasing at school

Anger and frustration

Embarrassment

Worry about physical appearance stamina

Poor concentration

Children need mutual support from all family members and it is important for the entire family to learn about the disease and try to be empathetic. Seek a psychiatrist’s help for your child to manage such challenges of ulcerative colitis.

Frequently Asked Questions

Does ulcerative colitis affect immunity?

What should I know about my ulcerative colitis?

How often is it necessary to get a colonoscopy?

What’s the difference between colitis and ulcerative colitis?

Are inflammatory bowel disease and ulcerative colitis the same?

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Urinary incontinence

Overview

Urinary incontinence refers to the involuntary leakage of urine. Many people think that it is a normal part of aging, however it can also be caused due to several other health problems such as urinary tract infections (UTIS), diabetes, enlarged prostate, alzhemier’s disease, menopause etc.

The disease can be triggered by several factors such as inadequate intake of water, excessive intake of caffeine, pregnancy, vaginal birth, and being overweight. It can affect the emotional, psychological and social life of the patient as many people do not share about their problem in embarrassment.

Urinary incontinence can be managed by lifestyle modifications, behavioral therapy, and medications. Surgical treatment is also considered in some cases.

Key Facts

Usually seen in

All age groups but more common in elderly

Gender affected

Both men and women but more common in women

Body part(s) involved

Urethra

Urinary bladder

Prevalence

Worldwide: 348 million (2018)

Mimicking Conditions

Delirium, dementia, or other cognitive impairments

Infection (urinary tract infection)

Atrophic vaginitis or urethritis

Pharmaceuticals or substances (e.g., diuretics, caffeine, alcohol)

Psychological disorder

Excessive urine output (e.g., diabetes, diabetes insipidus)

Reduced mobility or reversible urinary retention

Stool impaction

Necessary health tests/imaging

Medical history

Physical examination

Urine test

Urodynamic testing

Pad test

Stress test

Imaging tests: Ultrasound & Cytoscopy

Treatment

Antimuscarinics: Darifenacin, Solifenacin, Oxybutynin, Tolterodine, & Trospium

Alpha-adrenergic agonist: Phenylpropanolamine

Antidepressants: Duloxetine

Alpha-adrenergic antagonists: Terazosin & Tamsulosin

Beta-adrenergic agonist: Mirabegron

Vaginal estrogen creams

Hormone replacement therapies

Other procedures and surgeries: Bulking agents, Botulinum toxin injections, Medical devices (Neuromodulation devices, Artificial urethral sphincter & Vaginal insert), Sling procedure, Biofeedback sensor, Electrical nerve stimulation & Surgery

See All

Symptoms Of Urinary Incontinence

Urinary incontinence is not a disease, rather it is usually a symptom of underlying health problems. The symptoms of urinary incontinence include:

Leaking urine during normal day to day activities such as lifting weights, coughing, sneezing, laughing, exercising without any urge to urinate

Leaking urine during sexual activity

Bedwetting (leaking urine during sleeping)

Being unable to hold urine

Being unable to react toilet in time

Frequent urination (more than 8 times a day)

Feeling of wetness

Feeling of incomplete emptying of bladder

Causes Of Urinary Incontinence

The urinary system consists of detrusor muscles, the internal and external sphincters, and their neurological components.

In infants, the fullness of the bladder causes contraction of the detrusor muscles that leads to emptying of the bladder. As we grow, our bladder is trained to respond to the sensation of urge at volumes 200-300 ml. At this stage, a voluntary decision can be made for passing the urine depending upon the location and availability.

The emptying of the bladder upto 7 times in waking hours in a day is considered normal. The normal tolerance capacity of a healthy bladder is approximately 500 ml which the bladder can accommodate without increasing bladder pressure even during physical activities, coughing, lifting weights etc.

Any disturbance in the whole mechanism can lead to urinary incontinence. The possible causes are:

Detrusor overactivity: This is the most common cause of urinary incontinence in which there are consistent contractions of the detrusor muscles. This leads to relaxation of the sphincters and involuntary leakage of urine. It is commonly seen after spinal injuries, multiple sclerosis or other lesions of the central nervous system.

Impaired bladder contractility: An inadequately contractile bladder can also cause urinary incontinence. This can be due to aging and several pelvic floor diseases.

Decreased pressure in urethra closure: The sphincteric unit helps in the closure of the bladder which expresses the urethral pressure during the resting state (where the abdominal pressure is at its resting value where no voiding and no pelvic floor contraction occurs). The decreased pressure in urethra closure can also leakage of urine.

Atrophy of urethral areas: It is a medical condition in which urethra and its surrounding structures lose its strength and elasticity. It also causes urinary incontinence due to dysfunctioning of the urinary system. The atrophy is commonly seen in postmenopausal women due to estrogen deficiency.

Prostatic hypertrophy: The enlarged prostate in men also puts pressure on the bladder which can cause UI.

Urethral hypermobility: It is a condition in which there is an excess movement of urethra that can cause UI. It can be due to pregnancy, vaginal delivery, obesity, smoking, chronic cough, and chronic constipation

Weakness of urinary sphincter: Some conditions such as advanced age, menopause, enlarged prostate weaken the sphincter and pelvic floor muscles which can lead to UI.

Poor detrusor compliance: Sometimes, the bladder fails to stretch, which causes increased pressure, discomfort during filling and reduces urine holding capacity of the bladder. This pattern is typical after pelvic radiotherapy, or can result from prolonged periods of catheterization.

Reversible causes of Urinary incontinence

Reversible causes of UI, often described by the mnemonic DIAPPERS includes:

D- Delirium (confusion)

I - Infection (urinary tract infection)

A- Atrophic (urethral atropy due to menopause)

P- Pharmacological (medications)

P- Psychological (disorders such as stress and anxiety)

E- Endocrine (excess urine production)

R- Restricted mobility (not able to reach washroom on due to conditions such as arthritis)

S- Stool impaction (hardened stool that's stuck in the rectum or lower colon due to chronic constipation)

Types Of Urinary Incontinence

Urge incontinence

It is characterized with a feeling of sudden and strong urge to urinate, usually more than 8 times a day.

In this, the patient is not able to hold urine long enough to get the toilet.

This can be due to certain medical conditions such as diabetes, Alzheimer’s disease, stroke, and multiple sclerosis or can be a separate condition.

It is more common in elderly women.

Stress incontinence

It refers to the leakage of urine due to pressure exerted by urethra and bladder on weak pelvic floor muscle.

It involves leakage of urine during exercise, coughing, sneezing, laughing, lifting heavy objects.

Any form of physical activity and sudden bodily movements also increases the chances of leakage of urine.

Being overweight and prostate surgery also increases the chances of stress incontinence.

It mostly affects people who are active in sports.

Functional incontinence

In this type, the patient leaks urine due to his/her inability to reach the washroom on time.

This can happen due to some physical disability such as arthritis, a barrier in the environment or memory problem.

This type of incontinence is also known as toileting difficulty.

It mostly occurs in older people who have a normal bladder normal control but having other disabilities make it hard to reach the washroom on time.

Overflow incontinence

In this, leakage occurs when the bladder is overfilled than its capacity.

This can happen due to blocked urethra which leads to the incomplete emptying of the bladder.

The increased urine production in some conditions such as diabetes can also cause overflow incontinence.

Mixed urinary incontinence

It is the involuntary leakage of urine caused by a combination of stress and urge urinary incontinence.

Uncontrolled diabetes can be a cause of frequent urination.

Frequent urination and excessive urine volume (polyuria) is an early symptom of type 1 and type 2 diabetes. This is because there is excess glucose in the blood, which the body tries to eliminate and puts pressure on the kidneys to excrete it through urine. Find out the other possible causes of frequent urination.

Read Now

Risk Factors For Urinary Incontinence

Various risk factors that can increase the risk of UI include:

1. Medical conditions

Urinary tract infection: An infection of the urinary tract (urethra, ureters, bladder and kidneys) can cause urinary incontinence. This is temporary and goes away once the condition is treated.

UTIs are very common in women. Are you at high risk of the same?

Find out now.

Tap to know

Pelvic floor disease: The weak pelvic floor muscles in women during certain conditions can also make it hard for the bladder to hold urine and can be a cause of urinary incontinence.

Stroke: Stroke can affect various muscles of the body including the one that controls the urinary bladder. This can also cause urinary incontinence.

Diabetes: The increase in the amount of urine in diabetes can also cause urinary incontinence.

Menopause: During menopause, there are changes in the hormones that can impact the bladder and cause urinary incontinence.

Pregnancy: Urinary incontinence is very commonly seen during pregnancy as the expanding uterus puts pressure on the bladder. This usually subsides within a few weeks after delivery.

Multiple sclerosis:This condition disrupts the nerve signals that direct the movement of urine in your body and can cause urinary incontinence.

Enlarged prostate: The enlargement of the prostate gland puts pressure on the bladder and causes leakage of urine.

Constipation: Constipation for a long period of time can also cause urinary incontinence.

Obesity/overweight: Being obese or overweight puts more pressure on the bladder which is not able to hold urine can also be a reason for urinary incontinence.

Birth defects: There are certain birth defects that can also cause urinary incontinence such as bladder exstrophy in which the bladder develops outside the fetus.

Chronic cough: The persistent cough also puts pressure on the abdomen and that can also cause leakage of urine.

Genitourinary fistulas: It is an abnormal connection or passageway between the urinary and genital structures. This condition is also associated with urinary incontinence and is often treated with surgery.

Surgery: Some surgical procedures such as surgery of prostate gland can also cause urinary incontinence.

2. Nerve damage

It is the most common cause of functional incontinence. Nerve carries signals from brain to bladder and muscles of urinary bladder. The brain decides when to urinate. Any damage in the nerve can cause involuntary release of urine. The nerve damage can occur in various conditions such as:

Diabetes

Vaginal childbirth

Parkinson’s disease

Multiple sclerosis

Alzheimer’s disease

Brain or spinal cord injury

Anxiety

Heavy metal poisoning

3. Lifestyle factors

There are certain lifestyle factors that can cause urinary incontinence. These include:

Consuming food that cause constipation

Drinking excessive caffeinated beverages and alcohol

Physical inactivity

Smoking

Tobacco is injurious to health. Say no to tobacco. Try our smoking cessation product range.

Explore Now

4. Medications

Urinary incontinence can also result as a side effect of certain medications such as antipsychotics, benzodiazepines, antidepressants and hormone replacement therapy in postmenopausal women.

Diagnosis Of Urinary Incontinence

1. Medical history

The complete medical history is asked to determine the type, severity, and duration of urinary incontinence. The type can be determined by the history:

Urge urinary incontinence: It can be determined through the symptoms such as increase in frequency, urgency, and nocturia (frequent night time urination).

Mixed urinary incontinence: This is represented by characteristics of both stress and urge urinary incontinence.

Overflow urinary incontinence: This condition is associated with straining due to incomplete bladder emptying.

Stress urinary incontinence: It can be predicted through the trigger activity that is causing urine leakage.

Functional urinary incontinence: The history of the patient may suggest physical disabilities or some memory related issues.

Patients are also asked about the history of medical conditions and surgery that could be the reason for urinary incontinence. For females, a complete gynecological history is obtained to determine the number of births including the type of delivery (c section or normal).

2. Physical examination

The various ailments are assessed through physical examination such as pedal edema, cough, surgical scars, range of motion, enlargement of prostate gland, and pelvic exam to determine any cardiovascular, pulmonary, abdominal or musculoskeletal issue.

3. Urine test

The urine is tested for the presence of:

Urinary tract infections

Glycosuria (glucose in urine)

Proteinuria (protein in urine)

Hematuria ((blood in urine)

In various cases, blood urea nitrogen (BUN) and creatinine tests are also performed to assess kidney function.

4. Urodynamic testing

This includes several tests that are performed to check the urine holding capacity of the bladder. The tests also help in determining the functioning of urethral sphincter muscles – the muscles that control the involuntary flow of urine.

One such test includes the insertion of a tube into the bladder and filling it with fluid. This checks the holding capacity of the bladder.

5. Pad test

The patient is given a pad to wear which will help in checking any leaked urine.

6. Stress test

The patient is asked to cough to demonstrate involuntary leakage of urine. The test is more sensitive when done in a standing position.

7. Imaging

Ultrasound: This includes imaging of the bladder and assessing the urine emptying capacity of the bladder.

Cystoscopy: This technique uses a thin flexible tube with a camera at its end. The urethra and urinary bladder is examined through it for any anomalies that could be a cause of urinary incontinence.

8. Maintaining a journal

The doctor also recommend the patient to maintain a journal for a few days to record the following activities:

Any leakage of the urine

Frequency of urination

Ability to reach washroom on time

Conditions that trigger leakage of urine

The above information helps in identifying a pattern of urinary incontinence which will aid in the diagnosis process.

Celebs affected

Stephen King

He is a famous author and known for his horror novels, including titles like The Shining, Carrie and The Green Mile. He developed urinary incontinence as a result of UTIs.

Samuel Jackson

Samuel Jackson, a famous American actor developed incontinence when he was in his 40s.

Kat Perry

Kat Perry developed urinary incontinence during her high school as a result of UTI. She regained control over her bladder after the treatment of the infection.

Kate Winslet

The famous actress developed stress incontinence after having three children. She admitted that she faces the bladder leaking issues when she sneezes.

Specialist To Visit

It is believed that urinary incontinence is a normal process that goes along with aging. However, it is somewhat true but it can be treated and managed through several ways. The problem of urinary incontinence should not be ignored, if it is impacting your daily activities.

Some of the specialists that can help detect and treat urinary incontinence include:

General physician

Urologist

Gynecologist

Urogynecologist

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Prevention Of Urinary Incontinence

There is no sure shot way to prevent urinary incontinence. However, several factors that act as a trigger for urinary incontinence can be minimized by some lifestyle modifications. These include:

1. Modify your eating habits

The healthy eating habits helps in the prevention of obesity and diabetes that acts as a trigger for developing urinary incontinence. The follow eating habits should be followed to prevent UI:

Limit alcohol, spicy foods, chocolate, artificial sweeteners, caffeinated beverages as they may cause irritation and inflammation of the bladder.

Include high fiber foods such as wholegrain cereals (such as porridge, brown rice, wholemeal pasta, wholemeal bread or pulses such as lentils and beans) to avoid constipation. Aim for at least 25-30 gms of fiber each day.

Eat fruits and vegetables to keep the process of defecation easy.

2. Keep yourself hydrated

The lesser intake of water is also associated with constipation and bladder irritation. This can act as a risk factor for developing UI. To prevent dehydration:

Drink at least 6 to 8 glasses of water every day

Drink more water in hot weather and after strenuous exercise

Make a habit of frequently sipping water even when you are not feeling thirsty

The color of the urine helps in identifying whether the person is taking an adequate amount of water or not. The pale yellow color of the urine indicates that the person is adequately hydrated. Dehydration is characterized by the dark yellow color of the urine.

Note: Some medications, vitamins and foods can also affect the color of urine.

3. Indulge in some physical activity

It is always advised to indulge in some kind of exercise as it helps to maintain a healthy weight which reduces pressure on the pelvic floor muscles. This helps in reducing the chances of UI.

Physical activity also helps in preventing constipation which acts as a trigger for UI. Suggestions for physical activity include:

Include a brisk 30 minute walk every day

Pick any physical activity that you enjoy as it helps you to stick to a regular regimen

Include pelvic floor exercises to strengthen the muscles

4. Follow good toilet habits

Urinary incontinence can be prevented by adopting some good toilet habits which includes:

Avoid holding urine for a long period of time

Take as much as you need and empty the bladder fully

Sit in the full crouching squat position while urinating

Go to the toilet when the bladder is full

Avoid pushing your pelvic floor muscles to push the urine

Avoid straining during passing stools as it may weaken the pelvic floor muscles

Use correct posture while passing urine which involves an upright sitting with elevated feet

5. Quit smoking

Smoking affects the health of the bladder and it increases the chances of urinary incontinence. Avoiding smoking is known to be associated with decreasing the risk of UI.

Treatment Of Urinary Incontinence

The treatment plan is created according to the type of incontinence.

A. Medications

There are various medications that are used to reduce leakage. The medications are selected according to the needs of the patient. Some medications stabilize the muscle contractions of the bladder while some work by relaxing muscles of the bladder. This allows the complete emptying of the bladder. Some common examples of medications include:

Antimuscarinics ( darifenacin, solifenacin, oxybutynin, tolterodine, fesoterodine, and trospium)

Alpha-adrenergic agonist (phenylpropanolamine)

Antidepressants (duloxetine)

Alpha-adrenergic antagonists (terazosin and tamsulosin)

Beta-adrenergic agonist (mirabegron)

B. Vaginal estrogen creams

As the name suggests, these creams are directly applied to the vaginal walls and urethral tissue that helps in relieving urge or stress incontinence.

C. Hormone replacement therapies

It is most commonly used in women to restore normal bladder function. One such example includes estrogen replacement therapy during menopause.

D. Other procedures and surgeries

If lifestyle, behavioral and pharmacological (medications) therapy fails to treat the conditions, then some invasive techniques are used. These techniques can range from the use of simple injections to complicated surgeries that are selected as per the cause and symptoms of incontinence.

Bulking agents: This involves injecting a permanent substance into the lining of the urethra which helps in increasing its lining. It is mostly used in women with stress incontinence.

Botulinum toxin injections: This involves injecting botulinum toxin into the bladder which relaxes its muscles. It is used to treat urge incontinence.

Medical devices: This involves the implantation of several devices such as:

Neuromodulation devices: There are various devices that can modulate the nerve control to the bladder such as pacemakers. In some cases, nerves near the ankle are stimulated to achieve bladder control.

Artificial urethral sphincter: It is a device that is placed closed to the urethra to control urination. These types of devices are typically used in men with stress incontinence usually after prostate cancer surgery.

Vaginal insert: There are devices that can be placed in the vagina to compress the urethra. It helps in reducing stress incontinence in women.

Biofeedback sensor: This technique uses sensors to make the patient aware of the urine signals. It may help to regain control on the muscles of the bladder and urethra.

Electrical nerve stimulation: This technique sends electrical signals to the nerves present around the bladder that helps in controlling urine.

Catheterization: This involves the use of a catheter to drain the urine. A catheter is a tube that is inserted through the urethra into the bladder. It can be used occasionally or on a constant basis.

Surgery: It may be required in some cases such as when incontinence is caused by an enlarged prostate.

Home-care For Urinary Incontinence

Home remedies

Magnesium: It plays an important role in the proper functioning of muscles and nerves. It reduces spasms of the bladder and allows its complete emptying. It is found to reduce the symptoms of urinary incontinence, especially nocturia.

The people having incontinence issues should take magnesium-rich foods in their diet which include corn, potatoes, and bananas.

Vitamin D: The low levels of Vitamin D is associated with weak pelvic floor disorders including urinary incontinence. Patients of UI are advised to take sufficient amounts of Vitamin D as it has shown to reduce its symptoms.

Here’s the right way to take Vitamin D.

Read Now

Complications Of Urinary Incontinence

The urine leakage can lead to discomfort and embarrassment apart from other physical problems. This can cause the people to avoid social gatherings and can eventually lead to depression. The physical complications related to urinary incontinence include:

Urinary tract infections (UTIS)

Skin sores and rashes due to wet skin

Cellulitis (bacterial skin infection characterized by inflammation)

Pressure ulcers (injuries to the skin due to constant pressure on it)

Trauma and infection due to catheterization

Sexual dsyfunction

Prolapse (slipping of a part of body from its usual position)

Medication side effects

There are several physical symptoms that are the side effect of medications used in urinary incontinence. These include:

Dry mouth

Restlessness

Hypertension

Insomnia

Dizziness

Tiredness

Did you know a few minutes of yoga during the day can be a great way to get rid of stress that accumulates daily – in both the body and mind. Yoga postures, pranayama and meditation are effective techniques to release stress?

Find out the other benefits of yoga.

Read Now

Living With Urinary Incontinence

Urinary continence can be a cause of embarrassment for many and a hindrance to many daily activities. Here are a few tips that can help in living with urinary incontinence:

1. Timed voiding

Practice going to the bathroom on a regular time interval instead of waiting for the urge to go. This will prevent the overfilling of the bladder and thus reduces the chances of incontinence.

2. Emptying before physical activities

The patients of urinary incontinence are advised to empty their bladder before doing any physical activities such as running, jumping, or doing any form of exercise. This will reduce the chances of leakage.

3. Avoid heavy lifting

Most people tend to leak urine while lifting heavy objects. People suffering from urinary incontinence should avoid lifting heavy objects. If any heavy object is needed to move, take help.

4. Regulate the intake of caffeinated beverages

Caffeinated beverages such as tea and coffee trigger the leakage of urine. It is advised to limit their intake especially before starting an activity. If you are frequently waking up in the night to urinate, avoid these drinks right before going to bed.

5. Wear pads

There are various pads and products available in the market that are specially designed to absorb leaked urine. It can be worn to avoid the leakage of urine through the clothes.

6. Maintain a healthy weight

Being overweight can also be the cause of incontinence. It is advised to maintain a healthy weight through diet and exercise.

7. Keep yourself hydrated

Inadequate fluid intake can also cause urinary incontinence. Keep yourself hydrated throughout the day by drinking at least 8 glasses of water in a day.

8. Prevent constipation

Long term constipation can also stimulate the leakage of urine. It is advised to have a diet rich in fiber such as wholegrains, cereals, fruits, and vegetables to prevent constipation.

Dealing with constipation?

Watch this video by our expert revealing some simple home remedies to cure it.

Click Here

9. Quit smoking

Smoking can make many health problems, including urinary incontinence, worse.

Frequently Asked Questions

What are Kegel exercises?

Should water consumption be reduced to prevent leakage of urine?

Does pregnancy leave a lasting problem with urinary incontinence?

Can incontinence come and go?

What are the first signs of incontinence?

Is overactive bladder a type of urinary incontinence?

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Urinary tract infections (UTIs)

Also known as UTI, Bladder Infection

Overview

Urinary tract infections (UTIs) are one of the most common bacterial infections in women. As the name suggests, it is an infection of the urinary tract which includes the kidneys, ureters, urinary bladder, and urethra. It is reported that around 50–60% of women might develop UTIs in their lifetime and around 20–30% of women suffer from recurrent urinary tract infections.

One of the key reasons for UTIs is bacterial growth in the urinary tract which leads to an infection. Several factors can put you at risk of UTI which include holding urine for long durations, poor vaginal hygiene, hormonal problems such as diabetes etc.

Some of the common signs and symptoms include burning sensation during urination, frequent or intense urge to urinate even though little or nothing seems to come out and pain or pressure in the back or lower abdomen and rise in body temperature. One should consult a gynecologist if the symptoms fail to improve in a day or two with home care.

Key Facts

Usually seen in

Adults between 16 and 35 years of age

Gender affected

Both men and women but common in women

Body part(s) involved

Kidneys

Urinary Bladder

Urethra

Ureter

Prevalence

Worldwide: 150 million cases annually (2020)

India: 33.54 % (2018)

Mimicking Conditions

Pyelonephritis

Kidney stones

Vaginitis

Pelvic Inflammatory Disease (PID)

Herpes

Necessary health tests/imaging

Urine routine and microscopy

Urine culture

CT Urography or Urogram

USG, MRI or CT scan of abdomen

MRI or CT scan of pelvis

Cystoscopy

Treatment

Doxycycline

Quinolones: Ciprofloxacin, Ciprofloxacin+phenazopyridine, Ofloxacin+flavoxate, Levofloxacin & Ofloxacin

Cephalosporins: Ceftriaxone

Nitrofurantoin

Clotrimazole

Amoxicillin

See All

Symptoms Of UTIs

Urinary tract infections usually do not cause any signs and symptoms in its early course. However, there are certain symptoms which every woman needs to be aware of and book an appointment with a gynecologist if the symptoms fail to improve in a day or two with home treatment. Each type of UTI may result in more-specific signs and symptoms depending on which part of your urinary tract is infected which are:

Kidneys (acute pyelonephritis)

Bladder (cystitis)

Urethra (urethritis)

The common signs and symptoms of urinary tract infection include:

A strong and persistent urge to urinate

Experiencing a burning sensation while urinating

Appearance of cloudy urine

Strong-smelling urine

Feeling of not able to empty your bladder completely

Appearance of blood in the urine

A sudden urge to urinate

Feeling pain when you urinate

Experience lower back pain

Causes Of UTIs

Urinary tract infections (UTIs) are some of the most common bacterial infections. Escherichia coli is the common bacteria that cause UTIs in most patients. Other common causative pathogens include Klebsiella pneumoniae, Proteus mirabilis, Enterococcus faecalis, and Staphylococcus saprophyticus.

It usually occurs when bacteria enters the urinary bladder through the urethra and starts multiplying inside. Though most of the time, the urinary system of our body by design keeps out these bacteria, sometimes it fails. A full-grown infection of the urinary tract manifests when the body fails to deal with the infection.

Some of the common causes of UTIs include:

Holding urine for long hours

Following poor vaginal hygiene, especially during menstruation

Suffering from health conditions such as diabetes, dehydration, etc

Experiencing irregular bowel movement or constipation

Not following proper hygiene practices post sexual activity

Risk Factors For UTIs

Urinary tract infections (UTIs) are more common in women than in men. This could be attributed to the fact that women have shorter urethras than men. The shortness of the urethra, with its close relationship to the anus, makes it easy for bacteria to ascend in the urinary tract. Other factors that can up the risk of UTI include:

Changes in vaginal pH can trigger bacterial growth

Menopause causes a significant reduction in estrogen secretion which alters vaginal pH

Diabetes is correlated with the development of asymptomatic bacteriuria

Frequent sexual activity and having new sexual partners

Use of spermicides or diaphragm for birth control for contraception may irritate the vagina and urethra and facilitate the entry and colonization of bacteria

Other factors include age of the first UTI, maternal history of UTI and voiding dysfunction

In addition to these common factors, there are few other risk factors for UTI infection in women. These are:

Abnormalities of the urinary tract

Poor immunity

Blockage of the urinary tract (due to kidney stones, etc)

Use of a catheter

Any recent surgery of the urinary tract

Diagnosis Of UTIs

As known, in most cases, a urinary tract infection does not cause any symptoms, which makes it difficult to diagnose. However, if you are experiencing any symptoms of UTI, then do consult your gynecologist at the earliest. Your doctor might perform a physical examination and ask clinical history followed by an internal examination to know about your condition. Some of the common tests that can help to check for bacterial infection include:

Urine Routine & Microscopy to check for white blood cells, red blood cells, and bacterial growth

Urine culture test to detect bacteria in culture grown and provide specific treatment

CT Urography or Urogram of urinary system to detect presence of renal stones

USG, MRI or CT scan of abdomen

MRI or CT scan of pelvis to detect any abnormality in urinary system

Cystoscopy in case of recurrent UTI to view urethra and bladder for any suspected abnormality

Celebs affected

Tanya Roberts

An American TV actress, Tanya Roberts, best known for her role in 1984 James Bond film “A View to a Kill”, suffered from UTI. The infection spread to her kidneys and gallbladder & the actress died of sepsis triggered by a urinary tract infection in 2021.

Lena Dunham

The Hollywood actress suffered from urinary tract infection which caused her severe abdominal pain.

Prevention Of UTIs

Most UTIs are caused by bacteria that are already in the bladder, so flushing them out is the most important way to prevent an infection. Here are some effective ways by which you can prevent recurrent UTIs:

1 . Drink enough fluids

One of the easiest and effective ways to prevent UTI is by staying well hydrated. Fluid helps move things through the urinary tract, but it also dilutes the urine so bacteria can’t grow. Make sure you drink 1-2 liters of fluids daily.

2 . Don’t hold the urine

The longer urine stays in the bladder, the higher are the chances of bacterial overgrowth since stagnant fluid is an ideal environment for an infection to develop. Do not get into the habit of holding on to it for long, since it will make you prone to infection.

3 . Practice good toilet hygiene

After you’re done, make sure you wipe from front to back to keep from pushing bacteria nearer to your urethra. This is especially important after a bowel movement.

4 . Make sure you empty your bladder after sex

Sexual intercourse can move bacteria from the vagina into the urethra, thereby increasing risk of infection. Urinating after sex flushes out any bacteria that could have migrated to the bladder during intercourse.

5 . Choose contraceptives with caution

If you are prone to UTI, it is best to avoid spermicides and diaphragms. Spermicides not only introduce bacteria into your vagina but they also alter your vaginal pH, which can create an ideal environment for bacterial overgrowth. Diaphragms may interfere with your ability to empty your bladder completely, thereby increasing the risk of infection.

6 . Use female hygiene products carefully

If you get UTI too often, avoid bubble baths, bath oils, and perfumed products around genital area. Some doctors suggest switching from tampons to sanitary pads, since tampons may give bacteria more opportunity to enter the body and irritate the urethra.

7 . Change out of workout clothes quickly

If you are prone to UTI it is best to change out of your workout clothes right after you are done. Excessive sweat can increase the risk of bacterial multiplication which in turn can migrate into your urethra and lead to UTI.

8. Avoid tight-fitting clothes

Avoiding tight-fitting clothing can actually help keep you dry, preventing bacteria from growing in the urinary tract. Wearing cotton underwear will prevent extra moisture from getting trapped around your urethra.

Specialist To Visit

If you experience any of these symptoms of UTI, consult your doctor at the earliest. Some of the specialists that can help detect and treat UTI include:

Gynecologist

Urologist

Consult India’s best doctors online with a single click.

Consult Now!

Treatment Of UTIs

Antibiotics are the primary options for the treatment. If you have ever taken antibiotics you would have noticed that you start feeling better on the second day of taking the medications whereas your doctor has prescribed you 5 days worth of pills.

Some medicines used to treat UTI are:

Doxycycline

Quinolones like Ciprofloxacin, Ciprofloxacin+Phenazopyridine, Ofloxacin+Flavoxate, Levofloxacin and Ofloxacin

Cephalosporins like Ceftriaxone

Nitrofurantoin

Clotrimazole

Amoxicillin

Home Care For UTIs

Some of the self care measures for UTI you can follow include:

Use a hot water bottle to ease discomfort and pain.

Drink plenty of water. Aim for 8-12 glasses everyday.

Urinate when you first feel the need. Bacteria can grow when urine stays in the bladder too long.

Wear cotton underwear and loose fitting clothes so that air can circulate and keep the area dry.

Take Vitamin C. It increases the acid in urine so that bacteria cannot grow easily.

Avoid chocolate, citrus, carbonated drinks and caffeine as these can irritate the lining of your bladder and it is easier for bacteria to survive.

Complications Of UTIs

If left untreated, UTI can last for several months. Moreover, there is a high chance that the infection might spread to other parts of the body such as the kidneys, which can lead to kidney infection. It can lead to recurrent infections, especially in the case of women. Also, in rare cases, it can lead to sepsis, a life-threatening infection of the blood which can lead to severe complications.

Alternative Therapies Of UTIs

Home remedies for UTI

Parsley: It acts as a diuretic and flushes your kidneys which in turn flush out the bacteria and speed up the healing process of UTI. Boil about 1-2 cups of water and add roughly 1 cup of fresh parsley or 2 tbsp of dried parsley. Allow it to simmer, strain and drink. In the summer you can refrigerate it and then have it.

Celery seeds: These also act as a diuretic and chewing a handful of them can help increase the production of urine. Once or twice a day you can snack on celery seeds after your meal.

Cucumbers: They have high water content and it is a great way to get that extra fluid through your system when you are having a hard time drinking enough water. Have cucumber juice with a dash of ginger juice or include cucumbers in your salad.

Probiotics: Probiotics are now considered as a major home remedy for fighting UTI causing bacteria. Studies suggest that benign bacterial flora helps to prevent increase of microorganisms that cause illness. Increase consumption of probiotics such as yoghurt, raw cheese, kimchi, kefir in your diet.

Garlic: Enriched with several properties, garlic serves as a rich source of allicin due to which it exhibits antibacterial properties. Daily intake of garlic clove has been found to be beneficial in averting such infections.

Cranberry: Studies show that cranberries can help to inhibit the growth and colonization of bacteria that cause infection, including E.coli , the most common bacteria seen in urinary tract infection.

Here’s more amazing reasons to have cranberries often!

Click To Read!

Frequently Asked Questions

Can a man pass a UTI to a woman?

How long does a UTI last untreated?

Should you stop taking your medicines once you start feeling better?

Do I need to see a doctor for a UTI?

Can you get rid of UTI infection without antibiotics?

Can probiotics help treat urinary tract infections?

How do you stop a UTI when you feel it coming?

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Urticaria

Also known as Hives, Welts, Weals and Nettle rash

Overview

Urticaria is a condition characterized by itchy skin, reddened areas with defined borders, and swelling of the skin. It can be classified as acute or chronic based on the duration. Acute urticaria usually stays for 6 weeks while chronic urticaria may stay over 6 weeks. In most cases, chronic urticaria can recur frequently over weeks and months.

The most common causes of acute urticaria are allergic reactions to food, medicine, cosmetics or soap, infections, insect bites or stings, environmental pollutants, latex, extreme temperatures, emotional stress, and exercise. The cause of chronic urticaria is often difficult to identify and many times, impossible. However, in some cases, chronic urticaria can be linked to the conditions affecting the immune system or to diseases like hepatitis or cancer.

Urticaria can be mistaken for other skin conditions with similar appearance. However, a dermatologist can help to differentiate and diagnose the condition based on the symptoms, medical history and skin examination.

Urticaria can be prevented by avoiding exposure to any known causes, triggers or allergens. There is no specific treatment for urticaria as in most cases, the symptoms usually subside within a few days. In some cases, use of home remedies can help improve the symptoms like pain, swelling, and itching. If hives are caused by an allergy, then use of antihistamines might be advised. These are medications that counter the immune system’s chemicals released against the allergy.

Key Facts

Usually seen in

Children below 10 years of age

Adults between 20 to 40 years of age

Gender affected

Both men and women

Body part(s) involved

Skin

Blood

Hair

Prevalence

Worldwide: 0.1%–3% (2013)

India: 4.16% (2013)

Mimicking Conditions

Allergic contact dermatitis

Urticarial vasculitis

Drug eruptions

Erythema multiforme

Henoch-Schonlein purpura (IgA vasculitis)

Mastocytosis

Necessary health tests/imaging

Physical examination

Allergy test

Blood tests: Complete blood count (CBC), Erythrocyte sedimentation rate (ESR) & Antinuclear antibody (ANA)

Angioedema tests

Solar hives (urticaria) test: Photo testing & Patch testing

Cholinergic hives tests

Other tests: Imaging studies & Punch biopsy

Treatment

Antihistamines: Chlorpheniramine Maleate, Loratadine, Desloratadine & Cimetidine

Anti-inflammatory medications: Prednisone

Corticosteroids

Immune suppressing medications

See All

Symptoms Of Urticaria

Urticaria, also known as hives, typically manifests as red or skin-colored lumps or welts with distinct borders. They can be as small as a pen tip or as huge as a dinner plate. Pressing the center of a red hive can cause it to become white, this is known as blanching. They may appear as a single hive or as blotches or linked patches. It appears to help in regulating the body's allergic reaction to certain stimuli.

It is common for people to mistake hives for other conditions, but they are distinguished by a few characteristics. You can determine whether hives are causing a rash or skin disease based on how long they last and how much they move. The following symptoms are commonly associated with hives.

Red or skin-colored lumps or welts with distinct borders that usually disappear within 24 hours but may return to another location.

Bumps or welts that appear alone or in clusters, covering a greater area.

Itchiness and/or swelling in the area of the bumps or welts.

Pain or stinging may occur at the site of the pimples or welts.

Did you know?

Hives are a well-known allergic reaction. When you consume the food you are allergic to, it activates an immune response by producing IgE antibodies, which cause the symptoms. This is why physicians advise against eating high-allergen foods like peanuts and shellfish.

Causes Of Urticaria

The disease's etiology might be caused by a variety of reasons. Factors that are frequently encountered include:

1. Medications

Urticaria can be caused by certain medicines such as:

Penicillin

Aspirin

Nonsteroidal anti-inflammatory drugs

Sulfonamides

Thiazide diuretics

Oral contraceptives

Angiotensin-converting enzyme inhibitors

Vitamins

Codeine

Morphine

Curare and its derivatives

Synthetic adrenocorticotropic hormone

Radiocontrast agents

Urticaria rashes may appear anywhere from 1–2 hours to 15 days after oral consumption of the medicine or drug. They appear faster when medicines are administered intravenously as compared to oral administration.

2. Foods

Foods that are common causes of urticaria include:

Nuts

Eggs

Fish

Shellfish

Chocolate

Meat

Cow's milk

Fruits (citrus fruits, grapes, plums, pineapples, bananas, apples, and strawberries)

Vegetables (tomatoes, garlic, onions, peas, beans, and carrots)

Mushrooms

Fermented foods

Spices

Spirits

Note: Preservatives such as azo dyes, benzoic acid derivatives, salicylates, and food colors are also major causal factors. Urticaria generally appears 1–2 hours after intake of food. Children are more likely to develop food-related urticarial rashes.

3. Respiratory allergens

Urticaria can be induced by the inhalation of allergens like:

Pollen

Mold spores

Mites

Animal dandruff

Animal hairs

Note: Smoking is also a significant component since it includes numerous chemicals that might aggravate urticaria. Urticaria induced by respiratory allergens often develops shortly after contact.

4. Medical conditions

Urticaria can be caused by infections such as:

Sinusitis

Tonsillitis

Dental abscesses

Urinary tract infections

Hepatitis

Infectious mononucleosis

Note: Urticaria is caused by parasites, particularly in youngsters.

5. Contact urticaria

Urticaria can be caused through contact with:

Latex

Cosmetics

Chemicals

6. Insect bites

Insect bites may also cause urticaria, particularly in children.

7. Psychogenic factors

Stress, sorrow, and despair can worsen pre-existing urticaria as well as cause it.

8. Systemic disorders

Systemic disorders, in particular, can induce persistent urticaria. Thyroid and rheumatic disorders such as systemic lupus erythematosus, lymphoma, leukemia, and carcinomas may be examined if necessary. It should be mentioned that urticaria can arise during pregnancy.

9. External stimuli

Stimuli like pressure, heat, cold, and dermographism can all cause urticaria. Urticaria caused by pressure usually appears 3-4 hours after exposure. As a result, they are known as delayed pressure urticaria.

10. Hereditary urticaria

Urticaria can be hereditary and manifest in forms such as angioedema and familial cold urticaria.

11. Idiopathic urticaria

Sometimes, urticaria may occur because of unrecognized causes.

Skin allergies can be caused due to various factors that range from changes in weather to exposure to environmental toxins. Let us understand some of the common causes of skin allergies in children.

Read To Know!

Risk Factors For Urticaria

Any of the following factors can raise the risk of acute or chronic hives.

Allergic reactions (whether pre-existing or newly developed).

A personal history of hives.

A history of hives in the family (especially in the case of hereditary angioedema, although rare).

A well-known condition related to hives (infections such as urinary tract infection, strep throat, hepatitis, rheumatoid arthritis, or type 1 diabetes).

Viral infections.

Medications (include codeine, aspirin, morphine, and NSAIDs).

Skin sensitivity or dermatitis (inflammation of the skin).

Sensitivities to disinfectants, colors, chemicals, or perfume scents.

Emotional triggers (association with stress and anxiety).

Allergies are caused when the body’s immune system responds abnormally to an external trigger known as ‘allergen’. Here’s everything you need to know about allergies.

Click To Read!

Diagnosis Of Urticaria

Urticaria can be diagnosed by a variety of medical specialists, although family doctors make the majority of diagnoses (general practitioners).

Physical examination

A dermatologist diagnoses hives through a physical examination. However, in general, no particular tests are available to diagnose hives. This is due to the non-specific or idiopathic character of triggers in many cases. In certain situations, a trigger – such as a kind of medicine – can be discovered. If an outbreak of hives clears after discontinuing the drug, it can be determined whether it is a trigger. If it does not, the medicine is not the likely culprit.

A doctor will gather full medical history and perform a symptom discussion during the appointment in order to try to establish an underlying cause of hives, such as an allergic response, followed by a thorough physical examination.

The questions a doctor may ask during a consultation are:

How long have the symptoms been present?

How did the skin marks seem when they initially appeared?

Have the marks altered in any way (for example, size or form) since then?

Is there anything that has made your symptoms better or worse before your consultation?

Do the skin blemishes irritate, burn, or sting?

Before this consultation, have any markings vanished without leaving another trace, such as a bruise?

Have you been tested for allergies? If so, which?

Has a similar skin issue ever developed or happened before?

Have you tried any new meals for the first time?

Have any new goods been launched for the first time such as cleaning detergents?

Have you been bitten or stung by an insect lately?

Are you presently taking any new drugs (prescription or over-the-counter, including herbal supplements)?

Has a new pet been brought into the house?

Is there anyone in your family who has had a similar sort of skin problem?

Allergy test

The doctor will then do a physical examination and assess the skin marks (those that are present). If allergies are suspected, a skin prick test to detect the chemical causing the response may be done. The trigger may be very easily identified if urticarial rashes occur within a short period after intake of shellfish or peanuts, or exposure to sunshine or water, after a scrape to the skin, or after vigorous activity.

Once a trigger allergen has been identified, the doctor will advise avoiding coming into contact with or eating a specific food, as well as other items produced from or containing the chemical. If judged safe, the doctor may prescribe an oral food/drug test, in which the afflicted individual is asked to the suspected allergen (in a defined amount) in order to elicit a hive reaction. The patient is monitored closely throughout the test, with emergency equipment or medicine on standby. If there are significant chances of serious responses, such as anaphylaxis, these tests may not be conducted.

If you experience any symptoms of allergy, get an allergy panel done.

Book Test Here!

Blood tests

Blood tests may also be advised to screen for certain diseases known to be related to hive outbreaks and to analyze blood proteins for a possible genetic tendency (as in the case of hereditary angioedema). A urine sample is occasionally collected as well.

Note: Laboratory studies generally are not indicated for acute urticaria (< 6 weeks).

In the event of chronic hives, the following tests may be advised as applicable:

Complete blood count (CBC) to check for signs of anemia or any infections.

Thyroid function test to determine if the thyroid is hyperactive or underactive (hyperthyroidism or hypothyroidism).

Tests for liver function to look for any underlying liver condition.

Erythrocyte sedimentation rate (ESR) test is used to determine the rate of erythrocyte sedimentation (to assess any immune system abnormalities).

Stool test to assess for or identify any parasites causing an infection

Antinuclear antibody (ANA) test to rule out autoimmune disorders such as lupus.

Angioedema tests

C1 esterase inhibitor test (this test evaluates complement protein levels and helps detect any underlying causes of edema) and complement components (C2 and C4) to screen for deficits. Low amounts of these components might cause symptoms of edema and inflammation in the body.

Solar hives (urticaria) test

Photo-testing: A doctor or allergist can evaluate skin responses to UV radiation from a sun lamp using a range of wavelengths. The wavelength to which the skin reacts will be utilized to identify the type of solar allergy.

Patch testing: It involves applying certain chemicals (a suspected sensitizer agent that may cause a response) to the skin and covering it with a patch or dressing for a period of time (usually 24 to 48 hours). The region will next be examined to determine the likelihood of a response. After that, the skin may be exposed to UV light (radiation) via a sun lamp. If the skin responds, solar hives can be diagnosed.

In symptoms, autoimmune or metabolic signals may be checked by blood samples (and occasionally skin biopsies) to establish an underlying cause.

Cholinergic hives tests

An exercise challenge test: The patient may be asked to complete an exercise program in order to elicit a comparable response. During the challenge, medical devices may also be used to obtain various measures.

A passive warming test: During the exposure test, a doctor would use warm water or increased ambient temperature to elevate the patient's internal body temperature and monitor a probable reaction.

A skin test for methacholine: Methacholine, a non-selective muscarinic receptor, would be administered to activate the parasympathetic nervous system and monitor a potential response.

Other tests

Other studies that may be considered include the following:

Imaging studies: These are generally not indicated unless suggested by a specific symptom or sign.

Punch biopsy: It is advised if urticarial vasculitis (inflammation of blood vessels) is suspected.

Extensive testing is not generally recommended by medical specialists in the event of minor hive breakouts or a single incident. Chronic hives are seldom associated with an allergic reaction (due to the frequency of recurrences, which can last for more than 6 weeks). It is more likely that the reason is not of external origin. Relevant tests are performed to identify an underlying cause, which might be an autoimmune illness or another medical condition.

Celebs affected

Vicki Lawrence

Vicki Lawrence is an American actress, comedian, and pop singer, who has been living with chronic idiopathic urticaria. She is using her voice to educate people about the condition.

Prevention Of Urticaria

Making lifestyle changes that minimize or prevent hive flare-ups is generally the most effective strategy to lessen the chance of an outbreak or recurrence. It is not always possible to entirely avoid a hive breakout. A confirmed allergy (or a known cause such as medicines, environmental factors, foods, or exposure to specific pets) is a one-way trigger that can be easily avoided. Specific allergy treatment can also be used to minimize the risk and relieve breakouts.

If the reason is unknown and flare-ups occur often, maintaining a record that draws parallels between ‘cause and effect' (e.g., food ingested and a probable response) might help discover and avoid potential triggers.

Careful management of sun exposure (refraining from being out in the sun when it is at its strongest – often between 10 am and 4 pm, and gradually increasing time outdoors during the in-between months – spring and autumn or fall – to try and better adapt to stronger sunlight exposure) can be beneficial for solar hives.

Wearing lightweight or loose woven clothes that give maximum covering (long pants or skirts as well as sleeved items).

Wearing clothes with a UPF (ultraviolet) protection rating of at least 40, as well as a broad-spectrum sunscreen recommended by the treating medical professional (and applied regularly).

Maintain your calm. Hives can be triggered by stress. If you are frequently stressed, practice effective stress-reduction strategies including daily exercise, meditation, and mindfulness.

Certain products that may irritate the skin should be avoided. When you have hives, some soaps might cause your skin to dry out and create greater irritation. Make sure you use a mild soap designed for delicate skin. There are many to choose from here. These are generally free of scent and other irritants. You should also avoid using irritants such as heavy moisturizers and creams. When in doubt, use a solution that is designed for sensitive skin. Applying it shortly after washing may also help with itching.

Using anti-sun aids such as sunglasses, broad-brimmed hats, and umbrellas can help to protect against sun rays.

Specialist To Visit

The symptoms of urticaria are often easy to manage with the use of over-the-counter medications and lifestyle changes. However, if you experience rashes and itchy skin that seem different or worse than usual, consult a doctor. Also, if you experience these symptoms for more than 6 weeks or on a regular basis, immediately visit your doctor’s clinic to know the exact cause and get it treated.

Specialists that can help to manage urticaria include:

Dermatologist

Rheumatologist

Immunologist

Internist

Allergist

Pediatrician (for children)

Getting the right diagnosis and the right treatment can help in better prognosis and improve the quality of life. Consult the best experts online.

Consult Now!

Treatment Of Urticaria

If your symptoms are minor, you might not require therapy. Hives and angioedema often resolve on their own. However, therapy can provide relief for severe itching, severe discomfort, or symptoms that linger.

Medications

Prescription medicines, such as those listed below, may be used to treat hives and angioedema.

Anti-itch medications (antihistamines)

Antihistamines that do not make you drowsy are the conventional treatment for hives and angioedema. They are the first-line therapy for all urticaria patients.

Some class H1 antihistamines with drowsiness as a side effect are:

Chlorpheniramine

Chlorpheniramine Maleate

Hydroxyzine

Diphenhydramine

Examples of non-sedating second-generation H1 antihistamines are:

Loratadine

Cetirizine

Terfenadine

Mizolastine

Second generation H1 antihistamines include:

Desloratadine

Levocetirizine

Fexofenadine

Examples of H2 antihistamines:

Cimetidine

Ranitidine

Famotidine

Nizatidine

Treatment usually begins with a non-sedating antihistamine during the day and a sedating antihistamine at night. All antihistamines are equally effective in the licensed dosage. If patients do not respond to standard dosage, it is common to double or triple the dose of non-sedating antihistamines.

If patients complain of indigestion or acidity, H2 antihistamines might be administered. Combination therapy is frequently beneficial to the patient. In a short experiment, fexofenadine outperformed generic levocetirizine. Many patients do not react to these combinations, necessitating the use of second-line treatments. According to some research, 40% of patients did not respond to antihistamines.

Anti-inflammatory medications

Doctors may occasionally give an oral corticosteroid medication such as prednisone to decrease swelling, redness, and itching caused by severe hives or angioedema.

Immune suppressing medications

If antihistamines and corticosteroids do not work, your doctor may prescribe immune suppressing medication that might calm a hyperactive immune system.

Situations of emergency

Acute urticaria may progress to life-threatening angioedema and/or anaphylactic shock in a very short period, although anaphylaxis usually presents as rapid-onset shock with no urticaria or angioedema.

A trip to the emergency department and an emergency injection of epinephrine — a kind of adrenaline — may be required if you have a severe episode of hives or angioedema. If you have had a major attack or if your attacks continue after therapy, your doctor may advise you to carry a pen-like device that allows you to self-inject epinephrine in an emergency.

If associated bronchospasm is present, prehospital nebulized albuterol may be warranted.

Other measures may be appropriate, such as continuous ECG, blood pressure and pulse oximetry monitoring, administering intravenous crystalloids if the patient is hypotensive and administering oxygen.

Home-care For Urticaria

If someone has minor hives or angioedema, the following methods may help ease their symptoms.

People should stay away from triggers and take appropriate precautions. Foods, medicines, pollen, pet dander, latex, and insect bites are the most common triggers. If you suspect a medicine for your rash, discontinue its use and notify the primary care practitioner.

Over-the-counter itch relievers help reduce itching. Some non-prescription antihistamines are loratadine, cetirizine & diphenhydramine.

You can apply a cool washcloth to the affected region to soothe the irritated skin. It also helps avoid scratching.

A relaxing bath in cold water or a cold shower might provide relief from itching. Some people may benefit from bathing in cool water sprinkled with baking soda or oatmeal powder, but this is not a long-term option for chronic itching management.

Dressing in loose-fitting, smooth-textured cotton will help avoid skin irritation.

Staying out of the sun and seeking shade when outside will help prevent aggravation of painful rashes and itching.

Avoid sun exposure as much as possible to stay away from hives.

Sun exposure may aggravate the urticaria. Refraining from being out in the sun during summers when it is at its strongest – often between 10 am and 4 pm, and gradually increasing time outdoors during months of spring and autumn seasons to try and better adapt to stronger sunlight exposure, can be beneficial for solar hives. Here’s more on how to protect your skin from the sun.

Click To Read!

Complications Of Urticaria

Urticaria may lead to anaphylaxis. Anaphylaxis is one of the most serious complications of hives. It is an allergic reaction that is often severe and may even be fatal. It usually happens within seconds to minutes of exposure to a potential allergen such as peanuts or bee stings.

An anaphylactic reaction is produced due to a serial release of chemicals by the immune system, which might cause you to go into shock. Anaphylaxis is marked by rapid blood pressure drop and constriction of airways, preventing the sufferer from breathing.

The signs and symptoms of anaphylaxis are:

Fast and weak pulse

Skin rash

Nausea and vomiting

Swelling in the throat can cause a life-threatening obstruction of the airways

Certain foods, some medications, insect venom, and latex are common triggers for anaphylaxis.

Alternative Therapies For Urticaria

Home remedies for urticaria

1. Use a cold compress

The cold temperature of water or ice does wonders for soothing irritated skin. Simply soak a cloth or towel in cold water and apply to hive-affected areas of skin.

2. Make use of an oatmeal scrub

Oatmeal's anti-inflammatory properties make it an excellent hydrating and relaxing scrub for the skin. To soothe inflamed skin, take a lukewarm shower every morning and gently clean the areas of skin with hives infections with an oatmeal soap bar or scrub with baking soda.

3. Apply aloe vera gel

Aside from being a natural hydrator, aloe vera gel includes a large amount of beneficial antibacterial components. Applying a thick coating of aloe vera gel before bedtime significantly relieves the redness and discomfort associated with hives.

Ayurvedic treatment for urticaria

Follow these steps to cure urticaria rash with an ayurvedic treatment.

1. To minimize urticaria, take a 5 to 7 gramme dosage of a paste made from neem leaves, guduchi (giloy) leaves, or aloe vera pulp every day.

2. Take 1 teaspoon turmeric powder two to three times a day with a glass of milk or water. It's a fantastic remedy for boosting the body's immunity.

3. Massage the skin for 15 minutes with mustard oil before bathing in lukewarm water.

4. Mix 12 teaspoons black pepper (kali mirch) powder with 12 teaspoons desi ghee and eat it first thing in the morning on an empty stomach. For best effects, continue for up to three months.

Eczema, a form of skin inflammation, is commonly characterized by itchiness, red skin, small bumps and thickened skin over a period of time. Here’s more information about home remedies for eczema.

Read To Know!

Living With Urticaria

Hives – itchy red or skin-colored welts, also known as urticaria – affect about 20% of the population. They are frequently the result of an allergic reaction to a meal or medication and usually dissipate soon.

Hives may be very itchy, as well as unpleasant. Although hives are clearly a physical burden, they can also be detrimental to emotional well-being, isolating individuals socially and hindering their performance at work or school, especially if they have suffered from hives for a long time.

However, for a tiny percentage of people, hives recur with no recognized cause. Chronic idiopathic urticaria (CIU) or chronic spontaneous urticaria (CSU) occurs when fresh outbreaks occur practically every day for 6 weeks or longer (CSU). It affects one percent or less of the population. People between the ages of 20 and 40 are the most likely to suffer from it. A single outbreak of CIU generally lasts no more than 24 hours. However, following that, additional colonies emerge.

Urticaria vs. contact dermatitis vs. insect bites

Although used interchangeably, these three terms have different meanings.

Hives (urticaria): These are itchy, red welts caused by an allergic response. The welts vary in size and emerge and disappear on a regular basis as the response progresses. Chronic hives occur when welts form for more than six weeks and repeatedly recur throughout months or years.

Contact dermatitis: Contact urticaria is characterized by an immediate but temporary localized swelling and redness on the skin upon direct contact with an offending chemical. Contact urticaria should be distinguished from contact dermatitis, which occurs hours to days after contact with the offending agent.

Insect bites: Bug bites may resemble hives in appearance, but hives behave differently. Hives can change shape and move around the body, whereas a bug bite remains in one spot. Rosacea often manifests as redness on the face, with enlarged blood vessels visible.

Urticaria in pregnancy

It is unlikely that chronic urticaria would flare up during pregnancy. Pruritic urticarial papules and plaques of pregnancy (PUPPP) and pemphigoid gestationis are special disease of the skin, especially one that does not cause inflammation in pregnancy, with urticaria-like lesions that appear during the second or third trimester of pregnancy and disappear after delivery. Sex hormones may have a role in illness pathophysiology.

Frequently Asked Questions

What is the quickest approach to get rid of urticaria?

Does urticaria go away on its own?

What foods are not permitted in urticaria?

What causes urticaria?

How long does it take for urticaria to go away?

What causes hives to develop at night?

Can stress cause urticaria?

Is urticaria an autoimmune condition?

Do hives spread by scratching?

Can hives cause hair loss?

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Uterine fibroids

Also known as Uterine leiomyomas, Fibromas, Leiomyomas Uterine myomas, and Fibroids

Overview

Fibroids are muscular growths that develop in the wall of the uterus. Women in their reproductive age are most likely to be affected by them.

Fibroids are almost always benign (non cancerous) and do not increase the risk for uterine cancer. Mostly they do not cause symptoms, and a woman with a fibroid is usually unaware of its presence. However, very large fibroids may cause pressure on the bladder and other organs, leading to specific symptoms like heavy menstrual bleeding, back pain, frequent urination, and pain during intercourse.

The risk factors that promote the growth of fibroids include a family history of fibroids, obesity, high blood pressure, early age of commencement of periods amongst others.

As the growth of most fibroids slows as menopause approaches, the health care provider may advise “watchful waiting” if the symptoms are tolerable. However, fibroids associated with significant symptoms require medical intervention.

Key Facts

Usually seen in

Women between 30 to 40 years of age.

Gender affected

Women

Body part(s) involved

Uterus

Cervix

Prevalence

World: 4.5% to 68.6% (2018)

Mimicking Conditions

Adenomyosis (growth within the uterine wall)

Endometriosis

Ovarian cysts

Polyps

Necessary health tests/imaging

Laboratory tests

Complete blood count (CBC)

Imaging tests

Ultrasonography: Transvaginal and Transabdominal

Magnetic Resonance Imaging (MRI)

Computed Tomography (CT) scan

Hysteroscopy

Hysterosonography

Hysterosalpingography (HSG)

Laparoscopy

Treatment

Medications

Gonadotropin-releasing hormone (GnRH) agonists

Leuprolide

Zoladex

Trelstar

Birth control

Oral contraceptive pills

Intravaginal contraception

Intrauterine devices (IUDs)

Progestin-releasing intrauterine device (IUD)

Iron supplements:

Ferrous bisglycinate

Ferrous fumarate

Ferrous sulfate

New drugs

Elagolix

Tranexamic acid

Surgery

Noninvasive procedures

MRI-guided focused ultrasound surgery (FUS)

Minimally invasive procedure

Radiofrequency ablation (RFA)

Uterine artery embolization (UAE)

Hysteroscopic myomectomy

Robotic myomectomy

Traditional surgical procedures

Abdominal myomectomy

Hysterectomy

See All

Symptoms Of Uterine Fibroids

Many women have no symptoms of fibroids. However, sometimes uterine fibroids can be associated with the following signs and symptoms:

Painful periods or heavy bleeding

Menstrual periods lasting more than a week

Long-term vaginal discharge

Frequent urination (this can happen when a fibroid puts pressure on the bladder)

Inability to urinate or completely empty the bladder

Anemia

Constipation

Lower back pain

Enlargement of the lower abdomen

Feeling of fullness in the lower abdomen

Reproductive issues, such as infertility, multiple miscarriages, and early onset of labor during pregnancy

Complications during pregnancy, which increases the chances of cesarean (C-section) by multiple folds

Causes Of Uterine Fibroids

The exact causes of fibroids are not known. Research suggests that fibroids develop from abnormal muscle cells in the uterus. High estrogen levels lead to fibroid development and growth, and low progesterone levels are not able to inhibit their growth.

Types Of Uterine Fibroids

There are four major types of uterine fibroids:

Intramural fibroids

This is the most common type of non-cancerous tumor that grows in the muscles of the uterus. It grows within the uterine wall and can become very large if left untreated. The fibroid can grow in the front (anterior), top (fundal), or back (posterior) of the uterus.

Submucosal fibroids

This is the rarest type of noncancerous uterine fibroid, which develops in the muscle layer beneath the womb's inner lining and grows into the cavity of the womb.

Subserosal fibroids

These fibroids are located outside the lining of the uterus and protrude outward. These fibroids are very common and affect the daily lives of women.

Pedunculated fibroids

They are the least common type of fibroids that are located outside of the uterus. They’re often depicted as mushroom-like because they have a stalk and a much wider top.

Risk Factors For Uterine Fibroids

Fibroids usually grow in women during childbearing age, and research suggests that they may shrink after menopause. Several factors may affect a woman’s risk for having uterine fibroids, including the following:

Age

Fibroid development becomes more common as women age, especially during their 30s and 40s years of age.

Family history

Women with a family history of uterine fibroids have a higher risk of developing uterine fibroids.

Age of menarche (first period)

Research suggests that women who start menstruation earlier are at a greater risk for uterine fibroids. This can be due to increased exposure to estrogen over the years.

Obesity

Increased body fat, especially abdominal visceral fat enhances the risk of uterine fibroids. Women who are overweight or obese are at higher risk of having fibroids.

Do you want to know the other health risks of obesity?

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Vitamin D deficiency

Research has shown that Vit D deficiency is an important risk factor for uterine fibroids.

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Diet

Certain eating habits including consuming lots of red meat and alcohol as well as not adding fruits and green vegetables in daily routine can increase the risk of fibroids.

Stress

Stress is the body’s biochemical response to life challenges. To handle the effects of stress, the body produces extra hormones. These elevated rising hormones can stimulate fibroid growth and cause symptoms to flare up.

Read about the various effects of stress on the body.

Click here to know

Food additive consumption

Food preservatives like butylated hydroxytoluene (BHT) contribute to the proliferation of uterine fibroids. This is commonly found in packet cake mixes, potato chips, salted peanuts, and dehydrated mashed potatoes.

Soybean milk

It is well-known that soybean milk is rich in animal or plant estrogen-like substances, which may exert estrogen-like functions and if estrogen levels are too high it can lead to fibroid growth and development.

Oral contraceptives

Women who take oral contraceptives for a long time have a higher risk of uterine fibroids.

Alcohol intake

Drinking alcohol can increase the severity and duration of common fibroid symptoms. Many women have also reported increased fibroid pain after consuming alcohol. This is likely due to two major factors, increased inflammation and dehydration.

High blood pressure (Hypertension)

Hypertension does not directly cause fibroids. Few researchers have suggested that the use of certain anti-hypertensive medications may increase the levels of hormones in the body that can promote the growth of fibroids. It has also been seen that elevated blood pressure may cause smooth muscle wear and tear and thereby increase the risk of uterine fibroid onset or growth.

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Diagnosis Of Uterine Fibroids

Many women having uterine fibroids do not even know about it until it causes some symptoms. Uterine fibroids are frequently found incidentally during a routine pelvic examination. The medical practitioner may feel irregularities in the shape of the uterus, suggesting the presence of fibroids.

Medical history

During the medical history clinicians first ask about the age of the person and the start of the menses at puberty (menarche). The doctor will also check whether there is any history of fibroids running in the family.

Laboratory tests

Complete blood count (CBC): The doctor may suggest this test in the case of abnormal menstrual bleeding or to investigate the other potential causes of this. In heavy menstrual bleeding, CBC can help in checking for anemia.

Note: Uterine fibroids lead to heavy menstrual bleeding which causes anemia. A study has reported a case series of life-threatening anemia with hemoglobin levels <2.0 g/dl caused by uterine fibroids and genital bleeding.

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Imaging tests

Ultrasonography: This is a noninvasive imaging test that creates a picture of the internal organs with sound waves. The sound waves help in taking pictures of the uterus, and checking whether fibroids are present or not. Depending on the size of the uterus, the ultrasound can be performed in two ways:

Transvaginal: This test is used to look at a woman's uterus, ovaries, tubes, cervix, and pelvic area.

Transabdominal: This test is used to visualize the liver, gallbladder, kidneys, pancreas, intestine, bladder, uterus, and stomach.

Magnetic Resonance Imaging (MRI): This is a noninvasive test that creates detailed images of your internal organs by using magnets and radio waves. This test is helpful in visualizing the size and location of fibroids, identifying different types of tumors, and helping in exploring different treatment options.

Computed Tomography (CT) scan: It is an imaging procedure that uses a combination of X-rays and computer technology to visualize images of the inside of the body.

Hysteroscopy: It is a procedure to examine the inside of the uterus. The device used is called a hysteroscope, which is a narrow telescope with a light and camera at the end. The device is inserted through the cervix into the uterus and helps in looking the fibroids into the walls of the uterus and the openings of the fallopian tubes.

Hysterosonography: This test is also called a sonohysterography and saline infusion sonogram, which uses sterile salt water to expand the uterine cavity. This test uses sound waves to produce pictures of the inside of the uterus and is helpful in visualizing images of fibroids and the lining of the uterus in women.

Hysterosalpingography (HSG): This is an X-ray test in which contrast material is injected first and then X-rays of the uterus are taken. HSG is a thin tube that is passed through the vagina and cervix. This test is helpful in determining whether a person's fallopian tubes are open or blocked and if some submucosal fibroids are present.

Laparoscopy: This procedure is also called keyhole surgery or minimally invasive surgery that allows the surgeon to visualize the inside of the abdomen and pelvis without having to make large incisions in the skin. A thin and flexible tube with a camera on the end will be inserted to look closely at your internal organs through the cut made at the lower abdomen.

Celebs affected

Anoushka Shankar

Anoushka Sharma is a well-known sitar player. The music composer said that she had undergone a hysterectomy (removal of the uterus) to remove multiple, benign fibroids.

Bethenny Frankel

Bethenny Frankel is an American businesswoman, television personality, entrepreneur, and author. She suffered from uterine fibroids and even cited them as a cause of her miscarriage.

Prevention Of Uterine Fibroids

Uterine fibroids can’t be prevented. However, the risk can be reduced by making healthy lifestyle choices and undergoing regular pelvic examinations.

The following pointers can be helpful in reducing the risk of uterine fibroids:

Do’s

Monitor your menstrual cycle (duration and frequency)

Go for regular screening in case of a family history of uterine fibroids

Maintain a healthy weight

Add whole grains, vegetables, and fruits to your diet

Maintain optimum Vitamin-D levels, by basking in the morning sun and if required adding supplementation

Drink plenty of water to flush out toxins

Don'ts

Eating too much red meat, processed and packaged foods

Eatables or drinks loaded with food additives

Too much stress in day-to-day life

Alcohol consumption

Understand how drinking water can be beneficial for your overall health.

Watch this video now

Specialist To Visit

Uterine fibroids remain undiagnosed until a few symptoms appear. Doctors that can help you diagnose and treat uterine fibroids include

General physician

Gynecologist

A general physician can diagnose uterine fibroid during a pelvic examination if the uterus is enlarged or has an irregular shape. It is further confirmed by gynecologists through various diagnostic imaging exams to confirm the presence of these fibroids.

When to see a doctor?

You should connect with your doctor if you have the following symptoms:

Painful periods or heavy bleeding

Menstrual periods lasting more than a week.

Anemia

Enlargement of the lower abdomen

Chronic vaginal discharge

If you or your loved ones are noticing any of the above symptoms, seek medical help from our trusted team of doctors.

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Treatment Of Uterine Fibroids

There's no single best approach to uterine fibroid treatment, a combination of different treatment options exists. Treatment for uterine fibroids can involve medication to manage symptoms as well as surgical procedures to remove tumors in a few cases. The best option of treatment depends upon the:

The severity of the symptoms

The amount of fibroid tissue in the uterus

Whether the individual wants to conceive in the future

1. Be watchful of the symptoms

Many women with uterine fibroids experience no signs or symptoms, or only mild signs and symptoms that they can live with. In that case, watchful waiting could be the best option.

The treatment plan depends on the following options:

Number of fibroids.

The size of your fibroids.

Location of fibroids

Symptoms you are experiencing related to the fibroids

The desire for pregnancy.

The desire for uterine preservation.

2. Medications

Medications for uterine fibroids target hormones that regulate your menstrual cycle and help in treating symptoms such as heavy menstrual bleeding and pelvic pressure. Medications can temporarily ease symptoms but will not eradicate the growth of fibroids. Medicines to manage fibroid symptoms include

Gonadotropin-releasing hormone (GnRH) agonists: These medications act by blocking the production of estrogen and progesterone, putting the individual into a temporary menopause-like state. As a result, the menstruation stops and fibroids shrink in size.

A few examples of GnRH agonists include

Leuprolide

Buserelin

Triptorelin

Nafarelin

Note: These medications are not used for more than 3-6 months because symptoms return when the medication is stopped and long-term use can cause loss of bone.

Birth control: Also known as hormonal birth control in general, can help alleviate fibroid symptoms like heavy bleeding and menstrual pain but not reduce the size of fibroids per se.

A few examples of birth control options include

Low-dose oral contraceptive pills

Intravaginal contraception

Progestin-releasing agents: Pills, implant, injection or intrauterine devices (IUD) release a type of the hormone progestin. This may help relieve heavy bleeding caused by fibroids. This method only provides symptomatic relief only and doesn't shrink fibroids or make them disappear.

New drugs: Two new oral therapy drugs have also emerged namely:

Elagolix

Tranexamic acid

The role of elagolix is the management of heavy uterine bleeding in people who haven't experienced menopause with symptomatic uterine fibroids. The role of tranexamic acid is an antifibrinolytic drug used for the treatment of cyclic heavy menstrual bleeding in people with uterine fibroids.

Analgesics and Anti-inflammatory drugs: Pain relievers known as nonsteroidal anti-inflammatory drugs may be prescribed to ease pain caused by fibroids.

A few examples of these drugs are

Ibuprofen

Naproxen

Iron supplements: If a woman is experiencing anemia due to heavy blood loss, doctors may recommend iron supplements.

A few examples of iron supplements are:

Ferrous bisglycinate

Ferrous fumarate

Ferrous sulfate

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3. Surgery

There are several factors to consider when opting for different types of surgery for fibroid removal. The choice of surgery is dependent not only on the size, location, and number of fibroids but also on future pregnancies. Some surgeries are noninvasive, some are minimally invasive while few are conventional surgical procedures.

Non Invasive surgeries

MRI-guided focused ultrasound surgery (FUS): It is a non-invasive procedure that helps in preserving the uterus and requires no incision. Focused ultrasound is not an operation, instead of surgery, high-intensity, focused ultrasound waves are used to heat and destroy fibroid tissue.

Note: This procedure is performed while a person is inside an MRI scanner equipped with a high-energy ultrasound transducer for treatment

Minimally invasive surgeries

Certain procedures can help in destroying uterine fibroids without actually removing them through surgery.

Radiofrequency ablation (RFA): In this procedure, radiofrequency energy destroys uterine fibroids and shrinks the blood vessels that feed them. It is a laparoscopic-guided procedure where laparoscopic ultrasound helps in visualizing the inside of the uterus and maps the locations of fibroids during this procedure. After locating the fibroid, the doctor uses a specialized device to heat up the fibrous tissue and hence destroy it.

Note: This procedure is considered to be a safer, newer, and noninvasive alternative to hysterectomy and myomectomy

Uterine artery embolization (UAE): This is a procedure that treats fibroids without surgery. This is a procedure in which tiny particles (about the size of grains of sand) are injected into the blood vessels that lead to the uterus. The particles cut off the blood flow to the fibroid and cause it to shrink.

Hysteroscopic myomectomy: This is the most minimally invasive procedure to treat fibroids. Fibroids are removed through an instrument called a hysteroscope inserted into the uterine cavity through the cervix and vagina.

Robotic myomectomy: This is a type of laparoscopic myomectomy (a small incision in or near your belly button from where a laparoscope is inserted which is a narrow tube fitted with a camera into the abdomen) is used to remove uterine fibroids.

Note: The larger fibroids can be removed through smaller incisions by breaking them into pieces by a process called morcellation.

In all the above procedures, where the uterus is not removed so there is a risk that new fibroids could grow and cause symptoms.

Conventional surgical procedures

Abdominal myomectomy: This procedure is used in case of multiple fibroids, or very deep fibroids. This is an open abdominal surgical procedure to remove the fibroids but leaves the uterus intact. It involves making an incision through the skin on the lower abdomen and removing the fibroids from the wall of the uterus.

Hysterectomy: For women with severe symptoms, or intense fibroid growth based on the size or number of masses, a procedure known as hysterectomy is involved to remove the entire uterus. After undergoing a hysterectomy, a woman does not have a menstrual period and fails to become pregnant.

Home Care For Uterine Fibroids

Home care goes in hand with the conventional treatment of fibroids. The following pointers can be helpful in managing uterine fibroids:

Diet

Research suggests that diets high in the following may be helpful to prevent or slow fibroid growth:

Fibrous fruits: Fruits that are enriched in dietary fibers and fluid content are very beneficial for curing uterine fibroids. The fiber that is enriched in the fruits helps in eliminating the toxins and the excess estrogen from the body. One should include apples, bananas, raspberries, strawberries, and blueberries in the diet. Apricots and pineapple are also very rich in anti-inflammatory properties that effectively help in managing uterine fibroids.

Whole grains: The grains are helpful in releasing the excess estrogen from the body. Grains like oats, brown rice, barley, and quinoa have healing effects in maintaining uterus health.

Eggs: They are rich in proteins and omega-3 fatty acids. Consuming 1-2 eggs daily promotes the good health of the uterus. Eggs have healing properties that contribute to the condition of uterine fibroids.

Green tea: Green tea is known to contain two compounds bioflavonoid and epigallocatechin-3-gallate (EGCG). Many studies have shown that the bioflavonoid present in green tea helps in reducing the size and the number of fibroids in the uterus.

Get to know the Eight Amazing benefits of green tea that can do wonders in your lifestyle.

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Special ingredients

The following natural ingredients are known to do wonders for female reproductive health including management of uterine fibroids. However, make sure to consult your doctor before consuming them.

Chasteberry tincture

Chasteberry or chaste tree berry is commonly known as Vitex. It is effective in dealing with heavy menstrual flow, cramps, and some other symptoms of uterine fibroids. Taking 20-30 drops of chasteberry tincture twice a day for about two months can shrink small to medium-sized uterine fibroids.

Black Cohosh

Several studies have shown that black cohosh has been used extensively in dealing with gynecological problems. It helps in lowering the estrogen level and increasing the progesterone level, therefore, reducing the development of fibroids and causing the shrinking of fibroids too.

Black Cohosh root powder can be consumed every day in the form of tea or tablet and helps to get rid of the fibroids naturally.

Exercise

Regularly exercising will ensure that toxins are eliminated from the uterus, hence very effective in shrinking the fibroids.

Since a person is working out to manage the symptoms, avoid workouts that can make the symptoms worsen. Stay away from moves that put pressure on the stomach.

Stay away from lifting heavy weights, since this type of exercise can push more blood into your abdomen and lower body and increases the fibroid blood supply

One of the ways to manage fibroids is with cardiovascular exercises like walking, jogging, or swimming. Engaging in cardio is a great way to manage fibroids because the exercise makes you feel happy while maintaining a healthy weight.

Did you know?

A recent study has shown that women with fibroids are more likely to have cardiovascular risk factors than women without fibroids. Therefore, it is important to boost your heart health through cardiovascular exercise when you have fibroids. Engaging in cardio exercise is a great way to manage weight and maintain heart health as well.

Complications Of Uterine Fibroids

Most women do not experience any symptoms of fibroids, but in rare cases, the fibroids can cause significant problems.

Anemia: Also called a lack of red blood cells, which can lead to fatigue, dizziness, shortness of breath, or a rapid heartbeat if left untreated.

Issues during pregnancy: If fibroids are present at the time of pregnancy it can lead to problems with the development of the baby or difficulties during labor.

Miscarriage: In very cases, fibroids can cause miscarriage (the loss of a pregnancy during the first 23 weeks).

Infertility: The inability to become pregnant may occur in cases where a woman has large fibroids.

Cardiovascular diseases: Women with fibroids have thicker arteries and hence, the risk of cardiovascular diseases like heart attack and stroke is increased.

Alternative Therapies For Uterine Fibroids

Acupuncture

This procedure involves the insertion of very thin needles through your skin at strategic points on the body. It is beneficial in promoting blood flow in the uterus and helping to reduce fibroid sizes.

Yoga

Yoga has an amazing remedial effect on uterine fibroids. The following yoga asanas are highly recommended for uterine fibroids:

Bhujangasana (Cobra Pose)

Paschimottanasana (Seated forward bend)

Baddha Konasana (Bound Angle Pose)

Living With Uterine Fibroids

Uterine fibroids are benign noncancerous growths in the uterus that can cause frustrating symptoms like heavy bleeding, pain, etc. These symptoms can affect the quality of life as well as mental health. Some of the tips that can help in managing the symptoms of uterine fibroids in women:

Handle heavy menstrual flow and its effects

One of the hallmarks of uterine fibroids is heavy menstrual bleeding. High blood loss each month can deplete the body’s iron stores over time. Low iron can lead to iron-deficiency anemia, which causes weakness, and tiredness and affects the oxygen supply to the vital organs.

If a woman is undergoing heavy periods get regular blood tests to make sure the iron levels are within healthy limits. In the case of low levels iron supplements are recommended.

Get all types of iron supplements with just a single click.

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Relieve pelvic pain

If someone is facing mild mental health symptoms some of the strategies that can help in coping with the effects are:

Engage in regular exercise that can help reduce stress and fight mild or moderate depression

Lack of sleep can affect mental health. Make your sleep a priority and sleep for at least 7-8 hours

Struggling to fall asleep? Read about some amazing tips that will help you sleep like a baby.

Explore tips

Avoid or limit the intake of caffeine in the form of coffee, tea, and energy drinks which can make the anxiety symptoms worsen

Incorporate foods in the diet that can help in reducing stress and anxiety-like high in omega-3 fats and vitamin B complex.

Try these six wonderful herbs to beat stress and anxiety.

Click here to know

Seek medical help

Keep a close eye on the health and the menstrual cycle. Seek medical help if you experience symptoms like

Bleeding between periods

Pain during urination

Signs of anemia

Here are a few signs of anemia that you might be ignoring.

Do you go through the feeling of a sudden urge to eat? Do you face concentration issues?

If your answer to all of these questions is YES, then it’s time to wake up and get your health checked!

Click here to know more

Frequently Asked Questions

What to avoid if you have fibroids?

What organ is affected by fibroids?

What size of fibroids causes problems?

At what age do fibroids occur?

At what age do fibroids shrink?

Can fibroids turn cancerous?

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Cataract

Also known as Nuclear sclerotic cataract, Cortical cataract, Posterior subcapsular cataract, and Congenital cataract.

Overview

A cataract is an eye ailment in which the clear eye lens becomes opaque, obstructing light from passing through and causing a decrease in vision. For people with cataracts, gazing through foggy lenses is comparable to looking through a frosty or fogged-up window.

The majority of cases affect older people, while occasionally, younger people might also be affected. Various factors can cause cataracts, such as smoking, ultraviolet radiation, certain diseases like diabetes, trauma, radiation therapy etc. Cataracts can seriously impede daily activities; if untreated, they might even result in blindness.

Based on the severity of the medical condition, the doctor might ask you for prescription glasses or surgery if required. While prescription glasses cannot directly treat cataracts, they can aid in correcting blurry vision and other problems caused by cataracts.

Surgery is performed when the visual loss due to a cataract severely impacts the patient's quality of life. Cataract surgery is usually safe and effective, significantly improving vision.

Key Facts

Usually seen in

Adults above 50 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Eyes

Prevalence

World: 17.20% (2020)

Mimicking Conditions

Glaucoma

Refractive errors

Macular degeneration

Diabetic retinopathy

Corneal dystrophies and degenerations

Optic atrophy

Retinitis pigmentosa

Necessary health tests/imaging

Visual acuity test

Refraction test

Cover test

Slit-lamp test

Pupil dilation test

Tonometry test

Contrast sensitivity testing

Glare testing

Color vision testing

Potential acuity testing

Spectacular photographic microscopy

Treatment

Prescription glasses

Surgery

See All

Symptoms Of Cataract

The symptoms of cataract include:

Blurred vision

Cloudy, foggy, or filmy vision

Double vision or ghosted image out of the eye with cataract

Need for brighter light to read

Glare (Seeing a halo around lights), especially when you drive at night with oncoming headlights).

Poor night vision (difficulty seeing at night)

Colors don't look as bright as they used to

Did you know?

Air pollution can be a culprit leading to cataract.

Read this to know more

Causes Of Cataract

A cataract is a lens abnormality characterized by decreased transparency and increased cloudiness. The eye's lens is usually clear and made of mostly water and protein.

Crystallins are the main proteins that make the lens and the lens surfaces. They are responsible for the lens's refractive function. These proteins are arranged in a particular fashion that keeps the lens clear and allows light to pass through it. This helps the lens to focus a clear image onto the back of the eye or retinal surface.

Changes in the arrangement and alterations in the character of the lens proteins result first in increasing rigidity of the lens and eventually causing cataract.

Types of Cataract

Cataracts are classified based on the location and how they develop in the eye.

There are four major types of cataracts mainly:

Age-related cataract

It is the most common form of cataract. It usually develops in individuals > 50 years of age. Ageing can cause natural changes in the lens of your eye.

Secondary cataract

These cataracts are associated with diseases like diabetes or an eye problem (like glaucoma (increased pressure in the eye), eye infection, etc.). In some cases, medications such as steroids can cause this cataract.

Childhood cataract

Although cataracts are rare in children, your child may be at greater risk if you have a family history of childhood cataracts. It can affect one or both eyes (bilateral). In some cases, these cataracts are small and don't cause any trouble with vision.

Risk Factors For Cataract

There are several risk factors for cataract development that can be classified as:

Age

Age-related (or senile) cataract is defined as a cataract occurring in people >50 years of age. It becomes progressively more severe and frequent in the elderly and is responsible for 48% of world blindness.

Gender

Women are at a higher risk for most cataracts than men, probably due to a lack of estrogen (reproductive hormone) in post menopausal years.

Racial or ethnic groups

In comparison to Europeans, white people and persons with Asian ancestry have higher prevalence rates.

Genetics

Genes play an important role in the development of cataract. If your parents had cataract then there is a chance that you might also get cataract.

Traumatic injury

Damage to your lens because of serious injury to the eye can lead to cataract. This cataract can form quickly after the injury or take many years.

Certain Medications

Studies suggest that long term use of corticosteroids can lead to cataracts.

Smoking

The ill effects of smoking on the lungs are known to all. It is a known major risk factor for cataract as well.

Alcohol consumption

Alcohol increases the risk of cataracts as the lens is sensitive to the direct toxic effects of alcohol.

Radiation

Certain types of radiation, like ultraviolet (UV) rays from the sun and radiation therapy for cancer, may predispose to cataract.

Systemic diseases

Disorders that increase the risk of the development of cataract include:

Diabetes: Poor control of diabetes mellitus (DM) is linked to several eye complications, including cataracts.

Get first-hand information on everything related to diabetes

Watch This vedio Now

Hypocalcemia: Decreased amount of calcium in the blood can cause eye changes, leading to cataracts.

Hypothyroidism: It refers to a decrease in thyroid hormone production. Though very rare, evidence suggests that hypothyroidism can cause cataracts.

Severe dehydration and diarrhea

Severe dehydration, especially at a young age, can lead to cataract. The risk also increases with serious episodes of diarrhea.

Learn more on tips to avoid dehydration

Click Here

Diet lacking proper nutrition

Malnutrition and a diet deficient in antioxidants and vitamins increase the risk of the development of cataract.

Read about the benefits to reap from a healthy diet.

Tap Now

Maternal and fetal factors

Malnutrition and infections like rubella, toxoplasmosis, etc. have been associated with cataracts during pregnancy or early infancy.

Other factors

Some of the lesser-known factors include:

Certain skin disorders and allergies

Oxidative stress (imbalance in antioxidants in your body)

High cholesterol levels

Errors in copper metabolism

Hormone replacement therapy

Drug abuse

Ingestions of toxins

Did you know?

Cataract development is 2-3 times more likely in smokers when compared to non smokers. Learn about 5 ways your body reacts when you stop smoking.

Click now

Diagnosis Of Cataract

Cataracts are visible during clinical evaluation of the eye. The following steps are used evaluate cataracts:

1. History taking

Your healthcare provider will ask about your health history, which comprises the following:

Your chief complaint, i.e. a decrease in vision, any family history of cataract a

Past eye history

Any systemic disease causing or aggravating the symptoms

Your current medications

2. Comprehensive eye examination

The comprehensive eye exam will include dilation(eye drops will widen your pupils) to examine the eye.

Tests include:

Visual acuity test: This is the eye chart test. It checks for the ability to see from different distances.

Refraction test: This test assesses the sharpness and clarity of vision. Both eyes are tested individually for their ability to see letters of varying sizes.

Cover test: This test is used to determine if you have a squint as a faulty vision caused by cataract can lead to a squint.

Slit-lamp test: This exam is used to detect issues such as cataracts, eye injuries, and a lens clouding.

3. Other eye investigations

Visual acuity test: The test measures how well your distant vision is.

Pupil dilation test: This test is done to purposefully widen the pupils so that the eye doctor can examine the eyes thoroughly.

Tonometry test: This test measures the fluid pressure in the eye.

Contrast sensitivity testing: This test is similar to the visual acuity test and is based on differentiating between shades of grey.

Glare testing: It is based on the fact that vision in different light settings may be altered in cataracts.

Color vision testing: This helps detect acquired color vision defects.

Potential acuity testing: This gives an idea of vision after cataract removal.

Spectacular photographic microscopy: This is done before cataract surgery to see the health of the endothelium.

Celebs affected

Amitabh Bachchan

Amitabh Bachchan is a renowned Indian actor, who had been suffering from cataract. He tweeted "Saviour Dr Himanshu Mehta and his dexterity with the very latest medical machinery to remove cataracts despite the age-related soft tissues of mine. Any delay in these corrections can lead to blindness. So some advice .. get it done before it gets too late”.

Yash Gera

Yash Gera is an Indian model, actor, anchor, and DJ (disc jockey), who suffered from cataract. He said “Cataracts don't usually strike young people. The surgery is over and for a month, I will have to wear glasses except when shooting. I have resumed work, but avoid make-up so that chemicals don’t enter my eyes.”

Prevention Of Cataract

There is no prevention for cataract. However, a few tips that can help to lower the risk of developing cataract and slow down its progression are as follows:

Eat a healthy, well balanced diet

The diet should include the following-

Vitamins C: Good sources of vitamin C include citrus fruits, lemon, tomatoes, kiwifruit, broccoli, potatoes, strawberries, kale, bell peppers, guava, etc.

Check out our broad range of vitamin C supplements.

Tap Here

Beta-carotene- Beta-carotene is a rich source of vitamin A, which is indispensable for eye health. Good sources include carrots, sweet potatoes, and apricots.

Not just for your eyes, carrots are great for your overall health too.

Know More

Vitamin E: It protects the eyes from harmful chemicals. Food items rich in vitamin E include tree nuts, peanuts, sunflower seeds, vegetable oils, green leafy vegetables, etc.

Fill your gap in nutrition with our Vitamin E range.

Explore Now

Antioxidants: They are best recognised for shielding your eyes from UV rays and dangerous blue light. Foods high in antioxidants good for the eye include sweet corn, red grapes, spinach.

Omega-3 fatty acids: These are key for maintaining healthy eyes. They also slow the progress of cataracts. Fatty fish, fish oils, flax seeds, chia seeds, flaxseed oil, and walnuts are bountiful sources of omega-3 fatty acids. Supplements can also be consumed to meet your daily requirement of omega 3s.

Tap to explore our wide range of omega and fish oil supplements.

Click Here

Carbohydrates: It is advised to have a low-carb diet. Because a high-carbohydrate diet may hasten cataract progression.

Quit smoking

Smoking is known to increase your risk of developing cataracts. The sooner you get rid of this habit, the more your body will thank you.

Our smoking cessation product range can help you in your journey to quit smoking.

Tap Here

Wear sunglasses

Prolonged exposure to the sun's harmful UV rays can damage the proteins in the lens of your eye. Wearing sunglasses not only accentuates your fashion game but also protects your eyes.

Limit alcohol intake

Alcohol speeds up your body's inflammatory response and has dehydrating effects, which could harm the proteins in your eye's lens.

Keep blood sugar level under control

Cataracts are more prone to occur in diabetics, especially if blood sugar levels are uncontrolled.

Our extensive range of products can help to keep your sugar levels in check.

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Use steroid medications only under medical supervision

Prolonged use of prednisone and other steroid medications prescribed for many medical conditions can increase the chance of developing cataracts.

Read about dos and don'ts to follow if you are on steroids.

Click Here

Get regular eye checkups

To preserve eye health, it is better to go for frequent eye exams. An ophthalmologist can see any changes in your eyesight or ocular health even before any noticeable signs or symptoms occur.

Specialist To Visit

For proper diagnosis and treatment of cataract, you can visit the following specialists:

Ophthalmologist

Optometrist

An ophthalmologist is a specialist in the branch of medicine concerned with studying and treating disorders and diseases of the eye. Optometrists are trained to examine and detect defects of eyes.

Want to know more about types of eye specialists?

Click Here

When to see a doctor?

It is of important to visit your doctor at the earliest in case you experience the following:

Blurry vision

Seeing double or a ghosted images

Extra sensitivity to light

Having trouble seeing properly at night

Needing more light to read

Seeing bright colors as faded or yellow.

If you notice any such symptoms, seek medical advice immediately, and consult our trusted team of doctors.

Book A Consult Now

Treatment Of Cataract

The choice of treatment depends on the level of opacity that makes it difficult to do basic everyday tasks. These are the options available:

Prescription glasses

Prescription glasses along with sun shades to reduce the sensitivity to light, and magnifying lenses can help the vision to some extent.

While prescription glasses cannot directly treat cataracts, they can aid in correcting blurry vision and other problems caused by cataracts.

Surgery

Surgery is almost always required if visual acuity is less or if there is a medical reason like glaucoma or retinal detachment that negatively affects the eye's health.

Cataract surgery is a permanent solution that successfully enables the patient to see again normally. It involves the removal of the affected lens, which is replaced with an artificial lens.

Note: Many health conditions require optimisation before surgery for better results, such as diabetes, high blood pressure (hypertension), etc.

Keep a tab on your blood pressure (BP) level with our widest range of BP monitors.

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Complications Of Cataract

Cataract cause multiple complications discussed as follows:

Disease-related complications

Corneal ulceration: It is an open sore on your cornea (the transparent part of the eye that allows light to enter the inside)

Corneal perforations: It is a potentially devastating complication that can lead to corneal melting

Iritis: It is swelling and irritation in the colored ring around your eye's pupil

Subluxation of the lens: The lens is considered subluxed when it is partially displaced but remains within the lens space

Secondary glaucoma: Any form of glaucoma in which there is an identifiable cause of increased eye pressure, resulting in optic nerve damage and vision loss

Blindness: Cataract is the leading cause of blindness, accounting for 50% of blindness worldwide.

Surgery-related complications

Uveitis: It refers to eye inflammation of the uvea, which is the middle layer of the eye wall, between the retina and the sclera (white of the eye).

Posterior capsular thickening: It occurs when a cloudy layer of scar tissue forms behind the lens implant. It is common within the first 6 months after surgery.

Aphakia: It means not having a lens inside your eye. Absence of lens can make the eye out of focus, and vision blurry. It can be caused by surgery for cataracts.

Glaucoma: Cataract surgery can increase the eye's pressure. This can damage the eye's optic nerve, leading to glaucoma.

Retinal detachment: Retinal detachment is a condition that develops when the retina, a light-sensitive tissue in the back of the eye, is yanked away from its normal location.

Hyphema: It is the accumulation of red blood cells (RBC) in the anterior chamber of the eye.

Corneal burn: Also known as eye burn, it can result when certain chemicals used during the procedure come into contact with your eyes.

Opacification: Often referred to as "secondary cataract," it is the most common postoperative complication of cataract.

Did you know?

Cataract has its share of myths and misconceptions. Time to bust these myths related to cataract!

Click Here

Alternative Therapies For Cataract

Non-surgical cataract treatment options can successfully minimise the impact of cataracts and slow their progression. However, they cannot make cataracts go away. These alternative therapies for cataracts may include:

Homeopathy

This therapy can provide some symptomatic relief. Homeopathy medicines work by diluting the protein accumulation in the lens and, thus, preventing the protein clumping resulting in clouding.

6 homeopathy facts you must Know

Click Here

Living With Cataract

Cataracts tend to develop gradually as you age and aren’t usually painful. They won't usually cause vision loss initially, but you'll probably start to notice clouding in your sight, which can be concerning.

Regular eye tests are the best way to detect any eye health problem, as early symptoms might not be noticeable initially.

Cataracts may impact your day-to-day work, especially if your job involves a lot of screen time.

There are some reasonably small lifestyle changes you can make to help you manage cataracts, such as:

Stronger prescription eyeglasses.

Use brighter lights at home and work.

Wear anti-glare sunglasses.

Use magnifying lenses for reading and other activities that require up-close vision.

Time off for appointments and checkups

Cataracts may also affect your driving ability. You might experience glare or halos around bright lights such as headlights and street lights, making night driving harder. So it would be best if you were more careful when driving.

Cataract surgery successfully restores vision in most people. Corrected vision will positively impact life's social and emotional spheres.

Home-care For Cataract

The majority of the time, cataract surgery effectively restores vision. To prevent infection, postoperative care is crucial during the healing process.

Here are a few tips for rapid recovery:

Try to stay away from dirt and dusty areas.

Avoid strenuous or heavy activities such as vigorous exercise or heavy lifting for the initial few days post-surgery.

Avoid driving until your doctor examines you and permits you to resume driving.

Take your medications such as antibiotics, anti-inflammatory eye drops or other medications precisely as advised by ophthalmologists.

Use protective eye shields or sunglasses outdoors.

Do not rub your eyes.

Avoid swimming or hot tubs for the initial weeks post-surgery.

Avoid using eye makeup without consulting the ophthalmologist.

Follow up with your doctor as scheduled on day 1, week 1, and week 3

Frequently Asked Questions

What happens if you leave cataracts untreated?

Are cataracts considered a disability?

Are cataracts hereditary?

Do cataracts affect brain function?

Will cataract surgery correct my vision?

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Constipation

Also known as Costiveness, Dyschezia

Overview

Constipation is a common health problem that causes difficulty in passing stools and emptying the bowels. Almost everyone goes through constipation at some point in their lives. While constipation is uncomfortable, it is usually considered a symptom rather than a disease in itself. The various causes of constipation include diet that is not sufficient in fiber content, inadequate fluid intake, sedentary lifestyle, stress or sometimes an effect of some underlying medical condition of intake of specific medicines.

Prevention of constipation is centred around change in dietary and lifestyle habits. One should eat a high fiber diet comprising fruits, vegetables, legumes and whole grains. Restrict foods such as processed and packaged foods, milk and meat products.

Maintaining optimal fluid intake along with restricting intake of alcohol and caffeine in the form of coffee and soft drinks can also help in preventing constipation. Exercise regularly, do not delay the urge to pass stools and try to manage your stress levels.

Along with these changes, treatment of constipation involves many home remedies and use of over the counter laxatives. If relief from constipation is still not achieved, or in case of problems like pain while passing stools or rectal bleeding, it is always better to consult a doctor as long term use of laxatives or chronic constipation can lead to several other complications.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Intestine

Anus

Rectum

Prevalence

World: 15% (2020)

Mimicking Conditions

Ulcerative Colitis

Microscopic Colitis

Crohn's Disease

Lactose Intolerance

Celiac Disease

Gallstones

Pancreatitis

Endometriosis

Cow’s milk protein allergy

Necessary health tests/imaging

Blood tests to check for hemoglobin, thyroid stimulating hormone (TSH), calcium, glucose

Stool Examination

Abdominal X-ray,

CT scan or MRI of the colon

Barium enema study

Defecography

Magnetic resonance imaging defecography

Colonic transit (marker) studies

Colonoscopy

Treatment

Bulking agents: Psyllium husk & Bran

Lubricants: Mineral oil

Stool softeners: Docusate sodium

Osmotic laxatives: Lactulose, Lactitol or Polyethylene glycol

Stimulant laxatives: Sodium picosulfate & Bisacodyl

Enemas: Phosphate enema, Mineral oil enema

Suppositories

Chloride channel activators: Lubiprostone

See All

Symptoms Of Constipation

The symptoms of constipation include:

Reduced bowel movement of less than three times a week

Passing hard and lumpy stools

Straining while passing stools

Feeling of fullness, even after passing stools

Feeling of not able to completely evacuate the stools from the rectum

Feeling of a blockage in the rectum that prevents passing of stools

Some people may even need digital evacuation of stools

Bloating

Feeling sluggish

Abdominal pain

Causes Of Constipation

Some of the common cases of constipation include:

1. Poor dietary habits

One of the common causes of constipation is poor dietary habits that can affect bowel movements. If your diet fails to include foods rich in fibre such as fruits and vegetables in the right quantity, it can affect digestion and passing of stools. This is because fibre acts as a natural laxative, which holds water in the stool, increases its bulk and makes it easy to pass.

2. Insufficient fluid intake

Lack of sufficient water in the body can lead to dehydration is another factor that can cause constipation. When you suffer from dehydration, the body tries to conserve water by removing water from the stools. As a result, the stools contain less amount of water, which makes it harder to pass them from rectum.

3. Use of certain medicines

Constipation can be caused as a side-effect of certain medicines such as iron salts, opioids, sedatives, over the counter antacids and some of the drugs used to lower blood pressure. So if you are taking any of these medicines, then do consult your doctor. He may either change the dosage of the medicines or help you treat constipation with medicines or laxatives.

The list of certain medicines that can cause constipation include:

Paracetamol - if more than seven tablets are taken in a week

Nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen

Iron and calcium supplements

Aluminum-containing antacids

Anticholinergic agents or medicines that oppose the actions of the neurotransmitter acetylcholine. These include drugs for Parkinson’s disease, depression, delusions, hallucinations, and muscular spasms.

Anticonvulsants (drugs used to treat seizures) such as carbamazepine, phenobarbital, and phenytoin.

Cancer drugs such as vinblastine, vincristine, vindesine, and vinorelbine

Calcium-channel blockers such as verapamil

Water pills (diuretics) such as furosemide

4. Underlying medical conditions

Constipation can be caused by various health conditions like the following:

Irritable bowel syndrome

Endocrine disorders like Diabetes, Hypothyroidism, Hyperparathyroidism, Hypercalcemia, Hypokalemia, insufficient production of pituitary hormones

Tumor of the adrenal gland

Delayed emptying of the colon caused by pelvic floor disorders and colon surgery

Diverticular disease

Bowel obstruction

Narrowing of colon or bowel stricture

Colorectal cancer

Other abdominal cancer that presses on the colon

Rectal cancer

Lazy bowel syndrome in which there is slow movement of waste through the digestive tract

Neurogenic disorders like spinal cord injury, stroke, multiple sclerosis, Parkinson’s disease, brain injury etc.

Structural defects in the digestive tract like fistula, imperforate anus, malrotation etc.

Diseases like amyloidosis, lupus erythematosus, and scleroderma

5. Overuse of laxatives

Laxatives are common medicines used to treat constipation. In most cases, people with this condition do not consult a doctor but use laxatives to get rid of constipation. However, it is reported that overuse of laxatives is not good for your health. People who use laxatives frequently tend to lose the ability to pass stools without such aids. Hence, in the long run, it can lead to more use of laxatives and an increased risk of constipation.

The use of conventional laxatives, as a first step for the treatment of constipation, are not effective in many cases. Moreover, laxatives can cause drug interactions with other medications.

Risk Factors For Constipation

The risk factors for constipation include:

Age - constipation is more common in older adults

Gender - constipation occurs more frequently in women

Resisting or delaying the urge to pass stools

Travel or other changes in daily routine

Less physical activity - people with more sedentary lifestyle are more likely to have constipation

Stress

Depression or any eating disorder

Pregnancy especially during the last months

During menopause

Constipation is a common symptom during pregnancy, but this doesn’t mean that every pregnant woman will suffer from constipation. So, if you are pregnant and suffering from constipation, here’s a quick guide with tips to help control the condition.

Read More!

Diagnosis Of Constipation

The diagnosis of constipation depends largely on the patient’s history. The doctor will take:

Medical history (other health problems and medications taken)

Dietary history (intake of fiber and water)

Symptoms history (duration and severity)

Physical examination

This may include

1. Abdominal examination in which the abdomen may be examined for distension. The enlarged or swollen bowel may point towards constipation.

2. Rectal examination may be done to look for scars, hemorrhoids, fistulas or fissures around the perineum, the area between anus and scrotum (in males) or vulva (in females).

Laboratory test

These tests may be done to look for underlying conditions that cause constipation. These may include:

1. Blood tests to check for hemoglobin, thyroid stimulating hormone (TSH), calcium, and glucose levels to reveal signs of risk factors like anemia, hypothyroidism, hyperparathyroidism, diabetes etc.

2. Stool Examination to check for any signs of infection, inflammation, and cancer.

3. Radiology tests such as Abdominal X-ray, CT scan or MRI of the colon to assess the length and width of the colon or any lesion that may cause obstruction.

4. Barium enema study is an imaging study that uses x-rays along with an enema (containing barium) to detect abnormalities inside the colon. The contrast solution containing barium is injected into the rectum. Barium enema produces better images as compared to other imaging studies.

5. Defecography is a modification of the barium enema examination. A thick paste of barium is inserted into the rectum of a patient through the anus. This procedure then examines the process of defecation and gives information about anatomical abnormalities of the rectum and pelvic floor muscles during defecation.

6. Magnetic resonance imaging defecography is one of the latest tests for evaluating defecation. It is similar to barium defecography, however, MRI is used instead of X-rays to provide images of the rectum during defecation.

7. Colonic transit (marker) studies involve consuming a small amount of a radioactive substance usually in the form of a pill, and then tracking the amount of time and how the substance moves through the colon.

8. Colonoscopy or endoscopy of the colon is a diagnostic method in which a long, flexible, lighted tube is inserted through the rectum to get an internal view of the colon. During this procedure, biopsy may also be taken to test for cancer or any other problem.

Prevention Of Constipation

1. Eat a high fiber diet comprising fruits, vegetables, legumes and whole grains. Restrict foods with low amounts of fiber such as processed and packaged foods, milk and meat products.

2. Drink a minimum of 8 glasses of water during a day. Restrict intake of alcohol and caffeine in the form of coffee and soft drinks as they tend to dehydrate the body.

4. Stay active and exercise regularly

5. Do not delay the urge to pass stools

6. Try to manage stress

Specialist To Visit

In most cases, constipation improves on its own with simple changes in diet. However, consult a doctor if you have

1. Had less than three bowel movements in a week

2. Pain while passing stools

3. Rectal bleeding

Doctors/specialists who can help in the diagnosis and treatment of constipation are:

General Physician

Gastroenterologist

Pediatrician(in case of children)

Is Constipation Not A Serious Condition?

Though, many times it is taken lightly, it should not be ignored. It may not lead to life-threatening complications, however, untreated constipation can cause painful hemorrhoids and anal fissures. Constipation should never be avoided as its persistence can severely impact a person’s day-to-day chores. Consult the right expert.

Book Appointment!

Treatment Of Constipation

Treatment for constipation mainly includes lifestyle changes and medications to soften the stools or stimulate its movement through the colon. Mild constipation gets better with lifestyle modifications. However, severe constipation may require medications.

1. Lifestyle modifications

Constipation can be easily avoided by making a few changes to our daily habits including diet and lifestyle. These include:

Dietary Changes

First and foremost, drinking at least 3 litres of water is a must for adults. Water hydrates the body and softens stool and aids its movement from the colon.

Include fibre-rich vegetables like carrots, cabbage, cauliflower, broccoli, spinach, varieties of gourd etc. in your diet. Blanch the veggies and sprinkle on some seasoning and spices. Have portions equivalent to 250-300 grams daily.

A fruit a day will keep constipation blues away. Besides containing dietary fibre, fruits like orange, apple, papaya, dates, figs etc. are packed with nutrients.

Substitute white rice and polished wheat with whole grain products like brown rice and unpolished wheat. Oats also have similar qualities. Eat a cup full of these healthy grains daily to fight constipation.

Here is a list of food to avoid during constipation.

Read More!

Lifestyle Changes

Using the toilet at a fixed time every day will trick the body’s biological clock into creating a routine to defecate effectively. The morning is the best time to get started in this regard.

Avoid alcoholic drinks as much as possible. Alcohol dehydrates the body and causes stool to harden.

Start exercises like jogging, cycling, running and swimming to boost your metabolic rate and fight constipation.

Lessen or eliminate the consumption of oil and sugar-rich food from your diet as these upset digestion, cause constipation and lead to obesity.

2. Medicines

Laxatives are compounds which promote bowel movements and are used to relieve and prevent constipation. Some of these medicines are available over the counter (OTC) and come in the form of capsules, suppositories, enemas, pills, gums, and liquids. Most laxatives are advised to be used only for a short period of time. Use medicines only if recommended by your doctor.

Bulking agents such as bran and psyllium are fiber supplements, which are usually recommended for normal constipation.They contain fiber which add bulk to the stools and helps the stools to quickly move through the colon. People on bulking agents should drink ample amounts of water to maintain hydration.

Lubricants help in smooth movement of stools through the colon.eg. mineral oil.

Stool softeners work by moistening the stools eg. docusate sodium

Osmotic laxatives stimulate the absorption of water from the body to make stools softer. These include lactulose, lactitol or polyethylene glycol.

Stimulant laxatives help in contracting the muscles in the intestines rhythmically. Examples include castor oil, sodium picosulfate, and bisacodyl.

Enemas use a thin tube to inject a liquid or a gas into the rectum to expel its contents. Examples: Phosphate enema, mineral oil retention enema, and soapsuds enema.

Suppositories such as those containing glycerin or bisacodyl are placed into the rectum.

Chloride channel activators such as Lubiprostone are used to treat chronic constipation.

Here’s more information about different types of laxatives and how they work.

Click To Read!

Myths About Constipation!

Constipation is one of the most common health problems. Unhealthy eating practices, inadequate sleep, sedentary lifestyle and stressful life are some of the common triggers for constipation. Common across the population, there are certain myths surrounding constipation.

Read Now!

Complications Of Constipation

Constipation if left untreated or if suffering from a long time may cause:

1. Hemorrhoids, a condition that leads to swollen veins in the rectum and anus.

2. Rectal prolapse in which a part or the entire wall of rectum stretches and protrudes out from the anus

3. Anal fissures which are small tears in the anus that cause pain and bleeding.

4. Fecal impaction is a condition in which hardened stools get stuck in the intestines due to long term constipation.

Alternative Therapies Of Constipation

Biofeedback

It is used to treat chronic constipation. It involves training of pelvic floor muscles for passing stools by electronic monitoring.

Natural products

Many natural products that may help in constipation are:

Psyllium husk or Isabgol

Methylcellulose

Calcium polycarbophil

Guar gum

Foods To Relieve Constipation

Fruits, cereals, leafy vegetables, curd, and seeds can help you to deal with constipation. These foods are known to add bulk to stools, increase bowel frequency, soften the stools and decrease the gut transit time (which is the time taken by food to move through the digestive tract). However, keep a check on your fiber intake as excess fiber can also worsen constipation.

Here are some of the common foods to relieve constipation at home.

1. Kiwi

Green kiwi fruit increases the frequency of stools, softens the stools and eases defecation. This could be attributed to the presence of fiber (2-3 gm of dietary fiber per 120 gm of the fruit), which plays a key role in bulking of the stools and relieving constipation. It also contains an enzyme which stimulates the motility of the upper gastrointestinal tract.

Tip: You can peel the fruit, cut it into thin slices and either eat it raw or add to salads or smoothies to fight constipation.

2. Banana (Kela)

A medium-size banana (which weighs around 100 g) contains about 3 g of fiber. It not only absorbs water to soften the stools but also improves the movement of stool through the intestinal tract.

Tip: Eat a banana every day for regular bowel movements and prevent chronic constipation. Bananas are best eaten as a whole and not in smoothies or milkshakes.

3. Prunes

Dried plums, also known as prunes, contain around 6.1 g of fiber per 100 g of fruit, which is very high as compared to other commonly available fruits. Moreover, it is rich in fructose and contains a high amount of sorbitol (14.7 g per 100 g), a sugar compound that has laxative properties.

Tip: Eat prunes as a whole. Avoid drinking prune juice to deal with constipation because it has less sorbitol and fiber content.

4. Apple (Seb)

A medium sized apple contains around 4.4 gm of fiber, most of which is pectin. This fibre is broken down into short-chain fatty acids by the intestinal bacteria. These fatty acids absorb water, soften the stool and decrease the intestinal transit time, relieving constipation.

Tip: Eat the apple with its peel to increase your fiber intake. You can add apples to a fruit salad.

5. Pear (Naspati)

You can get around 22% of your daily recommended allowance of dietary fiber if you eat a medium-sized pear. In addition to fiber, pears are also rich in fructose and sorbitol.

Tip: Pears work best when eaten as a whole. However, drinking pear juice is usually recommended in kids whose intestinal function is not fully matured.

6. Figs (Anjeer)

Raw, as well as dried figs, are a great source of fiber, which not only relieves constipation but also promotes a healthy bowel. Around 75 g of dried figs and raw figs contain 7.3 g and 2 g of fiber respectively.

Tip: You can snack on figs by including them in your fruit salads, juices or smoothies. However, eating it in its whole form is regarded as the best way to up the intake of fiber.

7. Spinach (Palak)

Spinach is one of the common leafy vegetables that is loaded with fiber. Moreover, it is also rich in various minerals and vitamins that improve digestion. A cup of spinach contains around 4 g of fiber, which is known to add bulk to stools and makes it easier to move through the gut.

Tip: You can make palak parathas and palak paneer or add palak to smoothies or salads.

8. Oats

Oats are good for people suffering from constipation as it is rich in fiber. Oat bran is the outer covering of the grain, which is loaded with fiber. Moreover, adding around 8 g of oat bran to your diet every day reduces the use of laxatives.

Tip: Oat bran can be added to wheat flour, granola mixes or bakery items. But use oat bran and not ready-to-eat oats, as the latter contains less fiber as compared to oat bran.

9. Flaxseeds (Alsi)

One of the commonly used traditional remedies to deal with constipation, flaxseeds act as a natural laxative. This is due to the presence of soluble as well as insoluble fiber. A tablespoon of roasted flax seeds contains around 3 g of fiber.

Tip: You can add flaxseeds to cereals or use it in salads. Flaxseed powder can be added to wheat flour or milk.

10. Sweet potato (Sakargandi)

Unlike potatoes, sweet potatoes are rich in fiber. A medium-sized sweet potato contains around 3.8 g of both insoluble fibers such as cellulose and lignin and soluble fiber such as pectin. Both types of fiber play a key role in easing constipation by improving the bowel movement and adding weight to stools.

Tip: You can eat sweet potatoes in the boiled or roasted form to increase your intake of fiber. Alternatively, you can steam it, mash it and add it to curries or salads.

11. Probiotics

Probiotics contain bacteria such as bifidobacteria and lactobacilli which help maintain the level of good bacteria in the digestive tract which aids proper digestion.

Tip: Curd and buttermilk are the best natural forms of probiotics that are easily available. You can add curd to your diet.

A few examples of natural drinks that help in relieving constipation instantly.

Read More!

Yoga for Constipation

Yoga offers several poses that stimulate peristaltic action and increase blood flow to the gut. When done on a regular basis, yoga can help in regular bowel movements.

Matsyasana (fish pose)

Anjaneyasana (crescent pose)

Pavanamuktasana (wind-relieving pose)

Balasana (child’s pose)

Frequently Asked Questions

What happens when you are constipated for too long?

When is constipation an emergency?

How do you feel when you are constipated?

How do I make myself poop fast?

Do bananas help you poop?

What should you not eat when constipated?

What can I eat to poop?

Why is my poop hard if I drink a lot of water?

How do you know if you are constipated or not?

Can only a fiber rich diet keep constipation away?

Can drinking more water help in relieving constipation?

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Vaginal discharge

Also known as Leucorrhoea, Leukorrhea, Fluor albus.

Overview

Discharge from the vagina is a natural and normal process that helps to keep your reproductive tract clean, lubricated and healthy, warding off any infection.

The normal discharge is usually thin, clear or whitish to light yellowish and does not have any foul smell. It usually becomes more slippery and has the consistency of egg whites during ovulation. The amount and thickness of normal discharge can also increase during sexual arousal, pregnancy and the use of oral contraceptives.

Any changes in color, consistency, volume, and/or odor could signal an abnormal discharge. This abnormal discharge along with symptoms like itching, pelvic pain, or burning sensation while urination etc can be a vaginal infection that needs immediate attention.

Vaginal infections can be prevented by following good feminine hygiene, wearing breathable cotton undergarments, and a few healthy lifestyle changes. Treatment differs depending on the cause of the infection.

Key Facts

Usually seen in

Menstruating females

Body part(s) involved

Vagina, Cervix, Ovaries, Fallopian tubes

Mimicking Conditions

Herpes simplex virus infection

Cervicitis

Bacterial vaginosis

Candidiasis or yeast (fungal) infection

Trichomoniasis

Gonorrhea

Chlamydia

Necessary health tests/imaging

Laboratory tests: Examination of vaginal fluid, Absolute leukocyte count, Genital PAP smear and Molecular tests

Treatment

Antibiotics: Cefixime, Ceftriaxone, Ciprofloxacin, & Ofloxacin

Antifungal: Miconazole, Terconazole, & Fluconazole

Antiprotozoal: Tinidazole and Metronidazole

Specialists to consult

General physician

Gynecologist

Types of Vaginal Discharge

Vaginal discharge is broadly divided into:

A. Normal (Physiological) vaginal discharge

Vaginal discharge is a natural and normal process that helps to keep your reproductive tract clean, lubricated and healthy, warding off any infection.

The amount, color and consistency of normal vaginal discharge can vary from person to person and where you are in your menstrual cycle:

Days 1–5: During your period or menstruation, the discharge is red and bloody.

Days 6–14: Following a period, vaginal discharge is mostly white or slightly yellow, and sticky.

Days 14–25: A few days before ovulation, the discharge becomes clear, thin, slippery and stretchy, similar to the consistency of egg whites. After ovulation, the discharge goes back to being white or light yellow, and sticky.

Days 25–28: The amount of discharge reduces before the next period.

B. Inflammatory vaginal discharge

This type of leucorrhoea occurs when there is inflammation (redness and swelling) in the vagina caused by microbes.

Various types of vaginal discharge vary in color, amount, consistency, and smell. Some are normal, while others are an indication of an infection that warrants consultation with a doctor. Here you can get an idea of what different discharge can mean:

1. Clear to whitish

Watery, clear to whitish vaginal discharge is normal. It usually becomes more slippery and has the consistency of egg whites during ovulation. The amount and thickness of vaginal discharge can also increase during sexual arousal, pregnancy and the use of oral contraceptives.

2. White to cream or light yellow

White to cream or light yellow discharge is mostly a sign of healthy lubrication. However, if the white discharge has a frothy consistency like cottage cheese and is accompanied by a strong smell, it may indicate a yeast/fungal/candida infection, which can also cause severe itching or irritation.

3. Red

Red discharge occurs during a period or menstruation. However, if bleeding occurs between menstrual periods or after menopause you should consult a doctor on priority.

4. Pinkish to light brown

Pink to light brown discharge mostly occurs as spotting before a period. It can also be a sign of implantation bleeding during early pregnancy. Some pink discharge can be seen after sex if intercourse has caused tears or irritation in the vagina or cervix.

6. Yellow to green

While light yellow discharge may not indicate any illness, darker yellow to green discharge could indicate sexually transmitted infections. Sometimes, the discharge may smell fishy accompanied by itching or burning in or around the vagina.

7. Gray

When you have a gray color discharge with symptoms like pain in the pelvic region or pain while peeing and discomfort or itching around the genital area, it could be a sign of infection called bacterial vaginosis.

Did you know?

During pregnancy, vaginal discharge may become more noticeable. It helps to prevent any infections traveling up from the vagina to the womb. The discharge is heaviest towards the end of pregnancy and may contain streaks of thick, sticky, pink mucus, called ‘show’, an early sign of labor.

Causes of Abnormal Vaginal Discharge

1. Bacterial vaginosis

It is a common bacterial infection that occurs when the balance of bacteria in the vagina is altered. It can cause a grayish discharge accompanied by an intense fishy odor. It may also cause itching, redness, and swelling of the entire vaginal area.

Women who have several sex partners, or those who use a contraceptive intrauterine device, such as copper-T, are more likely to get bacterial vaginosis.

2. Candidiasis or yeast (fungal) infection

A vaginal infection that is caused by a yeast known as candida is called candidiasis. It is commonly seen in women who are taking contraceptive pills or certain antibiotics, or have conditions, such as diabetes and weakened immunity. The main symptoms are intense itching along with a thick white discharge that appears like cottage cheese.

3. Trichomoniasis

This vaginal infection is caused by the protozoa trichomonas vaginalis. It can cause a greenish-yellow, sometimes frothy, discharge and pain during urination. This infection is usually transmitted through unprotected sex.

4. Gonorrhea and chlamydia

These are sexually transmitted infections that produce abnormal discharges by affecting the cervix. Women may experience greenish or cloudy discharge, bleeding during or after sex, and abdominal pain.

Safeguard yourself from STDs by using the right protection. Shop from our wide range of contraceptives.

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Symptoms of Abnormal vaginal discharge

Abnormal vaginal discharge is marked by change in color, consistency, volume, and/or odor. Other symptoms that might accompany abnormal vaginal discharge are:

Itching or irritation in vaginal area

Pain or discomfort in pelvic area

Redness around the vaginal opening

Strong foul smell from discharge

Burning sensation or pain while urinating

Spotting after sexual intercourse

Pain during or after sexual intercourse

Flu-like symptoms including headache and fever

Fatigue or tiredness

Unexplained weight loss

Lower back pain

Constipation

Risk Factors of Vaginal Discharge

1. Non-infectious causes

Puberty

Menstrual cycle

Ovulation

Sexual arousal

Pregnancy

Menopause

Contraceptive device or birth control pills

2. Infectious causes

Poor feminine hygiene like not changing pads/tampons regularly

Douching, use of chemical or perfumed soaps

Weakened immune system

Uncontrolled diabetes

Certain medications, such as steroids or antibiotics

Unprotected sex with an infected partner

History of STDs like gonorrhea, trichomoniasis, and syphilis in the past

Use of public or unclean toilets

Low socio-economic status

Diagnosis of Abnormal Vaginal Discharge

Not every vaginal discharge is alarming but if you experience any unusual discharge marked by change in color, consistency, volume, and/or odor, see a doctor on priority. Diagnosis includes:

1. Medical history

Your doctor may ask you about your medical history including the medicines you've been taking during the past few weeks. The doctor will also discuss your symptoms, the severity of the symptoms, and the time duration of symptoms.

2. Physical examination

Your doctor will perform a pelvic exam to look for the type of vaginal discharge. A sample of discharge might be taken for relevant testing.

3. Laboratory tests

Examination of vaginal fluid: The vaginal discharge is placed under a microscope to determine the type of bacteria, yeast, or protozoa causing the vaginal infection. Identifying the cause helps the doctor prescribe targeted treatment.

Absolute leukocyte count: Also known as WBC count, it also helps examine the vaginal fluid for white blood cells (WBCs), an indicator of any infection.

Genital PAP smear: Your doctor may perform a Pap smear by taking a sample of the cells from the cervix. The sample is then sent to the lab to be examined under the microscope for any cell changes.

Want to learn more about Pap smear tests?

Click to read

Molecular tests: Sometimes specific tests are required for the diagnosis of STDs causing abnormal vaginal discharge. The standard test is the nucleic acid amplification test (NAAT), and it is generally used for the diagnosis of gonorrhea and chlamydia. This method detects and identifies the genetic materials of bacteria and other pathogens.

Prevention of Abnormal Vaginal Discharge

1. Maintain personal hygiene

Keep your private parts clean using lukewarm water.

Always pat the private parts dry after urinating using toilet paper or a soft cloth.

Wipe the right way. Always make sure to clean your private parts from front to back, and not from back to front.

Avoid harsh soaps, scented feminine hygiene products, douching and bubble baths. These can rob the vagina of good bacteria, leading to the overgrowth of bad bacteria.

Make a habit of washing and drying your hands before touching the vaginal area.

Up your hygiene game with our widest range of feminine hygiene products to meet all your needs.

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2. Be mindful of your sanitary products

If you are prone to vaginal infections, avoid using scented tampons and menstrual cups. Prefer sanitary pads and liners.

During your period, changing your pad every 3-4 hours is good hygiene and prevents bad odors.

If you use panty liners, make sure to change them regularly.

Confused about which sanitary products to use?

Here is what you need to know about the different products available.

Click to Read

3. Pay attention to your clothing

Wear cotton or cotton-lined undergarments as they absorb moisture and prevent sweat accumulation.

Wear loose-fitting leggings, tights, and pants. They help in free flow of air.

Avoid sitting around in damp or sweaty clothing as it can lead to vaginal and skin infections.

Change your workout clothes immediately after exercising.

Clean your underwear with a good quality detergent that has bactericidal and fungicidal properties.

4. Practice safe sex

Safe sexual practices are paramount to reduce the risk of sexually transmitted infections (STIs) and vaginal infections.

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Always urinate and gently wash the area around your vagina every time after indulging in sex.

5. Maintain a healthy lifestyle

Drink at least 8 glasses of water every day to wash out the toxic substances from the body.

Eat a well-balanced wholesome diet rich in fresh fruits and vegetables, whole grains, healthy fats, and protein.

Limit sugar, processed, and packaged foods in your diet.

Exercise regularly and get enough sleep.

Learn to manage your stress effectively.

Limit the consumption of alcohol

Quit smoking.

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Specialist To Visit

Doctors that can help with the diagnosis and treatment of vaginal discharge include:

General physician

Gynecologist

A general physician can evaluate the symptoms of vaginal infection and start the treatment. They can refer to a specialist for further assessment. A gynecologist is a specialist in diagnosing and treating diseases that affect the female reproductive system.

Consult our team of trusted doctors.

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Treatment of Abnormal Vaginal Discharge

Treatment of abnormal vaginal discharge depends on the severity of the symptoms, age, and other factors, such as the underlying causes. It may be caused by STDs; therefore, treating the causative agent is important to stop its recurrence. Management includes:

Medications-

1. For bacterial infections: If bacterial vaginosis is causing vaginal discharge, the following antibiotics are usually prescribed for its management:

Metronidazole

Clindamycin

Ceftriaxone

Doxycycline

Azithromycin

Ofloxacin

Gemifloxacin

Gentamicin

2. For fungal infections: In case of vaginal yeast infections, antifungal medicines are prescribed, such as:

Miconazole

Terconazole

Fluconazole

3. For protozoa infection: For protozoa infections, such as trichomoniasis, the doctor may prescribe drugs like:

Tinidazole

Metronidazole

Note: These medicines are available in the form of creams, ointments, or tablets. The doctor may instruct you on the route of administration of the medicine which depends on the severity and prolongation of the abnormal vaginal discharge.

Ordering medicines has never been easy. Get medications delivered to your home with ease of a click.

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Watch this video to understand the types of vaginal discharge, their prevention and effective treatment.

Home care for Vaginal Discharge

The following home remedies help in improving the vaginal microbiome and can be an adjunct to conventional treatment:

Lady Finger (Bhindi): You can boil the ladyfingers in water or use them as the main ingredient of your soup. You can also soak ladyfingers with yogurt which is a natural probiotic. Consumption of this mixture will inhibit the growth of bacteria in the vaginal area.

Coriander seeds (Dhania): Soak a teaspoon of coriander seeds in water for the whole night and strain it the next morning. Drink this solution early in the morning on an empty stomach to help relieve vaginal discharge.

Yogurt (Dahi): Yogurt is rich in probiotics. Having yogurt in your daily meals can improve the gut microbiome and helps reduce vaginal infections.

Basil (Tulsi): It is a wonderful herb with many antimicrobial, anti-inflammatory, and anti-allergic properties. You can prepare tulsi tea by boiling a few leaves with a glass of water. Drink this twice daily as it will help to relieve the symptoms of vaginal discharge.

Indian gooseberry (Amla): Amla is rich in vitamin C and has antioxidant, anti-inflammatory and antibiotic properties. Consuming amla or its juice enhances immunity. For the treatment of vaginal discharge, take one teaspoonful of amla powder with a glass of water once daily.

Aloe vera: Aloe vera has multiple medicinal uses. Its consumption is useful for managing excessive discharge, itching, and burning sensation.

Fenugreek (Methi): Consuming the fenugreek seeds decoction or one teaspoonful with a glass of water balances the pH level in the vagina.

Cumin (Jeera): Cumin seeds decoction is beneficial in reducing itching and discharge.

Complications of Abnormal Vaginal Discharge

Abnormal white discharge is a sign of vaginal infections. These vaginal infections can cause several complications such as:

1. Pelvic inflammatory disease (PID): Vaginal infections due to bacteria, yeast, virus, or STDs can spread from the vagina to other reproductive organs of females, such as the fallopian tubes, ovaries, & uterus.

The symptoms of PID include chills, fatigue, fever, & abdominal pain, and can lead to reproductive complications, such as:

Dysmenorrhea (painful periods)

Chronic pelvic pain

Internal abscesses (collection of pus due to infection)

Endometritis (inflammation and infection of the uterus)

Ectopic pregnancy (attachment of the egg outside the uterus)

2. Infertility: If untreated for a long time, abnormal discharge may affect the chances of a woman getting pregnant.

Did you know?

Sexually transmitted diseases (STDs), including gonorrhea and chlamydia can affect fertility in women. Know more about what causes infertility in women and how it can be treated.

Read now:

Alternative Therapies of Abnormal Vaginal Discharge

Alternative therapies can provide relief to a certain extent, however, always seek advice from your doctor before trying these. Some of the complementary therapies that have proven to be beneficial include:

1. Essential oils

Essential oils like tea tree oil and lavender oil have antibacterial and antifungal effects and have shown promise in the management of vaginal discharge caused by yeast or fungi.

Explore our wide range of essential oils.

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2. Traditional Chinese medicine

A traditional chinese medicine expert will prescribe chinese oral medicines depending on the severity of the disease for correcting the body’s imbalances. Studies have shown that TCM can be effective in treating excessive vaginal discharge or itching.

Living With Vaginal Discharge

Clear to white light yellow vaginal discharge is normal but its color, texture, and quantity can differ from person to person depending on their age. However, consult your doctor if you feel that it's abnormal and you are getting a heavy discharge frequently with changes in odor, color, and texture.

Though abnormal vaginal discharge can be managed with medications depending on the cause, a few important points to be kept in mind are:

During heavy discharge, use panty liners as they are meant to be used during non-period days.

Keep changing your pad at least every 4 to 8 hours during periods.

Regular health checkup is important to evaluate the presence of any infection and whether the female is receiving the right treatment which helps in clearing the infection or not.

Hormonal changes due to puberty, pregnancy, and menopause can cause heavy vaginal discharges. Always inform or discuss any changes you experienced while or before the treatment with your doctor.

Routine test to evaluate blood sugar level is required in case of yeast infection, as yeast overgrows in elevated sugar levels.

Watch our expert discuss vaginal discharge in detail.

Frequently Asked Questions

Is it normal to have a vaginal discharge?

When does normal vaginal discharge increase?

How do I keep my vagina clean?

What kind of vaginal discharge is not good?

Can abnormal vaginal discharge cause any complications?

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Corns

Also known as Calvus, Heloma and Focal intractable plantar hyperkeratosis

Overview

Corns are calloused areas of skin that develop to protect skin from damage against prolonged rubbing, pressure, and other forms of irritation. Calluses and corns typically form on the hands or feet.

Corns and calluses can be caused by many factors, such as wearing too fitted or too loose shoes, not wearing socks, walking barefoot regularly, etc. Other risk factors may include joint problems or other foot-related problems like bunions or hammer toe. These conditions can be prevented by reducing or removing the causes which lead to increased pressure at specific points on the hands or feet.

Corns and calluses can be treated with medicated products which chemically break down the thickened, dead skin. Salicylic acid is usually the main ingredient used in most corn and callus removal products.

People with fragile skin, poor circulation in the feet (due to conditions such as diabetes or peripheral arterial disease), and repeated formation of corns should consult a podiatrist or a healthcare professional for the appropriate management of this condition.

Key Facts

Usually seen in

Adults

Gender affected

Both men and women

Body part(s) involved

Feet and hands

Mimicking Conditions

Plantar wart

Poroma

Warty dyskeratoma

Calcinosis cutis

Gout and pseudogout

Hypertrophic lichen planus

Interdigital neuroma

Lichen simplex chronicus

Palmoplantar keratoderma

Keratosis punctata of palmar creases

Porokeratosis plantaris discreta

Porokeratosis palmoplantar et disseminata

Necessary health tests/imaging

Dermoscopy

Radiographs

Pressure studies

Treatment

Topical keratolytic agents

Laser therapy

Surgery

Specialists to consult

Podiatrist

Dermatologist

General physician

General surgeon

Orthopedic

Symptoms Of Corns

The following signs and symptoms may indicate corns:

Flesh-colored dry, hard, rough papules with a whitish center (called the core), usually located over a bony prominence

A raised hardened bump in which the center may be a dense knot of skin

Can cause pain when walking

A thick, rough area of skin

Tenderness or pain under the skin

Flaky, dry, or waxy skin

Corns can be of the following types:

Hard corns: They are usually small and occur on the bony areas of feet and hands.

Soft corns: They are whitish in color, have a rubbery texture, and may look like an open sore which might be painful. They usually occur between the toes and in moist and sweaty skin areas.

A callus is a section of skin that thickens because of friction, pressure, or irritation. It often happens on the feet but can also occur on the hands, elbows, or knees. However, corns and calluses are not the same things.

Calluses are usually asymptomatic, but if friction is extreme, they may thicken and cause irritation and mild burning discomfort.

Callus is less circumscribed than corn, is usually larger, does not have a central core, and may or may not be painful.

Causes Of Corns

The bones of the feet have many projections. Excessive pressure is applied to the skin overlying these bony projections either by poorly fitted shoes or some kind of foot deformity, such as hammer toes.

The body tries to protect this irritated skin by accumulating the outermost layer of the epidermis. But this accumulation causes a prominence that further increases the pressure on bony projections, leading to a vicious cycle and eventually the formation of corns and calluses.

Risk Factors For Corns

Here are some intrinsic and extrinsic risk factors that can lead to the development of corns and calluses:

Extrinsic (outside) factors

Poorly fitted or open footwear

Irregularities in the shoes, such as a poorly positioned seam or stitching

High heels

Wearing shoes without socks

Physical activities that lead to excessive pressure and friction, including running, jogging, climbing, etc.

Professions that cause repeated friction or pressure on skin, e.g., athletes or construction workers

Intrinsic (from within) factors

Bony prominences

Malunion fracture

Faulty foot mechanics

Cavovarus foot (a foot with an arch higher than normal, and that turns in at the heel)

Toe deformity (Claw, hammer, mallet)

Short first metatarsal (the shortest of the metatarsal bones located at the base of the big toe)

Hallux rigidus (stiff big toe)

Transfer lesion from osteotomy or removal of adjacent metatarsal head

Overweight

Did You Know?

Diabetics are more prone to get corns and calluses? Read more about diabetes.

Click Here!

Diagnosis Of Corns

In most cases, doctors can diagnose corns and calluses by visual examination. However, other diagnostic methods include:

Medical history and physical examination

The doctor will inspect the feet for certain signs and symptoms of corns along with following at the initial stages:

Patients footwear and information about any previous treatments like osteotomies, orthoses etc.

Patient’s gait and alignment of feet for faulty mechanics

Location and characteristic of keratotic lesions

Problems with the structure of foot bones

Bone alignment

Imaging tests

The doctor may perform the following imaging tests to conclude the reason for corn formation:

Dermoscopy: It is a noninvasive technique primarily used to examine skin lesions and areas affected by hyperkeratosis.

Radiographs: X-rays of weight-bearing feet may help show any bony prominences that contribute to corn formation.

Other tests

Some other tests used by healthcare professionals to investigate the underlying cause of corns and calluses are:

Blood tests: Tests such as fasting glucose level and rheumatoid factors are done to find the etiology of foot deformities in some patients.

Pedobarographic studies: Pressure studies (pedobarographs) of the feet can highlight areas of excessive pressure associated with corns.

Celebs affected

Katie Holmes

Katie Holmes is one of hollywood actresses who suffered from corns. A source revealed to Globe Magazine in 2019 “She desperately wants to do something about her crooked toes and unsightly bunions and she’s consulted with her surgeon.”

Jennifer Kate Hudson

Jennifer Kate Hudson is an American singer, actress, and talk show host. The American Idol alumnus showed off her corn-filled toes in silver shoes during the 2019 Oscars.

Prevention Of Corns

Following are some tips to prevent corns and calluses:

Wear properly fitted shoes. The shoes should neither be forcibly broken into nor should be too loose. Instead they should be comfortable to wear right out of the box.

Allow a space of 1/2 inch between the end of the shoe and the longest toe. For athletic shoes, allow up to 1 inch.

Check the width of the shoes. Adequate room should be allowed across the ball of the foot. The first metatarsophalangeal joint should be in the widest part of the shoe.

The heel should fit snugly.

Check the fit over the instep. A shoe with laces allows for adjustment of this area.

Avoid activities that apply repeated friction or pressure to the skin.

Wear gloves and properly fitted socks with no irritating stitching.

Suffering from cracked heels? Read about how to heal cracked heels naturally.

Click Here

Specialist To Visit

Corns are not life-threatening, but can cause a lot of trouble and irritation if left untreated. Doctors who can help diagnose and treat corns include:

Podiatrist

Dermatologist

General physician

General surgeon

Orthopedic

When to visit a doctor?

If you observe that corns and calluses are causing pain and discomfort or affecting your daily life in any way, you are advised to see a podiatrist, a foot specialist.

Remember: People with certain comorbidities, like diabetes, poor circulation, or any other serious illness, should have their feet checked from time to time.

If you notice any symptoms of corns or calluses, seek medical advice.

Feel free to consult our stellar professionals from the comfort of your home.

Book An Appointment

Treatment Of Corns

Corns and calluses can become a hinderance in daily life activities and may require treatment for a better quality of life.

The principles of treatment should be:

To provide symptomatic relief

To determine mechanical etiology

To formulate a conservative plan by advising on footwear and prescribing orthoses

To consider surgery if conservative measures fail.

The following treatment protocols may be considered for the management of corns:

Manual removal: Use a nail file, emery board, or pumice stone immediately after bathing to manually remove hyperkeratotic tissue.

Topical keratolytic agents: These agents facilitate lesion pairing by softening the corns. They usually contain salicylic acid 12.6-40% as a pad or solution. Urea 20-50%, silver nitrate, and hydrocolloid dressings can also be used for this condition.

More recently, hydrocolloid dressings that have a hydrating effect on the skin have been evaluated as the potential treatment of keratotic lesions. However, keratolytic agents must be used with caution, as overapplication can cause chemical burns.

Remember: Neuropathic and immunocompromised patients should avoid these agents.

Gentle paring (cutting off), debridement, or enucleation: Pain associated with a callosity can be relieved to a certain extent by sharp debridement to reduce the amount of hyperkeratotic tissue.

This procedure involves cutting off the lesion with a sharp scalpel blade and removing the central keratin plug (on underlying nerves in the papillary layer), with the use of local anesthetic if necessary.

It reduces the pressure on underlying dermal nerves, thus alleviating the pain. Also, recurrence can be prevented by gently trimming the lesion (after soaking the lesion in warm water for 20 minutes) using a pumice stone.

Laser therapy: The 2,940 nm erbium-doped yttrium aluminum garnet laser has been used to treat corns with minimal thermal tissue damage. The carbon dioxide laser has also been reported to be efficient. However, if the trigger factors are maintained, it might lead to recurrence of lesions in some patients.

Cushioning and foot biomechanics/Orthoses: Cushioning and altering foot biomechanics can help prevent corns and treat the existing ones.

Orthotic devices are often prescribed to redistribute mechanical forces in the foot and allow a lesion to heal. There are various types of orthoses, including doughnut-shaped corn pads, heloma shields, and silicone toe splints, that relieve pressure from the tender central core in corns.

In addition, silicone sleeves release mineral oil, thereby softening the lesion. Interdigital wedges made of plastazote (a foam padding) or orthodigital splints made of silicone promote healing of an interdigital soft corn.

Surgery: Various surgical options are available for those patients in whom conservative measures have not worked. In rare cases, surgery to correct an underlying problem of bone structure may be needed to treat a corn or callus that keeps returning and is not relieved by padding, shoe inserts, and periodic shaving.

Note: Diabetic patients with corns and calluses need to be wory, as attempting any treatment of corns on their own may lead to excessive trimming and ultimately abrasion of the skin. Treatment should strictly be done by a specialist only.

How can Diabetic prevent serious foot complications?

Click Here To Know More

Home-care For Corns

Before treating corn, first evaluate the cause of friction. In many cases, they’ll go away on their own when the pressure or friction causing them stops. If protecting the corns from further irritation doesn’t solve your problem, podiatrist or GP may recommend the following home-care tips to get rid of them:

Soak the affected area in warm water

You can soak the corn or callus in warm water for about 15-20 minutes or till the skin gets soft.

File or pumice the surface

You can file the corn and callus using a pumice stone. First you need to soak the pumice stone in warm water for sometime and then use it in circular or sideways motions gently to file the corn or callus.

Do not take off much skin

You should be careful and not file the skin excessively, as it might lead to bleeding and infection also.

Keep the toenails trimmed

Long toenails can push against your shoe, causing a corn to form over time. Keep your toenails trimmed to remove this pressure.

Use padding

You can surround the corn with donut-shaped adhesive pads to prevent it from making contact with the shoes. Likewise for calluses, you can cushion the affected area with moleskin to relieve pressure or further irritation.

You can also make a "donut" with moleskin, lamb's wool, felt, or foam. Many pharmacies sell over-the-counter products to cushion corns and calluses.

Wear properly fitted shoes

Tight shoes are the main cause of corns and calluses. It is advised to wear low-heeled shoes and choose shoes that aren’t too loose or tight. This reduces the irritation that caused the problem in the first place.

Moisturize the skin regularly

Use moisturizing lotion or cream with salicylic acid, ammonium lactate, or urea. These ingredients gradually soften the hard corns and calluses.

If you want to know more about home-care for corns and calluses.

Click Here

Complications Of Corns

Though corns appear to be a minor health problem, they can take a severe shape if not treated in due time.

Complications might include:

Pain

Tinea pedis (a fungal skin infection that usually begins between the toes)

Ulceration and infection

Septic arthritis

Osteomyelitis

Post-surgical complications include:

Digital swelling

Numbness

Infection

Floppy or flail toe

Deformity recurrence

Joint and toe stiffness

If you want to know more about joint pains.

Click Here

Alternative Therapies For Corns

The conventional method of treating corn involves surgery. But this is not a permanent solution, since corns have a tendency to recur.

However, alternative treatments like homeopathy might be tried.

To Read More Click Here

Living With Corns

Usually corns and calluses aren’t a serious problem, but these minor nuisances can interfere with everyday work. Therefore, it is important to manage them timely.

Consider the following general strategies and tips to manage corns and calluses:

Calluses on hands can usually be prevented by wearing gloves while indulging in certain activities, such as when gardening or lifting weights.

Calluses on feet can usually be prevented by wearing shoes and socks that fit well.

Corns on feet can be prevented by wearing shoes that have a wider toe box.

Wear gloves while using tools, such as a garden spade or rake.

Wear appropriate padding if you expose other parts of your body to friction. For example, if you are on your knees laying carpet, wear knee pads.

A podiatrist may be able to help you make changes that can manage and prevent their occurrence.

In addition, foot problems are common in people with diabetes. You can prevent diabetes-related foot problems by taking care of your feet every day. Managing your blood glucose levels, also called blood sugar, can also help keep your feet healthy.

Over time, diabetes may cause nerve damage, also called diabetic neuropathy, that can cause tingling and pain, and can also numb feeling in your feet. When you lose feeling in your feet, you may not feel a pebble inside your sock or a blister on your foot, which can lead to cuts and sores. These cuts and sores can also become infected. Hence, special care is paramount for diabetic patients.

Here are a few things that you can do every day to keep your feet healthy:

Check your feet every day.

Wash your feet every day.

Smooth corns and calluses gently.

Trim your toenails straight across.

Wear shoes and socks at all times.

Protect your feet from hot and cold.

Get a foot check at every health care visit.

Frequently Asked Questions

Can corns and calluses be removed?

What is the difference between corn and calluses?

Where do corns and calluses likely to be located?

Can corn and calluses be painful?

Do corns and calluses itch?

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Vaginal yeast infection

Also known as Vaginal thrush, Vaginal candidiasis, Vulvovaginal candidiasis, Candidal vaginitis and Genital candidiasis

Overview

Vaginal yeast infection is a fungal infection of the vagina that causes itching and burning of the vulva, the area around the vagina. Women usually have a yeast infection in the vaginal areas as this area has ideal conditions for yeast growth caused by Candida, a type of fungi.

A vaginal yeast infection causes irritation, discharge, and intense itchiness of the vagina and the vulva, the tissues at the vaginal opening. It affects up to 3 out of 4 women at some point in their lifetimes. The infection can be prevented by wearing cotton undergarments and changing wet bathing suits and sweaty clothing immediately.

Anyone is prone to yeast infection but the people at higher risk include women who are pregnant, use hormonal contraceptives, are taking certain antibiotics, or have health conditions like diabetes or weakened immunity.

The diagnosis of yeast infection can be done by considering the medical history and undergoing a physical examination. A sample of discharge is needed from the vagina to confirm the yeast infection. Treatment of this infection is usually done with antifungal ointments or creams.

Key Facts

Usually seen in

Adults between 25-34 years of age

Gender affected

Women

Body part(s) involved

Vagina

Mimicking Conditions

Lichen sclerosus

Lichen planus

Necessary health tests/imaging

Pelvic examination

pH test

Nucleic acid amplification test (NAAT)

Treatment

Candida diet

Supplements for candida infections

Anti-fungal medications: Miconazole, Terconazole, Ketoconazole, Fluconazole & Itraconazole

Specialists to consult

Gynecologist

Symptoms Of Vaginal Yeast Infection

The symptoms can range from mild to moderate and some of the common symptoms of yeast infection are:

Itching and irritation

Redness and swelling

Rash

White, and thick discharge that resembles cottage cheese

The severity of symptoms depends on the length of the untreated period. In other words, if you leave it without any treatment for a long period it may have a negative effect and lead to more serious health problems such as:

Yeast infection in the vagina leads to abnormal vaginal discharge (thick, white, odor-free vaginal discharge with a cottage cheese appearance)

Itching or soreness of the vagina

Vaginal rash

Pain during sexual intercourse

Watery vaginal discharge

Pain or burning when urinating

If it is left untreated or if you have any risk factors, it can lead to a complicated yeast infection with symptoms such as:

Persistent or many yeast infections per year

Swollen or irritated vaginal tissue

Itching leading to cracks, tears, or sores

Causes Of Vaginal Yeast Infection

In many people, Candida fungus is harmless. However, there are certain conditions which may trigger the yeast to cause an infection. Here are some of the most common causes of yeast infections.

1. Hormonal changes

Hormonal imbalance, especially imbalance in sex hormones like estrogen and progesterone, may affect the balance of fungus and other bacteria in the vagina, causing a yeast infection. It can also happen during pregnancy, breasfeeding, and menopause (if you are on hormone replacement therapyor HRT)

2. Diabetes

In women with uncontrolled diabetes, there is a higher risk of vaginal yeast infection because excess glucose can act as a food medium for yeast. Also, fungi can grow in any warm, moist fold of skin such as between fingers and toes, under breasts, and in or around sex organs.

3. Poor hygiene

Poor hygiene and infrequent bathing can allow the yeast to build up in the crevices of the skin. This allows the growth of yeast in sweaty and moist skin, leading to an infection.

4. Tight clothing

Clothes including undergarments that are too tight or made of a fabric that does not allow the skin to breathe can contribute to the growth of yeast.

5. A weakened immune system

An immune system that is compromised due to a disorder like HIV infection or medications that suppresses the immune system like steroids and chemotherapy can create opportunities for yeast and fungus to grow unchecked, causing a yeast infection.

6. Medications

Taking antibiotics for infections like urinary tract infections, can kill beneficial bacteria, leaving space for yeast to grow. In certain conditions, taking medications is necessary and the side effects can weaken the immune system and therefore cause yeast infection.

Specifically, corticosteroids are used in treating arthritis, asthma, autoimmune diseases, and allergic reactions increasing the chance of getting a candidiasis. Medications like tumor necrosis factor (TNF) inhibitors are used in the treatment of autoimmune diseases such as rheumatoid arthritis and psoriasis can increase the chances of getting histoplasmosis. It is an infection caused by a fungus called Histoplasma, which lives particularly in soil that contains large amounts of bird or bat droppings.

7. Sexual intercourse

Although not common, person with an active yeast infection can pass that infection on to sexual partners through unprotected genital or oral contact. Engaging in sexual activity during a yeast infection can exacerbate the symptoms and also delay the healing process.

8. Stress

Ongoing stress can cause the body to produce elevated levels of cortisol, which can impair the immune system, and the ability to fight infections, and can prolong a yeast infection. Both chronic stress and reduced antioxidant capacity are risk factors for recurrent vaginal yeast infections.

Risk Factors Of Vaginal Yeast Infection

The risk factors of vaginal yeast infection include women who are:

Are pregnant

Use hormonal contraceptives like birth control pills

Have uncontrolled diabetes

Are taking or have recently taken antibiotics or immunosuppressive medications like steroids or those used during chemotherapy

Have a weakened immune system due to HIV infection

Diagnosis Of Vaginal Yeast Infection

To diagnose vaginal yeast infection, the common diagnostic steps includes:

1. Medical history

A doctor will discuss all the obvious symptoms, the level of severity, the duration of time a person has been experiencing the symptoms, and also note down the complete medical history to date.

2. Physical examination

Appearances of rashes on the vaginal folds, and reddened skin rashes from the body are indicative of yeast infection. In some cases, vaginal yeast infection can cause a clumpy white discharge. However, the discharge alone is not enough to diagnose a vaginal yeast infection. The doctor must also conduct a few lab tests to determine whether yeast is present in the vaginal secretions.

3. Lab tests

The type of test depends on the location of your symptoms:

The standard test is to diagnose a sample of vaginal fluid to determine the type of fungus causing the yeast infection. Identifying the fungus can help the doctor to prescribe a more effective treatment for recurrent yeast infections. The microscopic examination would look for clue cells (vaginal cells studded with bacteria). Gram staining is usually performed to differentiate good bacteria from bad bacteria, this lab test allows to check for imbalances in the vaginal flora.

A pelvic examination is done to check the extent of the yeast infection.

A pH test is done to check for vaginal acidity. It measures how acidic or alkaline your vagina is on the pH scale. A healthy vaginal pH range is between 3.8 to 4 and is moderately acidic so that it can actively fight bacteria. When your vaginal pH is above 4, it is less acidic, making it easy for bacteria and yeast to thrive. If you are experiencing itching, burning, and discomfort and your vagina has a pH of 4.5-5.0, you may be experiencing a yeast infection.

4. Molecular tests

Nucleic acid amplification test (NAAT) can be used to identify small amounts of DNA or RNA in test samples. This test can be, therefore, used to identify bacteria, viruses, and other pathogens even when it is present in very small amounts. The urine sample is collected for NAAT testing. This test is less useful for diagnosing a yeast infection than it is widely used for identifying sexually transmitted infections.

A culture test can definitively diagnose a yeast infection, this is done by extracting cells from a vagina with the help of a swab and hence providing a proper sterile medium for the growth of yeast. If the infection is present, yeast will grow and if not, no growth will be found in the medium.

Prevention Of Vaginal Yeast Infection

1. Wearing breathable undergarments

Cotton is the best choice of fabric as it doesn’t hold onto heat or moisture. It helps in keeping you dry and can prevent vaginal or genital yeast infection.

2. Wear loose clothes

Wearing too tight-fitted clothes like jeans, skirts, underwear, yoga pants, and tights, can boost body temperature and increase the amount of moisture around the private parts. Therefore, it raises the chances of yeast infection.

3. Avoid douching

The acidic environment protects the vagina from infections or irritation. Feminine hygiene products like douches can disrupt the balance of bacteria in the vagina by removing some of the good bacteria that can fight infections.

4. Changing wet clothes immediately

Sitting in a wet bathing suit after swimming or damp workout clothes after the gym is not advised as moist and wet clothes have the strongest potential of causing yeast infection.

5. Limiting the use of antibiotics

Taking antibiotics for infections like cold and flu can kill off beneficial bacteria, leaving space for yeast to grow.

6. Maintaining good personal hygiene

At the time of the menstrual cycle, the overgrowth of yeast infection is high. Changing sanitary napkins, tampons and undergarments are useful and often save the person from recurrent infections.

7. Managing diabetes and high blood pressure

The frequency and length of time the blood pressure is greater than 250 mg/dL can be a causative agent of yeast infection; it can be controlled by limiting the salt intake in food and avoiding stress. Diabetes can be managed by keeping an eye on sugar intake.

8. Drinking probiotics and eating yogurt

These contain active live cultures of good bacteria and yeast that help in replenishing body’s flora and maintain the growth of yeast infection. Taking supplements with lactobacillus acidophilus may also help prevent them.

Vaginal infections are the most common type of yeast infection. Here are a few more tips to manage them better.

Click To Read!

Specialist To Visit

A general practitioner can evaluate the symptoms of vaginal yeast infection and start the treatment. He/she can further refer to a specialist for further assessment.

Gynecologists (specialists in checking vaginal infections for checking symptoms like vaginal discharge, itching, and discomfort during urination).

Candida Specialists ( a functional medical practitioner, to find the cause or reason behind repeated infections).

If you are facing any symptoms, consult our healthcare professionals.

Consult Now!

Treatment Of Vaginal Yeast Infection

The treatment for yeast infection depends on the age, overall health, and how widespread the infection is, and other factors to determine your treatment. It also depends on whether the infection is simple or complicated.

Simple infections are typically cleared up in a week using easily accessible oral or vaginal antifungal medications while complicated yeast infections should be treated with help of a general practitioner. A course of antifungal cream and medications is required for 7 to 14 days. The treatment aims at:

Creating a natural environment in the body where candida cannot overgrow

Providing the body with the key nutrients needed to repair the damage caused by the infection

1. Candida diet

The candida diet is essentially a low-carbohydrate, low-sugar, anti-inflammatory diet that helps to promote good gut health. The following are the foods that need to be added and avoided in diet to promote a healthy lifestyle without yeast infections.

Protein: This is a mandatory part of the candida diet. Lean cuts of proteins and eggs are an important part of protein sources.

Remove the problem foods: First, you need to remove the foods from your diet that feed the candida and encourage it to flourish in your body. Foods like sugar, white flour, yeast, and alcohol are believed to promote candida overgrowth. The diet should be mainly centered on vegetables and gluten-free foods like brown rice and millet.

Low sugar fruits only: At times, when the infection is at its peak, avoiding eating fruits because even though fruits are healthy, they get converted into sugar which can trigger growth of yeast. Only selective fruits like berries, lime, lemon, green apples, and avocados can be trusted.

Include green veggies: Green veggies such as cucumber, spinach, asparagus, and capsicum are included in the candida diet plan. All vegetables should be consumed fresh and raw.

Fermented foods: Fermentation is a process that converts all carbohydrates into organic acids. Yogurt is the best example of fermented food. If you have candida, fermented foods are the best as it is also good for digestion.

Replacing all drinks with water: While following the candida diet, it is best to replace all drinks with fresh water. Drinks containing sugar, fizzy drinks, fruit juices, milkshakes, and hot drinks like tea and coffee should be avoided. Caffeine intake should also be restricted since it elevates the blood sugar levels.

2. Anti-candida supplements

Probiotics: Yeast infections are usually a result of gut flora imbalances between candida and the friendly organisms that normally control yeast overgrowth. Probiotics supplements work by populating the intestine with beneficial organisms that can help to restore these imbalances. A few examples of probiotics are yogurt, and kefir (a fermented milk drink, it is a better source of probiotics than yogurt, and people with lactose intolerance can often drink kefir with no problems). Other examples of probiotics are traditional buttermilk, and some types of cheese are a rich source of protein, calcium, and Vitamin B12.

Antifungal supplements: Antifungals and anti-candida supplements contain ingredients that directly or indirectly can kill candida and yeast in the body. A list of antifungals and herbs for candida and yeast infection includes tea tree oil, oregano oil, and coconut oil. The same applies also to natural extracts such as echinacea and astragalus that have immune-boosting abilities, and also have antifungal properties.

3. Medications

The treatment for vaginal yeast infections depends on the severity and frequency of your infections.

For mild to moderate symptoms and infrequent episodes, your doctor might recommend:

Short-term vaginal therapy for three to seven days which usually clears up the infection. These medications are available in the form of ointments, creams, tablets, and suppositories. Common examples include miconazole and terconazole.

Antifungals may be taken orally as single dose fluconazole or can be applied intravaginally in a single day or 3-day regimen that is available over-the-counter (OTC).

For severe symptoms and frequent yeast infections, your doctor may recommend:

Long-course vaginal therapy taken for two weeks followed by once a week for six months. The therapy includes intravaginal azole therapy, which is the first line of treatment for many fungal infections. They are often administered for weeks to months. Oral azole drugs like ketoconazole, fluconazole, and itraconazole represent a major advance in systemic antifungal therapy.

In case of complicated infection, the administered dose of fluconazole 150 mg is increased as it is given orally, once every 3 days for three doses.

In a few cases of azole-resistant therapy, the doctor might recommend a boric acid capsule, inserted into your vagina. This medication may be fatal if taken orally and is used only to treat candida fungus that is resistant to the usual antifungal agents.

Home-care For Vaginal Yeast Infection

In many cases, yeast infections can be easily and successfully treated at home. This is done with either over-the-counter products or alternative therapies.

1. Boric acid

It is a powerful antiseptic with mild antifungal properties that is useful for treating yeast infections that are resistant to other remedies.

Tip: Dilute some boric acid with water, apply the diluted solution to the affected area and rinse it. This can be done for two weeks to get rid of yeast infection.

2. Apple cider vinegar

One of the most popular remedies for yeast infection is an apple cider vinegar bath. The acidic component of vinegar can eliminate any harmful microorganisms, including yeast.

Tip: A hot bath can be prepared by adding some vinegar. Soak your body in this bath for about an hour, this helps in lessening the skin irritation and itching.

3. Tea tree oil

It is an essential oil that’s used to kill fungi, bacteria, and viruses. This oil has powerful and effective natural antifungal properties that can help in the treatment of yeast infections.

Tip: Dilute organic tea tree oil with water or one teaspoon of olive oil and rub the diluted oil over the affected skin area several times a day.

4. Coconut oil

It has effective antifungal properties that can kill the fungi responsible for yeast infections. Pure coconut oil helps treat vaginal yeast infection and can be applied directly to the affected area.

Tip: Make a mixture of equal amounts of coconut oil and cinnamon oil. Apply it to the affected skin area to control the growth of the infection.

5. Calendula

It is a kind of herb that has potent antifungal and anti-inflammatory properties that can help treat yeast infections.

Tip: Two to three calendula leaves can be crushed, apply the crushed leaves topically onto the infected area. This can be done two to three times a week.

6. Cranberries

They contain both antibacterial and antifungal properties and can be used to fight the fungi responsible for yeast infections.

Tip: Drinking cranberry juice without sugar, several times a day can help in speeding up the healing process and provide effective results within a short time.

7. Yogurt

Lactobacillus acidophilus, a friendly strain of bacteria present in yogurt, can control the growth of infection in the body.

Tip: Plain, unsweetened yogurt can be added daily to the diet. Adding yogurt helps increase the gut microbiome and can reduce yeast in the body.

Complications Of Vaginal Yeast Infection

Some complications occurring due to yeast infection are:

1. Spread to other organs

The most common complication of a yeast infection is the spreading of yeast infection to other organs. In a few cases, the yeast cells enter the blood and reach the various other organs, leading to many other serious complications like endocarditis, meningitis, and arthritis. The organs commonly affected by Candida are the lungs, liver, heart, brain, joints, and intestine.

2. Pregnancy complications

In some cases, vaginal yeast infections may sometimes cause problems with a pregnancy. Pregnant women with yeast infections experience preterm labor, and preterm rupture of membranes.

3. Urinary tract candidiasis

Candida infection can spread to the urinary tract. One of the rare complications of yeast infection is renal candidiasis. This condition occurs due to the spread of infection through the blood to renal cells.

4. Recurrent infections

If the infection is not treated properly once, there may be a chance that the infection might come back. Recurrent yeast infections can be disruptive to a person's well-being. It can also cause difficulties in a relationship, if the yeast infections disrupt normal sexual activity.

Alternative Therapies For Vaginal Yeast Infection

Several alternative therapies emphasize yeast infection treatment on the elimination of the causes, rather than eliminating the fungus.

1. Aromatherapy

Aromatherapy is the practice of using the natural oils extracted from flowers, bark, stems, leaves, roots, or other parts of a plant to get rid of the itching and rashes related to yeast infection.

The tea tree oil is widely used to treat a variety of infections and is considered to be one of the more powerful infection-fighting oils. Other oils like clove oil, oregano oil, and lavender oil can also be used. For vaginal infection, 5 to 8 drops of essential oil can be mixed with one liter of water, Use this mixture to perform vaginal douche.

2. Chinese medicine for yeast infection

Acupuncture, herbal therapy, and diet and lifestyle changes offer ways to correct energy imbalances and enhance the body's defenses. Acupuncture and Chinese medicine can also help with combating stress and correcting the body’s imbalances. It also helps the liver and kidney to discharge all the toxins released by the dead yeast.

3. Herbal medicine

Several herbs can knock out excess fungus, while the others are effective in strengthening the immune system. Goldenseal is one of the most commonly used herbs for its immune-boosting properties, and it is also believed to be effective in stabilizing the overgrowth of fungus.

The other herbs useful in eliminating yeast infection are calendula, thyme, rosemary, chamomile, and ginger. These herbs can be taken in the form of capsules, and extracts, or can be added to tea.

4. Mind/body medicine for yeast infection

Chronic stress may also lead to too much yeast in the body. It is therefore recommended to relax the mind and reduce stress by meditation. Joining social groups and communities, and engaging in social activities can help modulate the mind and hence reduce stress.

Living With Vaginal Yeast Infection

If you frequently have yeast infections, you should discuss them with your healthcare provider. However, it is important to remember that an early diagnosis of yeast infection can help in clearing up the infection with antifungal medication and can save the person from further implications.

Make sure that the person understands the diagnosis and its health implications.

Regular checkup is required to evaluate the present infection and whether the person is receiving the right treatment which helps in subsiding the infection.

Routine blood sugar level evaluation is required in case of yeast infection, as yeast overgrows in elevated sugar levels.

Discussion of any possible hormonal changes due to menopause, pregnancy, and hormone replacement therapy. These changes lead to hormonal imbalance and hence put a person at a greater risk of developing Candida yeast infections.

A test for HIV/AIDS is required if a person is having frequent yeast infection.

Frequently Asked Questions

What is the medical name for a yeast infection?

Can anything be done to reduce the frequency of vaginal yeast infections?

Is yeast infection a sexually transmitted disease?

Are recurrent yeast infections related to an underlying medical condition?

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Coronary artery disease

Also known as Ischemic heart disease, Coronary heart disease, and Arteriosclerotic heart disease

Overview

Coronary artery disease (CAD), refers to the narrowing or blockage of coronary arteries (that supply blood to the heart) with plaque-like deposits. Over time, this results in restriction or obstruction of the flow of blood to the heart muscle. This can manifest in the form of chest discomfort (angina), a heart attack (due to sudden total blockage of a coronary artery), slow progress to heart failure, or even sudden death, due to a life-threatening rhythm disturbance.

Family history, advancing age, high blood pressure, an abnormal cholesterol profile, diabetes, obesity, and smoking are the major risk factors for CAD.

Management of CAD includes lifestyle changes like consuming a heart-healthy diet, an exercise regime, and cessation of smoking and alcohol. Medications can help to manage risk factors along with treating the symptoms. Surgery might be advised in severe cases.

Key Facts

Usually seen in

Adults after 35 years of age

Gender affected

Both men and women, but more common in men

Body part(s) involved

Coronary arteries

Heart

Prevalence

World: 20.1 million (2020)

India: NA

Mimicking Conditions

One lung problem

Pulmonary embolism

Floppy mitral valve syndrome

Angina pectoris

Wolff-Parkinson-White syndrome

Necessary health tests/imaging

Imaging tests:

a. Non-Invasive tests:

Chest X-ray

Electrocardiogram (ECG)

Echocardiography

Stress test (Stress Thallium)

Computed tomography (CT) scan

Magnetic Resonance Imaging (MRI) scan

Cardiac positron emission tomography (PET) scanning

Coronary Calcium Scoring

Nuclear ventriculography

b. Invasive tests :

Coronary angiography

Electrophysiology Study

Lab tests :

Total Cholesterol tests

Triglycerides (Tg)

High-density lipoprotein (HDL) cholesterol

Low-density lipoprotein (LDL) cholesterol

High sensitivity C reactive protein

Lipoprotein (a)

Troponin test

Homocysteine

B-type natriuretic peptide (BNP)

Treatment

1. Medications:

Blood thinners: Clopidogrel, Rivaroxaban, Ticagrelor, Aspirin

Beta blockers: Atenolol, Bisoprolol, Metoprolol

Statins: Rosuvastatin, Pravastatin, Atorvastatin

Calcium channel blockers: Amlodipine, Verapamil , Diltiazem

Nitrates: Glyceryl trinitrate, Isosorbide mononitrate.

ACE inhibitors: Ramipril, Lisinopril.

2. Surgery

See All

Symptoms Of Coronary Artery Disease

Angina or chest pain is the most common symptom of CAD. Angina develops when too much plaque deposits inside the arteries and narrows them.

Angina may cause symptoms like-

Heaviness

Pressure

Tightening

Burning

Indigestion

Heartburn

Sweating

For many people, a heart attack is the first clue that they have CAD. A few symptoms of a heart attack include-

Chest pain or angina

Weakness

Nausea

Cold sweat

Discomfort in the arms or shoulder

Shortness of breath or trouble breathing

Heart palpitations

Over time, CAD can weaken the heart muscle. This may lead to heart failure, a life-threatening condition where the heart cannot pump blood the way it should.

Are you confused between angina, heartburn, and heart attack?

Learn the difference

Types Of Coronary Artery Disease

The different forms of coronary artery disease include:

1. Obstructive coronary artery disease

This is the most common type of coronary artery disease. It develops when coronary arteries gradually narrow due to plaque buildup. As artery narrowing progresses, it can eventually block blood flow to the heart.

2. Nonobstructive coronary artery disease

This is not the result of plaque buildup but occurs due to other coronary artery problems, such as

Constriction at inappropriate times

Malfunctioning in smaller artery branches

Damage to the artery lining

Note: This form of CAD is more common in females than males.

3. Spontaneous coronary artery dissection (SCAD)

SCAD occurs when a tear in the wall of the coronary artery partially or completely blocks the blood flow. This form can unexpectedly present as a heart attack.

Causes Of Coronary Artery Disease

Atherosclerosis or gradual buildup of plaque in coronary arteries (the major blood vessels in the body that supply blood to the heart) causes coronary artery disease.

Over time, this plaque which is made up of cholesterol, waste products, calcium, and fibrin (which helps in blood clotting) narrows or blocks the coronary arteries. This affects their function to supply enough blood, oxygen and nutrients to the heart. It leads to chest pain and puts you at the risk of a heart attack.

Risk Factors For Coronary Artery Disease

Multiple risk factors can lead to coronary artery disease. They are broadly divided into non- modifiable and modifiable factors:

1. Non-modifiable risk factors

Hereditary

Genetic factors are a significant risk factor of CAD. People with a family history of CAD are more prone to develop this condition.

Age

The risk of CAD significantly increases after 35 years of age in both men and women.

Gender

Men are more likely to have CAD as compared to women. Evidence has shown that lipoprotein (a) which is a cardiovascular risk factor seems to be elevated in men more than in women.

2. Modifiable risk factors

Hypertension (High Blood Pressure)

High blood pressure Is a major risk factor for coronary artery disease. It is characterized by blood pressure in the arteries and other blood vessels greater than 185/115 mm Hg.

Is your blood pressure under control? Explore our wide range of BP monitors to check your BP at the comfort of your home.

Click to shop

Abnormal cholesterol profile

An abnormal cholesterol profile or more precisely dyslipidemia. ie. Excessive bad cholesterol (triglycerides and LDL) and less good cholesterol (HDL) in the blood is a major risk factor for the development of CAD. The extra cholesterol circulating in the bloodstream forms the basis for plaque blocking the arteries, robbing the heart of oxygen rich blood supply.

Diabetes mellitus

Diabetes is a condition in which the blood glucose levels in the body stay consistently above normal. The risk of heart disease is 2.5 times higher in men and 2.4 times higher in women in diabetic individuals as compared to those without diabetes.

India is the Diabetes capital of the world. Diabetes not only predisposes to heart disease but a plethora of other long-term complications. Watch our expert talk about Diabetes, its various complications, and their prevention.

Obesity

Obesity increases the development and progression of coronary artery disease (CAD). Over 80% of individuals with CHD are overweight or obese.

Being overweight or obesity is the root cause of a wide range of diseases including heart diseases.

Click to read more

Lack of physical activity

Sedentary lifestyle predisposes obesity, high blood pressure, and high bad cholesterol, and diabetes, which are all major risk factors of CAD.

Diet rich in unhealthy fats

Diet loaded with saturated fats, trans fat, and packaged food increases the risk of obesity and high bad cholesterol by many folds. This results in excessive plaque formation in coronary arteries, leading to CAD.

Vitamin D deficiency

Moderate to severe vitamin D deficiency is associated with an increased risk of cardiovascular diseases including high blood pressure, CAD, and heart failure.

Read about various causes of Vitamin D and when to get tested for its optimum levels.

Have a glance

Excessive alcohol intake

Drinking too much alcohol can raise blood pressure levels and the risk of heart disease. It has been recommended that women should have no more than 1 drink a day and men should have no more than 2 drinks a day.

Tobacco

The usage of tobacco and exposure to secondhand smoke significantly increases the risk of heart diseases. Smoking increases plaque deposition in arteries and reduces the capacity of blood to carry oxygen, predisposing to CAD.

Looking to quit smoking? Try our range of smoking cessation products and detach yourself from this deadly habit

Buy now

Periodontitis

It is a severe gum infection that can lead to tooth loss. Research has suggested that periodontitis can expose the body to oral bacteria which can lead to the development of plaque buildup in blood vessels and coronary heart disease.

Chronic kidney disease (CKD)

Patients with chronic kidney disease (CKD) exhibit an elevated risk of coronary artery disease due to accelerated aging of the cardiovascular system.

Air pollution

When a person breathes poor-quality air, the pollutants can travel deep into the bloodstream, through the lungs, to the heart. This increases the risk of developing heart and circulatory diseases.

A study has found that long-term exposure to air pollution can lead to premature aging of blood vessels. This contributes to the rapid buildup of calcium in the coronary arteries, predisposing to plaque formation and CAD.

Did you know?

There is a direct association between road traffic noise exposure and heart disease. Research has shown that exposure to noise levels greater than 60 dB is associated with coronary artery disease in adults. Moreover, traffic noise at night can cause repetitive sleep interruptions, leading to elevated stress hormones. This can predispose to high blood pressure and cardiovascular diseases.

Diagnosis Of Coronary Artery Disease

CAD is usually diagnosed through physical examination and relevant diagnostic tests. Suppose a person already has symptoms like chest pain, shortness of breath, and cold sweat; in that case, the doctor will examine the heart's electrical activity rate and the heartbeat's regularity and send the individual for further diagnosis.

Physical examination and medical history

A medical practitioner usually diagnoses CAD through a physical examination and medical history.

The doctor will check parameters like blood pressure and ask about medical history, lifestyle, and family history (to check whether heart disease is among your biological parents and siblings).

The symptoms of chest pain and pain in the jaw, neck, left arm, or back is assessed. Shortness of breath is evaluated during rest and in case of activity.

Imaging tests

The medical practitioner may recommend one or more tests to assess heart function and diagnose CAD:

1. Non-Invasive tests

Chest X-ray

This test uses a small amount of radiation to create images of the chest, including your heart.

Electrocardiogram (ECG)

ECG is a cost-effective and readily available test for the evaluation of coronary artery disease. This test helps record the heart's electrical activity.

Echocardiography

Echocardiography is an ultrasound of the heart. This noninvasive test translates sound waves from your chest into pictures of your heart. It allows the doctor to check the heartbeat and pumping of blood.

Stress test

Stress test is used to check how well your heart and blood vessels are working under stress. In this, your heart may be put under stress with medicine or exercise. The images from the ultrasound show your heart structure and how well your heart muscles are pumping blood.

Computed tomography (CT) scan

It is a diagnostic imaging procedure that uses a fusion of X-rays and computer technology to produce images of the inside of the body. The scan looks in the coronary arteries for plaque buildup.

Magnetic Resonance Imaging (MRI) scan

An MRI scan is a painless test that produces very clear images of the organs and structures inside your body using radio and computer-generated radio waves. This test helps in detecting tissue damage or problems with blood flow in the heart or coronary arteries.

Cardiac positron emission tomography (PET) scanning

A PET scan of the heart is a noninvasive nuclear imaging test that uses radioactive tracers to produce pictures of the heart. This test can detect areas of the heart muscle which are receiving insufficient blood due to heart damage.

Coronary Calcium Scoring

This test measures the amount of calcified plaque (calcium) inside the walls of the heart’s arteries. This information obtained can help evaluate whether a person is at increased risk of a heart attack.

Nuclear ventriculography

This test is a noninvasive procedure that uses radioactive materials called tracers to show the heart chambers. The tracers attach to the red blood cells and pass through the heart. The movement of the tracers helps detect any anomaly in the heart.

2. Invasive tests

Coronary angiography

This test, also called cardiac catheterization, is a gold standard test for diagnosing CAD. This test is performed under local anesthesia and involves injecting a contrast dye into the coronary arteries via tubes called catheters. It shows the extent and severity of heart blockages.

Electrophysiology Study

This is an invasive test to assess the heart's electrical system or is used to diagnose abnormal heartbeats or arrhythmia. The test is performed by inserting catheters and wire electrodes, which measure electrical activity, through the blood vessels that enter the heart.

Lab tests

Total cholesterol

This test measures the total amount of cholesterol in the blood. A total cholesterol level of less than 200 mg/dL (5.17 mmol/L) is normal and cholesterol levels greater than 240 mg/dL (6.21 mmol/L) are high.

Triglycerides (Tg)

Triglycerides are a type of fat found in the blood. They come from extra calories that are not used immediately after eating and are stored in fat cells. High levels of TG can increase the risk of heart diseases like CAD. Triglyceride levels less than 150 mg/dL (1.7 mmol/L) are considered optimal.

Low-density lipoprotein (LDL) cholesterol

LDL is bad cholesterol. Elevated levels of LDL cholesterol causes plaque accumulation in the arteries, which reduces blood flow and increases the risk of heart diseases. The normal level of LDL should be less than 100 mg/dL and levels greater than 190 mg/dL are considered very high and pose a high risk of CAD.

High-density lipoprotein (HDL) cholesterol

HDL is good cholesterol. High levels of HDL reduce the risk of CAD by carrying away LDL and keeping the blood flow more easily. HDL levels greater than 60 milligrams per deciliter (mg/dL) are good for the heart and levels less than 40 mg/dL increase the risk of cardiovascular disease.

High sensitivity C reactive protein

A high level of CRP in the blood has been linked to an increased risk of heart diseases. It can also help to determine the risk before any symptoms appear.

Lipoprotein (a)

Lipoprotein (a) is a low-density lipoprotein attached to a protein called apo (a) that helps in transporting cholesterol in the blood. High blood lipoprotein (a) levels may be indicative of a high risk of heart disease, blood clots, and stroke. The elevation of lipoprotein (a) is majorly caused by a genetic factor and runs in families.

Troponin

This test measures the levels of troponin T or troponin I proteins in the blood. These proteins are released when the heart muscle is damaged and determine the risk of heart diseases.

Homocysteine

This test measures the amount of homocysteine, an amino acid in the body. Increased serum homocysteine levels are positively correlated with severity of CAD.

B-type natriuretic peptide (BNP)

BNP helps the body to eliminate fluids and relaxes blood vessels. In the case of heart damage, the body secretes high levels of BNP into the blood to ease the strain on the heart. BNP levels increase gradually as the number of diseased coronary arteries increases.

Book your tests from the comfort of your home.

Book Here

Celebs affected

Bill Clinton

Bill Clinton was the 42 president of the United States. He underwent surgery to fix blocked arteries twice. Since then he has tried to lose weight and regained control of his health by eating a diet rich in legumes, vegetables, and fruits.

Prevention Of Coronary Artery Disease

The following tips can help in preventing or reducing the risk for coronary artery disease:

1. Consume a healthy diet

A healthy, balanced and wholesome diet plays a pivotal role in prevention of coronary artery disease. Here are some food items that you should prefer and the others you should avoid in your diet.

Foods to prefer-

Green leafy vegetables

Legumes

Whole fruits

Whole grains like wheat, brown rice, jowar, ragi and bajra

Low-fat or fat-free milk or yogurt

Unsalted nuts and seeds

Eggs, fish, seafood, lean poultry

Vegetable and nut oils like olive oil, canola oil

Foods to limit or avoid-

Refined grains like white flour or white bread

Table sugar

Sugar-sweetened beverages

Packaged foods

Red and processed meats

Butter, coconut, palm, cottonseed and palm kernel oils and other oils that congeal at room temperature

Alcohol consumption

High salt intake

A DASH diet or Dietary Approaches to Stop Hypertension diet is a novel concept that emphasizes on portion control of food, getting the adequate amount of nutrients, and to lower down the risk of hypertension and eventually CAD.

Read more about DASH

2. Indulge in physical activity

Combining a healthy diet with regular exercise is the best way of maintaining a healthy weight. It has been noted that regular exercise makes your heart and blood circulatory system more robust, lowers your cholesterol level, and also keeps your blood pressure under control.

Try these easy exercises to keep your heart in good health.

Explore now

3. Avoid smoking

Smoking is never a good idea for your heart's health. It has been researched that giving up on smoking significantly reduces the risk of developing coronary heart disease.

Looking to quit smoking, but finding it very difficult? Read about some practical ways that will help you get rid of this unhealthy habit

Check Out

4. Manage your stress effectively

Stress, anxiety, and negative mental health is associated with an increased risk of heart diseases and stroke. While stress is hands in glove with this fast paced world, it can be really detrimental to health. Hence we need to find ways to manage stress in ways that best suit us.

Is stress affecting your overall well being? Try some relaxation techniques to manage stress.

Read to explore

5. Get sound and sufficient sleep

Research has shown that poor sleep quality is associated with high blood pressure, elevated cholesterol, which are major risk factors of CAD. A healthy diet, regular exercise, sleep hygiene and low stress may promote deep and restorative sleep essential for good cardiovascular health.

Struggling to fall asleep? Read about some amazing tips that will help you sleep like a baby.

Explore tips

6. Keep your blood pressure under control

Always maintain your blood pressure under control. Eat a healthy diet, exercise regularly, and, if needed, take prescribed medications to lower your blood pressure.

Read these practical tips that will help you keep blood pressure in check.

Click to read

Did you know?

This is some good news for all coffee lovers. Research has shown that having two to three cups of black coffee a day has been associated with lowering the risk of developing coronary heart disease. Not just this, coffee has some other amazing health benefits too.

Read along

Doctor To Visit

The doctors that can be consulted for diagnosis and management of CAD are:

Cardiologists

A cardiologist is a physician who specializes in the treatment of disorders of the heart and the blood vessels.

Consult our team of trusted doctors.

Book a consultation now

Treatment Of Coronary Artery Disease

Treatment for coronary artery disease (CAD) involves managing the symptoms and reducing the risk of further problems. CAD can be managed effectively with a combination of lifestyle changes, medications, and, in a few cases, surgery.

A. Medications

The main aim of medications is to either reduce blood pressure or ease blood flow in arteries.

1. Blood thinners

Blood thinners are a class of medicine that helps in reducing the risk of a heart attack by thinning the blood and preventing it from clotting.

Common blood thinners are

Clopidogrel

Rivaroxaban

Ticagrelor

Aspirin

2. Beta blockers

These medicines are used to treat angina and high blood pressure.

Common beta blockers are

Atenolol

Bisoprolol

Metoprolol

3. Statins

This class of drugs works by blocking the formation of bad cholesterol (low-density lipoprotein, LDL).

Common statins are

Rosuvastatin

Pravastatin

Atorvastatin

4. Calcium channel blockers

This class of drug works by decreasing blood pressure by relaxing the muscles, which causes the arteries to become wider and reduces blood pressure.

Common calcium blockers are

Amlodipine

Verapamil

Diltiazem

Note- Popping calcium supplements without consulting your doctor could increase the risk of plaque buildup in arteries. Learn more about this.

Click Here to Learn

5. Nitrates

Nitrates are referred to as vasodilators that are used to widen your blood vessels. They work by relaxing blood vessels, allowing more blood to pass through them and thus lowering the blood pressure.

Common Nitrates are

Glyceryl trinitrate

Isosorbide mononitrate

These drugs are available in a variety of forms, like tablets, sprays, and skin patches

6. Angiotensin-converting enzyme (ACE) inhibitors

This class of drug is used in the treatment of high blood pressure. This drug blocks the activity of a hormone called angiotensin-2, which causes the blood vessels to narrow.

Common ACE inhibitors are

Ramipril

Lisinopril

Note- Heart medications should never be stopped suddenly without consulting your doctor as there is a risk of making symptoms worse.

B. Surgery

In case of narrowing blood vessels as result of a build-up of fatty deposits or no relief in symptoms by taking the prescribed medicines, surgery may be needed to open up or bypass blocked arteries.

Coronary angioplasty

This is also known as percutaneous coronary intervention (PCI), or balloon angioplasty. During the procedure, a small balloon is inserted to push the fatty tissue in the narrowed artery outwards which allows the blood to flow more easily. Coronary angioplasty is either a planned procedure in cases of angina or is performed as an emergency treatment for a heart attack.

Coronary artery bypass graft (CABG)

CABG is also known as bypass surgery or a heart bypass. It is a procedure to restore blood flow to areas of your heart that are blocked, causing heart attacks and CAD.

Heart transplant

When the heart is severely damaged and is unable to adequately pump blood around the body, a heart transplant may be needed.

Did you know?

Patients with COVID-19 are at an increased risk of a broad range of heart disorders. In a vicious loop, cardiac risk factors such as obesity, hypertension, diabetes increase the risk of acquiring COVID-19 infection in the first place and lead to worse cardiovascular outcomes after COVID-19.

Read more about COVID-19

Complications Of Coronary Artery Disease

1. Chest pain (angina)

In the case of narrowed coronary arteries, the blood supply to the heart is not enough. This can lead to chest pain (angina) or shortness of breath.

2. Irregular heart rhythms (arrhythmias)

When the heart does not receive sufficient blood and oxygen due to CAD, the normal heart signaling can get altered leading to irregular heartbeats.

3. Heart failure

The narrowed arteries due to CAD makes the heart weak and difficult for the heart to perform its functions. Heart failure occurs when the heart can't pump blood well enough to meet the requirements of the body.

4. Heart attack

Rupture of plaque in one of the coronary arteries can result in the formation of blood clots. This blood clot can stop the supply of blood and oxygen to the heart leading to a heart attack.

Did you know?

Cardiovascular diseases are one of the leading causes of mortality in India and CAD is one of the most common among them. Here is a list of common factors that increase the risk of a heart attack.

Click to read

Home Care For Coronary Artery Disease

Lifestyle changes are a cornerstone to improving your heart health. Staying physically active and making wise choices of foods to eat help in managing CAD.

1. Engaging in physical activity

Living with a heart condition can make you feel hesitant to exercise. Whether you have undergone heart surgery or are taking medication for a heart condition, don’t shy away from exercising. It is an important part of keeping your heart in good health. The following guidelines will help you in your exercising journey:

Doctor’s Consent: Always make sure to consult your doctor about which exercises are beneficial for you according to your health. Exercise programs, especially for patients with heart conditions, have to be tailored according to the individual’s exercise capacity and risk profile.

Aerobic exercises: Aerobic exercises are usually advised for individuals with CAD, as they help the heart to utilize oxygen better and improve blood circulation. You can choose an aerobic activity such as brisk walking, stretching, swimming, or light jogging. Do these for 15-20 minutes, 3-4 times a week. Always start slowly and gradually increase the pace.

Resistance training: Lifting weights increases muscle strength by making the muscles work against a weight or force. This training can be performed 2–3 days per week and includes one set of 8–10 exercises targeting all major muscle groups. Make sure to workout under the supervision of a professional trainer.

Warm up & cool down: Always perform a short warm-up session before starting the main exercise. After exercising, it is equally important to cool-down.

Take a break when tired: Take a break of a few minutes in between sessions if you get too tired. Sip some water. If you continue to feel exhausted, stop exercising. Also, don’t overexert yourself if you are unwell or have a fever.

Wear right clothing: Wear comfortable and breathable clothes that enable you to stretch easily while exercising.

Are you still apprehensive about starting to exercise after stent surgery? Read some tips that will help you navigate your exercising journey post surgery.

Click to read

2. Making dietary changes amicable to heart health

After the diagnosis of CAD, making dietary changes can improve the condition of your heart and also reduce the risk of having further episodes. Quitting smoking and alcohol intake goes without saying.

Watch this informative video to learn about dietary modifications for improving your heart’s health.

A special mention to these ‘Star nutrients’

Omega-3 fatty acids

Omega-3 fatty acids are “healthy fats” that support heart health. They help in reducing the inflammation and triglycerides, mildly lower blood pressure, and boosts immune functioning.

Rich sources of Omega-3 fatty acids include:

Nuts and seeds like flax seeds, chia seeds, and walnuts

Plant oils such as flaxseed oil, soybean oil, and canola oil

Fish, especially cold-water fatty fish, such as salmon, mackerel, tuna, herring, and sardines and other seafood

Supplements can be considered under the guidance of a health care provider.

Explore our wide range of omega fatty acid supplements.

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Vitamin D

Research has shown that vitamin D is beneficial for reducing the risk of heart disease. Bask in the morning sunshine for optimum levels of this vitamin. You can also load your plate with foods rich in vitamin D like milk, eggs, fortified orange juice, tuna and soya milk.

Fill any gaps in your Vitamin D levels by dietary supplements. Check out our wide range of supplements.

Explore now

Did you know?

Vitamins are not produced in the body. Therefore, they must be consumed adequately. However, vitamin D is an exception. Here are a few points which you need to know about vitamin D and why it is important.

Click Here to Know More

Alternative Therapies For Coronary Artery Disease

1. Yoga

Yoga serves a vital role in maintaining and elevating the positive health of people suffering from CAD. Several studies have also suggested that yoga significantly improves risk factors like obesity, lipid profile, blood pressure, and diabetes mellitus.

Practicing yoga can keep your heart healthy

Read how

2. Acupuncture

Research has shown that acupuncture can be a viable complementary therapy for CAD as it can improve blood circulation throughout the body and within the heart.

Living With Coronary Artery Disease

It's possible to lead a normal life after having heart surgery or problems like a heart attack. Here are a few tips that will help you in your journey of recovery from CAD:

1. Cardiac rehabilitation program

It is a major step for anyone recovering from a heart attack, heart failure, or other heart problem that requires surgery or medical care. This rehab program aims to improve the quality of life and prevent another cardiac event. A supervisor will guide you regarding

Physical activity

Healthy eating

Ways to relieve stress and improve mental health

2. Coordinate with your doctor

Keep in regular touch with your doctor. Make sure to consult your doctor in case of any health issues.

3. Follow a proper medication regimen

Take the medications prescribed by your doctor regularly without fail. It is also a good idea to consult your doctor when starting any medication for other medical conditions, to avoid interactions between different drugs.

4. Join support groups

If you have a heart condition you might find it useful to meet other people who are facing a similar situation. This gives a sense of motivation to live with your condition.

Did you know?

Reducing personal exposure to air pollution using a highly efficient face mask can reduce symptoms and improve cardiac health measures of patients with coronary heart disease.

Frequently Asked Questions

What are the three crucial coronary artery disease symptoms?

Can you stop coronary artery disease from progressing?

Is coronary artery disease genetic?

Can CAD cause a stroke?

What worsens coronary artery disease?

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Varicose veins

Also known as Varicosity, Venous blood vessels, and Vena

Overview

Varicose veins are abnormal, dilated blood vessels caused by a weakening of the walls of the blood vessels. They may appear as swollen, twisted clusters of blue or purple veins. These occur because standing and walking increases the pressure in the veins of the lower body.

Varicose can appear anywhere, but most often appear on the legs, in the pelvic area, and on the surface of the skin. Mild cases of varicose veins just produce leg discomfort and may just look aesthetically unpleasing but the severe form can lead to pain, swelling, itching bleeding, and eventually ulcer formation.

Older women are at a higher risk of developing varicose veins due to hormonal changes and loss of elasticity of the vein walls. Other risk factors can include prolonged standing or sitting, family history, and trauma.

Treatment might involve conservative or surgical management. Conservative management comprises self-care measures and compression therapy. Surgical or minimally invasive procedures are done by a healthcare provider to close or remove veins.

Key Facts

Usually seen in

Adults above 55 years of age.

Gender affected

Both men and women, but more common in women.

Body part(s) involved

Legs

Feet

Calves

Pelvis

Prevalence

World: 2-73% (2022)

India: 5% (2016)

Mimicking Conditions

Lymphedema

Deep vein thrombosis

Cellulitis

Stasis dermatitis

Necessary health tests/imaging

Tourniquet tests: Trendelberg test and Perthes test.

Imaging tests: Venous doppler test, Color duplex ultrasound scan, Magnetic resonance imaging (MRI), and CT Angiogram.

Treatment

Conservative management: Compression therapy.

Surgical management: Conventional surgery, Vein stripping, Radiofrequency, and laser ablation.

Minimally invasive procedures: Endovascular Laser Ablation( EVLA), Micropuncture or micro-incision or stab phlebectomy, and Transilluminated powered phlebectomy

See All

Symptoms Of Varicose Veins

Patients with varicose veins present with symptoms ranging from asymptomatic to significant symptoms, which include:

Discomfort

Itching (eczema)

Swelling

Aching pain that may get worse after sitting or standing for a long time

Blood clots in the deep veins of the legs

Twisted, swollen, and lumpy looking veins

The veins are blue or dark purple

Throbbing or cramping

Rash that is itchy or irritated

Darkening of the skin and loss of soft texture of the skin

A minor injury to the affected area may result in longer bleeding than normal

Tender areas around the veins

Fat under the skin just above the ankle can become hard, resulting in the skin shrinking

Irregular whitish patches that look like scars appear at the ankles

Irresistible urge to move the legs, typically in the evenings.

Varicose veins can lead to painful ulcerations on the legs if not managed properly. Learn how to effectively manage varicose veins.

Read This!

Causes Of Varicose Veins

Varicose veins may be caused by weakened valves within the veins that result in the pooling of blood in the veins instead of traveling to the heart. The causes of varicose veins can include:

Primary varicose veins: These can have a hereditary factor like weakness in the wall of the vein and occur in some members of the same family.

Secondary varicose veins: These develop because of secondary causes such as trauma or deep vein thrombosis (blood clots in the deeper veins).

Familial and congenital varicose veins: These are due to disorders due to vascular malformation in the limb, present at birth.

Did you know?

There is a simple test that can detect the presence of blood clots and it's called the D-Dimer test.

To Know More Click Here!

Risk Factors For Varicose Veins

The most important risk factors leading to the development of varicose veins are:

Age

This is due to the loss of elasticity of the tissues as a person gets older, causing the valve system to fail.

Gender

Women have a higher incidence of varicose vein disease due to high levels of female hormones (estrogen) and their effect on the vein walls.

Family history

Studies show that screening of parents and family members revealed if parents and grandparents had the problem, it will increase the risk of varicose veins irrespective of gender.

Obesity

Being overweight can put extra pressure on veins, studies demonstrate that the risk increases especially in overweight women.

Know more about the 6 health risks of obesity.

Read This!

Alcohol and smoking

Studies concluded that alcohol is likely to increase the risk of varicose veins in women and smokers had a higher incidence of varicose veins compared with non-smokers in both genders.

Are e-cigarettes safe? Do they help you quit smoking?

Get all these questions answered

Hormonal changes

These occur during different stages of life and include puberty, pregnancy, menopause, post-menopause, hormone replacement, and other medicines containing estrogen and progesterone that may contribute to the development of varicose veins.

Prolonged standing

Occupations that involve prolonged standing increase the volume and pressure of blood in the lower legs due to the effects of gravity leading to the development of varicose veins.

Immobility

Lack of mobility like sitting for a long time especially when legs are bent or crossed may force veins to work harder to pump blood to the heart increasing the risk of varicose veins formation.

Physical trauma

Trauma or damage to the underlying blood vessels is an important risk factor leading to the formation of varicose veins.

Deep vein thrombosis (DVT)

A DVT occurs when a blood clot forms in one or more of the deep veins in the body, especially in the legs. DVT significantly increases the risk of incidents of varicose veins.

Tall height

In both sexes, increasing height showed a significant relationship with varicose veins.

Know the actual reason why some people are taller than others.

Click Here!

Diagnosis Of Varicose Veins

Diagnosing varicose veins requires a thorough history, physical examination, and series of tests. They include:

Complete medical history

This should include previous interventions or surgery on the affected leg, pregnancy, ulcerations, trauma, any history of uterine fibroids and cancer, previous DVT (deep vein thrombosis), past hospital stays, cardiovascular disease, and previous lower limb fracture.

Clinical examination

The clinical evaluation of varicose veins in the standing position and inspected for redness,

tenderness, swelling, hyperpigmentation, and ulcerations. Classification of venous reflux is used to assess the clinical severity of symptoms, it includes:

C0: No visible or palpable signs of venous disease

C1: Reticular veins (purple blue veins)

C2: Varicose veins

C3: Edema (swelling)

C4a: Pigmentation and itching

C4b: Changes in the skin of the lower legs and White scar as a result of healed ulcer

C5: Healed leg ulcer

C6: Active ulcer on the leg

To determine the exact cause the tests include:

Trendelenberg test: Also known as Brodie–Trendelenburg test, it determines the competency of the valves in the superficial and deep veins of the legs in patients with varicose veins. It is done by elevating the leg to 45º, and a tourniquet is applied to the midthigh after the veins have completely drained.

Perthes test: This is done in a standing position with a tourniquet applied to the midthigh. If the varicose veins collapse after a 5-minute walk or varicose veins become more prominent and painful with walking, then the deep veins are obstructed.

Imaging techniques

If the cause of varicose veins is not clear from the clinical examination or if an intervention is being considered then imaging tests are done. They include:

Venography: It is a procedure of an x-ray of the veins after a special dye is injected into the bone marrow or veins. It is done to find blood clots, and identify a vein for use to assess varicose veins before surgery.

Venous doppler test: This is an ultrasound scan to check the direction of blood flow in the veins and check if there are any blood clots in the veins.

Color duplex ultrasound scan: It involves using high-frequency sound waves to look at the speed of blood flow, and the structure of the veins in the legs.

Computed tomography (CT): It can help find deep, hidden varicose veins and even the root cause behind the symptoms. Studies show that CT venography can provide an excellent road map for varicose veins surgery.

Magnetic resonance imaging (MRI): It can be used as an alternative tool that plays a better role in assessing varicose veins of the lower extremities and deep veins of the pelvis and abdomen.

CT Angiogram: This test can help your doctor confirm whether you have varicose veins or any other problem. A dye is injected that outlines your veins on x-ray images.

Ambulatory venous pressure measurements

It is used to detect the decline in pressure from a higher value in the leg veins. Ambulatory venous pressure (AMVP) measurement is considered the gold standard in evaluating calf pump function in chronic venous disease.

Book your tests from the comfort of your home

Click Here!

Celebs affected

Tapsee Pannu

Tapsee Pannu is a critically acclaimed Indian movie star who recalls her encounter with the varicose veins. "When I see this picture I remember how I got my varicose veins operated on and removed just 6 weeks before I started training. Now those scars can act as an evil eye," she wrote in her Instagram post.

Britney Spears

This American singer-songwriter, who is also a mother of two, went through exactly the same body metamorphosis as any other expecting mum that includes varicose veins. According to one report from 2018, Britney sought to get her damaged veins removed through an laser treatment.

Prevention Of Varicose Veins

As the saying goes” he who has a healthy body has everything” and the prevention of varicose veins mainly consist of making lifestyle changes that you would do just to keep yourself healthy. They are as follows:

Be active and exercise regularly

Regular exercise is a way to promote good blood circulation, as well as increase vein and

muscle strength. Strenuous exercises should be avoided if you already have varicose veins

Are you too lazy to sweat?

Read more about tips and tricks that can help you get moving.

Tap Here!

Maintain a healthy weight

As obesity is one of the known factors for the emergence of varicose veins, weight control helps avoid pressure on leg circulation.

Avoid prolonged sitting or standing

If you must stand for a long time, shift weight from one leg to the other every few minutes. While sitting for a long period, take short walks every 30 minutes.

Note: Avoid high heels for a long time as this can result in lost efficiency of the veins causing pooling of venous blood in the leg. You can also buy heel supporters that can help you with the discomfort.

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Wear loose clothing

Extra tight clothes throughout the day can reduce blood circulation, so, be sure to wear loose-fitting comfortable clothing to help promote good circulation.

Keep your legs elevated

To improve blood circulation in your legs take several short breaks throughout the day to elevate your legs above the heart level.

Use compression stockings

Wearing compression stockings or socks improves blood flow by placing pressure on the legs relieving leg swelling and lowering the risk of blood clots formations in the legs.

Buy compression stockings online.

Click Here!

Eat the right diet

Excess salt can cause swelling in the legs. Eating a low-sodium diet with high-fiber foods can help to prevent varicose veins.

Control your blood pressure

High blood pressure puts an extra strain on blood vessels making them more susceptible to becoming varicose veins.

Limit sun exposure

Sun exposure can worsen the appearance of varicose veins and excessive exposure to the sun can cause spider veins (small dilated red or purple veins) on the cheeks or nose in fair-skinned people.

Protect yourself from the harsh rays of the sun. Choose from the widest range of sunscreens that best suit your skin.

Shop Now!

Specialist To Visit

Varicose veins require accurate diagnosis and a comprehensive treatment team doctors who can help you manage them and they include:

General physician

Vascular surgeon

Physical medicine rehabilitator

Primary care provider

A vascular surgeon specializes in surgery for vascular system diseases. A physical medicine and rehabilitation doctor restores function and quality of life to those with physical disabilities and a primary care provider (PCP) prevents, diagnoses, and treats diseases.

When to visit your doctor?

Take an appointment with the doctor immediately if:

You have pain while walking or standing

You develop a sore or tender lump near a varicose vein

You have swelling in your ankles or feet

Your skin over a varicose vein bleeds on its own or when injured.

If you notice any of these symptoms seek advice from our trusted team of doctors immediately.

Consult Now!

Treatment Of Varicose Veins

Varicose veins treatment requires a correct understanding of the severity of symptoms. The treatment consists of the following:

Conservative management

For individuals with milder symptoms and who do not want to undergo surgery using long-term graduated compression stockings, leg elevation, and oral pain medications can be a means to relieve the symptoms. Stockings should be worn daily if you want to see results and avoid surgery.

Surgical management

For patients with symptomatic veins and substantial venous incompetence, surgery has been the optimal treatment for many years. Traditional surgical treatment consisted of the following:

Conventional surgery: A small incision is made in the groin crease and the top of the main incompetent vein is dissected and tied off. A fine plastic wire is passed through the vein and retrieved through the inside of the leg at the knee level.

Vein stripping: This procedure is used to remove or tie off a large vein in the leg that helps treat varicose veins.

Radiofrequency and laser ablation: These involve passing a probe up the long vein from knee level to the groin under ultrasound guidance and then ablating the vein in sections. This avoids a groin incision and may lead to less bruising and quicker recovery.

Sclerotherapy: This involves the injection of an agent called sclerosant into varicosities, followed by a period of compression bandaging and/or compression hosiery. The main risk of sclerotherapy is injection outside the vein, which can result in local tissue necrosis and scarring.

Foam sclerotherapy: This involves mixing sclerosant with a small quantity of air to produce a foam that spreads rapidly and widely through the veins, pushing the blood aside and causing the veins to go into spasm.

Minimally invasive procedures

Endovascular Laser Ablation( EVLA): This is a preferable treatment usually for larger varicose veins in which a thin catheter inserted into an enlarged vein heats the tip of the catheter using radiofrequency energy. As the catheter is pulled out, the heat destroys the vein by causing it to collapse and shut.

Micropuncture or micro-incision or stab phlebectomy: In this procedure, a physician makes a tiny incision and uses a surgical instrument or a large needle to hook the problem vein through the opening. The vein is then removed a tiny piece at a time.

Transilluminated powered phlebectomy: The procedure involves inserting a light under the skin while simultaneously injecting a mixture of saline and a local anesthetic that guides the surgeon to cut the vein into smaller pieces and suction the pieces from the space.

Management of spider veins

Many patients will have visible superficial veins referred to as "spider veins". These may not be a cause of worry just for cosmetic sake but can also be painful. Its management includes:

Liquid sclerotherapy: It involves the injection of a liquid sclerosant into the superficial veins.

Phlebectomy: It involves removing larger superficial varicose veins through small 2 mm to 3 mm incisions.

Laser therapy: Laser light can destroy the vein without damaging your skin. Laser therapy is only used to treat spider veins and is not useful for varicose veins.

Did you know?

COVID- 19 patients appear to have blood clotting problems, leading to DVT which is a major risk factor for the development of varicose veins. Read all the FAQs related to COVID- 19.

Click Now!

Home care For Varicose Veins

Lifestyle modification is crucial to ensure as complete and durable a treatment response as possible. All management modalities to treat varicose veins are considered safe and can be long-term or short-term. But, do we always have to opt for surgery? there are certain home remedies that can be beneficial, but they include:

1. Apple cider vinegar: It helps clean the body and enhances the circulation of blood through the veins. A study suggested that the external application of apple vinegar on varicosity patients increased the positive effects of conservative treatment.

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2. Red chili (Laalmirch): Also known as cayenne pepper is rich in vitamin C and antioxidants that treat allergies and viruses. The substance inside the pepper prevents blood clotting, helping prevent varicose veins.

3. Garlic (Lahsun): It contains flavonoids that help strengthen the veins and blood vessels, keeping them safe from damage thus, reducing varicose veins.

4. Lemon (Nimbu): It is a powerhouse of nutrients and minerals and vitamin C that can prevent varicose veins, and fluctuating blood pressures, and keeps the skin glowing too.

Note: Extract the juice from 2 to 3 lemons and add 4 teaspoons of olive oil. Mix it with the garlic paste and leave it overnight. Massage the affected area of Varicose veins with that mixture twice a day for two months to see the results. Read more about the health benefits of lemons.

Click Now!

Complications Of Varicose Veins

Varicose veins complications might be rare, but they include:

Venous ulcers: These are leg ulcers caused by problems with blood flow in your leg veins.

Pain: An achy or heavy feeling in the legs along with burning, throbbing, muscle cramping, and swelling in the lower legs.

Poor cosmesis: Cosmesis usually refers to the surgical correction of disfiguring defects, which becomes difficult with the presence of varicose veins.

Thrombophlebitis: Swelling of the veins in your leg.

Deep vein thrombosis (DVT): It can cause pain and swelling in the leg, and may lead to serious complications like pulmonary embolism.

Bleeding: Uncontrolled bleeding near the surface of your skin can result from varicose veins.

Read more about first aid tips to stop bleeding.

Click Here!

Alternative Therapies For Varicose Veins

Alternative or complementary therapies have proven to alleviate the symptoms of varicose veins and when incorporated with the treatment plan have shown promising results. Some of them include:

Hydrotherapy

Studies show that hydrotherapy is effective in treating primary varicose veins along with compression therapy and other conservative treatments. The warm sitz bath hydrotherapy is an effective non-invasive therapy for uncomplicated varicose veins and requires a high degree of patient compliance.

Leech therapy

A study suggested that the medicinal leech sucks venous blood and aids ulcer healing, and can be used as an effective adjunct in the management of complicated varicose veins. This however requires further evaluation by controlled trials.

Ayurveda

It can be helpful in treating painful venous ulcers, a complication of varicose veins. Studies suggest that therapeutic procedures, sodhana (purification therapy), act on non-healing ulcers and help them heal.

Check out our Ayurveda page.

Click Here!

Living With Varicose Veins

Varicose veins cannot always be avoided completely, they may cause serious issues if not taken care of. Some pieces of advice that can help you in order for the disease, not to progress include:

Make the right dietary choices

Potassium-high foods, such as almonds and pistachio nuts, reduces water retention and can help in reducing varicose veins. Also, cutting down on salty food can minimize water retention.

Know more about the top 50 potassium-rich Indian food sources.

Read This Now!

Add flavonoids to your plate

Flavonoids improve blood circulation, reduce blood pressure in the arteries, and can relax blood vessels, all of which can reduce varicose veins. Foods that contain flavonoids include:

Onions

Bell pepper

Spinach

Broccoli

Grapes

Cherries

Apples

Blueberries

Cocoa

Garlic

Massage religiously

Gently massaging the affected areas can blood circulation through the veins. Use massage oils or moisturizers for optimal effects and avoid pressing directly onto the veins as it can damage fragile tissues.

Make sure to keep moving

Avoid sitting for long periods of time and aim to get up and move around or change position frequently to keep the blood flowing smoothly. Also, avoid sitting with crossed legs, as it restricts blood flow to the legs and feet, which may add to circulation problems.

Take a cold shower

Cold water improves blood circulation. You can also massage with a jet of water from the feet to the thighs. Make sure to keep the skin of the affected area clean and well-hydrated.

Say “No” to alcohol and tobacco

As we have established these are the risk factors for varicose veins, they can worsen the symptoms if you already have varicose veins, hence avoiding them will not only help you with the symptoms but it can help you take that extra step towards leading a healthy life.

Try our smoking cessation range if you are keen on quitting this deadly habit.

Browse Now!

Be aware of the tourist class syndrome

Also known as traveler's thrombosis is a condition that occurs when you have to sit in the same position for a long time. To avoid this, perform foot exercises, keep sipping water, wear loose comfortable clothing, and make sure to keep moving every 2 hours in case of a long flight.

Take post-procedure follow-ups seriously

After endovenous ablation treatment, most physicians recommend a duplex ultrasound examination of the treated leg within the first week to evaluate for deep vein thrombosis.

Frequently Asked Questions

1. Are varicose veins painful?

2. How do you determine if you have symptomatic varicose veins?

3. Is the condition a health concern?

4. Is the loss of a vein a problem?

5. What needs to be done if compression stockings don’t work?

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Cough

Overview

Cough is a protective reflex that expels mucus, bacteria, and other foreign substances. It is the body's defense mechanism to clean the lungs and airways.

Cough can be acute or short term which usually lasts less than 3 weeks whereas chronic or persistent cough can last from 3 to 8 weeks. There can be numerous causes for cough. You may develop cough due to upper respiratory tract infections, allergies, pneumonia, asthma or other medical conditions. Moreover, cough might also be accompanied by other symptoms such as shortness of breath, wheezing sound, hoarseness of voice, or chest pain depending on what is causing it.

Acute cases of cough are usually managed by home remedies such as steam inhalation, gargling with salt water, using a humidifier or taking cough suppressants and expectorants. Drinking warm water or avoiding foods that can aggravate cough such as oily foods can also help in improving your condition.

However, in case of chronic cough, antibiotics and other medications might be prescribed depending on the cause and duration of your cough. Treatment of the underlying cause of cough also needs to be addressed in such cases.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Larynx

Pharynx

Bronchioles

Lungs

Mimicking Conditions

Bronchiolitis

Bronchogenic carcinoma

Chronic aspiration

COPD

Congestive heart failure

Foreign body of the airway

Interstitial lung disease

Neuromuscular disorders

Psychogenic cough

Sarcoidosis

Necessary health tests/imaging

Chest x-ray

Sputum examination

Bronchoscopy

CT scan

Treatment

Cough suppressants: Dextromethorphan, Levocloperastine & Codeine

Expectorants & mucolytics: Guaifenesin

Antibiotics: Amoxicillin clavulanate

Bronchodilators: Salbutamol, Budesonide, Montelukast & Theophylline

Antihistamines

Analgesics

Specialists to consult

General physician

ENT specialist

Pulmonologist

Allergist

Causes of Cough

There can be numerous causes of cough. Acute or short term cough usually lasts less than 3 weeks whereas chronic or persistent cough can last from 3 to 8 weeks. The various causes are discussed below:

Causes of acute or short-term cough

1. Acute viral or bacterial upper respiratory infection

Viral infections of the upper respiratory tract which include the common cold, viral laryngitis and influenza are the most common cause of cough. In such cases, cough is usually accompanied by fever, sore throat and runny nose. Cough can also occur due to bacterial infections in certain cases.

2. Inhalation of irritants or allergens

Acute exposure to dust, smoke, toxic fumes, mold, pollen & pet fur can cause inflammation of the upper respiratory tract and initiate coughing.

3. Acute rhinosinusitis

In acute rhinosinusitis, there is an inflammation and infection of the lining of the paranasal sinuses. This infection can cause mucus to collect at the back of the throat, which may make the throat itch. Some people might frequently cough to try to clear their throats, while others might experience uncontrollable coughing.

4. Pertussis or whooping cough

Pertussis or whooping cough may cause violent coughing led by a gasp for air. Pertussis is caused by a bacteria called Bordetella pertussis that affects the respiratory tract.

5. Lower respiratory tract infections

These are more severe viral and bacterial infections which can affect the airways in case of bronchitis and even the lungs in case of pneumonia. They usually cause a deep, persistent cough along with fever.

Causes of chronic or persistent cough

The reason behind a chronic cough is more difficult to diagnose. It needs diagnosis from a cough specialist or a pulmonologist. Possible causes of chronic cough include:

1. Upper airway cough syndrome

Upper airway cough syndrome is a chronic post-nasal drip, which tends to irritate the upper airway, inducing cough.

2. Hay fever or allergic rhinitis

Allergic rhinitis is an inflammation of the nasal mucosa, which is secondary to an allergic irritation occurring due to environmental factors. This results in increased mucus secretion. The mucus may also gather in the throat, causing post-nasal drip. This, in turn, may irritate the airways and stimulate a cough. It is usually associated with dry cough, sneezing and runny nose.

3. Chronic sinusitis

After a bacterial infection, your sinus and nasal mucosa may become irritated and inflamed, resulting in cold-like symptoms and cough over time.

4. Chronic bronchitis

Excessive mucus plugging in the airways causes a cough that lasts more than 3 months. Chronic bronchitis is not always of infectious origin but may be caused by bacterial infections in the past. Smoking is also an important risk factor of chronic bronchitis, and thus, a cause of cough.

5. Post-infectious cough

While recovering from an infection, the cough receptors become hyperresponsive, thereby inducing cough.

6. Gastroesophageal reflux disease (GERD)

In GERD, acidic contents from the stomach enter into the throat. This causes the receptors in the throat to get irritated, causing cough. Cough caused due to GERD worsens on lying down because on lying down the stomach contents travel back to the throat and cause cough.

7. Asthma

In asthma, the body's immune system becomes hyper-responsive to external factors. This may cause inflammation, bronchial hyperreactivity & intermittent airflow obstruction with constriction of the airways, thereby inducing cough.

8. Chronic obstructive pulmonary disease (COPD)

It is a chronic inflammatory lung disease that causes obstructed airflow from the lungs and is usually associated with smoking. A cough caused by smoking is almost chronic in nature with a distinctive sound. It’s often called a smoker’s cough.

9. Congestive heart failure (CHF)

In CHF, the heart’s ability to pump blood reduces. This results in buildup of fluid in the lung, causing cough.

10. Intolerance to angiotensin-converting enzyme (ACE) inhibitor medicine

A dry cough is one of the most bothersome side effects of ACE inhibitors taken by people for hypertension.

11. Obstructive sleep apnea

In obstructive sleep apnea, the airways get partially or completely blocked for a short period of time during your sleep. This raises airway resistance, thereby causing chest and diaphragm spasms, resulting in cough.

12. Throat disorders

Diseases such as croup in children, cause a distinctive barking cough and a harsh sound called stridor when the child breathes in.

13. Psychosomatic cough

This type of cough has psychological causes such as anxiety, stress and depression and may have been adapted with habit rather than any disease condition.

Other less common causes of cough

1. A foreign body

Accidently, food or other objects can go down the windpipe instead of the food pipe causing cough.

2. Tuberculosis (TB)

Symptoms of TB are usually coughing for three or more weeks along with coughing up blood or mucus, chest pain, or pain with breathing or coughing.

3. Lung cancer

Cancer starts when cells in the lung begin to grow out of control. It is mostly associated with chronic smokers.

4. Cystic fibrosis

This is a genetic disorder that affects the lungs and causes chronic cough.

5. Bronchiectasis

This is a condition in which airways of the lungs are permanently damaged and widened leading to a buildup of extra mucus.

6. Pulmonary embolism

In pulmonary embolism, a blood clot or embolus travels, usually from the legs, to the lungs causing sudden shortness of breath along with a lingering dry cough.

7. Pneumothorax

A pneumothorax or a collapsed lung occurs when air leaks into the space between the lung and the chest wall. It can be spontaneous or due to some chest injury, certain medical procedures, or underlying lung disease. Signs of a collapsed lung include sudden chest pain, dry cough and shortness of breath.

Is it cough or COVID-19?

COVID-19, caused by the novel coronavirus (SARS-CoV-2), commonly causes dry cough among other symptoms such as fever, tiredness, and loss of smell. In some people, cough can be severe, often accompanied by high fever and breathlessness, indicating pneumonia. Severe cough can put great strain on the throat and cause pain while eating or speaking. Managing the cough, clearing it out properly and being able to breathe properly again is a big part of recovery from COVID-19. Home remedies such as steam inhalation, and salt water or betadine gargle can provide relief to some extent. Here's more on COVID-19.

Click To Read!

Symptoms Of Cough

Cough, which is often mistaken as a disease condition, is a defense mechanism of the body to clear off mucus, bacteria, debris, and retained waste from your airways. The symptoms of cough may vary depending on the type of cough and the underlying pathology.

1. Whooping sound

If you have a whooping sound while coughing, you have a whooping cough. In this, there are violent bouts of cough, and it becomes hard for a person to catch a breath. This is a serious condition and should not be ignored.

2. Staccato cough

In this type of cough, you may experience repetitive cough that occurs in short outbursts. It is usually a sign of lung or bronchial infection such as pneumonia.

3. Hoarseness of voice

This is a common symptom if the cough is of either psychogenic origin or when there is the involvement of the laryngeal nerve.

4. Cough following exercise

Cough during or after exercise or intense physical activity is common in asthma patients. This is accompanied by a wheezing sound and shortness of breath.

5. Itchy and dry throat

Itchy and dry throat in cough is a symptom of bacterial or viral infection. Itchy throat is also a sign of hay fever or allergies.

6. Production of sputum

When a cough is accompanied with thick mucus, also known as phlegm, then it is a sign of infection in the lungs or upper respiratory tract.

7. Night cough

Certain conditions such as gastroesophageal reflux disease (GERD) can cause mucus to pool in the throat while lying down and result in night coughing.

8. Seasonal cough with watery eyes

Dry, cold weather or allergy season can lead to seasonal allergies, causing cough, itchy throat, and watery eyes.

9. Dyspnea

Cough along with dyspnea or difficulty breathing is common in patients with asthma, COPD, and other respiratory illnesses.

Wondering why your cough is lingering on? Here are 9 top reasons why that dreaded cough may not be going.

Click To Know!

Risk Factors For Cough

You are at a risk of cough if you have one or more of the following condition or habit such as:

Smoking

Allergies

Asthma

Chronic obstructive pulmonary disease (COPD)

Gastroesophageal reflux disease (GERD)

Congestive heart failure

Diagnosis Of Cough

If your cough is acute, it does not require any diagnosis and can be treated symptomatically. However, if there are any suspected underlying pathologies, then your doctor may recommend going for these diagnostic procedures.

Chest X-ray: A chest X-ray is done when a cough is determined to be severe or if the patient appears extremely ill. A chronic cough may also require diagnostic measures that include a chest x-ray and complete pulmonary function testing.

Bronchoscopy: Bronchoscopy provides direct visualization of vocal cords, trachea, and the airway passage. This is helpful in ruling out the presence of any mass in the vocal cord or throat.

Blood and skin tests: To diagnose if your cough is caused by an allergy, your doctor may recommend blood & skin tests for allergies.

Phlegm or mucus analysis: To diagnose the presence of any bacteria or tuberculosis, phlegm or mucus analysis is recommended.

Biopsy: A biopsy or a bronchoalveolar lavage is required to obtain samples for cytological analysis and presence of any microbes.

Echocardiogram: An echocardiogram may be indicated to look for any problem with the heart’s functioning that may be causing your cough.

CT scan: CT scan of the chest may be indicated for anatomical analysis of the chest region to look out for any abnormalities.

Gastroesophageal studies: Gastroesophageal studies evaluate speech and swallowing activities. This helps analyze aspiration and gastroesophageal reflux.

Prevention Of Cough

By knowing what triggers cough, you can easily prevent it. Here are some of the preventive measures to cough:

Get vaccination for flu: If you have seasonal allergies, it is advised to get a flu shot. You also need to ensure you've had the pneumococcal vaccine if you're 65 or older.

Wash your hands: Washing your hands is non-negotiable if you want to prevent common ailments like a cough or a cold. It is advised to wash your hands thoroughly before eating or touching your eyes, nose, or mouth. If you do not have access to clean water, carry a hand sanitizer when you travel.

Avoid contact with people who are sick: Just like all other common illnesses, you must wait for at least two weeks after the person got infected. The reason is, during this time, the person may be infectious, putting you at high risk of catching the infection.

Do not share belongings: Sharing stuff such as towels, utensils, etc. with the infected person can make you ill. Therefore, it is advised that to avoid contracting the disease, you must not share your personal stuff.

Dietary changes: A diet rich in fruits, fiber, and vegetables can help you prevent cough and other respiratory conditions and stay healthy in general.

Quit smoking: People who smoke tend to develop chronic cough, which is generally very hard to treat. To quit smoking there are various anti-smoking products available in the market that can assist you in smoking cessation.

Tobacco Threatens..!! Say No To Tobacco Now. How? Let Us Help.

Click Here!

Specialist To Visit

For an acute or chronic cough you may consult doctors from these specialties such as:

General physician

ENT specialist

Pulmonologist or lung specialist

Allergist

Gastroenterologist

Consult India’s best doctors online from a single click.

Click To Book!

Treatment Of Cough

Most cases of cough are symptomatically relieved with the help of cold & cough medicines. Some of the common treatment measures for cough include:

Cough suppressants

Cough suppressants are used to decrease the intensity of cough by suppressing the cough reflexes. Examples include:

Dextromethorphan

Levocloperastine

Codeine

Expectorants & mucolytics

These are used in case of excessive mucus secretions where the main aim is to increase mucus clearance. These are usually prescribed for a wet or productive cough. They work by thinning the mucus in the air passages to make it easier to cough up the mucus and clear the airways. The most commonly used expectorant is guaifenesin.

Antibiotics

If your cough is caused by chronic infectious upper respiratory infections, your doctor may prescribe antibiotic therapy. Amoxicillin clavulanate is the common antibiotic prescribed for cough.

Bronchodilators

The treatment of a chronic cough should focus on the underlying etiology whenever possible. The treatment should be aimed at reducing coughing rather than suppressing the cough. If you suffer from asthma or other bronchoconstriction conditions, bronchodilators may be used for the bronchodilatory effect for symptomatic relief in emergency situations. Examples of drugs that belong to this class are:

Salbutamol

Budesonide

Doxofylline

Montelukast

Theophylline

If there are any additional symptoms with cough, like an allergic reaction or pain on coughing, your doctor may prescribe:

Antiallergic medications (antihistamines)

Pain medications (analgesics)

Did you know?

Cough can be productive or non productive in nature. Here’s more on the types of cough and the medicine options available to treat them.

Click To Know!

Home-care For Cough

Along with medicines, you can also try certain tips or some simple home remedies to get rid of cough.

1. Keep yourself hydrated by drinking lots of fluids like coconut water, fruit juices, or infused waters. Fluids help to thin the mucus whereas lukewarm liquids like tea or soup can soothe the throat.

2. Honey is an excellent remedy when it comes to the treatment of cough. For a sore throat, you can mix honey in warm water or simply eat a spoonful of it. Never give honey to children younger 1-year-old as it might contain bacteria harmful for them.

3. Gargling with salt or povidone-iodine mixed in water is a simple but effective remedy that is of great help to remove mucus and soothe your throat.

4. Elevate your head with extra pillows while sleeping.

5. Use a cool mist humidifier in your room or work area or take a steamy shower to moisten the air. This will help in breaking the mucus buildup.

Ayurvedic herbs not only protect the airways and expel mucus but also boost your immune system. These are some of the ingredients that make up an all-natural, herbal cough syrup and are good for both dry and wet cough.

Tap To Know!

Complications Of Cough

A little bit of cough every now and then is normal, however, persistent cough can indicate a health condition. Acute cough that lasts less than 2-3 weeks may be a sign of acute illnesses such as cold. Whereas, chronic cough which is persistent may be the result of:

Asthma

Bronchitis

Sinus

Allergy

Dust fumes or occupational pollutants

Gastro-esophageal reflux disease (GERD)

You should not ignore persistent coughs (that have been there for more than four weeks) and seek medical advice, particularly if it disturbs your sleep or affects your work.

Alternative Therapies Of Cough

Here are few of the remedies for cough other than your conventional medicines.

1. Thyme leaves contain flavonoids that help in relieving sore throat. You can boil a few thyme leaves in water and consume the mixture after straining to get relief from the sore throat.

2. Peppermint (Pudina) helps in providing relief from the sore throat. You can either consume it in the form of tea or inhale it by adding a few drops of peppermint oil in boiling water

3.Clove (Lavanga) can be fried in ghee and should be kept in mouth for sucking. This preparation is quite useful for relieving cough.

4. Take 60 mg powdered fruit of long pepper (pippali) and 120 mg of rock salt (saindhava lavana) mix it with hot water & take it two times in a day.

5. Take 3-6 gm of fruit and root of long pepper (pippali) and dried ginger (shunthi) in equal proportion. Mix this with honey and take this mixture two times in a day.

6. Prepare ghrta also called ‘ghee’ from equal part of fruit of black pepper (maricha), adrak (ginger) and raw sugar (sharkara). It is to be taken twice a day in a dose of around 12-24 gm.

7. Taking 1-3gm of sitopaladi churna with 4 to 6 gm of honey twice a day may also help.

8. You can also take 300mg of karpooradi churna along with equal parts of sugar candy, twice a day.

9. You may take a juice of ginger (adrak) 14 ml with equal quantity of honey, twice a day.

10. The decoction of tamarind (imli) leaves (14 to 28 ml) is to be taken with 2 g of rock salt (saindhava lavana) and 500 mg of asafoetida (hing) fried in ghee. This preparation can be taken twice a day.

Living With Cough

If you are dealing with chronic cough, here are few simple tips which could help you deal better with your condition, without affecting your sleep and work.

Stay away from allergic triggers: Identify what you’re allergic to and keep away from the allergen. Avoid polluted areas. Dust mites are one of the most common causes of allergies.

Keep your clean and dust-free: Wash pillows, curtains and other upholstery regularly to eliminate the accumulation of dust.

Consult a doctor: Any cough that lasts more than 3 weeks is associated with fever or other unusual symptoms needs proper evaluation by a registered medical practitioner.

Avoid codeine containing cough preparations: This is because they can be habit forming in the long run. Also, avoid anti-allergy medicines in children and elderly as they can cause drowsiness.

Do not self-medicate: Many over-the-counter (OTC) syrups contain a combination of multiple drugs like suppressants, expectorants & analgesics. They should be avoided as they may contain drugs which you may not even need.

Use a humidifier: Dry air can aggravate your cough problems. You can use a humidifier in your room to keep the humidity. You can even try steam inhalation at home.

Gargle with salt water: Take half teaspoon of salt and mix with a cup of water. You can gargle with this solution 2-3 times a day to get relief from cough.

Use a thicker pillow: It is advised to use a thick pillow or use two pillows. This helps in elevating the trunk region, thus opening up the airways.

Hydrate well: Drinking enough water before bedtime helps in clearing the throat and loosening the mucus.

Sleep the right way: Sleeping on your back or stomach can aggravate the stomach. The best position to sleep while you have a cough is to sleep on your side.

Frequently Asked Questions

How do I know if my cough is serious?

How to get rid of cough faster?

How should you sleep when you have a cough?

What should I eat when I have a cough?

What foods should be avoided in cough?

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Vertigo

Also known as Spinning of head and Dizziness

Overview

Vertigo is a sensation of feeling off-balance. A person may feel as if he/she or the surrounding environment is spinning in circles.

Vertigo arises due to a disturbance in the inner ear, or it may occur due to other head and neck conditions that affect balance. Often, these vertigo episodes are mild and do not require any treatment as they resolve on their own. However, treatment is needed when the attacks do not go away or are so severe that they interfere with a patient’s day-to-day activities.

If you have vertigo, you must consult your doctor as it may be the presenting symptom of an underlying disorder such as ear infection, cervical spondylosis, stroke or brain tumor. The treatment is aimed at management of the underlying cause of vertigo.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Ear

Brain

Vestibular Nerve

Prevalence

Worldwide: 20-56% (2016)

Mimicking Conditions

Presyncopal faintness

Disequilibrium (Alcohol intoxication)

Nonspecific or ill-defined lightheadedness

Necessary health tests/imaging

CT Scan (Head)

CT Neck Plain

MRI Brain

MRI Cervical Spine

Balance Tests

Electronystagmography

Chair Test

Posturography

Treatment

Antivertigo medications: Betahistine & Cinnarizine

Antiemetics: Promethazine & Ondansteron

Antibiotics

Vestibular suppressants: Antihistamine, Anti-anxiety medications & Anticholinergic drugs

See All

Symptoms Of Vertigo

Vertigo is not a disease but a symptom of an underlying condition. Symptoms can range from mild to severe, and vary from person to person depending on the cause of vertigo. Vertigo can also lead to or occur alongside other symptoms:

When a person feels he/she is spinning or the world around him/her is spinning

A feeling of abnormal balance or a loss of balance

A sensation of dizziness or swaying

Giddiness or feeling faint

Increased sweating

A sensation of nausea that may or may not be accompanied by vomiting

Headaches

A feeling of fullness in the ear

Ringing in the ears or pain in the ears, or loss of hearing

Abnormal or jerky eye movements called nystagmus

Causes Of Vertigo

The ear is the organ responsible for maintaining vestibular equilibrium in the body. The innermost part of the ear, called the inner ear, has 3 loop-shaped structures called ‘semicircular canals’ which are responsible for the orientation of the body with respect to movements of the head. Any issue that causes a disturbance in these semicircular canals can lead to vertigo. This type of vertigo which is associated with the inner ear or the vestibular nerve, which connects the inner ear and the brain is called peripheral vertigo.This is the most common type of vertigo.

Neurological problems such as brain tumors, stroke, cervical spondylosis, multiple sclerosis, etc., cause central vertigo.

The various causes of vertigo are discussed as follows:

1. Benign paroxysmal positional vertigo (BPPV)

Benign: not dangerous to health

Paroxysmal: presents as a sudden, brief episode

Positional: set off by particular head or bodily movements

Vertigo: an internal sense of irregular or spinning movement either of oneself or of the surroundings

BPPV is the most common cause of vertigo. It is a harmless condition that presents as mild to intense dizziness lasting for a few seconds or minutes. It is often associated with a sudden change in the position of the head or body, like bending over, turning in bed, or sitting up. BPPV usually resolves on its own and is not serious.

The inner ear is a system of canals filled with fluid that lets the brain know about movements of the head. In BPPV, small calcium crystals in the inner ear move out of place. Hence, the system is not able to send the correct signals to the brain.

BPPV can happen because of a head injury or aging as well. The natural breakdown of cells that happens with age or during injury is thought to be responsible for this.

2. Meniere’s disease

This is a rare condition that causes severe vertigo, nausea, ringing in the ears, muffled or distorted hearing, hearing loss, and feeling of a plugged ear. This condition is characterized by excess fluid buildup in the inner ear. Meniere’s attacks usually happen suddenly and can last from 20 minutes to 24 hours. Patients also feel worn out after the attack passes.

3. Ear infections

Viral and less commonly bacterial infections can cause inflammation of the nerves in the ears. The vestibulocochlear nerve, a nerve in the inner ear, has two branches:

The vestibular nerve sends signals to the brain about balance. Its inflammation leads to vestibular neuritis.

The cochlear nerve sends signals about hearing. Its inflammation causes labyrinthitis.

This inflammation hinders the messages the nerves of the ear take to the brain. Hence, the symptoms of vertigo are experienced.

Rarely, another viral infection caused by the varicella-zoster virus can lead to Herpes zoster oticus, a type of shingles. It is an infection of the inner, middle, and external ear caused by the spread of the virus to the facial nerves. This leads to various symptoms of vertigo. In case it paralyzes the muscles of the face, it is known as Ramsay Hunt syndrome.

4. Acoustic neuroma (vestibular schwannoma):

It is a benign tumor that develops on the vestibular or cochlear nerves leading from the inner ear to the brain. The pressure on the nerve from the tumor may cause vertigo.

5. Vestibular migraine

Migraines are often characterized by painful headaches, however vestibular migraine may or may not involve headaches along with vestibular symptoms such as vertigo and imbalance. People with vestibular migraine do report common migraine symptoms, such as sensitivity to light, sensitivity to sound etc.

6. Cholesteatoma

Repeated ear infections, skull or facial bone birth abnormalities or an injury to the eardrum can result in a noncancerous skin growth in the middle ear. This growth is called a cholesteatoma, and as it grows behind the eardrum, it can damage the bony structures of the middle ear. This can lead to the symptoms of vertigo.

7. Perilymphatic fistula

The middle ear is filled with air whereas the inner ear is filled with fluid called perilymph. Usually, thin membranes separate the inner and middle ear. A tear in these membranes is called a perilymph fistula (PLF) which causes perilymphatic fluid from the inner ear to flow into the middle ear thereby affecting balance and hearing.

8. Central nervous system (CNS) disorders

Neurological conditions such as brain tumors, stroke, transient ischemic attack, cervical spondylosis, seizures, ataxia, peripheral neuropathy, parkinson’s disease and multiple sclerosis etc., can also cause vertigo.

9.Trauma

Concussion and head trauma or any trauma during ear surgery can also cause vertigo.

10. Syphilis

Late neurosyphilis may affect the ear leading to hearing loss, fluctuating hearing, or vertigo.

Is vertigo a symptom of Covid-19?

Vertigo as one of the significant clinical manifestations of COVID-19. It can also be experienced a few weeks after the resolution of the disease symptoms. Since viral infections can impact the inner ear, leading to vertigo, it may be possible it could be caused by the Coronavirus. Very rarely, vertigo has also been reported post COVID-19 vaccination. However, more research is required to prove this relationship. Read More About COVID-19!

Read More About COVID-19!

Risk Factors For Vertigo

Vertigo can happen to anyone at any point of time in their life. It may occur as a one-time brief episode, or it may be long-lasting with intermittent periods of symptoms. Certain factors can increase the chances of developing vertigo, such as -

Head and neck injuries

Old age

Gender (Females are more prone than males)

A medical history of past episodes of dizziness

Having a family member who has vertigo

Certain medications, such as antidepressants, antipsychotics and antihypertensives

Vitamin D deficiency

Did you know?

Women are two to three times more likely to suffer from vertigo than men. Although the exact cause is still not known, a 2020 study indicated that a difference in Vitamin D levels could be the reason. Also, bone loss caused by aging might increase the risk in women as compared to men. Check out your Vitamin D levels now.

Book A Test!

Diagnosis Of Vertigo

If you have symptoms of vertigo, you must visit your doctor who will perform a detailed physical examination, note down the history of symptoms, and may order certain diagnostic tests which are essential to determine the cause.

History: Before confirming the patient is having vertigo, it is essential to rule out the conditions that may mimic the symptoms of vertigo or any brain disorders. A physician performs a detailed overview checkup, reviewing the patient’s history, and can ask the following questions:

The characteristics of the dizziness the person is experiencing. Does dizziness leads to imbalance and light-headedness.

For how long the dizziness lasts.

The frequency of vertigo attacks in a day.

The symptoms faced by a person right before a vertigo attack.

Balance Tests

Vestibular system which is located in the inner ear along with the central nervous system is responsible for maintaining body balance. The following tests can be done to evaluate the functioning of these systems:

Fukuda-Unterberger’s test

The doctor asks the patient to march on a spot for 30 seconds with their eyes closed. If they rotate or lean to one side, it could indicate a problem in the inner ear, which could cause peripheral vertigo.

Romberg’s test

The doctor asks the patient to stand with their feet together, arms by their sides and then to shut their eyes. If the patient becomes unbalanced, it could point toward a problem with the central nervous system.

Rotary chair test

This test records eye movements while the patient is sitting on a rotational computerized chair. The test evaluates the vestibular system which regulates balance, posture and the body's orientation in space.

Computerized dynamic posturography (CDP)

This test is also called test of balance (TOB). It evaluates the ability to remain standing in either stationary or moving conditions.

Vestibular evoked myogenic potentials (VEMP) test

This test assesses vestibular function by measuring the reaction of muscles to a repetitive sound stimulus.

Video head impulse test(vHIT)

The doctor will gently move the patient’s head to each side. Eye movements are recorded while the patient focuses on a stationary object like a spot on the wall.

Vestibular test battery

A vestibular test battery includes several tests that will assess if vertigo is due to problems in the inner ear or due to some neurological cause. This helps in making an appropriate treatment plan.

Electronystagmography (ENG) and videonystagmography (VNG) tests

These tests record and measure the eye movements. In ENG, electrodes or small sensors are placed over the skin around the eyes. In VNG, special goggles are placed on the eyes. Patient is asked to look at and follow patterns of light on a screen. Patient is asked to move into different positions while watching the light pattern. Then warm and cool water or air will be put in each ear. This should cause the eyes to move in specific ways. If the eyes don't respond, it indicates damage to the nerves of the inner ear.

Imaging tests

Radio imaging tests may be performed to determine the cause of vertigo. The following tests can help determine whether the cause is inner ear disturbances or other head and neck conditions like cervical spondylosis, brain tumor, etc.

CT Scan (Head)

CT Neck

MRI Brain

MRI Cervical Spine

Other specific tests

Audiometry

It helps in the diagnosis of Ménière's disease, a rare disorder of the inner ear that causes episodes of vertigo.

Brainstem auditory evoked potentials (BAEPs)

This test evaluates the function of the auditory nerve and auditory pathways in the brainstem, which could cause vertigo.

Celebs affected

Paresh Rawal

Famous Bollywood celebrity Paresh Rawal suffered from an attack of acute vertigo on the sets while filming the movie ‘Atithi Tum Kab Jaoge’.

Janet Jackson

Janet Jackson is a famous American musician who had to postpone 9 shows because of vertigo.

LeBron James

NBA superstar LeBron James suffers from benign paroxysmal positional vertigo.

Prevention Of Vertigo

By avoiding certain activities, it is possible to prevent spells of vertigo.

Do not suddenly move your head from one position to another.

Do not insert sharp objects or foreign matter deep into your ears for cleaning purposes. It may damage the inner ear.

Do not engage in activities that involve swift, fast movements, such as joy rides.

Always cover your ears while deep diving or swimming for a prolonged period as prolonged exposure to water may irritate the inner ear.

Take care of your cervical spine by following the prescribed treatment if you have cervical spondylosis.

Certain medications may precipitate spells of vertigo. In such cases, consult your doctor to make the necessary adjustments.

Eating right and staying active can help with vertigo symptoms

The role of a healthy lifestyle in staying healthy cannot be underestimated. Studies have shown that foods rich in sugar, salt, saturated fats, and caffeine, along with lifestyle habits such as alcohol consumption, smoking & physical inactivity can further worsen the symptoms.

Read More!

Specialist To Visit

Most cases of vertigo are mild and occur as a one-off episode. Such patients do not need to visit a doctor as vertigo often resolves on its own. However, if the vertigo is long-lasting, interferes with the ability to live a normal life, is accompanied by nausea, vomiting, headaches, weakness in the hands or legs, speech difficulties, hearing loss, it is essential to seek medical care. The specialist doctors who can diagnose and treat vertigo are:

ENT specialist

Neurologist

Consult India's best doctors from the comfort of your home.

Book Now!

Treatment Of Vertigo

Often, episodes of vertigo are mild and resolve on their own without requiring treatment. In case the attacks do not go away or are so severe that they interfere with a patient’s day-to-day activities, treatment is needed. The treatment for vertigo depends on the cause and severity of the symptoms.

Antivertigo medications: These are a group of medications that are known to relieve vertigo (dizziness). One of the most commonly used drugs to treat vertigo arising out of Meniere’s disease is betahistine. It improves the blood flow to the inner ear and reduces the pressure of the excess fluid, which causes the symptoms of vertigo. Other examples include cinnarizine.

Antiemetics: This is a class of drugs that help ease the symptoms of nausea and vomiting, frequently associated with Vertigo. Some of the commonly used preparations that are effective against nausea and vomiting associated with vertigo include

Promethazine

Ondansteron

Antibiotics: If the cause for vertigo is a middle or inner ear infection, it must be treated with antibiotics to resolve the infection, and thereby vertigo. Oral antibiotics and antibiotic ear drops help fight bacterial infections of the ear, thereby reducing the inflammation that causes Vertigo.

Vestibular suppressants: These are medications that reduce the intensity of vertigo due to vestibular imbalance. There are three main categories of drugs.

Antihistamine preparations are the most commonly prescribed medicines that help reduce symptoms, such as dizziness and can prevent motion sickness.

Anti-anxiety medications like benzodiazepines can also act as vestibular suppressants in low doses and can help reduce the symptoms of an acute vertigo episode. These medicines are not routinely prescribed as their use is restricted to acute severe vertigo episodes or to manage the anxiety associated with vertigo.

Anticholinergic drugs like scopolamine help with dizziness and motion sickness.

Living With Vertigo

Vertigo can often impose certain restrictions on an individual's lifestyle. As symptoms of Vertigo are aggravated by sudden rapid movements of the head, a person with vertigo may not be able to enjoy adventure activities like joyrides and may face aggravated motion sickness, which may hinder traveling. Patients with vertigo may also be sensitive to bright lights, loud, and startling noises. Thus, they may not interact well in crowds or noisy places.

Severe forms of vertigo that impair balance may predispose the patient to increased chances of falls and complications arising out of such falls.

Home-care For Vertigo

A one-off episode of vertigo does not require any special care. However, if the episodes are severe and frequent, the patient needs to take utmost care.

Avoid sudden, jerky movements of the head and neck.

Sit down or lie down immediately when symptoms occur.

Use walking aids, such as a cane or walking stick if you have severe vertigo and have an increased risk of falling.

Avoid places with crowds, bright lights, and loud startling noises.

Sleep with your head slightly raised on 2 or more pillows.

Get out of bed slowly and sit on the edge of the bed for a while before standing up. Try to relax because anxiety can worsen vertigo.

Do not bend over to pick things up. Squat to lower yourself instead.

Do not stretch your neck - for example , while reaching up to a high shelf.

Since vertigo can occur repeatedly, here are some effective tips to help you to cope with this disorder. Here’s more about the practical ways to treat vertigo effective.

Click To Read!

Complications Of Vertigo

If vertigo is left untreated, the underlying cause may worsen and lead to several complications, such as:

Increased falls due to loss of balance

Loss of hearing

Loss of consciousness

Alternative Therapies For Vertigo

Along with medications, alternative therapies are known to improve the symptoms of vertigo.

Canalith repositioning maneuver: These are a specific sequence of movements of the head wherein the doctor places the head in different positions slowly to allow the semicircular canals in the ear to adjust to normalcy. The doctor gently turns the patient's head in predetermined positions which change the position of the inner ear and semicircular canals. These changes in position may dislodge any debris, etc. in the inner ear that may be exerting pressure and causing the symptoms of vertigo.

Physiotherapy: Vestibular rehabilitation and balance training exercises are a specific set of exercises that can help improve balance, thereby decreasing the chances of falls and reducing dizziness. Vestibular rehabilitation consists of certain head and neck exercises that help a patient to deal with the symptoms and may also treat the underlying cause if it is due to any physical changes such as vertigo, arising from an improper posture of the neck that occurs with cervical spondylosis.

Balance training includes exercises such as maintaining balance with an increasingly unstable surface such as standing on a wobble board or a disc, standing with eyes closed, ball catch and throw on an unstable surface, walking with side to side head turns, etc.

Homeopathy: Studies with homeopathic preparations have shown that homeopathy is as effective as conventional medications in controlling the symptoms of vertigo. Homeopathic medicines made from Ambra Grisea, Anamirta Cocculus, Conium Maculatum, and Petroleum Rectificatum are found to be effective in treating vertigo.

Frequently Asked Questions

How long does an episode of vertigo last?

What care should I take to avoid triggering my vertigo?

Does vertigo go away by itself?

Can stress and anxiety cause vertigo?

Is vertigo a sign of brain tumor?

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Cracked heels

Also known as Heel fissures and Split heels

Overview

Cracked heels is a common foot condition in which the skin on the heel becomes dry and hardened, resulting in splits due to the pressure of standing and walking.

The signs and symptoms of heel fissures include dry skin, a thick yellow or dark brown callus that causes pain and difficulty in walking.

Neglecting foot care, or lack of moisturizing, is often the main cause of cracked heels. It can also occur due to various other reasons, including wearing open-back shoes, being overweight, taking long hot showers, or having certain health conditions like diabetes or other skin disorders.

Treatment generally consists of over-the-counter products, insoles, liquid bandages, and certain home remedies. But if cracked heels are severe or infected, it may be necessary to see a medical professional to diagnose and treat the underlying cause.

Key Facts

Usually seen in

Adults

Gender affected

Both men and women but more common in women.

Body part(s) involved

Feet

Mimicking Conditions

Scabies

Plaque psoriasis

Eczema (atopic dermatitis)

Ichthyosis

Allergic contact dermatitis.

Necessary health tests/imaging

Imaging tests: Dermoscopy, Wood's lamp examination, and Radiographs.

Blood tests: Complete blood count (CBC), Blood glucose test, and Nutritional tests

Pedobarographic studies

Skin biopsy

Treatment

Over-the-counter (OTC) products: Foot balms or moisturizers & Liquid bandages

Debriding agents: Salicylic acid, Urea, Silver nitrate, and Glycerol

Topical medications: Timolol

Strapping

Shoe inserts

Specialists to consult

General physician

Podiatrist (Foot Specialist)

Dermatologist (Skin Specialist)

Orthopedic

Symptoms Of Cracked heels

The symptoms of heel fissures can vary in intensity from mild to severe. They include:

Visible cracks or split on the skin on the heels

Dry, hard, thickening of the skin around the rim of the heel

Callus formation with brown or yellow discoloration

Sensitivity or discomfort beneath the surface of the skin

If not treated, mild symptoms can worsen and develop into more severe ones like:

Pain while walking

Itching and bleeding from the fissures on the heels

Infection leading to warmth and redness

Give your feet all the love and care they deserve. Shop from our foot care range.

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Causes Of Cracked Heels

Prolonged friction, pressure, or dryness can lead to the development of thick, hardened layers of dead skin, known as calluses. Calluses tend to easily crack if they become too dry or are constantly walked on. This can cause fissures to penetrate deeper layers of the skin, resulting in bleeding and discomfort.

Did you know?

People with diabetes often experience heel fissures. Diabetes can lead to nerve damage, particularly in the feet, which can result in reduced sweating and moisture. These heel fissures may predispose to foot ulcers that do not heal easily.

Explore our widest range of diabetes care products.

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Risk Factors For Cracked Heels

Dehydration

It is one of the main reasons for cracked heels, as the skin on the feet's soles tends to lose moisture more easily when dehydrated.

Learn more about 8 signs of dehydration that you cannot miss.

Read this

Athlete's foot

It is a type of fungal infection that appears as a scaly rash and may result in the formation of cracked skin on the heels.

Eczema

Also known as atopic dermatitis, it causes dry, inflamed, and cracked skin, which can lead to heel fissures.

Tired of itchy skin?

Listen to our experts talk about ways to manage eczema.

Watch this video now

Uncontrolled diabetes

It can lead to neuropathy, which is a type of nerve dysfunction that damages the nerves responsible for sweating. This raises the likelihood of individuals developing calluses and cracked heels.

Learn about diabetes care.

Click here

Hypothyroidism

It is a condition where the thyroid gland does not produce sufficient hormones. When thyroid hormone levels are low, the body's metabolism slows down, leading to decreased production of natural oils that keep the skin moisturized. This can cause dry and cracked feet.

Palmoplantar psoriasis

It is a specific form of psoriasis that occurs on the palms and soles of the feet, leading to the formation of pustules(lesions), calluses, and cracks on the heels.

Check out our widest range of products curated especially to give you some relief from psoriasis.

Explore now

Juvenile plantar dermatosis

Also known as sweaty sock syndrome or wet sock dermatitis, this is a skin condition that primarily affects children, between the ages of 3 and 14 years. It is characterized by red, dry, and scaly patches on the soles of the feet.

Sjogren's Syndrome

It is a rare disorder in which the body's immune system targets and damages glands responsible for producing sweat and moisture, resulting in dry skin.

Obesity

Studies suggest that obesity can cause skin changes. Individuals who are obese may have a higher likelihood of experiencing cracked heels due to the additional weight-adding pressure on the heels.

Finding it difficult to reach your weight loss goals? Try weight management products.

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Pregnancy

The hormonal changes, weight gain, and increased pressure on the feet during pregnancy can contribute to skin dryness leading to cracked heels.

Bump ahead?

We have a well-designed plan for all moms-to-be to help you sail through this beautiful journey with ease.

Check out now

Aging

As you age, the skin tends to become thinner, drier, and less elastic, reducing the production of natural oils that keep the skin moisturized, resulting in dryness and can contribute to cracked heels.

Other factors

There are additional factors related to the environment and body mechanics that may also be important.

Living in dry and cold climates

Taking long and hot showers

Poorly fitted or open footwear (does not cover the back of the foot)

Spending long periods of time standing, especially on hard surfaces

Excessive running, jogging, and climbing that involve significant pressure and friction on the feet

Occupations that involve constant friction or pressure on the skin, such as athletes or construction workers.

Diagnosis Of Cracked Heels

Cracked heels are generally noticeable on the physical examination itself, but your doctor may conduct a few tests to diagnose the underlying cause. The diagnosis of cracked heels may require the following:

1. Medical history and physical examination

During the examination, the doctor will look for signs of cracked heels and may ask about the type of shoes worn and any past treatments. They will also inquire about your walking style and foot positioning to identify any potential mechanical problems.

2. Laboratory tests

The doctor may use other tests to find out what is causing cracked heels.

Blood tests: These are not typically done specifically for cracked feet. However, some blood tests that may be considered to find the underlying cause may include:

Complete blood count (CBC): This test helps detect signs of infection or inflammation.

Blood glucose test: Measures the level of glucose (sugar) in the blood and is used to check for diabetes or impaired glucose tolerance, which can affect skin health.

Nutritional tests: Certain deficiencies, such as in vitamins A, C, D, and E, can affect skin health, and blood tests can identify these deficiencies.

Pedobarographic studies: Pedobarographs also known as pressure studies can be used to identify areas that have high pressure on the feet, which can be linked to cracked heels.

Skin biopsy: In certain cases, a skin tissue biopsy is performed and sent to a laboratory for l examination. The pathologist looks at the sample under a microscope and considers other information, such as medical history, to determine a diagnosis.

3. Imaging tests

These are not usually done but may be required to determine the exact cause of a fissure heel. These include:

Dermoscopy: It is a technique using a dermatoscopy, a handheld device that illuminates and magnifies the skin. It is a non-invasive tool for the diagnosis of skin conditions.

Wood's lamp examination: In this examination, the doctor uses ultraviolet light to examine the skin to detect any underlying skin conditions or infections.

Radiographs: Weight-bearing foot X-rays can be used to identify bony protrusions that contribute to the development of cracked heels.

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Prevention Of Cracked Heels

There are a number of approaches that help to prevent the development of cracked heels. These include:

Make sure to apply moisturizer to your feet regularly, both in the morning and at night, in order to maintain soft and smooth skin.

Exfoliate regularly using a gentle foot scrub or pumice to prevent the buildup of excess dead skin cells.

Wear shoes that fit well and are not too tight or too loose.

Avoid walking barefoot on rough surfaces regularly as it can cause heel damage and dryness.

Wear non-skid socks or house slippers at home.

Use heel cups in your shoes. These can be bought at drugstores or sports stores as they help alleviate stress on your heels.

Examine your feet every day to identify any initial indications that cracks may be forming.

Keep yourself hydrated to avoid dehydration or dryness.

Looking for ways to heal and moisturize your cracked heels? Check out some effective remedies.

Know more

Specialist to visit

Cracked heels may not be a serious health concern, but neglecting their treatment can lead to discomfort and inconvenience. Doctors who can help diagnose and treat cracked heels include:

General physician

Podiatrist

Dermatologist

Orthopedic

A general physician can help diagnose and treat any underlying cause of cracked feet.

A podiatrist is a foot specialist who uses techniques like debridement to remove dead skin and prevent heel cracking.

Dermatologists are specialists who can diagnose and treat skin conditions.

Orthopedics are specialists in bones, muscles, and joints who can help identify underlying bony conditions causing cracked heels along with various treatment options.

When to visit a doctor?

See a doctor if:

Cracked heels are causing you pain or discomfort

Are interfering with your daily activities

You have health conditions such as diabetes, poor circulation, or other serious illnesses.

Do not take these symptoms lightly and talk to an expert to get professional guidance and treatment.

Book your appointment now

Treatment Of Cracked heels

The treatment of cracked heels is determined by the severity of the condition and the underlying cause. It generally consists of the following:

1. Over-the-counter (OTC) treatment

Foot balms or moisturizers: Applying healing balms or moisturizers that contain humectants (water-retaining agents) can effectively treat cracked heels. Regularly massaging the heels with a moisturizing lotion or balm can keep the skin soft and hydrated.

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Liquid bandage: It should be applied around the affected area and left on for a sufficient amount of time to seal the cracks. Liquid bandages not only seal existing cracks but also provide protection against infections and prevent future cracking.

2. Professional treatment

If the heels are severely damaged or if self-treatment does not show improvement after a week, it may be necessary to seek professional help.

Prescription debriding agents: These creams contain higher amounts of active ingredients such as salicylic acid, urea, silver nitrate, and cream with 10% glycerol. These medications assist in removing debris and dead tissue from wounds, aiding in the healing process and decreasing the risk of infection.

Topical medications: Topical timolol helps to restore the skin barrier and aid in the healing of deep and painful cracked heels.

Debridement: This is a medical procedure where a doctor removes the tough and damaged skin on your heels.

Note: This shouldn't be done at home using a razor blade or scissors, as there's a risk of infection and removing too much skin.

Strapping: In order to promote healing, your doctor will wrap a bandage tightly around your cracked heels to keep the affected skin from moving.

Shoe inserts: You may recommend using shoe inserts to redistribute weight and provide better support for the heel. They may also suggest using heel pads or cups to support the heel.

Using silicone heel cups can be beneficial as they reduce pressure on the feet and provide shock absorption.

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Tissue glue or adhesives: Tissue glue has the ability to effectively treat cracked heels by holding the deep fissures together.

Home Care For Cracked Heels

Cracked heels aren’t a cause for serious concern. You may be able to relieve it with over-the-counter or by simply applying heel balms or moisturizers. Additionally, there are home remedies that can treat dry and cracked heels and prevent their recurrence. They include:

Honey (Madhu): The healing properties of honey can help heal cracks in the feet by acting as a natural antiseptic and moisturizer, preventing dryness.

How to use it?

Mix a cup of honey with lukewarm water in a tub and soak your clean feet for 15-20 minutes while massaging them. Once finished, dry your feet and apply a moisturizer.

Coconut oil (Nariyal tel): Coconut oil is highly effective at moisturizing the skin and reducing inflammation, which can help fight infections due to deep heel fissures.

How to use it?

Apply a generous amount of coconut oil to your heels to benefit from these properties.

Check out our exclusive range of coconut oils.

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Oatmeal: Colloidal oatmeal is highly regarded for its ability to reduce inflammation and provide antioxidant benefits. Research has demonstrated its effectiveness in treating dry, scaly, and rough skin.

How to use it?

Mix colloidal oatmeal with coconut oil till it becomes a paste. Apply the paste to your cracked heels, let it sit for 20-30 minutes, and then gently scrub and rinse off with lukewarm water.

Apple cider vinegar: It possesses antibacterial and anti-inflammatory qualities that can provide relief and prevent infection in heel cracks.

How to use it?

Mix 1 part vinegar with 2 parts cool water in a large bowl and soak your feet in the solution for 5 to 10 minutes.

Buy apple cider vinegar products.

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Banana (Kela): They are a great source of essential nutrients that can improve skin elasticity and keep feet hydrated. Researchers have discovered that an anti-heel crack band made from banana peel gel is very effective for treating cracked heels.

How to use it?

Mash two ripe bananas into a paste and apply it to your cracked heels. Rinse your feet with lukewarm water after 30 minutes, and repeat this process daily for two weeks for optimal results.

Aloe vera: It is used in the treatment of dry skin due to its moisturizing effect. The vitamins and minerals present in aloe vera contain powerful antioxidants that can help in the regeneration of the skin.

How to use it?

Directly apply aloe vera gel on cracked heels to increase to heal the cracks.

Try aloe vera products.

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Turmeric (Haldi): It has anti-inflammatory and antiseptic properties that can be used to prevent infections due to cracked heels.

How to use it?

Mix castor oil with a pinch of turmeric powder to treat the cracks.

Listen to our expert talk about a few other tips to get rid of cracked heels.

Watch the video

Complications Of Cracked heels

Cracked heels may seem like a small issue, but if not treated promptly, they can lead to certain complications like:

Loss of feeling in your heel: This may occur when deep cracks or fissures extend into the underlying tissues, affecting nerves and reducing sensitivity.

Cellulitis: Heel fissures can cause open sores that can become infected and lead to a painful skin infection.

Foot ulcers: Deeply cracked heels can provide an entry point for bacteria, leading to infection and tissue damage.

Emotional stress: This is caused by concerns related to one's appearance. Symptoms that keep returning and can make it hard to walk or stand, which can have a negative impact on quality of life.

Take care of your mind as you would take care of your body.

Try mind care range

Alternative Therapies For Cracked Heels

Along with self-care and home remedies, there are certain alternative therapies as well that can provide some relief from cracked heels. They include:

Ayurveda

Ayurvedic doctors recommend using herbal ointments containing various natural ingredients to treat cracked heels. Ayurveda also suggests regularly massaging the cracked heels with warm sesame oil that is calming for Vata dosha (one of the three energies in our body that takes care of body movements).

Yoga

It is possible to treat cracked heels with specific yoga asanas. Yoga can aid in circulation, and foot flexibility, and promote stress reduction, while also encouraging mindfulness about foot care and enhancing balance and posture.

Yoga can benefit you in ways that you couldn't have imagined. Know more about the overall health benefits of yoga.

Enlighten yourself

Living With Cracked Heels

Though it may not seem like a big problem, living with cracked heels can significantly impact one's quality of life, causing discomfort, pain, and limitations in daily activities due to difficulty in walking or standing comfortably. Here are a few things you can do to pamper your feet:

Limit bath time

Do not shower for more than 5-10 minutes. Bathing for too long can make your skin dry and cracked heels worse. Also, do not rub your skin with harsh towels.

Go gentle with products

Always opt for mild, fragrance-free cleansers while cleaning your feet. This can help your feet retain their natural oils.

Do not forget to exfoliate

The skin on your heels is thicker than the skin on the rest of your body, which makes it more likely to become dry and crack. To alleviate cracked heels, you can soak your feet in lukewarm water and gently exfoliate the hard skin with a pumice stone, loofah, or foot file. Using foot scrub creams daily can also help.

Never skip moisturization

The best practice is to moisturize within 5 minutes of bathing and apply it to your heels immediately after bathing while your skin is still damp to lock in the moisture.

Set a bedtime ritual

Soak your feet in plain or soapy water for around 10 minutes, and dry gently. Exfoliate your heels gently and apply a richer, oil-based cream or petroleum jelly. Then wear thin cotton socks to enhance the moisturizing effect.

Protect your heels

Coat the cracks in your heels with a liquid bandage to form a protective shield, promoting faster healing, reducing discomfort, and preventing germs from entering the skin. Also, wear proper fitting shoes to avoid any discomfort.

Frequently Asked Questions

What is the difference between cracked heels and calluses?

How do you know if a cracked heel is infected?

Is Vicks good for hard skin on feet?

What is a heel cyst?

What is the lipoma of the heel?

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Vitamin D deficiency

Also known as Hypovitaminosis D and Low Vitamin D

Overview

Vitamin D is a fat-soluble vitamin that plays a vital role in many bodily processes.

Vitamin D deficiency can occur due to less sun exposure, dark skin, physical blocking of sun rays, diet lacking Vitamin D, obesity, and certain conditions and medications that interfere with Vitamin D absorption.

Symptoms of Vitamin D deficiency may not occur for several months or years. Some of the common symptoms may include fatigue and tiredness, bone and muscle pain, loss of appetite, hair loss.

This condition is usually managed with supplements. Sun exposure and eating a vitamin D-rich diet, including fatty fish and fortified dairy products also play a vital role.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but is more common in women.

Prevalence

India: 50% to 94% (2018)

Necessary health tests/imaging

Blood tests

25-hydroxy vitamin D (25-OH D), or calcidiol

Imaging tests

Bone X-rays

Dual-energy X-ray absorptiometry (DEXA) scan

Treatment

Vitamin D3 supplementation

Specialists to consult

General Physician

Orthopedics

Endocrinologists

Pediatrician (in case of children)

Symptoms of Vitamin D Deficiency

Vitamin D deficiency can be difficult to be noticed because symptoms may not occur for several months or years. Sometimes, the individuals may not have symptoms at all.

Vitamin D deficiency is more common in adults. Symptoms in adults may include:

Bone pain

Muscle weakness

Muscle cramps

Fatigue

Loss of appetite

Getting sick more easily

Hair loss

Pale skin

Depression (feeling of sadness)

Sleeplessness

Severe deficiency of vitamin D in children can lead to:

Muscle pain and weakness

Bone pain

Lethargy

Frequent respiratory infections

Rickets (a bone condition that causes growth abnormalities and joint deformities)

Bone fractures

Slow growth and development delays

Seizures due to low calcium levels

Watch our expert doctor discuss Vitamin D deficiency.

Click here

Causes Of Vitamin D Deficiency

Some of the common causes of vitamin D deficiency include:

Inadequate vitamin D synthesis in the skin

Insufficient dietary intake of vitamin D

Poor absorption of vitamin D from food

Vitamin D is not converted to its active form

Certain medications that interfere with the body's ability to convert or absorb vitamin D

Various risk factors associated with these causes are discussed in the next section.

Risk Factors For Vitamin D Deficiency

Some of the most common risk factors associated with vitamin D deficiency are discussed as follows:

Inadequate vitamin D synthesis in the skin

Decreased sun exposure

Reduced exposure to sunlight is a major risk factor of Vitamin D deficiency. Research suggests that 20 minutes of sunshine daily with over 40% of the skin exposed is required to avoid vitamin D deficiency.

Deeper skin tone

Individuals with deeper skin tones or darker skin produce less vitamin D with the same amount of sunlight exposure than individuals with lighter skin color.

Staying and working indoors

If an individual is staying home almost all the time and hardly going out during the day they are more prone to vitamin D deficiency.

Working overnight shifts

Those working in night shifts can be at a higher risk factor for vitamin D deficiency, because of less opportunity for sunlight exposure compared with daytime workers.

Old age

Most old aged individuals spend the majority of their time indoors, getting minimal exposure to natural sunlight. Additionally, as skin thins with age, vitamin D synthesis becomes less efficient.

Physical blocking of sunlight

Full coverage clothing and use of sunscreens can decrease the amount of vitamin D production in the skin in cases of severe sun protection.

Geographic factors

The following geographic factors may limit sun exposure and affect Vitamin D production

-Higher latitude (living far away from the equator)

-Lower altitude (less distance from sea level)

-Winter season

-Air pollution

-Cloud-shading

Inadequate dietary intake of vitamin D

Unbalanced diet

Inadequate intake of vitamin D rich foods like milk, dairy and animal-based sources like fish and fish oils, egg yolks, fortified milk, and beef liver etc is a major risk factor for Vitamin D deficiency.

Some common food sources of vitamin D.

Click here to know

Vegetarian diet

Vegetarian diet that includes only plant-based fare and no animal products is also linked to vitamin D deficiency.

Lactose intolerance

Various studies have shown that individuals who are genetically intolerant to lactose (the sugar present in milk) may suffer from a vitamin D deficiency. This has to do with dietary restriction of milk and dairy products rich in Vitamin D.

Are you lactose intolerant?

Here are a few healthy substitutes for people with lactose intolerance.

Click to know

Eating disorders

Eating disorders like anorexia nervosa, bulimia nervosa are strongly associated with Vitamin D deficiency and decreased bone density.

Medically restricted diets

Individuals who are on medically restricted diets due to certain medical conditions are at the highest chance of various nutrient deficiencies including vitamin D deficiency.

Fad diets

A fad diet is a popular dietary pattern known to be a quick fix for obesity but for long-term weight loss. These diets do not promote a healthy and sustainable diet and lifestyle habits. Certain fad diets eliminate food groups that contain vitamin D and hence, increase the risk of its deficiency.

Poor absorption of vitamin D from food

Medical conditions

Various medical conditions interfere with the absorption of Vitamin D from the diet. Some egs. include:

-Intestinal malabsorption (Celiac disease, Crohn’s disease, ulcerative colitis)

-Pancreatic insufficiency (Cystic fibrosis)

-Cholestasis syndrome (Biliary atresia)

Gut resection or small bowel resection

This surgery is done to remove a part of the small bowel when it is blocked or diseased. This negatively impacts the absorption of Vitamin D from food.

Weight loss surgeries

Weight-loss surgeries such as gastric bypass surgery, reduce the size of the stomach. This can lead to poor absorption of Vitamin D.

Get to know more closely about the weight loss surgeries and who can go for it.

Click to know about this

Genetic or endocrine disorders

The following conditions have a strong link with Vitamin D deficiency:

Chronic liver diseases

Kidney diseases

Hyperparathyroidism

Growth hormone deficiency

Diabetes mellitus

Hereditary resistance of vitamin D

Research has shown that the genetic influence on vitamin D levels is estimated to be around 80%, which is much higher than the dietary and environmental influences of around 25%.

Certain medications

Certain medications can lower vitamin D levels by activating the degradation of vitamin D. These include:

Steroids (such as prednisolone, dexamethasone)

Anti-seizure drugs (such as carbamazepine, topiramate, phenobarbitone, and phenytoin)

Tuberculosis drugs ( such as rifampicin)

Cholesterol-lowering drugs (such as cholestyramine and colestipol).

Antifungal agents (Ketoconazole)

Antiretroviral drugs for treating HIV

Perinatal factors

Breastfed infants

Infants who are exclusively breastfed but do not receive supplemental vitamin D or adequate sunlight exposure are at increased risk of developing vitamin D deficiency and rickets.

Maternal vitamin D deficiency during pregnancy

Vitamin D deficiency is observed in both pregnant women and newborn infants. Maternal vitamin D deficiency can lead to deficiency in their newborn baby and has been linked with various complications during pregnancy and delivery.

Other factors

Smoking

Vitamin D deficiency is higher among smokers. Research studies have shown that smoking may affect the gene that activates the production of vitamin D-3 in the body.

Want to detach yourself from this deadly habit?

Tips to quit smoking

Did you know?

There is an inverse relationship between vitamin D levels and BMI. A high BMI is indicative of obesity. It is hypothesized that excessive fat cells absorb the fat-soluble vitamin D, reducing its availability. Another hypothesis explains that the low Vitamin D concentrations are due to the fact that obese people are less active physically, which entails a decrease in sun exposure.

Get to know more about your BMI and how to calculate it. Click here to read.

Diagnosis Of Vitamin D Deficiency

History and physical examination

During screenings for vitamin D deficiency, a medical practitioner analyzes the potential risk factors and the personal health history. Various signs and symptoms of vitamin D deficiency are evaluated.

Blood tests

Simple blood tests can be useful in determining the levels of vitamin D in the blood.

25-hydroxy vitamin D (25-OH D), or calcidiol: The 25-(OH)D serum concentration is widely accepted as the best indicator of vitamin D status in individuals.

1,25-dihydroxy vitamin D (1,25(OH)2 D), or calcitriol : This test measures the bioactive form of vitamin D.The serum concentration of the active hormone 1α,25-(OH)2D does not provide enough information on the vitamin D status.

The 25-(OH)D has an almost 1000-fold greater concentration than 1,25-(OH)2D; and has a longer half-life of 20 days and hence is more stable in the circulation. Therefore, total-body vitamin D stores are best measured by assessing the circulating levels of 25-(OH)D.

Get your Vitamin D profile tested in the comfort of your home.

Tap now

Imaging tests

Bone X-rays: This imaging test can be advised if the doctor suspects that the patient may have bone weakness and softness.

Dual-energy x-ray absorptiometry (DEXA) scan: This test helps in measuring bone mineral density in patients with chronic vitamin D deficiency.

Prevention Of Vitamin D Deficiency

Vitamin D deficiency can be prevented by adhering to its Recommended Dietary Allowance (RDA).

RDA of vitamin D indicates daily intake that is sufficient to maintain bone health and normal calcium metabolism in healthy people. It is listed in both micrograms (mcg) and international units (IU). 1 mcg vitamin D is equal to 40 IU. RDA according to various age groups is as follows:

0-12 months: 400 IU (10 mcg)

1-70 years: 600 IU (15 mcg)

> 70 years: 800 IU (20mcg)

Some tips for avoiding Vitamin D deficiency include:

Do not shy away from the sun

Research shows that approximately 5–30 minutes of sun exposure, particularly between 10 a.m. and 4 p.m., either daily or at least twice a week to the face, arms, hands, and legs without sunscreen usually leads to sufficient vitamin D synthesis.

Consume vitamin D-containing foods

Try to include these foods regularly as part of a healthy balanced diet to top up your vitamin D levels.

Fatty fish – salmon, sardines, pilchards, tuna, mackerel

Sea foods oysters, shrimp

Red meat and liver

Mushrooms

Egg yolks

Cod liver oil

Soya products

Also include fortified foods containing vitamin D. These include:

Cow’s milk, almond, and oat milk.

Breakfast cereals.

Other dairy products, such as yogurt.

Orange juice

Maintain a healthy body weight

Maintaining a healthy body weight and avoiding being overweight can help maintain the vitamin D levels. Cycling and exercising regularly outside the house can both help in maintaining a healthy weight and sun exposure.

Treat underlying medical conditions

People with underlying health conditions such as celiac disease and cystic fibrosis affect the absorption of nutrients. Therefore treating the underlying condition may help in boosting the level of certain nutrients, including vitamin D.

Did you know?

Tanning booths are not therapies for vitamin D deficiency

Sunlight is composed of Ultraviolet A (UV A) and UV B but only UV B is required for vitamin D deficiency. The tanning booths use UV A as the major light source and hence do not help in Vitamin D deficiency. On the contrary, they can lead to the development of skin cancer.

Specialist To Visit

The symptoms of vitamin D deficiency can range from mild to severe. Doctors that can help you diagnose and treat vitamin D deficiency include

General physicians

Orthopedics

Endocrinologists

Pediatrician (in case of children)

Orthopedics focuses on injuries and diseases affecting the musculoskeletal system (bones, muscles, joints, and soft tissues). An endocrinologist is qualified to diagnose and treat hormone-related diseases and conditions. You can consult a pediatrician if you notice any signs and symptoms of Vitamin D deficiency in children.

Seek guidance from our trusted team of doctors.

Book your appointment now

Treatment Of Vitamin D Deficiency

The treatment of vitamin D deficiency is by taking vitamin D supplements. The form of vitamin D that is taken is called ergocalciferol or calciferol. Vitamin D can be given in various forms such as injectables or as a medicine (liquid or tablets). The doctor will discuss the dose and the best treatment schedule, depending on the severity, age, and situation.

Supplements

Both D2 (ergocalciferol) and D3 (cholecalciferol) are available as dietary supplements. They are well absorbed in the gut.

Both D2 and D3 raise serum 25(OH)D levels, however, most studies indicate that vitamin D3 increases serum 25(OH)D levels to a greater extent and maintains these higher levels longer than vitamin D2.

For the initial supplementation it is recommended to take Vitamin D3 for eight weeks either 6,000 IU daily or 50,000 IU weekly can be considered.

(Note: Once the serum vitamin D exceeds 30 ng/mL, a daily maintenance dose of 1,000 to 2,000 IU is recommended).

For high-risk adults who are vitamin D deficient due to an underlying condition, a higher dose of initial supplementation of Vitamin D3 at 10,000 IU daily is needed.

(Note: Once serum vitamin D level exceeds 30 ng/mL, 3000 to 6000 IU/day maintenance dose is recommended.)

Children having vitamin D deficiency require 1000 IU/day of vitamin D3 or 50,000 IU of vitamin D3 once weekly for 6 weeks.

(Note: Once the serum vitamin D level exceeds 30 ng/mL, only 1000 IU/day maintenance treatment is recommended).

Get your Vitamin D3 supplements online from India’s largest online pharmacy.

Order now

Did you know?

Excessive intake of Vitamin D supplements can lead to Vitamin D toxicity. The main consequence of vitamin D toxicity is a buildup of calcium in the blood, which can cause vomiting, nausea weakness, and frequent urination. Vitamin D toxicity can also lead to kidney stones. Therefore, sticking to the doctor’s prescribed dose and regular checkups is important.

Home Care For Vitamin D Deficiency

Vitamin D, also known as the sunshine vitamin, is extremely beneficial for maintaining overall good health. Home care for Vitamin D deficiency includes adhering to the points mentioned in the prevention section.

Complications Of Vitamin D Deficiency

Not getting enough vitamin D may raise the risk for other diseases and conditions and some of them can be life-threatening. Some of the complications of vitamin D deficiency include

Bone related diseases

Rickets: It is a childhood disease in which the child's bones become too soft, causing them to warp, bend and break more easily.

Osteomalacia: It refers to softening of bones in adults.

Osteoporosis: It is a bone disease that develops when bone mineral density and bone mass decrease.

Lifestyle-related diseases

Type 2 Diabetes: Vitamin D deficiency is associated with decreased insulin release, and insulin resistance, predisposing to diabetes.

Obesity: Vitamin D deficiency is strongly linked to being overweight and obese.

Polycystic Ovary Syndrome (PCOS): Vitamin D deficiency is considered as a risk factor of PCOS. It has also been noted that the degree of vitamin D deficiency correlates with the severity of PCOS.

Cardiovascular diseases

Heart diseases: Many research studies have shown that vitamin D deficiency increases the risk of developing hypertension, heart failure, and coronary artery disease.

Stroke: Stroke is a condition in which the blood supply to the brain is disrupted. Vitamin D deficiency can increase the risk of ischemic stroke in healthy individuals.

Autoimmune diseases

Multiple sclerosis: Vitamin D deficiency may play a role in immune system functioning and the development of autoimmune disorders such as multiple sclerosis.

Type 1 Diabetes: Low vitamin D is associated with insulin resistance, contributing to the development of type 1 diabetes.

Eye-related diseases

Age-related macular degeneration (AMD): It is an eye disease that can blur central vision. Lack of vitamin D appears to increase oxidative damage that leads to degeneration of photoreceptors in the eyes.

Neurological diseases

Depression: People with depression have higher chances of having vitamin D deficiency.

Sleep disturbances: Vitamin D deficiency can increase the risk of sleep disorders like difficulty in falling asleep, shorter sleep duration, and nocturnal awakenings in children and adults.

Alzheimer's disease: Vitamin D participates in the clearance of amyloid beta (Aβ) aggregates which is a hallmark of Alzheimer's disease (AD). A low level of serum vitamin D has been associated with a greater risk of dementia and AD.

Parkinson's disease: Low vitamin D levels for a long time, may lead to loss of nerve cells. This can predispose to the development of Parkinson's disease, which is characterized by uncontrollable movements, like shaking, stiffness, and difficulty in balance and coordination.

Respiratory diseases

Tuberculosis: Vitamin D deficiency is associated with an increased risk of developing active TB in individuals with Latent tuberculosis infection (LTBI).

Upper respiratory tract infections: Upper respiratory tract infections of viral origin like influenza(flu) are strongly linked to Vitamin D deficiency.

Cancers

Vitamin D deficiency has been linked to increased risk of prostate, ovary, breast, lung, esophagus, colon, liver, and pancreatic cancer.

Did you know about the role of Vitamin D in Covid 19?

Vitamin D plays an essential role in promoting immune response. Research has shown that Vitamin D levels can determine the chances of contracting coronavirus, its severity, and mortality. Therefore, maintaining vitamin D levels through supplementation or sun exposure is recommended to be able to cope with the Covid 19 infection.

Get all your questions answered about COVID-19

Alternative Therapies For Vitamin D Deficiency

Some of the alternative therapies that can augment diet, supplements and sun exposure include:

Exercise

A sedentary lifestyle and physical inactivity are important risk factors for vitamin D deficiency. Vigorous exercises such as running, and jogging, three or more hours a week can help in maintaining optimum levels of vitamin D.

Yoga

Doing yoga asanas early in the morning during sunlight can help replenish vitamin D levels and counter symptoms, including muscle pain, fatigue, and exhaustion. Sunshine also boosts the immune system and elevates the mood.

Frequently Asked Questions

What is the normal vitamin D level?

What is the best fruit high in vitamin D?

Which veg food has more vitamin D?

How do you take vitamin D tablets?

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Crohn’s disease

Also known as Regional enteritis

Overview

Crohn's disease is an inflammatory bowel disease (IBD) that causes chronic inflammation (swelling) and damage to the GI tract. The GI tract is in charge of digestion, nutrient absorption, and waste elimination.

Crohn's disease may manifest in "patches," affecting some areas of the GI tract while leaving others unaffected.

Inflammation (swelling) impairs the ability of the affected GI organs to function normally, resulting in symptoms such as chronic diarrhea, abdominal pain, rectal bleeding, weight loss, and fatigue. Symptoms differ and can shift over time. The disease can cause life-threatening flares and complications in severe cases.

The initial laboratory evaluation detects inflammation and screens for other diagnoses. To confirm the diagnosis and determine the extent of disease, endoscopy and cross-sectional imaging are used. Treatment decisions are guided by disease severity and risk of poor outcomes.

Treatment for Crohn's disease and other IBD types may include medication, dietary and nutritional changes, and, in some cases, surgical procedures to repair or remove affected portions of your GI tract.

Crohn's disease patients are more likely to develop cancer, osteoporosis, anemia, nutritional deficiencies, depression, infection, and thrombotic (blood clotting) events. It is critical to maximize prevention measures when caring for these patients.

Key Facts

Usually seen in

Individuals between 20 - 30 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

GI tract:

Oral Cavity

Esophagus

Liver

Stomach

Small Intestine

Terminal Ileum

Large Intestine/Colon

Rectum

Anus

Prevalence

India: 1.5 million (2020)

Mimicking Conditions

Amebiasis

Behcet disease

Celiac disease

Intestinal carcinoid

Intestinal tuberculosis

Mesenteric ischemia

Ulcerative colitis

Necessary health tests/imaging

Physical examination

Lab tests: Blood test, stool test

Imaging test:

Endoscopy, Colonoscopy

Biopsy

Chromoendoscopy

Capsule endoscopy-

X-rays and fluoroscopy

CT Scan

Magnetic resonance enterography(MRE)

Treatment

Aminosalicylates: Balsalazide, Mesalamine, Olsalazine, Sulfasalazine

Corticosteroids: Budesonide, hydrocortisone, methylprednisolone, prednisone

Immunomodulators: 6-mercaptopurine or 6-MP, azathioprine, cyclosporine, methotrexate

Biologic therapies: Adalimumab, certolizumab, infliximab, natalizumab, vedolizumab, ustekinumab

Other medicines: Acetaminophen, ciprofloxacin ,metronidazole. Loperamide

Surgery: Small bowel resection, large bowel resection, proctocolectomy and ileostomy

See All

Symptoms Of Crohn’s disease

The symptoms of IBD vary from person to person, may change over time, and can range from mild to severe.

Chronic diarrhea (for more than 4 weeks)

Stomach pain or cramps

Fever

Fatigue

Mouth sores

A loss of appetite

Sensation of incomplete evacuation

Nausea and vomiting

Rectal bleeding

Anemia (a condition in which you have fewer red blood cells than normal)

Swelling in inner lining of stomach

A feeling of fullness

Constipation

Weight loss

Rectal bleeding

Mucus in stool

Blood stains in stool

During a flare of Crohn’s disease symptoms, a person may also develop

Arthritis

Uveitis (eye inflammation)

skin rash and inflammation

liver or bile duct inflammation

Abscess (a collection of pus, which can develop in the abdomen, pelvis, or around the anal area)

Fistula (intestinal ulcers that extend and form a tunnel (fistula) to another part of the intestine, the skin, or another organ)

Intestinal obstruction, a blockage in the intestine

Anal fissures (small tears in your anus that may cause itching, pain, or bleeding)

Ulcers, open sores in your mouth, intestines, anus

Malnutrition (it occurs when your body does not receive the necessary vitamins, minerals, and nutrients).

Inflammation in other areas of your body, such as your joints, eyes, and skin

Types of Crohn’s disease

There are five types of Crohn's disease including:

Crohn's colitis: When disease affects only the colon.

Gastroduodenal Crohn's disease: It is characterized by chronic inflammation of the stomach and the first part of the small intestine, or the duodenum.

Ileitis: It is a condition that affects the ileum, or small intestine.

Ileocolitis: It is the most common type of Crohn's disease, affecting the ileum and colon.

Jejunoileitis: The disease affects the upper half of the small intestine.

Causes Of Crohn’s disease

The exact cause of IBD is unknown, but it is thought to involve a combination of genetic predisposition, infectious, immunological, dietary, and environmental factors.

Crohn's disease causes inflammation (swelling) anywhere from the mouth to the anus. However, the disease most commonly affects the junction of the small intestine and the colon (ileum). It begins with lesions near the intestinal crypt (a gland found in intestines). It eventually spreads to form ulcers, first in the superficial layer and then in deeper intestine tissues.

As the swelling worsens, non-caseating granuloma (cell swelling without cell death) forms, which is very common in Crohn's disease. This ongoing swelling causes bowel obstruction and stricture formation (a narrowing of the bowel which can lead to an intestinal blockage).

Risk Factors For Crohn’s disease

Risk factors for Crohn's disease may include:

1. Genetic predisposition

Genetics may also play a role, since Crohn's disease can run in families. Having a close relative with Crohn's disease increases the likelihood of developing the condition. If both parents have inflammatory bowel disease (IBD), the risk of developing Crohn's disease rises to 35%..

Note: As per study it has been found that children who have one parent with Crohn's disease have a 7 to 9 percent lifetime risk of developing the condition.

They also have a 10 percent chance to develop some form of inflammatory bowel disease.

2. Age

CD can occur at any age but the condition mostly develops before or around 30 years of age.

3. Immunity

Crohn’s disease is an autoimmune-mediated inflammatory condition. Foreign invaders such as bacteria, viruses, fungi, and other microorganisms are typically attacked and killed by the immune system.

An autoimmune reaction occurs when your immune system incorrectly attacks healthy cells in your body, causing an abnormal response to the intestinal tract and swelling. This causes chronic inflammation (swelling), ulceration, intestinal wall thickening, and, eventually, Crohn's disease symptoms.

Check out our immune test package.

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4. Stress

Stress may also have an important role in the pathogenesis of IBD. It has been proposed that stress may initiate or reactivate the gastrointestinal inflammation leading to the deterioration of clinical symptoms of IBD.

Learn more about how stress can affect the body.

Click Here to Know More

5. Environmental factors

There are several environmental factor that can increase the risk of developing and flaring up Crohn’s disease, such as-

Painkillers: Long term use of painkillers or Nonsteroidal anti-inflammatory drugs such as aspirin, and ibuprofen especially in women increases the risk of IBD (Inflammatory Bowel Disease).

Smoking: Cigarette smoking also increases the likelihood of developing Crohn's disease. Active smokers are more than twice as likely to develop Crohn's disease as nonsmokers.

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Poor diet: Poor dietary habits such as diets high in sugar, omega-6 fatty acids, polyunsaturated fatty acids, total fat, oil, meat etc. have also been associated with an increased risk of developing CD (Crohn’s disease).

Note: IBD or Crohn’s disease are not triggered by eating any one particular food. But for some people, certain foods can aggravate symptoms.

Appendicitis: Children who have their appendix removed are less likely to develop ulcerative colitis later in life, but they may be more likely to develop Crohn's disease.

Oral contraceptives or HRT(hormone replacement therapy): Both hormone replacement therapy and oral contraception may increase the risk of IBD in women.

Want to know more about oral contraceptives?

Click Here Now

Antibiotics: Antibiotic exposure during childhood may increase the risk of IBD or Crohn’s disease.

Lear more about antibiotics

Learn more about antibiotics

Diagnosis Of Crohn’s disease

To diagnose Crohn's disease, doctors typically use combination of tests. Before undergoing a physical examination, you must inform your doctor about your medical history, including any medications you are taking and your family history.

1. Physical examination

Examines your abdomen for bloating

Using a stethoscope, listens for sounds within your abdomen.

Taps on your abdomen to detect tenderness and pain, as well as to determine whether your liver or spleen is abnormal or enlarged.

2. Lab tests

It includes blood tests (RBC and WBC’s count) and stool test.

Blood tests- This test checks for high levels of white blood cells, which are indicative of inflammation or infection. The test also looks for anemia, or a low red blood cell count.

Stool test- It checks for bacteria or parasites. It is useful in ruling out infections that cause chronic diarrhea.

3. Imaging tests

Intestinal endoscopy- It includes the following

Endoscopy, colonoscopy - These are invasive tests in which a probe is inserted via the mouth (endoscopy) or the rectum (colonoscopy) to visualize the inner structures of the digestive tract in real-time.

Biopsy- During the biopsy, a small piece of tissue is removed from the inside of the intestine for further testing and analysis. Biopsy sample is also taken in the case of cancer.

Chromoendoscopy- A blue liquid dye is sprayed into the colon to highlight and detect minor changes in the lining of the intestine. Polyps can also be then removed and/or biopsied.

Capsule endoscopy- In capsule endoscopy, a capsule is swallowed containing a tiny camera that allows the doctor to visualise inside the digestive tract.

X-rays and fluoroscopy- For the procedure, you will be asked to stand or sit in front of an x-ray machine and drink barium. On an x-ray, the barium will make your upper GI tract more visible. The radiologist will then observe the barium moving through your upper GI tract on x-ray and fluoroscopy.

CT Scan and Magnetic resonance enterography (MRE) - A CT scan (also known as computed tomography) is a machine that takes a series of x-rays to make a picture of the digestive tract.

MRE is an imaging test which produces detailed pictures of your small intestine.

Book an appointment for lab test

Click Here

Celebs affected

Frank Fritz

Fritz, one of the stars of the History Channel's reality series American Pickers, is an antiques treasure hunter who has battled Crohn's for more than a quarter century. "Crohn's is like a duck," he said. "Ducks look calm, floating quietly on the surface of the water, but underneath they are paddling like crazy. It's the same for people with Crohn's—on the outside you can't really tell, but I'm working really hard to stay in control as much as I can."

Kevin Dineen

Dineen, now coach of the Florida Panthers, says that the disease was "a real eye-opening experience" because there's no quick fix. He said,"This is a chronic, debilitating disease that's with you for life," he says. "It took me a couple of years to come to grips with that."

Prevention Of Crohn’s disease

The "treat to target" or "tight control" approach is quickly becoming the approach in the treatment and management of many chronic conditions, including IBD and Crohn's disease.

Certain lifestyle modifications can help prevent the condition as follows-

1. Follow a few dietary rules

Such as limiting dairy products, having a fibrous diet comprising fruits, vegetables, legumes and whole grains. Restrict foods with low amounts of fiber such as processed and packaged foods, milk and meat products.

Want to know how a healthy diet can help you?

Read this now

2. Drinking plenty of water

Drink a minimum of 8 glasses of water during a day. Restrict intake of alcohol and caffeine in the form of coffee and soft drinks as they tend to dehydrate the body.

3. Quit smoking

Cigarette smoking flare up the Crohn’s symptoms or even worsen them.

Looking to quit smoking, but finding it very difficult? Read about some practical ways that will help you get rid of this unhealthy habit

Check Out

4. Get screening for colorectal and cervical cancer

Consult your doctor about getting screened for colorectal cancer. Patients with IBD may need to begin colorectal cancer screening before the age of 50. Talk to your doctor about how to prevent cervical cancer if you are a woman with IBD. Cervical cancer is more common in IBD patients.

5. Immunize yourself

Immunizations against infectious diseases are part of primary prevention efforts. IBD patients are more likely to contract vaccine-preventable illnesses such as influenza, pneumococcal pneumonia, and shingles. As a result, following vaccination guidelines for inactivated vaccines can help to reduce these infectious complications.

Note: Immunization is the key to the prevention of diseases.

Know more about immunization

6. Exercise regularly

Stay active by exercising on a regular basis. To aid digestion, perform light exercises such as walking after consuming heavy meals.

7. Manage stress

Stress and anxiety can aggravate Crohn's disease symptoms. Stress can also precipitate flare-ups.

Is stress affecting your overall well being? Try some relaxation techniques to manage stress.

Read to know more

Doctor To Visit

The first step is to find a qualified gastroenterologist who is a specialist in treating patients with Crohn’s disease or ulcerative colitis. In order to diagnose and treat the symptoms of Crohn's disease, you need to visit:

General physician

Infectious disease specialist

Gastroenterologist

A gastroenterologist is a medical practitioner specializing in the diagnosis and treatment of disorders of the gastrointestinal tract and related organs. An infectious disease specialists is a physician who diagnoses and treatments acute and chronic diseases caused by bacteria, viruses, fungi, parasites, and even prions.

When to see a doctor?

You must visit a doctor if Crohn's disease becomes a chronic problem and/or is accompanied by one or more of the following symptoms such as:

Frequent diarrhea

Vomiting

Blood or mucus in the stools

Fever

Unexplained weight loss

Severe abdominal pain

Fatigue

Night sweats

Consult India’s best doctors here with a single click.

Book An Appointment

Treatment Of Crohn’s disease

The medical treatment is broadly classified into five groups-

1. Aminosalicylates

It helps control swelling at the wall of the intestine. It is usually prescribed to treat people who are newly diagnosed with Crohn’s disease and have mild symptoms. These drugs include:

Balsalazide

Mesalamine

Olsalazine

Sulfasalazine

2. Corticosteroids

These, also known as steroids, help to suppress the immune system and reduce swelling. It is usually given to people who have moderate to severe symptoms. They are effective for controlling flare-ups in the short term. Because of their side effects, they are not recommended for long-term or maintenance use.

Drugs include:

Budesonide

Hydrocortisone

Methylprednisolone

Prednisone

3. Immunomodulators

These medications suppress the immune system, resulting in less swelling in the digestive tract. These medications are used to keep people in remission who have not responded to other medications or have only responded to steroids. The drugs include:

6-mercaptopurine

6-MP, azathioprine

Cyclosporine

Methotrexate

4. Biologic therapies

Biologic therapies are indicated for people with with moderate to severe active disease who have not responded well to conventional therapy.The drugs that are used include:

Adalimumab

Certolizumab

Infliximab

Natalizumab

Vedolizumab

Ustekinumab

5. Other medicines

Acetaminophen: It is used for mild pain.

Antibiotics:it is used to prevent or treat complications that involve infection, such as abscesses and fistulas such as ciprofloxacin and metronidazole.

Loperamide: It helps to slow or stop severe diarrhea.

6. Surgery

Even with medicines, many people will need surgery to treat their Crohn’s disease. There are different types of operations to treat Crohn’s disease such as-

1. Small bowel resection- This surgery often involves removal of the diseased segment of bowel (resection), the two ends of healthy bowel are then joined together (anastomosis). There are two types of small bowel resection-

Laparoscopic: Laparoscopic surgery is a minimally invasive surgical technique used in the abdominal and pelvic areas. The surgeon inserts a laparoscope to get a close-up view of the small intestine.

Open surgery: When a surgeon makes one incision about 6 inches long in your abdomen to remove the diseased or blocked section of small intestine and reconnect the intestines again.

2. Subtotal colectomy or large bowel resection- It is done to remove part of your large intestine.It is again of two types-

Laparoscopic colectomy- In it the surgeon removes the diseased or blocked section of your large intestine and again reconnects the ends of the large intestine.

Open surgery- When a surgeon makes one incision about 6 inches long in your abdomen to remove the diseased or blocked section of large intestine and reconnect the intestines again.

3 Proctocolectomy and ileostomy- It is a surgical procedure that removes your entire colon and rectum. An ileostomy is a stoma, or opening in your abdomen, created by a surgeon from a section of your ileum.

Did you know?

Over a span of 5 years, studies have shown that 18% of Crohn's patients may eventually require surgery. But now, this percentage has significantly declined within the last several years because of various treatment options available according to the severity of disease.

Complications Of Crohn’s disease

Some people develop complications that may require urgent medical care which includes-

1. Fistulas- Fistulas are ulcers on the intestine's wall that spread and form a tunnel (fistula) to another part of the intestine, the skin, or another organ.

2. Stricture- It is a narrowing of an intestine section caused by scarring, which can result in an intestinal blockage.

3. Abscess- A collection of pus that can form in the abdomen, pelvis, or around the anal area. A doctor may drain an abscess with a needle inserted through your skin or through surgery.

4. Perforated bowel- chronic intestine swelling can weaken the wall to the point where a hole forms.

5. Anal fissures- Anal fissures are small tears in the anus that can cause itching, pain, and bleeding. The majority of anal fissures heal with medical treatment, such as ointments, warm baths, and dietary changes.

6. Intestinal obstruction- a blockage in the intestine.

7. Ulcers- open sores in your mouth, intestines, anus, or perineum

8. Malabsorption and malnutrition, including deficiency of vitamins and minerals- You may need IV fluids or feeding tubes to replace lost nutrients and fluids.

9. Swelling (in other parts of body such as your joints, eyes, and skin)

Complications outside the GI tract

Some patients develop symptoms that are related to the disease but affect other parts of the body. The extraintestinal complications include:

Eyes (redness, pain, and itchiness)

Mouth (sores)

Joints (swelling and pain)

Skin (tender bumps, painful ulcerations, and other sores/rashes)

Bones (osteoporosis)

Kidney (stones)

Anemia, a condition in which you have fewer red blood cells than normal

Liver ( hepatitis, and cirrhosis)- occurs rarely

Cancer- People with Crohn’s disease of the colon or ulcerative colitis have a higher risk for colorectal cancer than the general population.

Blood clots- People with IBD have about a three times greater risk than the general population for developing blood clots that form in veins and lungs arteries.

Primary Sclerosing Cholangitis (PSC)- PSC is a form of severe swelling and scarring that develops in the bile ducts.

Alternative Therapies For Crohn’s disease

Along with the medicine your doctor prescribes, you may want to add “complementary” treatments to help with Crohn’s symptoms, boost your immune system, or just feel better every day.

1. Pay attention to diet: Changing your diet can help reduce symptoms. You must try following diet modifications:

Avoiding carbonated drinks

During a flare-up, avoid high fiber foods, dairy, sugar, high fat foods, and spicy foods.

Drinking more liquids

Eat small meals, boil or steam food instead of frying it.

Keeping a food diary to help identify foods that cause problems

2. Probiotics: Probiotics aim to restore that balance by adding good bacterias in the gut. They can help improve digestion and certain strains have shown they help reduce symptoms of Crohn’s.

Food sources of probiotics include yogurt, tofu etc.

Here’s more about the health benefits of probiotics.

Click To Read

3. Prebiotics: Prebiotics provide fuel for the good bacteria growing in your digestive tract.

Some prebiotic sources include asparagus, legumes, bananas etc.

Probiotics and prebiotics may prove effective in keeping our gut healthy. Check out our prebiotics and probiotics supplement range.

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4. Anti-inflammatory food: It includes virgin olive oil, green leafy vegetables (spinach, kale), fatty fish (tuna, salmon), fruits (strawberry, cherries, oranges) etc. These foods will help combat free radical damage and encourage less overall inflammation (swelling).

Read more about anti inflammatory diet for a healthy body

Tap Now

5. Herbs:

Aloe vera juice- Has calming effects that may help digestion and improve immunity

Glutamine- An amino acid that helps in intestine functioning

Turmeric (Haldi) It has anti-inflammatory properties and reduces swelling

Read more about 5 other benefits of turmeric for a healthy body

Click here

Note: Talk to your doctor or dietician if you have any concerns about diet or food. But do not start any supplements or dietary modifications on your own without consulting your doctor or dietician.

5. Exercise and yoga: Any form of exercise or yoga can ease stress is a great way to relax and help your intestines work more normally. That can be key for Crohn’s, since stress can trigger flare-ups and make symptoms worse.

Know more about yoga benefits.

Tap Here

6. Take proper rest: During flare-ups, you should consume a liquid diet to allow your system to rest and re-set. Aside from bowel rest, try to get extra sleep, go slowly, avoid stress and intense exercise, and take naps as needed. Allow your body to heal.

7. Moxibustion:It is a type of traditional chinese medicine that is typically administered in conjunction with acupuncture. The two approaches are thought to complement each other best. It's similar to heat therapy. Dry herbs are burned close to your skin, often near acupuncture points. Moxibustion combined with acupuncture may help with Crohn's symptoms.

Frequently Asked Questions

Can Crohn’s disease be cured?

Who is at risk of Crohn’s disease?

How do people cope with Crohn's disease?

Can Crohn's affect your liver?

Can my diet cause Crohn’s disease?

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Vitiligo

Also known as Leucoderma and Piebald skin

Overview

Vitiligo is an autoimmune condition that causes areas of skin to lose color, resulting in spots and patches on the skin. It is caused by the lack of melanin, a pigment that gives color to the skin. Vitiligo can affect any area of skin, but it commonly appears on sun-exposed body parts like the face, neck, and hands, and in skin creases.

The condition varies from person to person and there's no way of predicting how much skin will be affected. Some people only get a few small, white patches, but others get bigger white patches that join up across large areas of their skin. The lack of melanin in your skin can turn the hair in the affected area white or gray.

Vitiligo may be triggered by particular events, like stressful skin damage, severe sunburn or cuts (this is known as the Koebner response), or exposure to certain chemicals.

Treatment varies depending on the severity of the condition. It usually comprises medications to suppress autoimmunity, topical creams to lighten the skin, or procedures like depigmentation and skin grafting.

Key Facts

Usually seen in

Individuals between 10-30 years of age.

Gender affected

Both men and women, but more common in women.

Body part(s) involved

Face

Hands

Inner area of the mouth

Genitals

Nose

Rectum

Eyes

Inner ear

Prevalence

World: 0.5% to 2% (2020)

India: 0.25% to 4% (2019)

Mimicking Conditions

Phenols and other derivatives

Genetic syndromes

Hypomelanosis of Ito

Piebaldism

Tuberous sclerosis

Vogt-Koyanagi-Harada syndrome

Waardenburg syndrome

Hermanski-Pudlak syndrome

Menke’s syndrome

Ziprkowski-Margolis syndrome

Griscelli’s syndrome

Pityriasis alba

Atopic dermatitis/allergic contact dermatitis

Psoriasis

Lichen planus

Toxic drug reactions

Posttraumatic hypopigmentation (scar)

Phototherapy- and radiotherapy-induced

Melanoma-associated leukoderma

Mycosis fungoides

Leprosy

Pityriasis Versicolor

Leishmaniasis

Onchocerciasis

Treponematoses (pinta and syphilis)

Idiopathic

Idiopathic guttate hypomelanosis

Progressive (or acquired) macular hypomelanosis

Nevus anemicus

Nevus depigmentosus

Lichen sclerosis et atrophicus

Melasma

Halo nevus

Progressive macular hypomelanosis

Hypopigmented mycosis fungoides

Necessary health tests/imaging

Wood’s lamp test

Dermoscopy

Blood tests

Eye exam

Skin biopsy

Treatment

Medications

Corticosteroids: Betamethasone and Clobetasol

Vitamin D3 analogs: Calcipotriol and Tacalcitol

Methotrexate

Topical medications: Methoxsalen, Tioxasalen, Psoralen, Valerate, Fluticasone propionate, and Triamcinolone

Phototherapy

Depigmentation

Surgery

See All

Symptoms Of Vitiligo

Vitiligo presents itself clinically as white spots on the body distributed symmetrically and more obvious in people with dark skin. Discoloration first shows on sun-exposed areas like hands, lips, arms, and face. Other symptoms include:

Loss of skin color

Loss of color inside of your mouth and nose

Change in color of the inner layer of the eyeball

Hyperpigmentation at the edges of the discolored patches on the skin

White patchy lesions

Development of vitiligo at specific trauma prone sites, like cut, burn, or abrasion

Premature graying of the hair

Types Of Vitiligo

Vitiligo has 3 major types and they include:

Segmental vitiligo: Also called unilateral or localized vitiligo, it is an autoimmune disease. Segmental vitiligo affects one side of the body. It is generally seen in younger age groups, affecting about 30% of children diagnosed with vitiligo.

Non-segmental vitiligo: It is the most common type with 90% of cases. This is also an autoimmune disease which affects both sides of the body, most often appearing on sun-exposed parts like the face, neck, and hands.

Mixed vitiligo: This type is a convergence of both types of vitiligo, rare cases where segmental becomes non-segmental.

Know more about facts related to vitiligo that you may not be aware of.

Read This Now!

Causes Of Vitiligo

Vitiligo occurs when the melanocytes (cells producing melanin, a pigment that gives color to eye skin and hair) die or stop functioning. The exact cause of vitiligo is unknown, though it is frequently associated with multiple autoimmune diseases. There are various theories and it is hypothesized that genetic factors can influence the age of onset of vitiligo.

Risk Factors For Vitiligo

Vitiligo is often related to autoimmune disorders, and your chances of developing vitiligo increase if you have the following risk factors:

Gender

Both sexes are equally affected, however, some studies report an increased risk for more extensive depigmentation in the female gender.

Family history

Vitiligo sometimes runs in families, but the inheritance pattern is complex because of multiple causative factors.

Immunotherapy

It is an option for treating melanoma(a type of skin cancer) that can lead to autoimmune side effects, including vitiligo-like depigmentation.

Autoimmune conditions

Studies show that vitiligo seems more common in people who have certain autoimmune diseases, like Addison's disease, pernicious anemia, psoriasis, rheumatoid arthritis, systemic lupus erythematosus (SLE), thyroid disease, and type 1 diabetes.

Sunburn

Research has shown that a history of a blistering sunburn may be associated with a higher risk of developing vitiligo in a population of white women.

Protect your skin from sun damage. Check out our extensive range of sunscreens to meet all your skin care needs.

Shop Now!

Stress

Studies suggest that environmental and psychological stressors are triggers for the onset and progression of vitiligo.

Industrial chemicals

Chemical triggering factors, both household and industrial (occupational) play a very significant role in the induction and propagation of vitiligo.

Viral infections

Vitiligo may be an example of an autoimmune disease triggered by a viral infection in an individual who is genetically susceptible.

Learn more about how viruses spread and how to prevent viral infections.

Watch This Video Now!

Diagnosis Of Vitiligo

The diagnosis of vitiligo is generally straightforward and does not usually require confirmatory laboratory tests. Diagnosis can be confirmed by the following:

Physical examination and medical history

The diagnosis of vitiligo is usually made on clinical features and the important while examining and taking past medical history must include:

How long has the lesion been present

Factors or events that may have caused the onset of vitiligo

Are there any symptoms associated with the lesions

How is the progression or spread of lesions

Are there any changes in lesions over time

Presence of any other diseases

Current medications

Occupational history or any exposure to chemicals or radiation

Family history of vitiligo and other autoimmune diseases

Wood’s lamp test

The Wood's lamp is often used to diagnose skin disorders like melasma (patches and spots on the skin) and vitiligo. Under the Wood’s light, the vitiligo lesions emit a bright blue-white fluorescence and appear well demarcated.

Dermoscopy

It is useful in assessing the stage and disease activity of vitiligo. Typically vitiligo shows residual pigmentation and telangiectasia, which are usually absent in other hypopigmentation disorders.

Other tests

These are usually done to exclude other disorders. They include:

Blood tests to check for other autoimmune conditions

An eye exam to check for uveitis (inflammation of part of the eye)generally seen in individuals with vitiligo.

A skin biopsy to examine the tissue for the missing melanocytes seen in the depigmented skin of a person with vitiligo.

Book your tests from the comfort and safety of your home.

Click Here!

Celebs affected

Winnie Harlow

Winnie Harlow is a top model who has walked ramps all across the world and is considered a face of persons with vitiligo. She says that vitiligo is just another difference like long hair, blonde hair, white skin, short height, etc.

Michael Jackson

Michael Jackson, the King of Pop, was one of the most famous people with vitiligo. According to an interview, the white patches started appearing on MJ’s skin when he was around 24 years old. In the beginning, he used make-up to hide the spots. Later, he used treatment to de-pigment his entire body.

Prevention Of Vitiligo

Vitiligo isn’t preventable or curable as the exact cause for it is still not very clear. However, there are certain tips that can help prevent future depigmentation and return some amount of color to the skin by protecting your immune system and skin. They include:

Protect yourself from the sun

Sunburns can worsen vitiligo. You can protect your skin from the sun with the following. To protect your skin from the sun, follow these tips:

Seek shade especially when you see a short shadow because the sun’s damaging rays are the strongest during that time

Wear clothing that protects your skin from the sun

Use a hat and clothing to protect your skin from vitiligo from the sun

Use a sunscreen that best suits your skin every day when you go outside

Read about tips to choose the right sunscreen for your skin.

Click Here!

Try to avoid injuries

Skin injuries like cuts, scrapes, and burns can trigger new spots or patches. It is best to be careful and steer clear of anything that can cause an injury.

Stay away from artificial tanning

Never use a tanning bed or sun lamp and can burn skin that has lost pigment worsening vitiligo. If you want to add color to your skin, use camouflage makeup, self-tanner, or skin dye.

Understand the risks of getting a tattoo

Tattoos can be tempting and seem like a nice alternative to cover up a light spot or patch but, a tattoo can wound your skin leading to the Koebner phenomenon, which causes new spots of vitiligo to develop where you injure your skin.

Get all your queries answered about getting a tattoo.

Watch This Video!

Opt for a healthy lifestyle

Vitiligo is an autoimmune disease which means that your immune system is attacking healthy cells. Choosing a healthy lifestyle that consists of eating right, exercising regularly, managing your stress, and avoiding alcohol and cigarettes can take you a long way.

Want to quit smoking?

Try our range of smoking cessation products and detach yourself from this deadly habit.

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Specialist To Visit

Vitiligo is a disease that causes the skin to lose color in patches. The doctors that can be your best option to treat and manage vitiligo are:

Primary care provider

Dermatologist

A primary care provider is a doctor that prevents, diagnoses, and treats diseases. A dermatologist focuses on disorders of the skin, nails, and hair.

Get a consultation from our team of non-judgemental and trusted doctors.

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Treatment Of Vitiligo

There are various types of treatments available from topical medications to therapies that can help manage this condition and these include:

Medications

No medications or therapy can stop vitiligo, but there are certain drugs that when used alone or with light therapy, can help restore some skin tone. They include:

Corticosteroids: The main therapeutic effect of corticosteroids in vitiligo is modulation and inhibition of inflammation. Corticosteroids are also given orally with the main objective to suppress the immune response and stabilize the disease. The most commonly used corticosteroids are:

Betamethasone

Clobetasol

Calcineurin inhibitors: These are immunomodulators that inhibit inflammation. These are recommended for the head and neck areas as they have fewer side effects.

Vitamin D3 analogs: Vitamin D is an essential hormone synthesized in the skin and is responsible for skin pigmentation. Vitamin D analogs that are known to induce repigmentation in patients with vitiligo are:

Calcipotriol

Tacalcitol

Methotrexate: It decreases the number of T cells and has anti-inflammatory, and immunomodulatory effects.

Prostaglandin F2 alpha analogs: These are used for ocular hypertension that happens due to hyperpigmentation.

Statins: These are lipid-lowering drugs and their role in vitiligo is to provide anti-inflammatory and immunomodulatory effects.

Azathioprine: This is an immunosuppressant that inhibits DNA synthesis in immune effector cells.

Cyclosporine: Certain studies suggest cyclosporine leads to earlier disease stabilization in active vitiligo activity when given in low doses.

Tofacitinib: It is an arthritis drug that has shown some promising results in management of vitiligo.

Topical management

Topical formulations that are helpful for repigmentation of skin and with the least amount of side effects are:

Methoxsalen

Trioxsalen

Psoralen

Corticosteroids like

Betamethasone

Valerate

Fluticasone propionate

Triamcinolone

Alobetasol

Phototherapy

It is a treatment done with a special type of light (not sunlight). Phototherapy for vitiligo uses UV-A and narrowband UV-B therapy, which constitutes the principal treatment modality for generalized vitiligo. Longer treatment duration, at least 6 months should be encouraged to enhance the treatment response.

Recent advances

Vitiligo needs comprehensive treatment and the most recent advances to treat vitiligo are:

Minocycline: Studies suggest that minocycline 100 mg helped in arresting disease activity.

Afamelanotide: This a longer-acting synthetic analog of the alpha-melanocyte motivating hormone, has also shown promise in initial clinical studies.

Surgical transplantation: A variety of cellular transplantation techniques have been investigated in vitiligo that have shown some promising results.

Read more about drugs used in the treatment of vitiligo.

Click Now!

Home-care For Vitiligo

There are many treatment options from creams, oral medicines, and ultraviolet treatment, to treat vitiligo and they totally depend upon the condition and response of the skin cells. There are certain effective natural home remedies used to treat vitiligo and they have no side effects, however, always consult your doctor before starting anything new. The natural ingredients that can be beneficial for vitiligo include:

Mustard oil (Sarson ka tel): This is a very effective home remedy used to heal vitiligo. Make a paste with turmeric and mustard oil and apple for 20 mins the affected area. Turmeric along with mustard oil stimulates the pigmentation of the skin.

Turmeric (Haldi): Turmeric has a lot of medicinal benefits and also acts as a home remedy to cure vitiligo disease. One can lower the effects of vitiligo by using turmeric.

Honey (Shahad): It is a natural moisturizer filled with antioxidants and directly applying honey on the face gives it a much-needed boost of nutrition and moisture.

Ginger (Adrak): This is the best home remedy to treat vitiligo and many other skin diseases. Drinking ginger juice twice a day can help heal vitiligo.

Ghee: It has numerous benefits like blood purification, increasing immunity increases and aiding in skin-related problems.

Black pepper (kali mirch): It is known for its benefits in skin problems and wrinkles.

Note: One effective home remedy used to treat vitiligo is to heat 10 peppers in 10 gm of ghee. Then, remove the pepper and mix this ghee with normal ghee. Consuming this ghee regularly will purify the blood and improve immunity.

Learn more about 6 amazing medicinal benefits of black pepper.

Read Now!

Complications Of Vitiligo

Vitiligo can make one conscious about the way they look and can cause social stigmatization and mental stress. Other complications include:

Eye involvement like iritis (swelling and irritation in the colored ring around your eye's pupil)

Depigmentation of the skin making it more prone to sunburn, and skin cancer

Loss of hearing due to melanocytes impairment in the inner ear

Skin degeneration after prolonged use of topical steroids.

Alternative Therapies For Vitiligo

The latest alternative or complementary therapies have proven to yield good results in treating vitiligo. Some of them include:

Depigmentation therapies

These refer to medical treatments that remove skin pigmentation. These therapies are generally recommended for extensive and refractory vitiligo, when >50% of the body surface is affected or if cosmetically sensitive areas are the major component involved.

Skin grafting

Studies have shown that skin grafting can be used in patients with acute and hard-to-heal chronic wounds, burns, and stable vitiligo. The use of advanced therapies may improve the quality of life, and accelerate the re-pigmentation of patients with vitiligo.

Suction blister grafting (SBG)

SBG is an easy and cost-effective method of repigmentation generally done to treat vitiligo at difficult sites like the angle of the lip. The quality of repigmentation matches accurately with the adjacent skin.

Micro-pigmentation

Also termed medical tattooing, micro-pigmentation can be used as an alternative treatment for patients with vitiligo who are resistant to conventional treatments. It involves implanting small particles of natural pigment under the skin just like a tattoo.

Living With Vitiligo

Vitiligo may not be a life-threatening disorder but the toll it can take on one’s mind and body can be massive. The human race has still not evolved on matters of appearance and the social stigma around the way one looks can be quite disturbing. Learning to accept your condition and adapt to it can help improve your quality of life. Here are a few things to keep in mind while living with vitiligo include:

Give mental health the utmost priority

If you feel depressed or self-conscious about changes to your appearance, talk to your dermatologist who might recommend counseling or a support group. Counseling can be helpful in coming to terms with these issues.

Learn more about your condition

Knowledge is power and knowing about treatment, what can worsen your vitiligo, and other facts can help you decide what’s right for you and can play an active role in your care, which can help you feel more in control.

Connect with other people with vitiligo

The emotional aspects of having vitiligo are often overlooked, but the struggle is real. Talking to others with the same condition can help you feel less alone and there's real power in supporting others, no matter the cause, and whether you're someone who lives with vitiligo yourself.

Eat the right kind of diet

Add vegetables, fruits, nuts, seeds, and spices that are all high in antioxidants. Foods high in omega-3 (but lower in omega-6) could also help improve your symptoms. These include oily fish, nuts, seeds, and algae. Also, try a gluten-free diet as gluten can worsen inflammation, and add fiber and probiotics to your diet.

Note: Avoid inflammatory foods like processed meats, sugary drinks, trans fats, and processed snack foods.

Learn more about an anti-inflammatory diet.

Click Now!

Take supplements

Although it is considered preferable to consume nutrients through whole foods, there are certain supplements that can aid repigmentation in vitiligo patients. These include:

Ginkgo biloba

Alpha lipoic acid

Vitamin C

Vitamin E

Vitamin D

Meet all your nutritional requirements from our wide range of supplements.

Fill Your Cart Now!

Vitiligo in kids: Tips for parents

Children usually cope best with vitiligo better and your own over-consciousness as a parent may create more problems for your child than the actual vitiligo. Here are a few things to keep in mind:

Let your child know that vitiligo is not a serious skin problem

Teach your child how to answer this/her friends, teachers, and relatives, if they inquire about vitiligo

Communicate with close relatives, informing them about vitiligo and requesting them not to discuss it with your child

Avoid discussing your child’s vitiligo repeatedly

Examine the spots when your child is asleep

Encourage your child to engage in any activities or hobbies that he/she loves

Do not allow vitiligo to interfere with your child’s joy and self-esteem

Help your child boost his/her self-confidence.

Frequently Asked Questions

When should I start worrying about my vitiligo?

How does vitiligo spread?

Is vitiligo painful?

What is the outlook for vitiligo?

Is vitiligo contagious or fatal?

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Cuts and puncture wounds

Also known as Injuries, Abrasions and Lacerations

Overview

Injuries caused by sharp objects that damage the skin and result in the exposure of underlying soft tissues are known as cuts and puncture wounds. The risk is high in children, elderly population and those who suffer from balance disorders such as Parkinson’s disease, cerebral palsy, ataxia, etc. Also, diabetics and immunocompromised patients need to be extra careful of cuts and wounds as they have higher risk of contracting an infection due to such wounds.

Cuts and puncture wounds are often accompanied by bleeding, pain, swelling, fever and infection. Minor cuts can be treated with simple home remedies, but a puncture wound, as it is deep, must always be treated by a doctor. If left untreated, it can lead to severe wounds or infection. If the cut is deep, it can even lead to chronic blood loss.

Whenever an injury occurs, ensuring basic first aid for cuts and puncture wounds is essential. If these wounds cannot be managed by first-aid alone, you must seek medical care. This involves use of painkillers, antibiotics and anti-inflammatory medicines along with surgical debridement and suturing of the wounds, in some cases.

Key Facts

Usually seen in

Children between 1 to 10 years of age

Adults above 60 years of age

Gender affected

Both men and women

Body part(s) involved

Skin

Bones

Soft tissues

Nerves

Blood vessels

Mimicking Conditions

Abrasions

Bruises

Burns

Scalds

Chronic skin ulcers

Treatment

Antibiotics: Amoxicillin, Cotrimoxazole & Ampicillin

Antibacterial ointments: Amoxicillin, Clotrimoxazole & Ampicillin

Normal saline infusion

Paracetamol

Specialists to consult

General physician

Emergency department physician

Orthopedic and Trauma Surgeon

Dermatologist

Causes Of Cuts And Puncture Wounds

Cuts and puncture wounds are the injuries resulting from trauma caused by sharp objects. Such wounds damage the skin and cause a break in the continuity of the skin. More specifically, these can be described as below:

Cuts: These are the injuries occurring from clean, sharp-edged objects, such as knives, scissors, etc., or as a result of blunt trauma, such as an injury sustained after falling on a rocky surface, or hitting the edges of furniture, etc. These types of wounds typically have a larger surface area but are mostly superficial.

Puncture wounds: These refer to the injuries occurring from sharp objects, such as nails or needles. They typically have a smaller surface area but penetrate deeper.

Cuts and puncture wounds can occur in a variety of circumstances where a body part is at risk of sustaining an injury, such as:

Falling and hitting yourself on sharp objects like rocks, furniture, tools, broken glass, etc.

Walking without proper footwear on open roads or grounds where nails or other sharp objects may be lying around

Not wearing protective gear while operating tools or heavy machinery

Automobile accidents

Self-infliction of injury

Surgical incisions

Did you know?

In people with hemophilia, a small cut/injury can lead to incessant bleeding. Hemophilia is a rare bleeding disorder that affects the ability of the blood to clot. This condition causes the person to bleed for a long time due to deficiency of a clotting factor VIII or factor IX. This deficiency can cause recurrent bleeding into joints and muscles post an injury or surgery.

Click To Know More

Symptoms Of Cuts And Puncture Wounds

On sustaining an injury that leads to cuts and puncture wounds, immediate response and delayed response can take place.

Immediate responses can lead to symptoms such as:

Bleeding: At times, the bleeding can be minimal. In the case of larger cuts or puncture wounds or where soft tissues or blood vessels are also injured, there may be significant blood loss.

Swelling: The area surrounding the wound becomes swollen, inflamed, and tender to touch.

Pain: Depending on the severity of an injury and the structures involved, the intensity of pain ranges from mild to extremely severe.

Difficulty in movement: Due to pain, swelling and bleeding, it becomes difficult to move or bear weight on the area injured.

Delayed responses can lead to symptoms such as:

Fever: If a wound that has not healed for long becomes infected, the body tries to fight off the infection, resulting in fever.

Pus formation: It is a common occurrence in infected wounds. Pus refers to a collection of dead white blood cells that accumulate in the wound due to an ongoing infection.

Chronic pain: Wounds that do not heal for a long time can cause chronic pain.

Infection: Contaminated wounds, presence of foreign bodies in the wounds, diabetes, reduced immunity, and unclean dressings can lead to a wound being infected.

Risk Factors For Cuts And Puncture Wounds

Although injuries can happen to anyone at any point in time, certain factors increase the chances of complications and serious injuries. These factors include:

Age: Children and elderly are more prone to cuts and puncture wounds. While children are often careless while playing outdoors, elderly may struggle with balance and coordination issues. They may also be more prone to falls. Hence, have a higher risk of sustaining cuts and puncture wounds.

Movement disorders: Patients suffering from movement disorders, such as Parkinson’s disease, cerebral palsy, ataxia, etc., are more prone to falls, thus having a higher risk of injuries.

Health conditions & low immunity: Diabetics are more prone to wound complications. If a diabetic patient sustains cuts and puncture wounds, it is more likely to get infected and healing may be delayed. Similarly, patients on chemotherapy or those who have got an organ transplant are prone to complications arising from simple cuts and puncture wounds because of their low immunity.

Psychological illnesses: People with certain psychological conditions such as borderline personality disorder, depression, anxiety disorders and post-traumatic stress disorder are more likely to be self-critical and thereby engage in self-injury.

Common sites for cuts and puncture wounds

A few areas in the body are more prone to injuries than others.

Cuts: The common sites of injuries include forehead, knees, elbows, hands, fingers and legs.

Puncture wounds: The common sites of injuries include toes, feet, legs, fingers and hands.

Diagnosis Of Cuts And Puncture Wounds

Mild cuts and puncture wounds need no investigation and often heal on their own. If the injury is severe or does not heal appropriately, doctors may order a few investigations/tests to evaluate in detail:

Arterial and Venous Doppler Both Lower Limb, Arterial and Venous Doppler Both Upper Limb may be performed, depending on the site of injury in the case of puncture wounds with excessive blood loss to determine the blood insufficiency.

X-ray to detect if a concurrent bony injury has occurred. Tests may include X-ray Right Ankle AP View, X-Ray Left Elbow AP View, etc.

Complete Blood Count (CBC), Erythrocyte Sedimentation Rate, Total Leukocyte Count (TLC) and Differential Leukocyte Count (DLC) in cases of suspected wound infection.

Glucose - Random Blood, Glucose - Fasting Blood to check for sugar control in diabetic patients.

Culture sensitivity testing refers to identification of disease-causing microorganism, and to determine which antibiotics are sensitive to (effective against) the identified microorganism. It is usually recommended in case of severe infection.

Celebs affected

Ranveer Singh

Bollywood actor Ranveer Singh suffered an injury on his face while shooting for the film ‘Gunday’

Specialist To Visit

Seek medical care if cuts and puncture wounds cannot be managed by first aid in the following situations:

Excessive bleeding, spurting or bleeding that does not stop even after 10 minutes of applying pressure

Very deep puncture wounds

Presence of foreign bodies deep inside the wound

Excessive pain

Inability to move parts surrounding the wound

Medical care is also required in cases where the wound gets infected after primary care at home. Signs of infection include:

Pus formation or discharge from the wound

Foul-smelling wounds

Fever

Increased redness and warmth around the wound

Increased pain

Doctors to consult in such situations:

General physician

Emergency department physician

Orthopedic and Trauma surgeon

Dermatologist

Get a tetanus shot for cuts/bruises from a contaminated object/surface.

Get a tetanus shot if you haven’t got one in the last 10 years. This is because cuts due to a rusty blade or knife can increase the risk of tetanus, which is a serious bacterial infection that can cause painful muscle spasms. So, if you have a deep cut or cut due to a rusty instrument, then getting a tetanus injection can protect you from infection.

Get your shot!

Treatment Of Cuts And Puncture Wounds

The treatment of cuts and puncture wounds depends on whether emergency care is essential or care for complicated wounds is required.

1. First-aid for cuts and puncture wounds

Whenever an injury occurs, it is essential to administer basic first aid to the cuts and puncture wounds. After administering first aid, the decision may be made whether the wound can be managed at home or needs treatment by a doctor, depending on the severity of the wound.

The pointers given below should be followed when you administer basic first aid:

Inspect the wound thoroughly and look for the presence of any foreign body, such as dirt, tin, stones, pieces of glass, etc.

Carefully remove the foreign body if it is superficial, ensuring it does not increase the bleeding. If the foreign body is deeply embedded in the wound, do not try to remove it. Seek medical help.

Assess the amount of bleeding and if the bleeding is excessive, immediately call for help.

Try to stop the bleeding by applying pressure to the area and holding the area in an elevated position if possible.

Once the bleeding is under control, gently but thoroughly clean the wound with an antiseptic liquid or sterile water.

Apply a topical antiseptic cream and cover the area with a sterile bandage dressing.

Inspect the dressing regularly to see if it gets soiled or wet, and change it as required.

Monitor for signs of infection, such as fever, discharge from the wound, increased pain, etc.

2. Emergency treatment of cuts and puncture wounds

Emergency treatment consists of:

Stopping the bleeding. If the patient has lost excessive blood, intravenous transfusions with normal saline infusion or blood transfusion may be required.

Surgical debridement and cleaning the wound in the case of heavily contaminated wounds, with extensive damage to surrounding soft tissues.

Suturing the wound.

Use topical antiseptic ointments while covering the wound with proper dressing

Appropriate additional treatment for concomitant injuries.

Tetanus toxoid TF injection is given if the patient has not taken a dose in the last 5 years.

Painkillers, antibiotics and anti-inflammatory medicines are recommended to relieve pain, prevent infection and inflammation respectively.

3. Treatment for complicated cuts and puncture wounds

If the wounds become infected, additional treatment to control the infection and promote healing is required.

Paracetamol for relief from pain and fever.

Antibiotics like amoxicillin, cotrimoxazole, ampicillin, azithromycin, and doxycycline can be given to prevent bacterial infection

Antibacterial ointments like soframycin, mupirocin, neosporin, etc are used along with dressing to cover infected wounds

Vitamin C and zinc supplements to promote rapid wound healing.

Home-care For Cuts And Puncture Wounds

After appropriate first aid of cuts and puncture wounds, it is essential to take utmost care for faster healing without complications.

Keep a close tab on any signs of infection such as fever or pus discharge from the wound.

Change dressings at regular intervals. Once every day or more frequently if they get soiled.

Wash hands thoroughly before tending to wounds.

Use sterile bandages and antiseptic ointments only.

Take ample rest. Do not move the part unnecessarily or exert undue pressure.

Take a balanced diet rich in vitamins and protein to facilitate faster healing.

ProTip: Keep your hand or leg elevated to stop bleeding.

In most cases, bleeding due to minor cuts and scrapes usually stops on its own. However, if the bleeding fails to stop, then gently apply pressure on the wound to stop bleeding. Use a clean cloth/hand or bandage to apply the pressure. You can even elevate the area if the wound is in the leg or hand which can also help to reduce bleeding.

Buy first aid supplies

Complications Of Cuts And Puncture Wounds

If cuts and puncture wounds are left untreated, they may result in a variety of complications, such as:

Excessive blood loss, leading to hypotension and vascular shock.

Chronic wound infection may spread to other parts of the body, such as bones, and cause osteomyelitis.

Formation of ugly hypertrophic scars and keloids.

Loss of mobility in the affected area.

Diabetic foot in patients with unregulated blood glucose levels.

Amputation of the body part in case of severe untreated infection.

Death due to excessive blood loss or from infection leading to septicemia.

Alternative Therapies for Cuts And Puncture Wounds

There are not many alternative therapies that can effectively treat cuts and puncture wounds. Standard medical care remains the most effective choice in treating cuts and puncture wounds.

Certain alternative medicine forms are available and have been found to be effective in promoting rapid wound healing. These may include homeopathic preparations such as Calendula Officinalis which is applied topically as an ointment or used in the dressing as drops.

Minor cuts can be treated with simple home remedies, but a puncture wound, as it is deep, must always be treated by a doctor. Once bleeding is arrested, gently clean the area with a cotton swab dipped in antiseptic dilution. You can apply an antiseptic ointment like soframycin or even turmeric over the wound. Turmeric is an excellent antiseptic agent and can also help arrest bleeding.

Keep the wound covered with a clean sterile bandage or leave it open after antiseptic application.

REMEMBER! Monitor for signs of infection such as increased swelling, pain, fever, etc. and if they occur, consult your doctor immediately.

Frequently Asked Questions

Do I need a tetanus injection every time I get injured?

How to prevent diabetic foot occurrence after a toe injury?

Should tight bandages be applied to stop bleeding from a wound?

Should a wound be left open or covered with a dressing?

How to prevent scar formation after a wound?

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Vomiting

Also known as Throwing up, Spewing, Retching, Puking, Barfing, Regurgitating, and Chundering

Overview

Vomiting, or throwing up, is a forceful discharge of the contents of the stomach through the mouth. It isn’t a condition, but rather a symptom of many other conditions. While some of these conditions can be serious, most aren’t a cause for major concern. It can be a one-time event linked to something that doesn’t settle right in your stomach. However, recurrent vomiting may be caused by an underlying medical condition.

Every person experiences vomiting at least once in their lifetime. Causes of vomiting in adults can be the use of certain medicines, pregnancy, drinking too much alcohol, infections, a blockage in your bowel, and chemotherapy. In children, the causes include swallowing milk too rapidly, viral infections, intolerance to milk, and certain food allergies.

Recurrent vomiting can be due to some other health disorder that needs to be addressed and treated. Treatment or management mainly consists of avoiding known triggers of vomiting, drinking a lot of fluids to avoid dehydration, and taking antiemetic medications.

Key Facts

Usually seen in

All age groups

Gender affected

Both male and female, but more common in women.

Body part(s) involved

Stomach

Food pipe (Oesophagus)

Mimicking Conditions

Nausea

Cyclic vomiting syndrome

Necessary health tests/imaging

Laboratory tests:

Complete blood count (CBC)

Serum electrolytes

Erythrocyte sedimentation rate(ESR)

Thyroid-stimulating hormone(TSH)

Imaging tests:

Abdominal radiography

Computed tomography (CT)

Abdominal ultrasonography (USG)

Magnetic resonance imaging (MRI)

Treatment

Antiemetic drugs:

Diphenhydramine

Hydroxyzine

Promethazine

Prochlorperazine

Metoclopramide

Ondansetron

Specialists to consult

General physician

Pediatrician

Gastroenterologist

Symptoms Of Vomiting

Vomiting is a common gastrointestinal complaint that can be triggered by a lot of stimuli and it is considered a defense mechanism against toxins, drugs, bacteria, viruses, and fungi that enter the body. Symptoms associated with vomiting include:

Nausea

Abdomen distension

Diarrhea

Fever

Lightheadedness

Vertigo

Increased heart rate

Excessive sweating

Dryness of the mouth

Decreased urination

Chest pain

Fainting

Confusion

Excessive sleepiness

Have you been vomiting quite frequently?

Know what can cause vomiting and when to visit a doctor.

Enlighten Yourself Now

Causes Of Vomiting

During vomiting, the major muscles in between the neck and stomach contract at the same time. This puts pressure on the stomach, expelling the contents in the stomach up the throat and through your mouth. The most common causes of vomiting include:

Gastroenteritis

Acute viral gastroenteritis is an intestinal infection caused by various viruses. It is a major cause of vomiting. Other signs and symptoms include diarrhea, stomach cramps, nausea, and sometimes fever.

Food poisoning

If you eat food that is contaminated or stale, it can lead to food poisoning. It is caused due to multiplication of bacteria in the food which produces toxins in the body.

Food poisoning commonly causes vomiting. Other symptoms include nausea, and stomach cramping, with or without diarrhea.

Inner ear infections

Also known as labyrinthitis, it can cause vomiting that is commonly accompanied by dizziness and a feeling of spinning (vertigo).

Motion sickness

Motion sickness is a sensation of throwing up while traveling by road, air, or sea. The movement of the vehicle causes turbulence as a result of which the inner ear loses its balance and causes nausea and vomiting.

Want to travel but scared of motion sickness? We have got you covered.

Read some effective tips and tricks to avoid motion sickness.

Click Here

Pregnancy

Pregnant women typically endure repeated episodes of nausea and vomiting, particularly during the first trimester of pregnancy called "morning sickness".

Is a baby on the way?

Pregnancy is a special and precious time for every woman. However, with so many changes happening in the female body, it comes with its own share of ups and downs.

Here are 5 tips to make you easy to sail through your pregnancy.

Click Here To Read

Appendicitis

Appendicitis is an inflammation of the appendix (a thin pouch that connects to the large intestine). This can cause pain that tends to move to the right or lower right side of the stomach. Nausea and vomiting are often associated with appendicitis.

Gallstones

Gallstones are hardened deposits of digestive fluid that can form in gallbladder (a small, pear-shaped organ on the right side of the abdomen that holds a digestive fluid called bile). Gallstones can lead to severe abdominal pain that can cause vomiting.

Gastroesophageal reflux disease (GERD)

It is a condition in which stomach acid repeatedly flows back into the tube connecting your mouth and stomach. This can lead to nausea and even vomiting in some cases.

Migraines

These are a type of headaches that can cause severe throbbing pain or a pulsing sensation, usually on one side of the head. They are usually accompanied by nausea, vomiting, and extreme sensitivity to light and sound.

Struggling with migraine?

Watch our expert, a leading neurologist decode it for you.

Browse Here

Medications

Nausea and vomiting are common side effects of many medications. These include antibiotics, vitamins, birth control pills, analgesics, and antidepressants. So talk to your doctor if you feel nauseated after taking any medications. He/she might consider changing the medications.

Chemotherapy

Chemotherapy-induced nausea and vomiting (CINV) is a debilitating side effect of cancer treatment, affecting up to 40% of patients.

Concussion

It is a traumatic brain injury that affects your brain function. It is of utmost importance to seek emergency care if you experience repeated vomiting or nausea after a head injury.

Crohn’s disease

It is a type of inflammatory bowel disease (IBD) that causes swelling of the tissues in your digestive tract. It can cause a narrowing of the intestine that prevents food from normally traveling through the digestive tract, causing nausea and vomiting.

Other causes of vomiting

These may include:

Bowel obstruction

Menstruation

Excessive alcohol consumption

Anxiety

Intense pain

Kidney infections and stones

Irritable bowel syndrome (IBS)

Food allergies

Exposure to toxins

Did you know?

Nausea and vomiting also occur in about 20-30% of postoperative patients as a complication of anesthesia. The term PONV is typically used to describe nausea and/or vomiting in the immediate 24 postoperative hours. Postdischarge nausea and vomiting (PDNV) refer to symptoms that occur after discharge for outpatient procedures.

Causes of vomiting in babies

Common causes of vomiting in babies may include:

Viral gastroenteritis

Swallowing milk too quickly

Food allergies

Milk intolerance

Urinary tract infections (UTIs)

Middle ear infections

Pneumonia

Meningitis

Ingesting toxic substances accidentally

Congenital pyloric stenosis (a condition present at birth that causes narrowing of the passage between stomach and bowel)

Blockages in the bowel.

Is your child vomiting?

Here are some important things to remember when your child has one or multiple episodes of vomiting.

Click To Read

Diagnosis Of Vomiting

Vomiting can be a symptom of many causes, sometimes it can be as simple as indigestion and sometimes it can be due to an underlying disorder. Though the diagnosis of vomiting can be simple, its cause should not be neglected and every possibility must be evaluated. Diagnosis mainly consist of:

1. Medical history

Past history is very important in determining the cause of vomiting. Questions such as onset duration and frequency, any chronic illness, the timing of vomiting, and associated symptoms must be asked to get a thorough understanding of the reason behind vomiting.

2. Physical examination

The physical examination is focused initially on signs of dehydration, including, evaluation of fingers for calluses that are suggestive of self-induced vomiting.

Signs of depression or anxiety which may suggest psychiatric causes need to be evaluated.

Abdominal examination is extremely important as it can detect distention with a tenderness that can be suggestive of a bowel obstruction.

3. Laboratory tests

Tests are directed by the history and physical examination to determine the underlying cause or to evaluate for the consequences of vomiting. These tests include:

Complete blood count (CBC): It is done to diagnose any changes in blood cell count.

Serum electrolytes: this test is done to check for acidosis (too much acid in the body fluids), alkalosis (excess base in body fluids), azotemia (build-up of nitrogen products in the blood), and hypokalemia ( deficiency of potassium in the blood)

Erythrocyte sedimentation rate(ESR): To check for inflammation

Pancreatic/liver enzymes: For patients with upper abdominal pain or jaundice

Pregnancy test: In case of any female of childbearing age

Protein/albumin: In patients with chronic organic illness or malnutrition

Specific toxins: To check for any ingestion or use of potentially toxic medications

Thyroid-stimulating hormone(TSH): For patients with signs of thyroid toxicity or unexplained nausea and vomiting.

4. Imaging tests

Supine and upright abdominal radiography are done to check for small bowel or any other kind of obstruction.

5. Other tests

Further testing may be needed to evaluate obstructions or any other cause. These tests may include:

Esophagogastroduodenoscopy

Computed tomography (CT)

Abdominal ultrasonography (USG)

Magnetic resonance imaging (MRI) of the brain

Book your tests now to clear out every possible cause for your recurrent vomiting episodes.

Click Here

Celebs affected

Kim Kardashian West

Kim Kardashian is an American media personality, socialite, and businesswoman. She battled with morning sickness during pregnancy and said in an interview "It's a very different type of pregnancy from my first one, but I'm so grateful to be pregnant when we didn't even think it was going to happen for us, [so] I don't care how sick I am."

Beyoncé

Beyoncé is an American singer, songwriter, and actress. In an interview with Harper's Bazaar, her best friend Gwyneth said “watching Queen Bey headline the Glastonbury Festival was special—and not only because of her performance. She was absolutely incredible, especially as she was barfing in between," she told the magazine.

Prevention Of Vomiting

The sequence before vomiting is nausea and when you begin feeling nauseous, there are a few steps you can take to potentially stop yourself from actually vomiting. The following tips that can prevent vomiting include:

Take deep breaths as soon as you begin to feel nauseous

Drink plenty of water and other liquids

Eat fresh or candied ginger or try ginger tea

If you are prone to motion sickness, take an OTC (over-the-counter) medication to stop vomiting

Suck on ice chips

Avoid oily or spicy foods if you have indigestion

Sit down or lie down with your head and back propped up

Do not consume an excess of alcohol

Do not sleep immediately after eating

Avoid staring at screens while traveling

Try to avoid any kind of activity when you feel nauseous

The most common cause of vomiting is a bad stomach.

Up your stomach care game from our widest range of products that can take care of your stomach.

Shop Now

Specialists To Visit

Vomiting can be caused due to several reasons. In case of frequent vomiting, doctors that can help you diagnose the exact cause and provide treatment include:

General physician

Pediatrician (in case of children)

Gastroenterologist

A gastroenterologist is a medical practitioner qualified to diagnose and treat disorders of the stomach and intestines.

When to see a doctor?

It is essential to see a doctor in case of the following symptoms:

In children:

Vomiting lasts more than a few hours

Diarrhea and signs of dehydration are present

Fever higher than 100 degrees Fahrenheit

Your child hasn't urinated for six hours

In adults:

Blood in the vomit

Severe headache along with stiff neck

Fatigue

Confusion and disorientation

Severe abdominal pain

Fever over 101 degrees Fahrenheit

Diarrhea

Rapid breathing or heart rate.

If you or your child have persistent vomiting, do not delay and get medical advice from our world-class doctors.

Consult Now

Treatment Of Vomiting

The basic management of vomiting is to avoid any environmental triggers such as crowded places, odors, and heat. Also, treating the underlying cause is important to stop the episodes of vomiting.

However, nausea and vomiting can be very vigorous in individuals undergoing treatment for cancer, or who have undergone any kind of surgery. Treatment in such cases includes:

1. Antiemetic drugs

Antiemetics are drugs used to combat nausea and vomiting. These work by blocking the pathways involved in vomiting. Most commonly used antiemetics include:

Scopolamine

Diphenhydramine

Hydroxyzine

Promethazine

Prochlorperazine

Droperidol

Metoclopramide

Ondansetron

2. Newer agents

These agents work by blocking the action of a chemical messenger (neurokinin) in the brain that may cause nausea and vomiting during anti-cancer treatment (chemotherapy).

Aprepitant is the first of these agents to be introduced, but its efficacy is not yet established.

Note: Glucocorticoids (corticosteroids) such as dexamethasone are well-established antiemetics for chemotherapy-induced as well as postoperative nausea and vomiting.

Read more on dos and don'ts to follow while taking oral corticosteroids.

Click Now

Home-care For Vomiting

Vomiting can be a one-time affair or can happen regularly due to various reasons. However, the feeling is not quite welcoming and can take a toll on the mind and the body. The first and foremost step is to keep yourself hydrated. The following tips should be kept in mind for the management of vomiting in children:

Avoid solid foods for up to 24 hours in case of persistent vomiting.

Keep your child hydrated.

Lay your child on their side to minimize the chance of them inhaling vomit into their airways.

Do not try medications and alternative treatments without a doctor’s approval.

There are numerous tips to manage nausea and vomiting and some of the most effective home remedies include:

Ginger (Adrak): Ginger is a widely used herb for its many natural medicinal properties and particularly as an antiemetic.

Lemon (Nimbu): According to studies, 40% of women have used lemon scent to relieve nausea and vomiting, and 26.5% of them have reported it as an effective way to control their symptoms.

Peppermint oil: It significantly reduces the frequency of nausea, vomiting, and retching.

Fennel (Sauf): It refreshes the flavor of your mouth and helps stop vomiting. You can have it as it is or as fennel seeds tea.

Cumin (Zeera): The powder and seeds of cumin are known to be effective in relieving nausea and vomiting.

Cinnamon (Dalchini): It helps to reduce menstrual bleeding, nausea, and vomiting. Studies also showed significant improvements in gastrointestinal symptoms with cinnamon.

Feeling nauseated?

Try these 6 foods to get instant relief.

Read More Now

Complications Of Vomiting

In most cases, nausea and vomiting might clear up on their own unless there is an underlying chronic condition. Persistent vomiting can lead to the following complications:

Dehydration: May be caused by failure to replace obligate water losses and the most common causes are vomiting, diarrhea, sweating, etc.

Loss of enamel: Studies demonstrate that self-induced vomiting can lead to the erosion of the outer layer of teeth (enamel).

Alternative Therapies For Vomiting

Nausea and vomiting are distressing symptoms that may significantly detract from the overall quality of life and greatly influence an individual’s overall mood and social activities. Chronic vomiting can also be managed with alternative therapies that have shown some good results. These therapies include:

1. Acupuncture and acupressure

Acupuncture and acupressure are two techniques commonly used to manage chronic vomiting. During acupuncture, a therapist inserts thin needles into specific points on the body. Acupressure aims to stimulate the same points of the body but uses pressure instead of needles to do so. Both techniques stimulate nerve fibers, which transmit signals to the brain and spinal cord and some believe these signals can decrease nausea.

2. Aromatherapy therapy

This type of therapy may help relieve nausea and vomiting, although studies on its effectiveness are mixed. To practice aromatherapy, try deep breathing with an open essential oil bottle, or an essential oil diffuser, or add a few drops to a cotton ball. If you have asthma or another respiratory condition, ask your doctor before diffusing essential oils.

Buy essential oil products online to get rid of the unwelcoming feeling of nausea and vomiting. Fill your cart now.

Tap Here

3. Traditional Chinese medicine (TCM)

According to TCM, vomiting is a manifestation of impaired homeostasis and reversed upward qi (in Chinese philosophy, qi, is the life force that every person and thing has) flow within the stomach, resulting in the expulsion of the stomach’s contents through the mouth.

This alternative therapy involves a variety of therapeutic techniques and the key to treatment lies in harmonizing the stomach and diminishing qi counter flow.

Frequently Asked Questions

What is the difference between nausea and vomiting?

What is cyclic vomit syndrome?

What foods should be avoided during vomiting?

Which position is best in case of vomiting?

Can vomiting cause sore throat?

Why does Vomiting Occur?

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Cervical cancer

Overview

Cervix is the lowermost part of the womb (uterus) that lies on top of the vagina. It plays an important role in preventing the ascent of pathogens from the vagina into the uterus and allowing the entry of sperm into the fallopian tubes (channel for transport of eggs and fertilization). It is also crucial for the maintenance of pregnancy in the uterus until the onset of labor.

Cervical cancer is a type of cancer that occurs in the cells of the cervix. This cancer can affect the deeper tissues of the cervix and may spread to other parts of the body (metastasize), often the lungs, liver, bladder, vagina, and rectum.

This cancer is the second most common female malignant (cancerous) tumor globally which seriously threatens female’s health. Nearly all cervical cancers are caused by an infection with human papillomavirus (HPV).

Some cases may not show any symptoms, but general symptoms include bleeding in between periods and after sexual intercourse. Foul-smelling white discharge and low back pain or lower abdominal pain may also be present. Treatments include surgery, radiation, chemotherapy, and palliative care.

Key Facts

Usually seen in

Women between 15-44 years of age

Gender affected

Women

Body part(s) involved

Cervix

Vagina

Uterus

Badder

Rectum

Kidneys

Lungs

Breast

Liver

Prevalence

India: 6-29% (2016)

Mimicking Conditions

Cervical fibroids

Endometriosis

Cervical polyps

Necessary health tests/imaging

Pap smear

Liquid-based cytology (LBC)

HPV testing

Colonoscopy

Biopsy

Imaging: CT scan & PET scan

Treatment

Surgical procedures: Conization, Hysterectomy & Loop electrosurgical excision procedure (LEEP)

Radiation therapy: External-beam radiation therapy & Internal-beam radiation therapy

Chemotherapy: Cisplatin & Cisplatin with 5-fluorouracil (5-FU)

Targeted therapy: Bevacizumab & Tisotumab vedotin

See All

Types Of Cervical Cancer

Cervical cancers and cervical pre-cancers are classified based on their appearance on a microscope. They are most commonly of two types:

Squamous cell carcinoma

It is the most common type (80% to 90%). These cancers develop from the outer cells of the cervix (exocervix). Squamous cell carcinomas most often begin in the transformation zone (where the outer cells join the inner cells of the cervix).

Adenocarcinomas

This is the other type (10% to 20%) that develop from the mucus-producing gland cells of the inner cells of the cervix (endocervix).

Less commonly, cervical cancers have features of both squamous cell carcinomas and adenocarcinomas and are called adenosquamous carcinomas or mixed carcinomas. Here’s more on the common signs of cancer.

Click Here!

Symptoms Of Cervical Cancer

Cervical cancer symptoms are usually mild in the early stages and can go unnoticed. Symptoms according to the stage of cancer include:

Early or stage 1 cervical cancer

In the early stages of cervical cancer, a person may experience no symptoms at all. Some of the signs and symptoms of stage 1 cervical cancer can include:

Watery or bloody vaginal discharge

Foul odor in the vaginal discharge

Vaginal bleeding after sexual intercourse

Bleeding in between menstrual periods

Longer and heavier menstrual periods

Bleeding post menopause

Discomfort during sexual intercourse

Advanced cervical cancer

If there is a spread of cancer (metastasis) to nearby tissues or organs, symptoms may include:

Blood in urine

Diarrhea

Fatigue

Weight loss

Loss of appetite

General feeling of being ill

Dull and aching pain in the back

Swelling in the legs

Pelvic/abdominal pain

Difficulty or pain during urination

Pain or bleeding from your rectum while passing the stool

Note: It can take almost 20 years for the precursor lesion caused by sexually transmitted HPV to develop into an invasive form of cervical cancer.

Learn what the experts have to say about cervical cancer.

Causes Of Cervical Cancer

Almost all cervical cancers are caused by sexually transmitted human papillomavirus (HPV). This is the same virus that causes genital warts. There are more than 1000 strains of human papillomavirus, but only certain types can cause cervical cancer. The two types that most commonly cause cancer are HPV-16 and HPV-18.

The major mechanisms through which HPV contributes to cancerous activity involve the viral oncoproteins, E6 and E7, which interfere with major tumor suppressor genes (P53 and retinoblastoma). In addition, E6 and E7 have been associated with changes in host and viral DNA.

Most people will get HPV at some point in their lives and not realize it as the body fights against the infection. However, if the body fails to fight this infection, it can cause the cells of your cervix to change to cancerous cells. HPV can spread from the following:

Any direct skin-to-skin contact of the genitals

Vaginal, anal, or oral sex

Sharing sex toys

Did you know?

Being infected with a cancer-causing strain of HPV doesn’t mean you’ll get cervical cancer. Your immune system eliminates the vast majority of HPV infections, often within 2 years. Read about different types of HPV.

Click Now!

Risk Factors For Cervical Cancer

A number of risk factors for cervical cancer are linked to exposure to HPV. High-risk types, especially HPV16, are prevalent in the human population, and infection is usually transmitted by sexual contact, causing squamous intraepithelial lesions. Most lesions disappear after 6−12 months due to the intervention from the immune system. However, a small percentage of these lesions remain and can cause cancer. There are also other numerous risk factors for cervical cancers which include:

Human immunodeficiency virus (HIV) infections

According to studies, the risk of developing an infection from high-risk HPV types is higher in women with HIV. The results showed a relationship between HIV and cervical cancer that suggested a higher rate of persistent HPV infection with multiple viruses with cancerous activity, among people with HIV.

Multiple sexual partners

Many studies have suggested that women with multiple sexual partners are at high risk for HPV acquisition and cervical cancer. Multiple sexual partners of the spouse can also be an additional risk factor.

Excessive use of oral contraceptives

Oral contraceptive (OC) pills are known to be a risk factor for cervical cancer. It has been reported in a study that the use of OC for 5 years or more can double the risk of cancer. In addition, the use of OC pills is an associated risk for developing cervical cancer, especially adenocarcinoma.

Smoking

Smoking increases the chance of developing precancerous lesions of the cervix (called moderate or severe dysplasia) and increases the chance of developing cervical cancer. Smoking greatly increases your risk for dysplasia and cancer, and weakens the immune system, increasing the chances of getting affected by HPV.

In addition to increasing the risk of cervical cancer, smoking can lead to premature pregnancy, ectopic pregnancy and also affect reproductive health. Here's more on smoking can affect women's health.

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Hygiene patterns

Several genital hygiene patterns showed an association with cervical cancer. Not using a sanitary napkin, not maintaining vaginal hygiene, and not taking special care in cleaning their genitals when washing increases the risk of infections. Lack of particular care in cleaning the genitals can increase he risk of cervical cancer by 5.6 times.

Weak immune system

Having a weakened immune system caused by immunosuppression increases the risk of HPV infection and cervical cancer. Immunosuppression weakens the body’s ability to fight infection and other diseases.

Did you know?

Early age (below 18 years) of first intercourse and multiple child births are also risk factors for cervical cancer. Awareness is the key to preventing cervical cancer. Understand more about cervical cancer- detection and prevention.

Click To Read More!

Diagnosis Of Cervical Cancer

Early stages of cervical cancer don't usually involve symptoms and are hard to detect. The first signs of cervical cancer may take several years to develop. The International Federation of Gynecology and Obstetrics (FIGO) classified cervical cancer stages into the following:

Stage 0: Also known as carcinoma in situ, it is the presence of abnormal cells in the innermost lining of the cervix.

Stage I: Invasive form of cancer that is only confined to the cervix.

Stage Ia cervical carcinoma: Preclinical invasive carcinoma that can be diagnosed only by means of microscopy.

Stage Ib cervical carcinoma: Clinically visible lesion that is confined to the cervix uteri.

Stage Ib1: Primary tumor not greater than 4.0 cm in diameter.

Stage Ib2: Primary tumor greater than 4.0 cm in diameter.

Stage II: The locally limited spread of cancer beyond the uterus but not to the pelvic sidewall or the lower third of the vagina.

Stage IIa cervical carcinoma: Spread into the upper two-thirds of the vagina without parametrial (the fat and connective tissue that surrounds the uterus) invasion.

Stage IIb cervical carcinoma: Extension into the parametrium but not into the pelvic sidewall.

Stage III: Cancerous spread to the pelvic sidewall or the lower third of the vagina, and/or hydronephrosis or a non-functioning kidney that is incident to invasion of the ureter.

Stage IIIa cervical carcinoma: Extension into lower one-third of the vagina, without spread to the pelvic sidewall.

Stage IIIb cervical carcinoma: Extension into the pelvic sidewall and/or invasion of the ureter, with the latter resulting in a non-functioning kidney or hydronephrosis.

Stage IV: Cancerous spread beyond the true pelvis or into the mucosa of the bladder or rectum.

Stage IVa cervical carcinoma: Extension of the tumor into the mucosa of the bladder or rectum.

Stage IVb cervical carcinoma: Spread of the tumor beyond the true pelvis and/or by metastasis into distant organs.

Finding abnormal cells during cervical cancer screenings is the best way to avoid cervical cancer. Cervical cancer diagnosis requires the following:

A physical exam and complete medical history

Examining the whole body to check general signs of health, including checking for any signs of disease like lumps or anything unusual. Past medical history, patient’s health habits, and prior illnesses and treatments will also be taken.

Pelvic exam

An exam of the vagina, cervix, uterus, fallopian tubes, ovaries, and rectum is done. A speculum is inserted into the vagina and the doctor or nurse looks at the vagina and cervix for signs of disease. A pap test of the cervix is usually done. The doctor or nurse also inserts a lubricated, gloved finger into the rectum to feel for lumps or abnormal areas.

Traditional pap smear

A pap smear, also called a pap test, is a procedure to test for cervical cancer in women. It involves collecting cells from your cervix.

Here's everything you need to know about pap smear.

Click To Read!

Liquid-based cytology (LBC)

Liquid-based cytology (LBC) is a new method of preparing cervical samples for cytological examination and unlike the conventional 'smear' preparation, it involves making a suspension of cells from the sample and this is used to produce a thin layer of cells on a slide.

Visual inspection with acetic acid & Lugol’s iodine (VIA/VILI)

Visual inspection with acetic acid (VIA) is a visualization of a woman's cervix to detect precursors of cervical cancer after application of acetic acid (ordinary table vinegar) on her cervix. Healthcare workers (midwives, nurses, and clinical officers) can practice VIA at several levels of healthcare settings.

HPV testing

The HPV test is a screening test for cervical cancer, but it doesn't confirm if an individual has cancer, instead, the test detects the presence of HPV, the virus that causes cervical cancer, in the system.

HPV-based testing is a pivotal part of cervical cancer screening besides cytology-based tests.

The application of HPV detection has accelerated the transition of cervical cancer screening from morphology to molecular biology.

Computerized screening

Because human fatigue and error may be major contributors to false-negative readings of Pap smears, computer-assisted image analysis, and artificial intelligence have been introduced as a means of improving the sensitivity of the Pap smear.

Artificial intelligence (AI) has also shown promising results in screening and examination based on image pattern recognition.

Endocervical curettage

This is a procedure to collect cells or tissue from the cervical canal using a curette (spoon-shaped instrument). Tissue samples are taken and checked under a microscope for any signs of cancer.

Colposcopy

A procedure in which a colposcope (a lighted, magnifying instrument) is used to check the vagina and cervix for abnormal areas. Tissue samples may be taken using a curette (spoon-shaped instrument) or a brush and checked under a microscope for signs of disease.

Biopsy

This is done if the pap smear shows any abnormal cells. A sample of tissue is cut from the cervix and viewed under a microscope by a pathologist to check for signs of cancer.

Imaging

These tests help doctors find out where the cancer is located and whether it has spread to other parts of the body. They include:

1. Computed tomography (CT) scan: It involves taking pictures of the cervix at specific times after the intravenous (IV) injection of contrast medium to find out exactly where the tumor is in relation to nearby organs and blood vessels.

2. Positron emission tomography (PET) scan or PET-CT scan: A PET scan is usually combined with a CT scan or MRI scan to produce images of the inside of the body. The combination provides a more complete picture of the area being evaluated.

Women’s cancer awareness package is a group of tests clubbed together to detect cancer markers in women. Get your lab tests done by our professionals in the comfort and safety of your house.

Book Now!

Celebs affected

Sonia Gandhi

Sonia Gandhi is an Indian politician and the president of the Indian National Congress. In August 2011, she underwent successful surgery for cervical cancer in the United States.

Erin Andrews

Erin Jill Andrews is an American sportscaster, television personality, and actress. She was diagnosed with cervical cancer in 2016 and credits the experience for making her more vigilant about her health.

Prevention Of Cervical Cancer

There are more than 100 kinds of HPV and about a dozen of them have been shown to lead to cancer. The two most important things to prevent cervical cancer are to get the HPV vaccine and to get tested regularly according to American Cancer Society (ACS) guidelines. These include:

Undergoing cervical screening

Early detection of the types of HPV that can cause cancer is key in preventing cervical cancer. A well-proven way to prevent cervical cancer is to have screening tests. Screening is having tests to find conditions that may lead to cancers and can find pre-cancers before they can turn into invasive cancer. Finding precancerous lesions through regular screening can limit the cases of cervical cancer to a greater extent.

Getting HPV vaccine

The HPV vaccine can help prevent HPV infection by protecting against HPV. Vaccines are available that can help protect children and young adults against certain HPV infections.

These vaccines only work to prevent HPV infection and will not treat an infection that is already there. These vaccines help prevent pre-cancers and cancers of the cervix. Some HPV vaccines are also approved to help prevent other types of cancers and anal and genital warts.

Note: India accounts for around 16% of the total deaths caused by cervical cancer across the world. And it can be prevented with a vaccine.

Learn more about vaccine to prevent cervical cancer: age, types, schedule & more.

Tap To Read!

Limiting exposure to HPV

HPV is passed from one person to another during skin-to-skin contact with an infected area of the body. Although HPV can be spread during skin-to-skin contact; vaginal, anal, and oral sex doesn't have to occur for the infection to spread. It is even possible for a genital infection to spread through hand-to-genital contact.

Also, HPV infection seems to be able to spread from one part of the body to another. This means that an infection may start in the cervix and then spread to the vagina and vulva.

HPV exposure can be limited by:

Encouraging the partners to talk with a doctor or nurse about the HPV vaccine

Not having sex when there are visible warts

Limiting the number of sex partners

Avoiding sex with people who have had many other sex partners

Not having unprotected sex

Some methods used to prevent sexually transmitted diseases (STDs) decrease the risk of HPV infection. The use of a barrier method of birth control such as a condom, and dental dams during oral, anal, and vaginal sex can help protect against HPV infection.

Maintaining a healthy lifestyle

There are a lot of cancer prevention clinical trials that aim to find out whether actions people take can prevent cancer. These may include eating fruits and vegetables, exercising, quitting smoking, or taking certain medicines, vitamins, minerals, or food supplements.

Specialist To Visit

Every kind of cancer requires comprehensive care that consists of a group of doctors. Doctors that take care of patients with cervical cancer and help in diagnosing and formulating a treatment plan are:

Gynecologist

Gynecologic oncologist

Radiation oncologist

Medical oncologist

A gynecologist specializes in female reproductive health. Gynecologic oncologists are specialists in cancers of the female reproductive system and can perform surgery and prescribe chemotherapy and other medicines. A radiation oncologist is a doctor who uses radiation to treat cancer whereas a medical oncologist uses chemotherapy and other medicines to treat cancer.

What to ask your doctor?

What type of cervical cancer do I have?

Has my cancer spread outside the cervix?

What is the stage of my cancer and what does that mean?

Will I need other tests before we can decide on treatment?

Do I need to see any other doctors or health professionals?

Get all your queries answered by our trusted professionals.

Consult Now!

Treatment Of Cervical Cancer

Different types of treatment are available for patients with cervical cancer. They include:

A. Surgical procedures

Surgery is the removal of the tumor and some surrounding healthy tissue during an operation. Surgical procedures opted for cancer that has not spread beyond the cervix include:

1. Conization: A procedure in which a cone-shaped piece of abnormal tissue is removed from the cervix. A scalpel, a laser knife, or a thin wire loop heated by an electric current may be used to remove the tissue.

2. Hysterectomy: A hysterectomy is a surgical procedure to remove the womb (uterus). A hysterectomy can be:

Simple hysterectomy: It is the removal of the uterus and cervix.

Radical hysterectomy: It is the removal of the uterus, cervix, upper vagina, and the tissue around the cervix. A radical hysterectomy also includes the removal of the surrounding lymph nodes.

3. Loop electrosurgical excision procedure (LEEP): This procedure uses a wire loop heated by an electric current to remove cells and tissue in the cervix and vagina. It is used as part of the diagnosis and treatment for abnormal or cancerous conditions.

4. Exenteration: This surgery is done if cancer has come back within the pelvis (the lowest part of your tummy, between your hips). This procedure removes the cervix, uterus, and ovaries.

5. Radical trachelectomy: It is a surgery to remove the cervix, nearby tissue and lymph nodes, and the upper part of the vagina. It can be used to treat women with early-stage cervical cancer to preserve their fertility. After the cervix is removed, the uterus is attached to the remaining part of the vagina.

6. Bilateral salpingo-oophorectomy: This is a surgical procedure to remove both the ovaries and fallopian tubes. It is done at the same time as a hysterectomy.

B. Radiation therapy

Uses high-energy x-rays or other particles to destroy cancer cells. Radiation therapy may be given alone, before surgery, or instead of surgery to shrink the tumor. The types of radiation therapy include:

External-beam radiation therapy: The most common type of radiation in which the radiation is given from a machine outside the body.

Internal-beam radiation therapy: When radiation treatment is given using implants, it is called internal radiation therapy or brachytherapy. Brachytherapy involves the application of a radioactive source in close proximity to the tumor.

Note: For the early stages of cervical cancer, a combination of radiation therapy and low-dose weekly chemotherapy is often used. This is done to increase the effectiveness of the radiation treatment.

C. Chemotherapy

Chemotherapy is the use of drugs to destroy cancer cells, usually by keeping the cancer cells from growing, dividing, and multiplying of cells.

For people with cervical cancer, chemotherapy is often given in combination with radiation therapy (concurrent chemoradiation). The chemo helps the radiation work better. Options for concurrent chemoradiation include:

Cisplatin: This drug is given weekly during radiation. This drug is given into a vein (IV) before the radiation appointment.

Cisplatin with 5-fluorouracil (5-FU): This combination is given every 3 weeks during radiation.

The chemo drugs most often used to treat cervical cancer that has come back or metastasized include:

Cisplatin

Carboplatin

Paclitaxel

Topotecan

D. Targeted therapy

In this treatment, specific genes, proteins, or the tissue environment that contributes to cancer growth and survival are targeted. This type of treatment blocks the growth and spread of cancer cells and limits damage to healthy cells.

For recurrent or metastasized cervical cancer, platinum-based chemotherapy combined with the targeted therapy is used. Targeted therapy uses the following:

Bevacizumab

Bevacizumab-awwb

Bevacizumab-bvzr

Tisotumab vedotin

E. Immunotherapy

This therapy uses the body's natural defenses to fight cancer by improving your immune system’s ability to attack cancer cells.

The immune checkpoint inhibitor pembrolizumab is used to treat cervical cancer that has recurred or metastasized during or after treatment with chemotherapy. It may also be used with chemotherapy with or without bevacizumab in people with recurrent or metastatic cervical cancer.

Did you know?

Every 8 minutes, 1 woman dies of cervical cancer in India. Read about things you must know about cervical cancer.

Click Here!

Home-care For Cervical Cancer

The news of cervical cancer can be devastating. Cancer not only affects the body but has a serious effect on the mind as well. Some of the things that the patients can do at home that can help manage the symptoms of treatment include:

Taking enough rest post any surgical procedure

Being physically active

Quitting smoking

Getting emotional support from loved ones

Following all the instructions given by doctors

Eating a well balanced and nutritious diet

Adding nutritional supplements to the diet

Taking to a counselor

Adopting a healthy behavior

Avoiding sex for 6-8 weeks after hysterectomy

Tips for caregiver

There are numerous resources available for the patient and their family, battling with cervical cancer. Tips that the caregivers can follow to help the patient in the difficult times include:

Encouraging and providing mental support to the patient

Understanding the course of treatment

Helping the patient manage their symptoms and side effects

Coordinating their medical appointments and giving medications on time

Assisting the patient in maintaining personal care and hygiene

Talking with empathy and positive attitude to the patient

Helping the patients with household chores

Handling insurance and billing issues for them

Cervical cancer diagnosis can lead to chronic stress. With so much to take care of, one often finds it hard to cope with situations that are beyond control. Read about effective ways to manage chronic stress.

Tap Now!

Complications Of Cervical Cancer

Cervical cancer complications are seen in advanced disease and associated treatments and are similar to other cancers. They may include:

Renal failure: Kidney involvement typically occurs in the more advanced stages of cervical cancer. Kidney failure in cervical cancer can often be associated with blockage of the ureters.

Hydronephrosis: It is the swelling of a kidney due to a build-up of urine. It represents an advanced disease in patients with cervical cancer as it indicates the involvement of the parametria.

Pain: It is seen when cancer progresses and spreads to nearby tissues and organs. The patient may experience pain in the pelvis or have issues urinating.

Lymphedema: It refers to tissue swelling caused by an accumulation of protein-rich fluid that's usually drained through the body's lymphatic system. Lymphedema is usually seen as a result of treatment involving pelvic radiotherapy or lymph node removal.

Blood clots: Like any other cancer, cervical cancer can make the blood thicker leading to the formation of blood clots. Large cervical tumors can also put pressure on the veins in the leg, helping clots to form.

Fistulas: A fistula is an abnormal connection between two body parts, such as an organ or blood vessel and another structure. Vaginal fistulas are the most common type of fistula in patients with cervical carcinoma

Orbital apex syndrome (OAS) and blindness: OAS involves damage and dysfunction of the optic nerves. This occurs in rare cases where cancer spreads to the eye. It is seen in the malignant mixed Mullerian tumor which is a rare uterine and cervical carcinoma and accounts for <5% of uterine cancers.

The COVID-19 pandemic has led to a substantial reduction in preventive healthcare, including HPV vaccinations and cervical cancer screenings, which can lead to complications and an increased number of cervical cancer cases.

Read about COVID!

Alternative Therapies For Cervical Cancer

When considering alternative and complementary treatments for cervical cancer, it is very important to communicate with your medical teams as some of the alternative therapies may be contraindicated from the treatment plan. Alternative approaches, used by patients include:

Naturotherapy

Advocating a holistic approach to using plant-derived nutritional chemicals in the treatment of cervical cancer can be very beneficial. Naturotherapy may not replace the conventional treatment regimen, but it may enhance the efficacy of chemotherapy and radiotherapy. Some of the natural herbs include:

Curcumin or turmeric (haldi)

Ginger root (adrak ki jadh)

Holy basil (tulsi)

Green tea

Grapes

Broccoli

Banana

Cabbage

Homeopathy

Homeopathy claims to stimulate healing responses to diseases by administering substances that mimic the symptoms of those diseases in healthy people. As far as therapeutic medication is concerned, several well-proved remedies are available for cervical cancer symptoms treatment which include:

Iodum

Kreosotum

Natrum carb

Carbo animalis

Thuja

Calcarea flour

Hydrocotyle

Sabina

Calcarea carb

Kali iodide

Sulphuric acid

Conium

Hydrastis

Sanguinaria

Phosphorous

Lachesis

Acupuncture

One of the most distressing and intractable conditions in patients with cancer is pain. It has been reported that about 20% to 30% of cancer patients bear a variety of levels of pain.

Acupuncture is recommended for patients to control cancer pain. Previous studies have reported that it not only has beneficial efficacy for cancer pain management but also almost has no adverse events for patients with cancer pain. However, more research is required to specifically explore the effectiveness of acupuncture at pain acupoints for cervical cancer pain.

Living With Cervical Cancer

Cancer and its treatment not only causes physical symptoms and side effects, it also has emotional, social, and financial effects. Managing all of these effects is how patients and their families can survive this hardship. For some women, cancer may never go away completely. And they may get regular treatments. Learning to live with cancer that does not go away can be difficult and very stressful. Here are a few tips to manage it:

Give importance to palliative care

Palliative care focuses on improving how you feel during treatment by managing symptoms and supporting patients and their families with other, non-medical needs. Palliative care along with treatment for cancer has shown greater results with less severe symptoms, a better quality of life, and more satisfaction with treatment. Palliative treatments vary widely and often include:

Medication to relieve the symptoms

Nutritional changes

Relaxation techniques

Emotional and spiritual support

Encouraging the patient to do things they love

Follow-up regularly

For some women with cervical cancer, treatment may remove or destroy cancer, but the patient is always under the fear that cancer might come back. It's important to let your doctor know about any new symptoms or problems because they could be caused by cancer coming back or by a new disease or second cancer.

Most doctors recommend that women treated for cervical cancer keep getting regular pap tests no matter how they were treated (surgery or radiation). Survivors of cervical cancer should be vigilant for early detection of any other cancer, such as breast, lung, and colorectal cancer. Imaging tests may be done if the signs or symptoms of cancer come back.

Manage the physical symptoms of advanced cancer

Advanced cervical cancer means cancer that has spread to other areas of your body such as the liver or lungs. Unfortunately, advanced cancer can't usually be cured. But treatment can often control cancer and relieve symptoms. Things to keep in mind include:

Talk to the doctors and healthcare team regularly

Inform the doctor about new side effects or changes in existing side effects

Inform the healthcare team about the new symptoms so that they can potentially keep them from worsening

Get treatment for long-term symptoms

Coping with tiredness

Walking may improve quality of life for people with advanced cancer. The American Cancer Society recommends brisk walking for at least 150 minutes or any vigorous-intensity activity for 75 minutes for every adult each week to stay healthy. Read how wailing can help you if you have cancer.

Click Now!

Focus on emotional and mental wellbeing

Lots of information and support is available for family and friends of patients with cervical cancer. Some people find it helpful to find out more about their cancer and the treatments they might have. Fear and anxiety can be managed.

Talking about advanced cancer

Sharing feelings with close family members and friends

Getting all the information needed to go about with the treatment

Understanding the physical limitations

Managing the sexual relationship by talking to the partner

Coping with practical issues like financial expenses, child care and work issues

Supervise the cost of cancer care

Cancer treatment can be expensive and coping financially can become a source of stress and anxiety for patients and their families. In addition to treatment costs, there might be extra unplanned expenses as well. This can stop many patients from continuing the treatment. This can be managed by asking the social worker about benefits or grants, they can also help with the claiming process.

Frequently Asked Questions

How common is cervical cancer in India?

What changes are seen in the body if one has cervical cancer?

What is cervical cancer pain like?

Can one feel cervical cancer with the finger?

Is cervical cancer usually curable?

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Whooping cough

Also known as Pertussis and 100 day cough

Overview

Whooping cough is an extremely contagious respiratory infection caused by the bacteria Bordetella pertussis. It is also called pertussis which literally means “a violent cough”. The disease is characterized by the “whooping” sound that an individual makes when gasping for air after a fit of persistent cough.

The disease can affect people of all ages, however the severity of the symptoms depends on various factors, including the patient's age, strength of the immune response, and extent of spread of bacteria.

The disease usually starts with cold-like symptoms including a runny nose, mild cough or fever. Within two weeks, a dry and persistent cough may develop which can cause difficulty in breathing. In infants, the cough can be minimal or absent. They may develop a serious symptom called apnea which is a pause in the breathing pattern.

Vaccination can effectively prevent whooping cough and is recommended for all ages. Whooping cough (pertussis) vaccine is given as a combination vaccine with the vaccines for diphtheria and tetanus.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Lungs

Prevalence

Worldwide: 20-40 million (2017)

Mimicking Conditions

Viral upper respiratory infection

Bronchiolitis

Pneumonia

Tuberculosis

Necessary health tests/imaging

Total leucocyte count

Differential leucocyte count

Nose or throat culture and test

Chest X ray

Treatment

Antibiotics: Azithromycin, Clarithromycin & Erythromycin

See All

Causes Of Whooping Cough

Whooping cough is a bacterial infection caused by Bordetella pertussis & hence, also known as “pertussis”. It is a highly infectious disease that can be transmitted from one person to another through close contact.

If a person suffering from whooping cough sneezes or coughs, the bacteria laden droplets get sprayed into the air, which when inhaled by a healthy person can enter their body. Once inside the body, the bacteria attaches to cilia (hair like extensions) that are present in the upper respiratory system. Post attachment, the bacteria releases toxins which damages the cilia and causes the airway to swell and discomfort in breathing.

On an average, infected people are most contagious for upto 2 weeks after the cough begins. As per the World Health Organization (WHO), there are about 20-40 million cases of whooping cough globally. Of the total cases, 95% have been found to be diagnosed in developing countries.

High incidence rates have been observed in young children due to low vaccination coverage. Coughing adults and adolescents are the major reservoir of B. pertussis and are the usual sources of infection in infants and children.

Symptoms Of Whooping Cough

The incubation period (the time period between exposure to an infection and the appearance of the first symptoms of the disease) is 7-14 days.

The symptoms can be divided into three stages:

The catarrhal phase

The paroxysmal stage

The convalescent phase

1. The catarrhal phase

This is the most infectious period and lasts for 1-2 weeks.

The initial symptoms of whooping cough are mild and are similar to common cold which includes:

Mild cough

Nasal congestion

Sneezing

Runny nose

Low fever (below 102 degrees F)

The cough becomes more severe and frequent as the disease progresses. Though the cough may not be typically paroxysmal (sudden outbursts) in early stages, it tends to be annoying and more frequent at night.

2. Paroxysmal stage

This stage is characterized by paroxysms -- episodes of sudden outburst or bouts of cough. A thick layer of mucus accumulates inside the airways and causes uncontrollable coughing. Cough is marked by high pitched and long rasping indrawn breath at the end. This phase lasts for approximately 2-6 weeks.

Prolonged and severe coughing may lead to:

Vomiting

Extreme fatigue

Red or blue face

High-pitched “whoop” sound with the subsequent breath of air

Not every whooping cough patient develops the characteristic “whoop” sound. In this case, persistent cough is considered a symptom for the disease. Intense coughing often results in loss of bladder control, heaviness in the head, headaches, vomiting, and exhaustion. Sudden but common triggers for the uncontrollable cough include yawning, stretching, laughing, yelling, or exercise. It may also occur more frequently at night.

The longer it takes to treat the disease, the more frequent cough episodes may be experienced. Infants with whooping cough may not be able to cough and instead may find it very difficult to breathe.

3. Convalescent phase

The intensity and paroxysms of cough decrease gradually over 1-4 weeks. The vomiting becomes less frequent. Appetite, general condition and overall health usually improves.

Did you know?

Whooping cough is also known as 100 day cough. This is because coughing fits due to the infection can last for up to 10 weeks or more. So do not ignore the symptom and get tested by consulting the right doctor.

Consult Now!

Risk Factors For Whooping Cough

Whooping cough infection can be caused at any time of the year but cases surge during summers. Certain people are at a higher risk of getting the infection and some factors can increase their susceptibility towards the disease, which includes:

1. Lack of immunization or vaccination

According to the American Lung Association, anyone who is not yet vaccinated is at a major risk for getting the infection. However, pregnant women and infants may experience severities discussed below:

Pregnancy: Pregnant women approaching the end of their pregnancy should take extra care to stay away from people who might be infected. Unvaccinated women and their babies are at a higher risk of getting the infection.

Babies and infants: Babies are unable to build their own immunity until they are vaccinated when they are two months old. Infants under a year who have not been vaccinated. If an infant gets infected, they may have to be rushed to the hospital for special treatment and care.

2. Close contact with an infected person

If anyone in your family or community has been in close proximity with an infected person, used or shared common objects, there is a high risk of getting the infection.

3. Adults with asthma

Studies suggest that adults with asthma are at an increased risk of contracting whooping cough. Adults with asthma may develop severe symptoms if they contract the infection. Also, whooping cough in infancy or childhood increases the risk of developing asthma later in life. Therefore, it is highly recommended to stay up to date with the vaccination status to stay safe.

Did you know?

A pregnant woman can pass some whooping cough antibodies to the baby by breastfeeding. Understand about common things to know while breastfeeding.

Click To Read!

Diagnosis Of Whooping Cough

Whooping cough causes symptoms that are clearly evident but an early diagnosis could be difficult because the symptoms resemble those of a common cold or common respiratory illness. If your symptoms worsen, and the cough persists (longer than 7-10 days) you must visit your doctor.

Often the doctor may ask you questions about the type of cough or symptoms you experience. Based on those answers, your doctor may recommend some medical tests to confirm the presence of the disease such as:

1. Total leucocyte count

A blood test is a general and not a specific test for whooping cough diagnosis. A blood test will help determine the presence of an infection or inflammation. A blood sample will be drawn and sent to the laboratory to check for white blood cell count. White blood cells (WBCs) are a component of blood that accounts for 1% of your blood. They are responsible for protecting your body from infections and therefore an increase in the number of WBCs will be indicative of an infection or inflammation.

2. Differential leucocyte count (DLC)

Differential leucocyte count (DLC) detects the percentage of each type of white blood cell present in blood.

3. Nose or throat culture test

A culture test is performed by swabbing the nasopharynx (the area where the nose and throat meet). A culture test is performed to check for the presence of the whooping cough bacteria. Your doctor may recommend performing a laboratory test to check for the presence of the bacteria using the sample.

4. Polymerase chain reaction test

Polymerase chain reaction test is a highly sensitive rapid laboratory test that can help determine the presence of the bacteria in a biopsy specimen.

5. Chest X-ray

A chest X-ray helps to produce images of the heart, lungs, airways, blood vessels and the bones of the chest and spine. It is a common and usually one of the first imaging tests recommended by a doctor when they suspect a heart or lung disease. A chest X- ray will help confirm the presence of an inflammation or fluid in the lungs which can occur during the disease.

Celebs affected

Jenny McCarthy

She is an American actress, model, activist, television personality, and author who was diagnosed with whooping cough.

Prevention Of Whooping Cough

Whooping cough can be prevented by getting vaccinated and staying up-to-date with the immunization. Alongside one must practice certain preventive measures to prevent the disease. They are:

Vaccine and immunization

Vaccination is the best way to prevent whooping cough across age groups including babies, children, teens, pregnant women, and adults. Tdap (tetanus-diphtheria-acellular pertussis) and DTaP (diphtheria-tetanus-acellular pertussis) vaccines are the two globally available vaccines which helps to prevent whooping cough. Both these vaccines are effective against diphtheria, tetanus and pertussis.

Types of vaccines available

Broadly, two types of whooping cough vaccines are available:

Whole cell (wP/DTwP)

Acellular (aP/DTaP)

Since 1978, India has been employing the whole cell (wP/DTwP) vaccine in their national immunization programs. Whereas, the acellular ones are mainly prescribed by the private sector.

The American Lung Association recommends the following form of the whooping cough vaccine for the respective age groups:

1. DTaP for young children

2,4 and 6 months

15 through 18 months

4 through 6 years of age

2. Tdap for preteens

11 through 12 years

3. Tdap for pregnant women

During the 27-36th week of each pregnancy

4. Tdap for adults

Including adults with asthma

Anytime for those who have never been vaccinated

Chemoprophylaxis

It refers to the use of drugs to prevent disease. Erythromycin is recommended for close family contacts of patients suffering from whooping cough, especially children <2 years old.

Additional preventive measures

Here are some additional preventive measures that can help to prevent the spread of whooping cough.

1. Self-isolation of suspected individuals

Suspected cases should self-isolate to avoid the spread of the infection to adults and young children.

2. Staying up-to-date with your vaccination status

Vaccination is the key to prevent the disease. You may require booster doses to ensure the immunity is maintained. Booster doses are recommended for all adults 19-65 years and adults in contact with babies less than 12 months old.

3. Practicing good personal hygiene

Whooping cough is a contagious disease therefore make sure you maintain good hygiene by washing your hands with soap and water at regular intervals. Especially, if you come in contact with an infected person, make sure to cover your mouth and face with your hand.

Practicing personal hygiene is extremely important. Someone who gives importance to self-hygiene not only feels comfortable in his/her skin but also prevents transmission of diseases to others.

Learn more about 5 simple ways of maintaining hygiene at your workplace.

Tap To Read!

Specialist To Visit

Symptoms of whooping cough mimic common cold and therefore diagnosis can often be difficult. However, persistent and prolonged cough can cause:

Vomiting after coughing

Turn your face or lips red, purple or blue

Difficulty in breathing

Whooping sound after the cough

Sluggishness

If symptoms of whooping cough do not resolve, and get worse you must book an appointment with your doctor to confirm the presence of the disease.

To manage and treat the disease, you can consult the following specialists:

General physician

Pediatrician (in case of children)

Infectious disease specialist

Pulmonologist or a lung specialist

If your cough fails to subside or if you have any other symptoms along with cough, it is wise to book a consultation with our doctors.

Consult Now!

Treatment Of Whooping Cough

Whooping cough is a bacterial infection and therefore can be treated with antibiotics. If the treatment of whooping cough is initiated at an early stage, it becomes easy to manage the severity of the symptoms. If your doctor confirms the presence of the infection, you will be recommended to start antibiotics right away.

Medication

Commonly recommended antibiotics include:

Azithromycin

Clarithromycin

Erythromycin

If an infant gets the infection, there is a higher chance of complication and risk. In most cases, infants may even need hospitalization. In a complicated and severe case, the patient may require intravenous fluids to replace the lost liquid levels.

Supportive measures

General measures include providing adequate nutrition and hydration and avoiding factors aggravating cough. Nebulization with salbutamol is effective in reducing bronchospasm (tightening of the muscles that line the airways or bronchi in the lungs) and controlling bouts of cough. If nebulization is not possible, salbutamol may be given orally.

Home-care For Whooping Cough

Common symptoms of whooping cough include cough, runny nose, fever and nasal congestion. Some home care tips and tricks for whooping cough include:

Do not give your child over the counter cough medications, unless prescribed by the doctor.

Avoid contact with anyone in the household or outside till the time you don't recover completely from the infection. This will help prevent the spread.

Flu-like symptoms can best be resolved with medications prescribed by the doctor and getting plenty of rest. Make sure you relax and take rest till the time your symptoms don't resolve completely.

Keep your surroundings free from triggers such as smoke, dust and chemical fumes to avoid coughing and sneezing.

Practice good hand hygiene by washing hands frequently and properly using soap.

Drink plenty of fluids in the form of juices, water and soups to stay hydrated and avoid loss of water. Especially for children, be watchful for symptoms such as dry lips, lack of tears while crying and infrequent urination.

Use of cool mist vaporizer that could help to loosen the mucus and soothe the lungs

Eat small meals in short intervals. This will help to digest the food and avoid chances of vomiting.

Avoid close contact with others by keeping your mouth covered with a mask.

Complications Of Whooping Cough

Whooping cough, if left untreated, can cause serious complications in different age groups, especially babies and young children. They are at a higher risk for complications because of not being vaccinated and protected.

Infants: Complications of whooping cough

According to the Centers for Disease Prevention and Control (CDC), about half of the babies younger than 1 year old who get the whooping cough infection do need hospitalization. Of those babies who are treated in the hospital with whooping cough:

1 out of 4 (23%) get pneumonia (lung infection)

1 out of 100 (1.1%) will have convulsions (violent, uncontrolled shaking)

3 out of 5 (61%) will have apnea (slowed or stopped breathing)

1 out of 300 (0.3%) will have encephalopathy (disease of the brain)

1 out of 100 (1%) will die

Teens and adults: Complications of whooping cough

Teens and adults who are vaccinated tend to face less complications compared to those not vaccinated at all. Some of the commonly reported complications of whooping cough include:

Pneumonia: Lung health can be compromised and lead to pneumonia if whooping cough gets severe. Pneumonia can lead to acute respiratory distress and cause a medical emergency sometimes.

Seizures: It is a sudden, uncontrolled electrical disturbance in the brain that causes changes in your behavior, movements or feelings, and in levels of consciousness.

Encephalopathy: It is a group of brain disorders that can be harmful if left untreated.

Hernia: It is a condition when an area of an organ or tissue pushes through a weakened layer of muscle, usually in your groin or abdomen. Severe whooping cough can often lead to a hernia due to persistent and prolonged coughing.

Damaged or collapsed lungs: Persistent coughing can cause pressure on the lungs and therefore can lead to collapsed lungs.

Tuberculosis: It can lead to flare ups of tuberculosis infection.

Malnutrition: This could be due to persistent vomiting and avoiding eating because of fear of cough.

Living With Whooping Cough

Whooping cough is a bacterial disease and it can be cured with medications such as antibiotics. However, in some cases it can get severe and cause complications.

Here are some tips to prevent and manage whooping cough effectively:

Stay up-to-date with your vaccination status: Vaccines for bacterial diseases such as whooping cough require booster doses after an interval of time. The immunity developed due to the dose tends to drop over the time. Therefore, make sure you get your booster dose as and when scheduled for.

Get plenty of rest: Make sure you relax and take rest till the time your symptoms don't resolve completely. In case of complications, follow up with your doctor on a regular basis.

Keep your surroundings free from triggers: Common triggers for cough include smoke, dust and chemical fumes. Make sure to keep your living surroundings clean and tidy.

Practice good hygiene: Wash your hands frequently using soap to eliminate chances of a reinfection or spread of the disease.

Keep yourself hydrated: Often bacterial infections can cause loss of fluids in the body. Drink plenty of fluids in the form of juices, water and soups to stay hydrated and avoid loss of water.

Use mist vaporizers: If you experience discomfort due to the bacterial infection, use vaporizers that can help to loosen the mucus and soothe the lungs.

Eat small meals in short intervals: A bacterial infection can often cause difficulty in digesting food. It is recommended to consume small meals that are easy to digest in short intervals. Stay away from large meals.

Avoid cough medications for children: It is highly recommended to avoid cough medications if your child is infected with the disease. They fail to clear the airway when used for children.

Watch for signs of dehydration: Children with whooping cough may get dehydrated. Be watchful for signs of dehydration such as dry lips, and decreased frequency of urination.

In case of severity of infection, make sure to follow up with your doctor. Taking proper medications under the advice of your doctor will help manage the disease.

Frequently Asked Questions

What is the most common cause of whooping cough?

Who is at most risk of whooping cough?

Should you stay home if you have a whooping cough?

Can whooping cough be spread by kissing?

How long does whooping cough vaccine take to kick in?

How long is whooping cough contagious?

What precautions does whooping cough require?

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Wilson's disease

Also known as Hepatolenticular degeneration, Lenticular degeneration, Cerebral pseudosclerosis Kinnier Wilson disease, Westphal's pseudosclerosis and Westphal-Strumpell syndrome

Overview

Wilson's disease is a rare inherited disorder that is characterized by the accumulation of copper in the body. It is caused by mutations in the ATP7B gene which encodes a protein that plays an important role in the transport of copper from the liver to the rest of the body. It also helps remove excess copper from the body.

Although the accumulation of copper begins at birth, symptoms of the disorder do not appear until later in life, between the ages of 6 and 40. Liver disease is the most common manifestation of Wilson’s disease. Involvement of the nervous system or psychiatric changes result in symptoms like tremor, muscle stiffness, drooling, difficulty with speech, physical coordination, abrupt personality change, inexplicable deterioration at school or other work, neurosis, and psychosis.

For diagnosis, healthcare professionals typically look at a person’s medical history, symptoms, physical exam, characteristic features like Kayser-Fleischer ring(a deep copper-colored ring around the edge of the cornea that represents copper deposits in the eye) and laboratory tests.

Prognosis for patients with Wilson disease is usually good, unless disease is advanced before treatment begins. Affected people require lifelong treatment, which may include certain medications and dietary modifications. If treatment is begun early enough, symptomatic recovery is usually complete, and a life of normal length and quality can be expected.

Key Facts

Usually seen in

Age group 6-45 years

Gender affected

Both men and women more common in women

Body part(s) involved

Liver

Brain

Other vital organs

Mimicking Conditions

Congenital glycosylation disorders

Brain iron accumulation syndromes

Manganese transport defects

MDR3 deficiency

Drug-induced hepatitis

Necessary health tests/imaging

Physical examination

Eye examination (Kayser-Fleischer rings, sunflower cataract)

Blood tests: Liver biochemistry(Alanine transaminase (ALT) & Aspartate transaminase (AST) levels), Ceruloplasmin & Copper levels

Urine tests

Imaging tests: Magnetic resonance imaging (MRI), Computed tomography (CT) & Liver biopsy

Genetic testing

Treatment

Chelating therapy: Penicillamine & Trientine hydrochloride

To maintain normal levels of copper: Ammonium tetrathiomolybdate & Zinc acetate

Liver transplantation

Specialists to consult

Hepatologists

Gastroenterologists

Symptoms Of Wilson’s Disease

Wilson's disease is present at birth, but signs and symptoms don't appear until the copper builds up in the brain, liver, or another organ. A few signs and symptoms depend on the parts of the body affected by the disease. These include

Liver symptoms

In Wilson's disease, the majority of patient’s present with hepatic symptoms at diagnosis, and almost all have signs of liver damage over the course of the disease.

In some cases, people develop these symptoms when they have acute liver failure. These symptoms may include:

Nausea and vomiting

Poor appetite

Darkened color of urine

Yellowish tint to the whites of the eyes and skin, called jaundice

Pain in the upper part of the abdomen

In some people the symptoms of the disease develop in case of chronic liver disease and complications from cirrhosis. The clinical features of cirrhosis include spider naevi, splenomegaly, portal hypertension, and ascites.

It has been recommended that all young patients with unexplained chronic liver disease, with or without cirrhosis, should be screened for Wilson’s disease if the following symptoms are visible in them:

Swelling of the lower legs, ankles, or feet, called edema

Itchy skin

Jaundice

Feeling tired

Neurological and neuropsychiatric symptoms

Neurological and neuropsychiatric signs are present in 40–50% of patients with Wilson’s disease. A few signs may appear before the characteristic neurological features, including changes in behavior, deterioration of school work, or an inability to carry out activities that need good hand-eye coordination. Common neurological symptoms may include:

Tremors (unintentional and uncontrollable rhythmic movement of one part or one limb of your body)

Lack of motor coordination

Drooling of saliva

Slurred or slow speech

Dystonia (contraction of muscles involuntarily, causing repetitive or twisting movements)

Headaches

Insomnia

Seizures

Mood disturbances

Along with behavioral changes, other psychiatric manifestations include

Depression

Anxiety

Hallucinations and delusions

Suicidal tendencies

Psychosis

It is a severe mental disorder in which thought and emotions are impaired and contact is lost with external reality. Psychosis is majorly seen in patients with a neurological Wilson’s disease manifestation.

Eye symptoms

The main ophthalmic findings of Wilson’s disease include:

K-F (Kayser-Fleischer rings) - usually greenish, gold, or brownish rings around the edge of the corneas

Sunflower cataracts - brilliantly multicolored and are visible only by slit-lamp examination)

Other less common symptoms include

Night blindness

Exotropic strabismus - a form of eye misalignment in which one or both of the eyes turn outward

Optic neuritis - characterized by inflammation of the optic nerve, which carries visual information from the eye to the brain. This inflammation usually causes temporary vision loss.

Optic disc pallor - refers to an abnormal pale yellow coloration of the optic disc

Other changes

Pathological changes of bone have been recorded to account for osteomalacia, osteoporosis, spontaneous fractures, adult rickets, and osteoarthritis.

Copper accumulation in heart tissues can cause cardiomyopathy and arrhythmias.

Other rare manifestations include hypoparathyroidism, infertility, repeated miscarriages, and kidney abnormalities.

Causes Of Wilson’s Disease

Wilson's disease is caused by changes (mutations) in the ATP7B gene. This gene encodes a protein that plays an important role in the transport of copper from the liver to the rest of the body. Mutations in the ATP7B gene prevent this protein from working properly, which can lead to an accumulation of copper in the body.

The ATP7B mutations that cause Wilson's disease are inherited, ie. they are passed from parent to child. These mutations are autosomal recessive, meaning that a person must inherit two ATP7B genes with mutations, one from each parent, to have Wilson disease.

People who have one ATP7B gene without a mutation and one ATP7B gene with a mutation do not have Wilson disease, but they are carriers of the disease.

Risk Factors For Wilson's Disease

The risk of Wilson’s disease is genetic ie. it is inherited and the risk increases if your parents or siblings have the condition. A genetic test can be performed if a child shows symptoms of Wilson’s and has one or both parents who have the disease.

Diagnosis Of Wilson’s Disease

There is no one test for the diagnosis of Wilson’s disease. The diagnostic challenge is that the symptoms are often nonspecific and the disease affects many different organ systems, which results in confusion with other disorders. Many symptoms may evolve over time rather than appear all at once.

In a few cases, the diagnosis is easy to establish in individuals with neurological symptoms, K-F rings, and a low ceruloplasmin concentration. Doctors diagnose Wilson's disease based on your medical and family history, a physical exam, an eye exam, and tests.

Medical history

A doctor will ask about the family and personal medical history of Wilson's disease and other conditions that could be causing the symptoms.

Physical exam

During a physical exam, the doctor will look for physical signs related to Wilson’s disease.

Eye examination

Using a microscope with a high-intensity light source (slit lamp), an ophthalmologist checks the eye for Kayser-Fleischer rings, which are caused by excess copper in the eyes. Wilson's disease also is associated with a sunflower cataract, that can be seen on an eye exam.

Blood tests

The doctor may order one or more blood tests, including tests that check amounts of:

Liver biochemistry: People with Wilson's disease may have abnormal alanine transaminase (ALT) and aspartate transaminase (AST) levels.

Ceruloplasmin: This protein is the major carrier of copper in the blood circulation carrying six copper atoms per molecule of ceruloplasmin. A ceruloplasmin concentration of less than 0·2 g/L (normal laboratory range 0·2 to 0·5 g/L), is regarded to be consistent with Wilson’s disease.

Infants should not be tested until after age 1 year because ceruloplasmin levels are low during the first few months of life. Children < 6 years with normal test results should be retested 5 to 10 years later.

Copper levels: The normal copper content of the liver is less than 55 μg/g. The hepatic copper content ⩾of 250 μg/g dry weight is considered the hallmark of Wilson’s disease. It is the method of choice for confirming the diagnosis of the disease. Hepatic copper concentration should be obtained in cases where the diagnosis is not straightforward and in younger patients.

Urinary excretion of copper

A 24-hour urinary copper excretion is increased in Wilson’s disease, which reflects the amount of serum-free copper in circulation.

In people symptomatic of Wilson’s disease, a urinary copper excretion in a 24-hour period of >1.6 μmol (>100 μg/24 h) is considered diagnostic of the disease.

The reference limits for normal 24-h excretion of copper vary between laboratories, with many taking 40 μg per 24 h (0·6 μmol/24 h) as the upper limit of normal.

Liver biopsy

Liver biopsy is an important tool for the evaluation of patients with the hepatic disease if the results of blood and urine tests don’t confirm or rule out a diagnosis of Wilson disease. During a liver biopsy, the doctor evaluates small pieces of tissue from your liver. A pathologist will examine the tissue under a microscope to look for features of specific liver diseases, such as Wilson's disease, and check for liver damage and cirrhosis.

Genetic testing

All first-degree relatives of a patient with newly diagnosed Wilson’s disease must be screened for Wilson’s disease. Molecular genetic analysis can be useful for families where both mutations have been identified in the index patient, enabling molecular analysis for the same mutation in the family members.

Imaging tests

Neurologic evaluation and radiologic imaging of the brain, should be considered prior to treatment in all patients with neurologic Wilson’s disease and should be part of the evaluation of any patient presenting with neurological symptoms:

Magnetic resonance imaging (MRI): MRI is a non-invasive imaging technology that produces three dimensional detailed anatomical images. MRI of the brain appears to be more sensitive than CT (Computed Tomography) scanning in detecting early lesions of Wilson disease.

Computed tomography (CT): A CT scan of the head is an imaging scan that uses X-rays to develop a 3D image of the skull, brain, and other related areas of the head.

Prevention Of Wilson’s Disease

Wilson’s disease is a genetic disorder. People with a family history of Wilson’s disease should always go for genetic counseling as a part of pregnancy planning. Genetic counseling is a way to estimate personal genetic risk information and translate it into practical information for families. Genetic counseling helps families understand information about genetic disorders and explain the patterns of inheritance. Therefore, people will get a better insight into the future.

Specialist To Visit

A general practitioner can evaluate the symptoms, and start the treatment. They can further refer to other doctors for assessment depending upon the organ affected.

Hepatologists: They specialize in the diagnosis and treatment of diseases related to the liver, the biliary duct, the gallbladder, and the pancreas.

Gastroenterologists: They specialize in the digestive system and its disorders.

If you are facing any health issue, consult our healthcare professionals.

Consult Now!

Treatment Of Wilson’s Disease

Successful treatment of Wilson’s disease depends upon timing more than medication. Treatment often happens in stages and should last a lifetime. If a person stops taking the required medications, copper can build back up again. Compliance is a problem for patients because they find it difficult to take life-long treatment when they feel healthy. The various treatment modalities are discussed in detail:

Chelating therapy

The first treatment is to remove excess copper from the body through chelation. Penicillamine and trientine are chelating agents used to treat Wilson's disease. These medicines work by binding excess copper in body tissues, carrying it to the kidneys where it is finally removed via urine.

Penicillamine: Penicillamine is the most commonly used chelating medication but while taking this medication, it is advisable to have regular monitoring of full blood count and urinary protein because of possible adverse effects. The early side effects in the first 1–3 weeks include sensitivity reactions with fever, rash, swelling of lymph nodes, thrombocytopenia, and increased levels of protein in urine. These side effects of penicillamine can be severe, requiring discontinuation in many patients.

Trientine hydrochloride: It is regarded as an accepted alternative to penicillamine for the initial treatment of Wilson’s disease. Trientine has few side effects and although they are similar to penicillamine, the frequency is much lower.

To maintain normal levels of copper after removal

The second stage is to maintain normal levels of copper after removal. The doctor may prescribe zinc or ammonium tetrathiomolybdate as it prevents the intestines from absorbing copper.

Ammonium tetrathiomolybdate: this medication forms a complex with copper and protein. When it is taken with meals, the drug forms complexes with copper in the food and that is secreted into the intestine, thus preventing absorption.

Zinc acetate: Zinc was first used in the 1960s to treat Wilson’s disease. Its mode of action is through inhibition of copper absorption in the intestine. Zinc monotherapy appears to be effective and safe in neurologic Wilson’s disease and consequently may have a role as first-line therapy in this setting.

NOTE: Penicillamine or trientine must not be taken at the same time as zinc because either drug can bind with zinc, forming a compound with no therapeutic effect.

Long-term maintenance therapy

After the symptoms improve and the copper levels are normal, doctors usually focus on long-term maintenance therapy. This includes continuing zinc or chelating therapy and regularly monitoring your copper levels. Even avoiding foods having a high level of copper in them such as dried fruits, mushrooms, nuts, chocolate, shellfish, and multivitamin.

Other therapeutic agents

Toxic concentrations of copper in the liver produce oxidant damage to mitochondria with lipid peroxidation, which can be reduced experimentally by vitamin E administration. Vitamin E concentrations may be low in patients with Wilson’s disease.

Liver transplantation

Liver transplantation may be lifesaving for patients with severe Wilson’s disease or severe hepatic insufficiency non responsive to drugs. Liver transplantation is a curative therapy, with neurologic and psychiatric disease stabilizing or improving, and Kayser-Fleischer rings disappearing over time.

Home Care For Wilson’s Disease

Home remedies

Milk thistle: It is a natural remedy that can help reduce the risk of liver failure if a person has Wilson’s disease. This strong antioxidant has been found to help regenerate injured liver cells and halt the development of cirrhosis in those who have inflammatory liver conditions. It may even improve liver function and survival in those who do have cirrhosis.

Turmeric: Turmeric contains a compound called curcumin which has potent antioxidant properties, it also works as a copper chelating agent.

Vitamin E: It can be useful as an adjunctive treatment for those with Wilson’s disease. Oxidative stress has been found to play a critical role in Wilson’s disease and vitamin E may be able to counter this.

Zinc supplements: Zinc salts can hamper the absorption of copper in your digestive tract and help reduce the buildup of copper in the body.

Follow a low copper diet: A low copper diet is an important part of managing this condition. Avoid foods with a high copper content such as mushrooms, chocolate, nuts, dried fruits like prunes, dates, and raisins, soy products, shellfish, and organ meat initially.

Ayurvedic regimen: The ancient science of Ayurveda classifies Wilson’s disease as a liver disease dominated by pitta. Treatment, therefore, focuses on regulating pitta, expelling toxins (ama) from the body, boosting the digestive fire (Agni), and detoxifying and protecting the liver.

Medicines that expel copper: This is the first line of treatment for Wilson’s disease, aimed at controlling the amount of copper that builds up in the body. The medicines that release copper from the organs into your bloodstream.

Living With Wilson’s Disease

Self-care

Self-care is an integral part of daily life. It means you take responsibility for your health and well-being, with support from people involved in your care. Self-care involves things to stay fit, maintain good mental and physical health and effectively deal with other minor ailments.

Low copper diet

Foods with a high concentration of copper generally should be avoided, at least in the first year of treatment when the excess copper is being cleared from the body. These include liver, cashews, black-eyed peas, vegetable juice, shellfish, mushrooms, chocolate and cocoa.

Regular follow-ups with doctors

Poor long-term adherence to drug therapy for Wilson’s disease is common. But, continual, lifelong treatment of Wilson disease is mandatory regardless of whether symptoms are present. Regular follow-up care with an expert in liver disease is highly recommended.

Complications Of Wilson’s Disease

Cirrhosis of liver

Cirrhosis of the liver is one of the potential complications that may develop from Wilson's disease. As the patient's body attempts to clear the buildup of excess copper from the liver, scar tissue is formed in the area, compromising normal liver function.

During the early stages of cirrhosis, patients may be asymptomatic, with symptoms appearing only in the most advanced stages. In the later stages, the symptoms of cirrhosis include jaundice, itchy skin, fatigue, swelling in the legs, and loss of appetite. For patients with Wilson's disease, liver abnormalities can begin as early as six years of age.

Kidney stones

Patients with Wilson's disease have an increased risk of developing kidney stones, which are formed from tiny deposits of the salts and minerals that are normally filtered by the kidneys.

Due to their increased risk for kidney stones, it is recommended that patients with Wilson's disease have an annual x-ray to check for any stones. If small stones are found, these can often be passed with the help of pain relievers, alpha-blockers, and plenty of fluids. Larger stones may require other surgical interventions.

Hemolysis

It is characterized by the abnormal destruction of red blood cells, and it is a potential complication for patients with Wilson's disease. This condition causes patients to feel fatigued, and they may also have an increased heart rate and an enlarged spleen or liver. Patients may feel weak, and they could become dizzy or confused.

Neurological issues

Patients with Wilson's disease may experience a variety of neurological issues. For example, lack of coordination, gait abnormalities, tremors, and slurred speech could occur. Some individuals might experience involuntary muscle movements or twitching, and speech difficulties have been observed.

For some patients, neurological issues could be accompanied by psychological changes such as depression, irritability, mood swings, and changes in personality. Bipolar disorder and episodes of psychosis may develop.

Alternative Therapies For Wilson’s Disease

All Wilson's disease patients need to take some type of medication therapy to remove excess dietary copper every day, for life. In some cases, Wilson’s disease patients may benefit from additional forms of therapy to help control emotional or physical symptoms or regain lost movement or speech.

These other forms of therapy maybe

1. Physical therapy

Physical therapy restores function for individuals who have neuromuscular or skeletal problems like arthritis, osteoporosis, joint and muscle pain, and coordination issues. The physical therapy will include

Exercise and programs to increase muscle function, coordination, balance, and endurance

Training in mobility, gait stability, posture, and positioning

2. Occupational therapy

Occupational therapy assists individuals with adapting to their social and physical environment.

Therapists help improve function through:

Activities that help in maintaining memory, orientation, and cognitive integration

Adaptive techniques or equipment to overcome physical disabilities

Education and training in areas such as dressing, bathing, eating, and grooming

3. Psychiatric Care

People with Wilson’s disease may experience a range of psychological disorders over their lifetimes. Depression is the most common and may happen at a rate that’s more than double that of the general population. The feelings that the person experience are:

Persistent sad, anxious, or empty mood

Feelings of guilt, worthlessness, or helplessness

Thoughts of death or suicide, or suicide attempts

Difficulty sleeping, early-morning awakening, or oversleeping

Difficulty in concentrating, remembering, or making decisions

If any of these are suspected, get in touch with your personal physician or mental health professional for an evaluation.

Frequently Asked Questions

How common is liver transplantation for Wilson's disease?

What age does Wilson's disease affect?

What are the symptoms of Wilson's disease?

What are the various complications of Wilson’s disease?

How does Wilson’s disease affect the eyes?

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Chickenpox

Also called as Varicella

Overview

Chickenpox is a viral infection caused by the varicella zoster virus (VZV, also known as chickenpox virus). It is an extremely contagious disease which mostly affects kids but can occur in adults as well. It is usually a mild and self-limiting disease but can lead to severe health complications in people with low immunity or infants. It is characterised by classic super itchy rashes and flu-like symptoms. Although the symptoms of chickenpox take their own course of time, home remedies and home care treatment options do play a key role in relieving the itching and pain. The treatment of chickenpox is mostly centred around managing the symptoms.

Key Facts

Usually seen in

Children below 10 years of age

Gender affected

Both men & women

Body part(s) involved

Skin

Mimicking Conditions

Insect bites

Impetigo

Drug reactions

Dermatitis herpetiformis

Urticaria

Viral exanthems

Pityriasis lichenoides et varioliformis acuta

Disseminated herpes simplex virus infection

Atypical herpes zoster

Rickettsial disease

Neonatal syphilis

Erythema multiforme

Contact dermatitis

Necessary health tests/imaging

Polymerase chain reaction (PCR)

Varicella zoster IgG test

Varicella zoster IgM test

Treatment

Antipyretics: Paracetamol

Antivirals: Acyclovir, Famciclovir, Ganciclovir, Ribavirin, Valacyclovir

Specialists to consult

Pediatrician (in case of children)

Dermatologist

Infectious Disease Specialist

Internal Medicine Specialist

Symptoms Of Chikenpox

The symptoms caused by chickenpox infection appear 10 to 21 days after exposure to the virus and usually last about 5 to 10 days.The initial symptoms may resemble any other infection. At the beginning of chickenpox, a person may begin to feel unwell, have bodyache and headache, accompanied by loss of appetite. After one or two days these are followed by the appearance of the classic rash of chickenpox. One is contagious to close contacts up to 48 hours before the skin rash starts to occur. The common non rash symptoms of chickenpox are as follows:

Fever is the most common symptom of chickenpox. It usually lasts for 3-5 days and is in the range of 101°–102°F (38.3°–38.8°C).

Fatigue or Malaise which is the general feeling of being unwell

Loss of appetite

Headache

Muscle or joint pain

Flu-like symptoms such as a cough or runny nose

Once the chickenpox rash and blisters appear on the body, they go through the following three phases:

Red or pink-looking bumps (papules) are often first noted on the stomach, chest, back, or face areas, which then spread throughout the body.

The bumps eventually get filled up with fluid, forming blisters (vesicles)that begin to break open and leak.

The blisters develop a crust, scab, and begin to heal.

All the blisters are not formed at the same time. New blisters keep on developing throughout the infectious period. However, they follow the same phases as explained above.

All symptoms are typically mild for young children. Those who have been vaccinated (including children and adults) can also still get an infection, but symptoms will be milder and produce fewer blisters on the body.

However, in severe cases of chickenpox rashes and blisters start spreading throughout the body. In some cases, small lesions may even form on the throat, around the eyes, and in the mucus membranes of the urethra, vagina or anus.

In some cases rashes are accompanied by symptoms of disorientation, dizziness, shortness of breath, a rapid heartbeat, a cough (which worsens), poor muscle coordination, and a stiff neck. These symptoms could indicate another possible medical condition or complication which may require prompt medical intervention.

Causes Of Chickenpox

Chickenpox is caused by the virus varicella zoster. It mostly spreads due to close contact with an infected person. The virus can spread through:

Coughing or sneezing via respiratory droplets

Kissing or sharing drinks or food through saliva

Handshaking or hugging through contact with the blisters or the fluid on the skin

Touching contaminated surfaces like door handles or tables, etc

Is chickenpox contagious?

Chickenpox is contagious from a day or two before the symptoms start to appear till the blisters become dry and have crusted over. Hence, avoid touching the person who is infected as this can increase your risk of infection. It usually takes a week or two for the blisters to dry and disappear completely. Know more about how the virus spreads and the ways to prevent it.

Read Article Here!

Risk Factors For Chickenpox

You may be at high risk of getting infected with the chickenpox virus if you have not contracted the infection in your life. The risk increases if you:

Haven’t been vaccinated for the infection

Have been in contact with an infected child or adult

Are an adult who is living with an infected child

Work in a school, childcare facility, or healthcare setting

Have low or compromised immunity due to illness or use of any medications

Does Chickenpox = Chicken + Pox??

No, chicken pox doesn’t mean chicken with pox. It is a viral disease that is caused by the varicella virus. While it is suggested that the name arises because of the marks on the skin that resemble pecks of a chicken, there are few interesting theories as well such as The red blisters that appear on the skin were thought to look like chickpeas (chavli in hindi) and hence, the name chicken pox, says another theory. Chickens were usually associated with weakness and thus, the name chicken pox. An old English word giccan which means to itch was corrupted into chicken. Also, pox was spelled as pocks (plural form of pock — an old English word) Check out more about chickenpox. Seeking medical help, check our doctors.

Consult Now!

Diagnosis Of Chickenpox

Chickenpox is usually easy to recognise and diagnose due to its classic skin rashes.

However, if required, a confirmatory test by polymerase chain reaction (PCR) testing can be done. For this, the blister fluid or scabs are tested for the presence of the virus.

Moreover, tests for antibodies may be performed to determine if immunity is present against chickenpox. These include:

Varicella Zoster IgG test which is used to evaluate the level of antibodies IgG produced by the immune system to fight against varicella zoster virus.

Varicella zoster IgM test is performed to diagnose chickenpox, and to distinguish between a recent, current, or old infection.

Celebs affected

Ishan Khatter

In 2019, Bollywood actor Ishan Khatter shared about his recovery from chickenpox on Instagram.

Barkha Sengupta

TV fame Barkha Sengupta, known for her role in the serial “Naamkaran” posted on instagram in 2019 that she was down with chickenpox and recovering from it.

Angelina Jolie

Hollywood actress Angelina Jolie suffered chickenpox at the age of 39. She made the announcement through a video in 2014.

Prevention Of Chickenpox

One of the simple and effective ways to prevent chickenpox is through vaccination. Although routine infant vaccination has substantially reduced transmission of wild-type varicella, chickenpox vaccination is not a part of the Indian Universal Immunisation Program. Hence, get vaccinated for chickenpox if you have not yet as it can significantly lower the risk of suffering from an infection. Moreover, it is one of the safe and effective options to prevent chickenpox infection. Do consult your doctor for advice on vaccination.

As chickenpox is contagious in nature, it is recommended that if a person in a family is diagnosed with chickenpox, other family members must get vaccinated, if not vaccinated before.

Planning to get vaccinated for chickenpox

Click Here Now!

Specialist To Visit

In most cases, the symptoms of chickenpox are usually mild and often go away on their own. However, visiting a clinician and early intervention may lead to slow progression and early resolution of disease. There are times, especially in adults, when the symptoms of chickenpox become severe and may fail to show any signs of improvement. In such a case it is wise to consult a doctor to get it treated.

You must see a doctor if you experience symptoms such as:

Vomiting

Shortness of breath

Rash on the eyes

Stiffness of neck

High fever (over 102 F)

Bacterial infection

Loss of muscle control

Dizziness

In addition to a general physician, the specialists who can help treat this condition are

Pediatrician (in case of children)

Dermatologist

Internal Medicine Specialist

Infectious Disease Specialist

Treatment Of Chickenpox

Chickenpox usually runs its course in a week or 10 days. The treatment is mostly aimed at relieving the symptoms. Non Aspirin products such as Paracetamol can be taken to reduce fever.

In adults and those with severe symptoms of chickenpox, doctors might prescribe antiviral medication as it can make the symptoms less severe and improve the condition. However, ensure to follow the course of the treatment and do not self-medicate. Some of the common antivirals used include:

Acyclovir

Famciclovir

Ganciclovir

Ribavirin

Valacyclovir

Do’s and Don’ts

As a protective measure, those infected are usually required to stay at home while they are infectious.

It is advised to not use OTC medications such as aspirin for fever as it is associated with Reye’s syndrome in kids. It is a severe disease that affects the brain and may even cause death.

Avoid the use of anti-inflammatory painkillers without consulting your doctor as it can increase the risk of severe skin infections.

Daily cleansing with warm water will help avoid secondary bacterial infection.

Keeping nails short and wearing gloves may prevent scratching and reduce the risk of secondary infections.

Home Care For Chickenpox

1. Do not scratch the itch

One of the key symptoms of chickenpox is itchy skin and hence, it is advised to avoid scratching. This is because it not only increases the risk of scars but also can lead to infection. As a safety measure, you can trim the fingernails of your kids, which can prevent skin infection caused due to scratching. Tap or pat on the itchy skin but do not scratch.

2. Use cold compress

Chickenpox also causes fever, which in turn can make you more prone to skin itching and scratching. Increased body temperature can make things worse for a person with chickenpox. This is the reason why it is advised to use a cold compress as it not only helps in lowering the body temperature but also soothes itchy skin. Apply a cool, damp compress over the itchy area as it acts as one of the effective chickenpox remedies.

3. Eat healthy, home-cooked food

It is quite common to crave for spicy and processed food when you are ill. However, it is best to avoid indulging in spicy, oily or salty foods as these not only hinder your digestion process but can also increase heat in the body. Hence, it is best to opt for home-cooked foods, preferably bland foods, to improve the healing process. Also, up your intake of fruits which are rich in Vitamin C and boost immunity such as oranges, apples, grapes, lemons, etc.

4. Stay hydrated

Drink lots of fluids as it helps you to stay hydrated and prevent dehydration caused due to high fever. Moreover, it can also help to flush the viral toxins from the body and aid in quick recovery. However, avoid drinking sugary beverages and opt for fresh, plain water, especially if you or your kid has sores in the mouth. For kids, you can opt for sugar-free popsicles to replenish fluid stores in the body.

5. Wear gloves

This tip mostly applies to kids because they are the ones who are more prone to scratch an itchy skin. This is the reason why it is advised, especially for kids, to put gloves or socks over their hands to prevent scratching. This can not only prevent the direct content of the nail with the chickenpox blister but also lower the risk of infections and limit scarring. Also, wear loose, cotton clothes, which will help the skin to breathe and ease the itching.

6. Avoid self-medication

Most people tend to pop a pill for fever or a painkiller for body ache without a second thought when suffering from chickenpox. However, this is not a good idea. Aspirin, which is commonly used to relieve fever, can cause a deadly condition known as Reye’s syndrome in children below 16 years of age. Hence, do not self-medicate but consult your doctor before taking any pills.

Complications Of Chickenpox

Chicken pox is usually a mild disease. However, complications can happen from chickenpox. They are more common in adults and people with weak immune systems like:

Infants

Pregnant women

Patients with conditions like HIV/AIDS, cancer, chemotherapy, steroid therapy, transplants

Some of the serious complications of chickenpox include:

Secondary Bacterial infections

Dehydration

Pneumonia (infection of the lungs)

Encephalitis (inflammation and swelling of the brain)

Cerebellar ataxia (defective muscular coordination)

Transverse myelitis (inflammation of spinal cord)

Bleeding

Sepsis

Toxic shock syndrome

Reye's syndrome in children and teenagers who take aspirin during chickenpox

Death

Chickenpox And Shingles

Although shingles and chickenpox are caused by the same virus, they are not the same illness. Chickenpox is usually a milder illness that affects children. Shingles results from a reactivation of the virus long after the chickenpox illness has disappeared.

The chickenpox virus stays in the body even after recovery. Later in life, the virus can reactivate and cause shingles. If you have shingles, you can spread the varicella virus to people who have never had chickenpox or never received the chickenpox vaccine. These people will develop chickenpox, not shingles. It takes from 10 to 21 days after exposure to chickenpox or shingles for someone to develop chickenpox.

Alternative Therapies Of Chickenpox

In addition to antiviral medications, there are few home remedies that are known to help relieve the symptoms and help to get rid of scars caused due to scratching. However, make sure to consult your doctor before you try any of these chickenpox remedies.

1. Oatmeal bath

Oatmeal bath is one of the most popular natural remedies to relieve itchy skin caused due to chickenpox. For this, you need to cook two cups of oatmeal in two liters of water for around 15 minutes. Now, let it cool and tie the cooked oatmeal in a cotton cloth and allow it to float in a tub of warm water till the water becomes turbid. Splash this water all over the body to soothe itching.

2. Baking soda

This is also quite commonly used to get rid of itching in people with chickenpox. Add 1/4th teaspoon of baking soda in a glass of water. Dip a soft, cotton cloth in it and dab it on the skin such that the baking soda dries on the skin. This can keep you away from scratching the blisters.

3. Vitamin E oil

Rich in antioxidant, Vitamin E oil can help to relieve itching as well as prevent scars caused due to scratching of chickenpox blisters. Gently apply Vitamin E oil all over the skin as it exerts a calming and soothing effect on the skin and thus, promotes healing. Moreover, regular application of this oil was found to lighten the scars/marks caused due to chickenpox.

Living With Chickenpox

For the short time, when a person has chickenpox, there’s little one can do other than make themselves as comfortable as possible. In most cases, once you have chickenpox, you will not have it again in your lifetime. Rarely, someone may get it more than once. Patients should take ample amounts of rest. Drink lots of water and other fluids to maintain hydration. Other drinks such as cinnamon, chamomile, and basil herbal teas can also boost the immune system. Diet should be simple and wholesome. Avoid fatty and spicy food. Food that is high in saturated fat causes inflammation which can slow the healing of the irritated area. Trim your fingernails to avoid scratching as this can form deep scars and wounds. Application of antihistamine lotion and cool baths can help to calm the itching.

Along with self care it is very important to prevent chickenpox from spreading at home. Make sure your family washes their hands frequently, especially after eating and using the restroom. Try not to expose unvaccinated family members, pregnant women, newborns, elderly people, or those with low resistance to infection. One should try to stay isolated until all blisters have crusted or dried.

Frequently Asked Questions

What do chicken pox look like when they first come out?

Does chickenpox provide lifelong immunity?

Why is chicken pox worse for adults?

How long is chickenpox contagious for?

Does chickenpox happen twice?

Is chickenpox related to smallpox?

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Xerophthalmia

Also known as Xerotic Keratitis and Keratomalacia

Overview

Xerophthalmia refers to the group of eye signs and symptoms associated with severe Vitamin A deficiency. Vitamin A serves various essential functions in the eye and its deficiency can adversely affect the health of eyes. It is a major problem in developing countries and is a leading cause of preventable blindness worldwide.

It can affect people of any age but children between the age of 2 to 6 years are more prone to this deficiency. The disease can be caused either due to improper consumption, metabolism, or storage of Vitamin A.

This disease can be easily prevented and treated by taking a proper dose of Vitamin A through diet and supplements. Immunization against certain diseases such as measles which serve as a precipitating factor for xerophthalmia can also help in preventing Vitamin A deficiency in children.

Key Facts

Usually seen in

Children between 2 to 6 years of age

Gender affected

Both men and women

Body part(s) involved

Eyes

Mimicking Conditions

Acanthamoeba keratitis

Onchocerciasis

Trachoma

Allergic conjunctivitis

Viral conjunctivitis

Dry eye syndrome

Retinitis pigmentosa

Bitot spots

Hypothyroidism

Necessary health tests/imaging

Physical exam

Blood test: Serum Vitamin A, Serum retinol binding protein & serum zinc

Dark adaptometry and night vision threshold tests

Electroretinogram (ERG)

Impression cytology

Treatment

Vitamin A supplementation

Zinc supplementation

Topical treatment

Antibiotics

Related NGOs

Ophthalmologist

Symptoms Of Xerophthalmia

The symptoms of xerophthalmia depend upon the severity of deficiency and age of the patient and gradually progresses through the following stages:

Night blindness (impaired sensitivity of the eye to light)

This is the first sign of xerophthalmia in which the person is not able to see in dim light and may bump into objects and/or show reduced mobility.

Conjunctival xerosis

It is characterized by the dull, dry, thick, wrinkled appearance of the conjunctiva. It develops due to changes in mucin secretion that lubricates the conjunctiva.

Bitot spots

It refers to whitish, foamy, opaque deposits on the conjunctiva.

Corneal xerosis

Cornea appears dull, dry and hazy in appearance.

Corneal ulceration or Keratomalacia

Corneal xerosis often leads to ulcers and softening of the cornea. It can even perforate and destroy the cornea of the eyes..

Corneal scars

Scarring of the cornea is a late and severe symptom of xerophthalmia.

Xerophthalmic fundus

It refers to the structural changes in the fundus (the inside, back surface of the eye).

Causes Of Xerophthalmia

Vitamin A is an essential nutrient and is responsible for the following central functions of the eyes:

A form of vitamin A, called retinal, combines with a protein called opsin to form rhodopsin, an essential light absorbing molecule needed for vision in dim light and color sensitivity.

Vitamin A also plays an important role in maintaining a clear vision by supporting the functioning of the cornea which is the protective outer layer of the eye

Vitamin A helps to stimulate the lacrimal glands to produce moisture in the eyes and avoid issues like dry eyes.

The deficiency of Vitamin A is the main cause of xerophthalmia. The causes of the deficiency include:

A. Inadequate dietary intake of Vitamin A

Low intake of dietary sources of Vitamin A can be attributed to:

Insufficient food supply

Chronic alcoholism

Highly selective eating

Difficulty in swallowing

Mental illness

Here are the ways you can help and support a friend or family member who is coping with mental illness which might be highly affecting their diet pattern.

Tap To Know!

B. Impaired absorption of Vitamin A

The leading causes of insufficient absorption of Vitamin A are diseases affecting the pancreatic, liver, and intestines like:

Chronic liver disease (progressive damage of liver for more than 6 months)

Inflammatory bowel disease (inflammation in the digestive tract)

Pancreatitis (inflammation of the pancreas)

Celiac disease (hypersensitivity to certain foods leading to impaired digestion)

Pancreatic insufficiency (improper functioning of the pancreas)

Short bowel syndrome (improper absorption of nutrients from food)

Chronic diarrhea

Upper gastrointestinal surgery

Giardiasis (intestinal infection accompanied by fever and diarrhea)

Abetalipoproteinemia (impaired absorption of fats and vitamins)

C. Reduced storage of Vitamin A

The reduced storage of Vitamin A due to the following reason can also cause xerophthalmia.

Liver diseases

Cystic fibrosis (inherited disorder that mainly affects lungs and digestive system)

Did you know?

Vitamin A also nourishes the skin cells and promotes a healthy and glowing skin. A healthy dose of Vitamin A also prevents skin cancer by maintaining the production of new skin cells. Know more such benefits of Vitamin A.

Read To Know!

Risk Factors For Xerophthalmia

The following factors can trigger Vitamin A deficiency and eventually lead to xerophthalmia:

Age

Infants and children are more prone to xerophthalmia due to their higher need of Vitamin A for the growth and development. Children are also more prone to intestinal infections that may impair the absorption of Vitamin A.

Worried about the health of your child? Know some easy and practical ways to ensure that your child does not develop nutritional deficiencies.

Tap To Know!

Malnutrition

Malnutrition can lead to multiple vitamin deficiencies including Vitamin A deficiency. People living in developing countries are more prone to xerophthalmia due to more chances of malnutrition.

Zinc deficiency

Malnutrition, especially zinc deficiency, decreases the level of active Vitamin A in the body and increases the chances of developing xerophthalmia.

Pregnancy

Pregnant and lactating women are at higher risk of developing xerophthalmia due to increased chances of Vitamin A deficiency in this period. Neonates born to Vitamin A deficient mothers are at higher risk of developing xerophthalmia.

Poor lactation

Breast milk provides various essential nutrients to neonates that are required for normal growth and development. It also protects the infants from various infections in the initial years of life. Inadequate breastfeeding in infants younger than 6 months also increases the risk of xerophthalmia.

Medical conditions

Some diseases such as chronic liver disease, liver cirrhosis, diarrhea, inflammation of the pancreas, and inflammatory bowel disease make the person more vulnerable to xerophthalmia.

Comorbidities

The various diseases such as pneumonia, jaundice, vomiting, and septicemia also increase the risk of xerophthalmia.

Low socioeconomic status

Poor people are more prone to Vitamin A deficiency as they cannot afford proper meals to fulfill their nutritional requirements.

Lack of education

People who are not properly educated about the importance of proper nutrition are more prone to nutritional deficiences like those of Vitamin A.

Alcoholism

The excessive consumption of alcohol lowers the level of Vitamin A in the body and predisposes to xerophthalmia.

Alcohol Lowers Cholesterol

Though small quantities of red wine are known to improve cardiovascular health, continued drinking causes a spike in cholesterol, leading to plaque building in the arteries. Alcohol consumption in the long run, puts you at a heightened risk of heart-attacks. Bust more such myths about alcohol.

Bust Now!

Diagnosis Of Xerophthalmia

A thorough dietary, medical, social history including alcohol intake is taken from the patient having signs of xerophthalmia. In case of specific indications of night blindness or severe xerophthalmia, treatment with Vitamin A is started immediately. The diagnosis is mostly based on the symptoms.

Physical exam

The doctor first examines the eyes of the patient for any signs such as dry eyes and spots that are characteristic of xerophthalmia. The physical exam also includes assessment of jaundice.

Blood tests

Serum Vitamin A/retinol

This test measures the level of Vitamin A in the body. The ocular symptoms related to Vitamin A deficiency have been shown to develop at concentrations <10mcg/dL.

Serum retinol binding protein

Vitamin A is transported to the tissues in the form of retinol after binding with the retinol binding protein (RBP). The level of RBP reflects retinol concentration which in turn gives an idea about Vitamin A status. The normal level of serum RBP is 30-75 ug/ml.

Serum zinc

The decreased level of zinc is also associated with xerophthalmia. The normal levels of serum zinc are 75-120 mcg/dL.

Dark adaptometry and night vision threshold tests

These tests are used to diagnose night vision defects.

Electroretinogram (ERG)

ERG measures the electrical activity of the retina in response to a light stimulus, non-invasively. ERGs are recorded using an electrode placed in contact with the cornea.

Impression cytology

In this, the specimens of the conjunctiva (clear tissue covering the white part of the eye) are studied for the presence of goblet cells (highly specialized cells that produce and secrete mucins, responsible for hydration and lubrication of eyes). A decrease in the amount of these cells is also an indicator of Vitamin A deficiency.

Specialist To Visit

Any patient who is experiencing visible symptoms such as dry eyes, must consult the doctor immediately.

The diagnosis of xerophthalmia is done by an ophthalmologist, a physician specializing in diseases and surgery of the eye.

If you are facing any eye-related problems, consult our medical professionals.

Consult Now!

Prevention Of Xerophthalmia

All the following factors that maintain an adequate level of Vitamin A play a role in preventing xerophthalmia:

Consuming adequate Vitamin A

The best way to prevent xerophthalmia is to take an adequate amount of Vitamin A through a healthy balanced diet rich in Vitamin A food sources such as carrots, milk, fish, eggs, green vegetables, yams, and sweet potatoes.

People who are on restrictive diets or facing some issues in getting adequate amounts of Vitamin A, should take the recommended dose of Vitamin A supplements.

Appropriate intake of Vitamin A is also very important during pregnancy and lactation to build stores of retinol in the liver.

Environmental sanitation

The chances of Vitamin A deficiency increases in the presence of certain diseases such as respiratory tract infections, tuberculosis, diarrhea, and worm infestations. Proper sanitation of the living environment helps in reducing the prevalence of these diseases.

Hygiene is a critical measure of how a person lives his life. Someone who gives importance to self-hygiene not only feels comfortable in his/her own skin but also helps others around him to work in comfort.

Here are 5 simple tips to maintain hygiene at the workplace.

Click To Know!

Vaccination

Certain vaccine-preventable diseases such as measles serve as a precipitating factor for xerophthalmia. Immunization helps in the elimination of such factors and may help in preventing xerophthalmia.

Did you know?

A child is exposed to thousands of germs every day through the food he eats, air he breathes, and things he puts in his mouth. Vaccines use very small amounts of substances (antigens) that help your child’s immune system to recognize and learn to fight serious diseases. Learn in detail about vaccination in children.

Read Now!

Home-care For Xerophthalmia

1. Consume Vitamin A rich food

People should consume food rich in Vitamin in their diet such as:

Carrots

Broccoli

Fish

Fortified cereals

Beef

Liver

Eggs

Chicken

Mangoes

Whole milk

Green leafy vegetables

2. Wear glasses

Wearing glasses is a good practice as it reduces the pressure from the eyes and is helpful for the people suffering from night blindness. It also helps the eyes to focus in a better way.

3. Avoid looking directly in the dark

The people suffering from night blindness should avoid looking at the dark source directly as it may adversely affect the pupil (black center of the eye).

4. Eyes exercises

Patients having xerophthalmia should keep their eyes in motion by looking in different directions, focusing at different points and blinking their eyes. It serves as an eye exercise and helps in the recovery of the eyes.

5. Adaptation to darkness

The people who are at initial stage of xerophthalmia i.e night blindness should try to adapt to darkness by sitting in a dark room for 20-30 minutes daily. They should also wear a sleep mask while sleeping. This will make the eyes comfortable in darkness and also help to prevent severe eye disorders.

6. Eye massage

Eye massage is a very powerful tool to improve the overall health of the eyes. It should be done only under the supervision of an expert as improper technique can damage the eye lens. To do eye massage:

Put slight pressure on both the eyes with the palms

Keep that pressure for around 5-10 seconds

Vision will turn white instead of black for a slight moment

When the black vision comes back, open the eyes

This will significantly improve vision in the dark

Regular eye massage can prevent night blindness to some extent

Complications Of Xerophthalmia

Vitamin A deficiency can cause various complications due severe malnutrition. It also increases the chances of mucosal infections. Keratomalacia and night blindness can also be life threatening in children.

High doses of Vitamin A can treat early symptoms such as conjunctival xerosis and night blindness. Corneal xerosis may however sometimes lead to permanent vision loss.

Frequently Asked Questions

Is xerophthalmia a genetic disorder?

Is xerophthalmia reversible?

How does Vitamin A help in the management of night blindness?

What are the symptoms of Vitamin A toxicity?

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Xerostomia

Also known as Dry Mouth, Xerotos and Waterlessness

Overview

Xerostomia, commonly known as dry mouth, is a condition in which the person’s salivary glands don't make enough saliva to keep the mouth wet. It is generally seen as a side-effect of certain medications, symptom of some medical disorders or as an adverse effect of radiation in cancer therapy. Rarely, the cause may be directly related to the salivary gland itself.

Saliva helps prevent tooth decay by neutralizing acids produced by bacteria, limiting bacterial growth, and washing away food particles. Saliva also enhances the ability to taste and makes it easier to chew and swallow food. Along with this, saliva contains enzymes that help in the easy digestion of food.

Decreased salivary secretion can range from minor discomfort to something that affects general wellbeing and the health of your teeth, gums, and surrounding oral tissues. Identifying the factors and causes for xerostomia creates a path for the treatment.

Key Facts

Usually seen in

Adults above 50 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Oral cavity (mouth)

Mimicking Conditions

Hyposalivation

Necessary health tests/imaging

Sialometry

Saliograpy

Salivary scintigraphy

Biopsy

Blood tests: Complete blood count (CBC), Blood sugar tests & Electrolyte levels

Treatment

Saliva substitutes

Saliva stimulants

Medications: Pilocarpine & Cevimeline

Other medications and preparations: Anethole trithione, Yohimbine & Human interferon alfa (IFN-a)

Specialists to consult

Dentist

General physician

Symptoms Of Xerostomia

Xerostomia is generally the symptom for many health conditions and a side-effect of certain medications. But it can present itself with other symptoms that include:

Changes in perceiving the tastes along with intolerance to spicy, salty, or sour foods or drinks

Burning sensation in the mouth in addition to sticky, dry, and rough tongue

Difficulty in chewing, swallowing, tasting, or speaking

Sore throat

Atrophic, cracked, or chapped lips besides peeling

Mouth ulcers or sores

Increased chances of infections in the mouth

Hoarseness of the voice

Bad breath or halitosis

Increased dental cavities or decay

Ineffectiveness to retain dental dentures or any other oral prosthesis

Causes Of Xerostomia

Xerostomia is a condition when the salivary glands produce less saliva leading to dry mouth. Some of the common causes include the following:

1. Medications: This is the most common cause of xerostomia. Many medications that are sold over-the-counter mention dry mouth as the side-effect. Some medicines that are known to cause xerostomia are:

Medications for anxiety and depression

Drugs like anticholinergics that are used in the treatment of urinary incontinence, overactive bladder, and chronic obstructive pulmonary disorder

Decongestants and antihistamines used in allergies and cold

Some pain medicines

Some drugs are used in the treatment of high blood pressure

Certain bronchodilators used to treat asthma

Some medicines used in treatment of diarrhea

Certain muscle relaxants

Medications for Parkinson's disease

Drugs used in chemotherapy for the treatment of cancer

2. Radiation therapy: Radiation treatments to the head and neck region for treatment of cancer can cause irreversible damage to the salivary glands. This can lead to a significant decrease in salivary production.

3. Dehydration: Dehydration occurs when the body loses a lot of fluids without getting replenished. This can happen during hot summer months or conditions like vomiting, diarrhea, fever, excessive sweating, blood loss, or burns. When the body is dehydrated, production of saliva is reduced leading to dry mouth.

4. Mouth-breathing or snoring: Breathing through the mouth due to nasal congestion or snoring while sleeping causes saliva to evaporate. This leads to dryness in the mouth.

5. Medical conditions: Xerostomia can be a sign of medical conditions like:

Sjogren’s disease (formerly known as Sjogren syndrome)

Acquired immunodeficiency syndrome (AIDS)

Poorly controlled diabetes

Uncontrolled hypertension (high blood pressure)

Anemia

Hypothyroidism

Sinusitis

Sleep apnea

Cystic fibrosis

Mumps

Yeast infections

Rheumatoid arthritis

Systemic lupus erythematosus

Parkinson's disease

Alzheimer's disease

Hepatitis C

Lymphoma

Chronic graft-versus-host disease seen in bone marrow transplant recipients

Salivary gland agenesis or aplasia

Stroke

6. Aging: People might experience xerostomia as they age. The factors contributing to it can be the use of certain medications, changes in the body's ability to process medication, inadequate or improper nutrition, or long-term health problems.

7. Nerve damage: Any injury, infection, or surgery that causes damage to the nerves of the head or the neck region can result in xerostomia.

8. Smoking and drinking: Alcohol acts as a diuretic, meaning, as the body breaks down alcohol, it removes the water from the blood through urine. Also, smoking reduces the salivary flow rate leading to dryness of the mouth or xerostomia.

9. Use of recreational drugs: “Meth mouth” is a condition due to the use of methamphetamine that causes severe xerostomia and damage to teeth. Other drugs such as marijuana also can cause xerostomia.

10. Stress and anxiety: Cortisol (also called the stress hormone) is produced in excess when a person is under stress or is anxious. Increased levels of cortisol in saliva can change the composition of the saliva causing the mouth to become dry.

Did you know?

Xerostomia or dry mouth is one of the main oral symptoms of COVID-19 infection. It is thought that coronavirus can make alterations in the salivary gland which can lead to dry mouth. Xerostomia usually appears before other common symptoms of COVID-19 like fever, cough or difficulty in breathing.

Read More About COVID-19!

Risk Factors For Xerostomia

Xerostomia can be a symptom of an underlying condition or an adverse effect of certain medications. It can be permanent or temporary depending on the cause. Some of the risk factors associated with xerostomia are:

Medications like antidepressants and anxiolytics (anti-anxiety)

Autoimmune conditions like Sjogren’s disease and AIDS

Old age

Bulimia or anorexia

Blockage of major salivary duct such as from a salivary stone or infection

Smoking

Chemotherapy and radiation to the head and neck

Mouth breathing

Patients with mental or nervous disorders

Individuals wearing dentures

Pregnancy or breastfeeding

Diagnosis Of Xerostomia

The diagnosis of xerostomia is based on detailed:

Medical history

Details about duration, frequency, and severity of dry mouth are documented. The history of dryness at other sites (eyes, nose, throat, skin & vagina) along with complete prescription drug history, health conditions, and any other symptoms along with it are obtained.

Physical examination

Major salivary glands are examined for the presence of any pain, firmness, or enlargement. The amount and quality of saliva coming from the ducts inside the mouth is assessed.

Examination of the mouth

There may be very little or no pooled saliva on the floor of the mouth. The saliva may appear stringy, ropy, or foamy.

The presence of dry, sticky or reddish oral mucosa is inspected. Occasionally, fungal or yeast infections will be present, appearing as removable white plaques on the inner mucosal surface of the mouth.

Tongue may appear dry with decreased numbers of papillae.

The extent and pattern of dental decay is evaluated. Multiple dental caries, especially at the neck of the teeth or the tips of the teeth along with plaque accumulation, gum infections can be seen.

Several office tests and techniques can be utilized to detect the abnormal functioning of the salivary glands. These tests are as follows:

1. Sialometry

Also known as salivary flow measurement, it is a simple test or procedure that measures the flow rate of saliva. In this test, collection devices are placed over the parotid gland or the submandibular/sublingual salivary gland at the opening of the duct, and saliva is stimulated with citric acid.

The normal salivary flow rate for the parotid gland when it is not stimulated is 0.4 to 1.5 mL/min/gland. The normal flow rate for “resting” the whole saliva is 0.3 to 0.5 mL/min; for stimulated saliva, 1 to 2 mL/min. Values less than 0.1 mL/min are generally considered xerostomic.

2. Saliograpy

It is an imaging technique that may be used to detect any masses or stones in the salivary gland. It involves the injection of radio-opaque dye into the salivary glands.

3. Salivary scintigraphy

It can be useful in assessing salivary gland function. Technetium-99m sodium pertechnate is injected intravenously to ascertain the rate and density of uptake and the time of excretion in the mouth.

4. Biopsy

Minor salivary gland biopsy is often used in the diagnosis of Sjögren’s syndrome (SS), HIV-salivary gland disease, sarcoidosis, amyloidosis, and graft-versus-host disease (GVHD). Biopsy of major salivary glands is an option when malignancy (cancer) is suspected.

5. Blood tests

In addition to accessing the salivary glands, some blood tests may also help in detecting any underlying infection or disease. The tests are:

Complete blood count (CBC)

Blood sugar tests

Electrolyte levels

Did you know?

Two simple signs for diagnosis of xerostomia are a tongue blade sign in which a tongue blade sticks to the oral mucosa while touching it and a lipstick sign in which the lipstick sticks to the front surface of the upper teeth. Do not ignore these signs as dry mouth can be a symptom of an underlying disease.

Read More!

Prevention Of Xerostomia

Though xerostomia is quite common, it can often be prevented. Here are a few tips to prevent it:

Drink a minimum of 2L (i.e. 8 glasses of 250ml each) of water a day.

Start using a humidifier in your home, especially in the bedroom.

Breathe through the nose rather than through the mouth.

Consult the physician before taking any over-the-counter medications such as antihistamines and decongestants.

Avoid caffeinated beverages, tobacco, and alcohol, all of which increase dryness in the mouth.

Do not consume any recreational drugs as they may cause severe xerostomia.

Try maintaining and monitoring blood sugar levels in case of diabetes.

Practice good oral hygiene practices.

Note: If someone has to undergo radiotherapy, surgical transfer of one submandibular salivary gland to the submental space (deep compartment of the head and neck that lies in the midline below the chin) shields the gland during radiation therapy. Studies confirm that there is no adverse effect on the function of the gland in this position.

Specialist To Visit

Xerostomia is a disorder of the mouth. Though it may not appear to be serious, it can be an indicator of several underlying diseases or conditions. Severe xerostomia can cause difficulty in talking, swallowing, and eating food. It can hamper your self-esteem and confidence due to bad breath. Specialists to visit are:

Dentists

General physician

A dentist detects dry mouth and can detect xerostomia long before the patient becomes aware of its existence. One of the more common signs of xerostomia is insufficient pooling of saliva under or around the tongue, a phenomenon easily noted by the dentist. Whereas, your physician may know your medical history and may help in the detection of any other related health condition.

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Treatment Of Xerostomia

Xerostomia can be managed by several over-the-counter medications and products that aid in providing relief from the symptoms. These medications range from salivary substitutes and stimulants to products designed to minimize dental problems. They are as follows:

1. Saliva substitutes

These can be used as artificial saliva that help replace the lost moisture and lubricate the mouth. These substitutes are available commercially, but they can also be compounded. Artificial salivas do not stimulate salivary gland production but are designed to mimic natural saliva. Thus, they are considered as replacement therapy rather than a cure.

These salivary substitutes are available commercially as solutions, sprays, gels, and lozenges. In general, they contain an agent to increase viscosity such as carboxymethylcellulose or hydroxyethylcellulose, minerals such as calcium and phosphate ions and fluoride, preservatives such as methylparaben or propylparaben, and flavoring and related agents.

2. Saliva stimulants

A recently developed product called natrol dry mouth relief, which has a patented pharmaceutical grade of anhydrous crystalline maltose (ACM) is used to stimulate saliva production. It has been used in a clinical study of patients with Sjogren's syndrome and ACM was shown to increase secretions. Natrol dry mouth relief is formulated as lozenges that can be dissolved in the mouth three times daily. As its effect is to stimulate salivary glands, it is not recommended for patients whose salivary gland function has been lost through radiation therapy.

3. Medications

Pilocarpine: Pilocarpine is a muscarinic (M3) agonist which stimulates the secretion of saliva. It is indicated for the treatment of symptoms of xerostomia due to salivary gland hypofunction caused by Sjogren’s syndrome or by radiotherapy for cancer of the head and neck area.

Cevimeline: Cevimeline is a cholinergic agonist with a high affinity towards the muscarinic M3 receptors located on lacrimal and salivary gland epithelium, leading to an increase in the secretions of the exocrine glands. It is used to relieve the symptoms of xerostomia in patients with Sjogren’s syndrome.

Note: These prescription medications have to be avoided in patients having asthma & glaucoma.

4. Other medications and preparations

The following medications are under clinical trial and the efficacy is yet to be determined.

Anethole trithione: This is a bile secretion-stimulating drug or cholagogue. It acts by stimulating the parasympathetic nervous system and increases the secretion of acetylcholine, resulting in the stimulation of salivation.

Yohimbine: It is an alpha-2 adrenergic antagonist which indirectly results in an increase of cholinergic activity peripherally thus improving salivation.

Human interferon alfa (IFN-a): This drug is currently undergoing clinical trials to determine the safety and efficacy of low-dose lozenges in the treatment of xerostomia in patients with Sjogren’s syndrome.

Home-care For Xerostomia

Home remedies for xerostomia help in managing the symptom and provide relief however, these cannot be considered as the cure for it.

1. Try over-the-counter saliva substitutes or oral lubricants

Many different brands of salivary substitutes or oral lubricants are available in the market. They do not cure xerostomia but provide some relief and help during eating and speaking.

2. Drink a lot of water

Sipping water and staying hydrated can help relieve the symptoms and discomfort caused by xerostomia. Studies have shown that dehydration may be a causative factor in xerostomia and increasing the water intake can help treat mild dehydration.

3. Avoid certain medications

The most common cause for xerostomia is the use of certain medications. Talk to the doctor and understand if the medications are causing dryness in the mouth. Do not stop those medications abruptly without consulting the doctor.

The types of medicines that may cause dry mouth include:

Antianxiety medicines

Anticonvulsants

Antidepressants

Antihistamines

Antipsychotics

Sedatives

Smoking-cessation agents

Urinary incontinence agents

Bronchodilators

Decongestants

Diuretics

High blood pressure medications

Muscle relaxants

Narcotic analgesics

Nonsteroidal anti-inflammatory drugs

Opioid analgesics

Parkinson’s disease medications

4. Say no to dehydrating habits

Some of the common ways to prevent dehydration & thereby xerostomia are:

Quit smoking

Avoid caffeine

Limit alcohol use

Decrease sugar intake

5. Give importance to overall oral care

Xerostomia can be both a symptom and a cause of poor oral hygiene. Maintaining good oral hygiene plays a crucial role in the management of xerostomia. This includes frequent flossing, fluoride toothpaste use, and use of mouthwash.

When choosing a mouthwash, make sure it doesn't contain any alcohol as alcohol-based mouthwashes will only further increase dryness of the mouth. Also, mouthwashes containing xylitol can also help prevent dental caries.

Since dry mouth often leads to the development of fungal infections like oral candidiasis, antifungal mouth rinses, and dissolving tablets might be required. Dentures often lodge fungal infections, so they should be soaked daily in a chlorhexidine solution.

6. Try sugarless candies or gums

Sucking on sugar-free candies or products like chewing gums, cough drops, and lozenges may provide some short-term relief from xerostomia. Citrus, cinnamon or mint-flavored candies make good choices. Some sugarless gums and candies also contain xylitol which can help in prevention of dental cavities.

7. Use lip balms frequently

Moisturizing the lips with a lip balm or petroleum jelly every 2 hours can also be helpful.

8. Dietary modifications

Moisten foods with gravy, soups, sauces, creams, ghee or butter. Also. taking sips of water or fluids while having a meal can help in softening the food and chewing. Try to have foods that are at room temperature.

Restrict salty foods and dry foods like toast, cookies, dry breads, dry meats, dried fruits, and bananas. Foods and beverages with high sugar content should also be avoided.

9. Avoid mouth breathing consciously

Mouth-breathing can make xerostomia worse and may also cause other oral health problems.

10. Use a humidifier

Creating a humid environment may help in relieving xerostomia simply by adding more moisture to the surroundings.

Complications Of Xerostomia

Xerostomia can often be a contributing factor for both minor and serious health problems. It can affect nutrition and dental as well as psychological health. Some of the common problems associated with xerostomia include:

Constant sore throat

Burning sensation in the mouth

Halitosis or bad breath

Difficulty speaking and swallowing

Hoarseness of voice

Dry nasal passages

Excessive plaque accumulation

Gum diseases

Dental caries

Oral candidiasis

Alternative Therapies For Xerostomia

1. Home remedies

Herbal medicines have shown potentially good results on improving salivary function and to reduce the severity of xerostomia. Moreover, they are relatively safe. Some of the herbs that can be used to manage xerostomia are:

Aloe vera: The gel or juice inside the aloe vera plant is very moisturizing. Drinking aloe vera juice can be a treat to the mouth and provide relief from xerostomia.

Ginger: Ginger is known to help stimulate salivary production.

Homemade mouthwash: Blend 1 cup of warm water with 1/4 teaspoon of baking soda and 1/8 teaspoon of salt. Rinse your mouth for a few seconds then rinse with water. Repeat every 3 to 4 hours.

2. Oil pulling

Oil pulling is an old age ayurvedic technique of holding a few tablespoons of coconut or sesame oil in the mouth for 10 to 15 minutes without swallowing. Since the oil cleans out the mouth while coating and soothing irritated spots, it can give some relief in xerostomia.

3. Unani therapy

According to Unani therapies, the best way to manage xerostomia is through lifestyle modifications. This is based on Setteh-e-Zarurieah, which means consuming foods that are moisturizing in nature like rice cooked with milk, fresh fish, goat meat, foods that are prepared with pumpkin and spinach as well as purslane.

The best food for patients with xerostomia are almonds, figs, grapes, peaches, and fresh broad beans.

4. Acupuncture

In acupuncture, an acupuncturist inserts thin, disposable needles into the skin in such a way that energy flow increases to the mouth and throat. However, acupuncture as a therapy needs more studies and scientific backing.

Living With Xerostomia

Xerostomia is a condition that causes dryness of the mouth. It can be mild or severe depending on the cause. Xerostomia can be treated with salivary substitutes, salivary stimulants, and meditations.

In addition to these, the symptoms of xerostomia can be managed by following certain simple tips. They are as follows:

Drink at least 8 glasses of water everyday

Avoid medications that cause dry mouth

Try sugarless candies or gums

Limit the intake of caffeine and alcohol

Decrease the sugar intake

Maintain a good oral hygiene regimen

Use a non-alcohol based mouthwash

Try over-the-counter saliva substitutes or oral lubricants

Moisturize lips with a lip balm

Eat food with creams, ghee or butter

Restrict eating salty and dry food items

Avoid breathing through the mouth continuously

Use a humidifier in the house

Quit smoking

Get proper sleep

Avoid walking in the sun or excessive exercise

Furthermore, patients with xerostomia should avoid stresses such as anger, sorrow, and excessive fear. If the symptoms still persist consult a dentist or a physician to understand the root cause and manage the symptoms.

Frequently Asked Questions

What is Sjögren’s syndrome and how is it related to xerostomia?

How will a dentist or a physician treat xerostomia?

What is the relationship between rheumatoid arthritis and xerostomia?

How does radiation treatment cause xerostomia?

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Chikungunya

Overview

Chikungunya is a viral disease that spreads to humans through the bites of infected female mosquitos. The most prevalent mosquitoes implicated are Aedes aegypti and Aedes albopictus. These two species can also transmit other mosquito-borne diseases, such as dengue. They bite throughout the day, with peak activity in the early morning and late afternoon.

Chikungunya is characterized by fever and severe joint pain, which is often debilitating and varies in duration; other symptoms include joint swelling, muscle pain, headache, nausea, fatigue and rash.

Prevention of Chikungunya involves protecting oneself from mosquito bites by using various tools like nets, sprays, coils, electric bats, and mosquito repellent creams. Mosquito control measures like eliminating stagnant water from plants, coolers, tyres, and road potholes is also crucial.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but more common in women

Body part(s) involved

Blood

Brain

Heart

Lungs

Kidneys

Skin

Joints

Prevalence

India: 14.9% (2019)

Mimicking Conditions

Malaria

Dengue

Zika virus disease

Yellow fever

Leptospirosis

Measles

Mononucleosis

African tick bite fever

Seronegative rheumatoid arthritis

Reiter arthritis

Rheumatoid arthritis

Hepatitis C

Systemic lupus erythematosus

Necessary health tests/imaging

RT-PCR test

Antibody tests: ElISA test, IgM, IgG antibody test

Complete blood count (CBC)

Treatment

Non-steroidal anti-inflammatory drugs (NSAIDs): paracetamol

Disease-modifying antirheumatic drugs (DMARDs): methotrexate, hydroxychloroquine or sulphasalazine

See All

Symptoms Of Chikungunya

The symptoms of chikungunya typically appear 2 to 12 days after a person has been bitten by an infected mosquito. The most common symptoms of chikungunya include:

Abrupt onset of fever or chills

Severe joint pain and swelling

Joint stiffness

Knee pain

Shoulder pain

Muscular pain

Headache

Nausea

Rashes and redness of the skin

Fatigue or tiredness

Abnormal bleeding tendency

Skin blistering

Causes Of Chikungunya

Chikungunya is a viral disease that is transmitted to humans through the bite of infected mosquitoes, primarily the Aedes aegypti and Aedes albopictus species.

When an uninfected mosquito bites a person infected with Chikungunya virus (CHIKV), the virus enters the mosquito's body. After a few days, the virus spreads to the mosquito's salivary glands.

When the mosquito bites another person, the CHIKV enters the bloodstream and spreads throughout the body, infecting various tissues, including muscle cells and immune cells. In the new person, the virus multiplies and reaches high levels in their blood, causing symptoms of chikungunya.

This virus can enter the body through the skin, when we breathe (respiration), through the mouth (ingestion), through sex (vaginal, oral, anal) or close sexual contact, or to an unborn baby through the placenta or birth canal.

The virus primarily targets cells in the joints, leading to inflammation and severe joint pain.

Risk Factors For Chikungunya

While anyone can contract chikungunya, the following risk factors may increase the likelihood of infection or the severity of the disease:

Staying or traveling to regions where chikungunya is endemic or experiencing outbreaks.

Living in areas with inadequate mosquito control measures, such as stagnant water sources or poor sanitation.

Spending time outdoors, especially in areas with high mosquito populations. Mosquito exposure is more likely during the daytime, particularly around dawn and dusk when Aedes mosquitoes are most active.

Wetter and hotter months of the year.

Individuals who have not been previously infected with chikungunya.

Infants, young children, older adults, and individuals with weakened immune systems or underlying health conditions.

Ever wondered why mosquitoes prefer biting you over others?

There might be times when you might have wondered why mosquitoes bite you more than others. Well, this could be because of:

'O' Blood type

Mosquito attracting genes

Pregnancy

Consumption of alcohol

The rationale behind this is that alcohol consumption, pregnancy, and even physical activity raise your metabolic rate, causing you to exhale more carbon dioxide, which in turn attracts more mosquitoes.

Diagnosis Of Chikungunya

The diagnosis of chikungunya involves a combination of clinical evaluation and laboratory tests. Here are the key steps involved in diagnosing chikungunya:

1. Medical history and physical examination

The healthcare provider will begin by taking a detailed medical history, including information about recent travel to regions where chikungunya is prevalent and symptoms you may be experiencing. A physical examination to check for signs of the disease will also be performed.

2. Symptoms

Chikungunya is characterized by symptoms like sudden onset of high fever, joint pain, muscle pain, headache, rash, and fatigue. These symptoms can be similar to those of dengue and Zika, making it important to consider the possibility of chikungunya based on the presence of symptoms and the geographical location.

3. Laboratory Tests

The most commonly used tests for the diagnosis of chikungunya include

a. Reverse Transcription-Polymerase Chain Reaction (RT-PCR): This test detects the genetic material (RNA) of the chikungunya virus in a blood sample. It is most effective during the first week of illness when the virus is actively replicating.

b. Antibody tests: Also known as serological tests, are designed to identify the existence of antibodies in the bloodstream, which typically develop after an infection. These tests employ either indirect immunofluorescence (IFA) or enzyme-linked immunosorbent assay (ELISA) methods.

The purpose of these tests is to detect the presence of anti-chikungunya antibodies, specifically IgM (which is detectable from five days to several weeks after infection) and IgG (which remains present from two weeks to several years after infection).

It's important to note that antibody tests do not detect current infections but indicate previous exposure to the virus.

4. Other tests

In most situations, it is advisable to undergo a complete blood count (CBC). This can provide your doctor with information about the severity of the infection and the presence of other conditions like anemia caused by the infection.

Don’t ignore the symptoms and get tested.

Book Test Now

Celebs affected

Lindsay Lohan

In 2014, Lindsay Lohan, the American actress and singer, contracted chikungunya during a trip to French Polynesia. She confirmed the diagnosis through her social media accounts.

Dona Ganguly

Dona Ganguly, the wife of former cricketer Sourav Ganguly, got infected by chikungunya virus in 2022. She was admitted to a private hospital with fever, joint pain, and rashes.

How to differentiate between chikungunya, dengue and Zika virus disease?

Dengue, Zika virus disease, and chikungunya infection are all mosquito-borne viral diseases transmitted by Aedes mosquitoes. These conditions share common symptoms like fever, rash, and joint pain, making symptom-based diagnosis challenging. However, specific laboratory tests, such as RT-PCR and serological tests, play a crucial role in differentiating between these infections and confirming the diagnosis.

Prevention Of Chikungunya

Presently there is no approved vaccine for the prevention of chikungunya.

Two vaccine candidates, one made from a modified measles virus and another using virus-like particles, have completed initial tests. More research and trials are underway before the vaccine is approved for public use.

In the absence of a vaccine, the most effective way to avoid chikungunya is by taking measures to protect yourself from mosquito bites.

Preventive measures to avoid mosquito bites

Wear long-sleeved shirts and long pants when working outdoors during the day to reduce the risk of mosquito bites.

Install window and door screens to keep mosquitoes out of your living areas.

Avoid outdoor activities during times when mosquitoes are most active.

Use mosquito nets or screens around beds to create a barrier against mosquitoes.

Consider using mosquito zapping devices, such as electric bats, to control the mosquito population.

To minimize mosquito attraction, switch your outdoor lights to yellow "bug" lights. While not repellent, these lights tend to attract fewer mosquitoes compared to regular lights.

Apply mosquito repellents that contain DEET, picaridin, IR3535, Para-menthane-diol (PMD), or oil of lemon eucalyptus.

Pro Tip: Apply sunscreen before applying mosquito repellent.

Tips for babies and children

Do not use products containing oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) on children under the age of 3.

Avoid applying insect repellent on a child's hands, eyes, mouth, cuts, or irritated skin.

When using insect repellent for children, adults should first spray it onto their own hands and then apply it to the child's face.

After returning indoors, wash your children's skin with soap and water to remove any repellent, and wash their clothing before they wear it again.

Avoid using sprays in pressurized containers that children may accidentally inhale or get into their eyes.

Products for preventing mosquito bites

Mosquito repellent bands: Worn on the wrist, they come in chemical (DEET-impregnated) and natural (essential oils) varieties.

Mosquito patches: Stickers stuck on clothes (collars, sleeves, skirts, shorts) available in chemical and herbal forms.

Body lotion or mosquito sprays: Synthetic repellents (DEET, permethrin) or natural repellents (citronella) for protection.

Mosquito repellent sticks: Similar to incense sticks, loaded with repellents, used in open spaces like gardens, terraces, or balconies.

Mosquito nets: Conventional option with fine wire mesh (18 x 18 strands per inch) for beds or window screens.

Additional repellent products: Apart from these repellents, there are products like blankets, floor cleaners, electric zappers and table-top fumigation machines, which help keep mosquitoes away.

Protect yourself and your family from mosquitoes with our wide mosquito repellant range.

Explore Now

Tips to prevent mosquito breeding

Avoid excessive watering of potted plants and ensure that trays are emptied to prevent them from becoming breeding grounds.

Regularly change the water for indoor plants and decorative items that can collect water, such as bird baths, tabletop fountains, flower vases, and fish tanks.

Empty water from trays under air conditioners, refrigerators, and other containers like pet or bird feeding bowls.

Clean these containers at least once every 15 days to disrupt the mosquito breeding cycle, which typically lasts around 15-20 days.

When not in use, turn over empty pails and buckets, and cover containers with tight-fitting lids to prevent mosquitoes from breeding.

Use dustbins with properly fitting lids and dispose of trash daily, as uncovered trash cans attract mosquitoes.

Implement regular fogging with mosquito repellents or larvicides, and consider spraying pesticides like DDT in potential mosquito breeding areas.

Are you wondering why there are lots of mosquitoes in your house even when you keep it clean? Want to know if your house is a mosquito magnet?

Read this article

Doctor To Visit

If you notice a high fever accompanied by chills and mosquito breeding in your vicinity, it is advisable to consult a doctor. Additionally, if you encounter a combination of symptoms like high fevers, joint pain, headaches, muscle pains, or a rash, it is crucial to seek medical attention without hesitation.

Medical professionals who specialize in diagnosing and treating chikungunya are:

General physician

Internal medicine specialist

Infectious disease specialist

Pediatrician (for children and adolescents)

A general physician will examine your symptoms. If they confirm a diagnosis, they may refer you to an Internal Medicine specialist who provides comprehensive care for adult patients, managing complex cases and addressing underlying health conditions.

Infectious disease specialists also play a crucial role in quickly and accurately diagnosing and treating infectious diseases like chikungunya.

A pediatrician can be consulted for medical treatment and preventive healthcare services for children and adolescents.

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Treatment Of Chikungunya

The main treatment for Chikungunya fever focuses on relieving symptoms, such as drinking enough fluids, resting, and using paracetamol for pain and fever relief. The treatment can be broadly divided into two phases:

1. Acute phase

After a silent incubation period of 2 to 4 days, patients generally display the chikungunya symptoms that may persist 3–7 days during the acute phase of the disease. The following treatment protocols are usually followed during this phase:

Rest should be one of the main recommendations as physical activities tend to aggravate the joint pain, contributing to local wear and thus to prolonging the clinical condition.

Certain local measures like the application of cold compresses or ice packs and pain relief gels to the affected joints can reduce swelling and pain.

The two most commonly used medications prescribed for mild to moderate pain are Paracetamol and Metamizole. NSAIDs like ibuprofen and aspirin are usually avoided because of the risk of bleeding.

In the case of severe-intensity pain, Paracetamol or Metamizole might be combined with opioids like Tramadol.

2. Post acute phase

While most patients start showing signs of recovery after a week, in some cases chronic and incapacitating joint pain can persist.

In the case of moderate to severe pain that is not responding satisfactorily to the medications in use, other drugs must be recommended. Among these options are disease-modifying antirheumatic drugs (DMARDs), like methotrexate, hydroxychloroquine or sulphasalazine.

Once the pain subsides, the pain relief medications are suspended; conversely, if the pain persists, corticosteroids like prednisolone might be prescribed at an anti-inflammatory dose.

Note: Special considerations are made for pregnant women and children in terms of medication choices.

Listen to our expert talk about the most common mosquito-borne diseases like malaria, chikungunya & dengue including their prevention and treatment. Watch this video

Home-care For Chikungunya

Certain herbal remedies that may help alleviate the symptoms of chikungunya. It's important to note that these remedies may provide relief but should not replace medical treatment or advice.

Here are some herbal remedies that may help manage the symptoms of chikungunya:

1. Turmeric (haldi): Turmeric is an effective natural remedy for alleviating chikungunya-related pain. It contains curcumin, a compound with potent antioxidant and anti-inflammatory properties. It can be consumed as a spice in cooking or taken as a supplement.

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2. Ginger (adarak): Ginger can help relieve pain and discomfort associated with chikungunya.

It can be consumed as tea, or as an ingredient in various dishes. To make ginger tea, simply steep fresh ginger slices in hot water for several minutes. It can also be taken in supplement form.

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3. Sonth: Sonth, or dried ginger is known for its anti-inflammatory and pain-relieving effects. It can be consumed as tea or added to food for relief from chikungunya symptoms.

4. Coconut Water (nariyal paani): Coconut water has a positive impact on the liver, which is often targeted by the Chikungunya virus. Consuming coconut water can aid in a quicker recovery and help reduce chikungunya symptoms.

5. Basil (Tulsi): Basil, also known as tulsi, can help lower body temperature and boost the immune system. Chewing basil leaves or drinking tea made from boiling basil leaves in water can provide relief and aid in the recovery process.

6. Papaya leaf extract: Papaya leaf extract is believed to have immune-boosting properties and may help increase platelet count. It is typically consumed as tea or juice. Fresh papaya leaves are crushed or ground, and the juice is extracted. It can be consumed orally, but the dosage and frequency should be discussed with a doctor.

7. Garlic (Lehsun): Garlic possesses antiviral and immune-boosting properties and alleviates symptoms associated with chikungunya. Garlic can be consumed raw, cooked, or in supplement form. However, it's important to note that consuming excessive amounts of garlic may cause digestive discomfort, and it can also interact with certain medications. It's best to consult with a doctor before using garlic as a remedy.

8. Giloy: Also known as Guduchi, is an ayurvedic herb with immunity-enhancing and anti-inflammatory properties. It can be taken as juice or decoction.

9. Spirulina: Spirulina is a type of blue-green algae rich in nutrients. It is often used as a dietary supplement due to its high protein content and immune-enhancing properties.

Diet for better recovery from Chikungunya

1. Consume nutrient-rich foods: Include a variety of fruits, vegetables, whole grains, lean proteins, and healthy fats in your diet. These foods provide essential nutrients, antioxidants, and fiber to support your immune system and promote overall well-being.

2. Increase intake of anti-inflammatory foods: Chikungunya can cause joint pain and inflammation. Include foods with anti-inflammatory properties in your diet, such as turmeric, ginger, garlic, berries, leafy greens, fatty fish (like salmon and mackerel), and nuts.

3. Include foods rich in vitamins and minerals: Foods that are high in vitamin C, vitamin D, vitamin E, and zinc can help boost your immune system. Citrus fruits, berries, kiwi, bell peppers, spinach, nuts, seeds, and legumes are good sources of these nutrients.

4. Focus on healthy fats: Include sources of healthy fats like avocados, olive oil, nuts, and seeds in your diet. These fats have anti-inflammatory properties and can support your overall health.

5. Limit processed foods and added sugars: Minimize your consumption of processed foods, sugary snacks, and beverages as they can weaken the immune system and promote inflammation.

6. Probiotics: Probiotics such as yogurt, pickles, tempeh (Fermented Soybeans) etc are rich in probiotics, the good bacteria that support gut health and help stimulate the immune system to fight off disease.

Other tips that can help in alleviating symptoms:

1. Stay hydrated: Drink plenty of fluids such as water, herbal teas, and fresh fruit juices to stay hydrated and help flush out toxins from your body. Also, proper hydration makes it easier for immune-boosting nutrients to get to where they need to go (cells) in your body.

2. Take proper rest: Get plenty of rest to allow your body to recover and conserve energy. Avoid strenuous activities that may worsen your symptoms.

3. Epsom salt baths: Soothing bath with Epsom salt is a commonly used home remedy for various conditions, including muscle aches and pains. Dissolve about two cups of Epsom salt in a bathtub filled with warm water and soak in it for 15-20 minutes. This may provide temporary relief and help relax the muscles.

4. Cold Compresses: Applying cold compresses or ice packs to swollen joints or areas of pain can help reduce inflammation and provide temporary relief from discomfort.

Complications Of Chikungunya

Most individuals with chikungunya experience a self-limiting illness and recover within a few weeks. However, individuals with pre-existing health conditions or weakened immune systems may be at a higher risk of developing the following complications:

Eye issues such as conjunctivitis (often known as pink eye, is an inflammation or infection conjunctiva), optic neuritis (swelling of the optic nerve), iridocyclitis (inflammation of the iris), retinitis (inflammation of the retina), uveitis (inflammation of the uvea) etc.

Persistent joint pain

Chronic Arthritis (long-term joint inflammation and leads to chronic arthritis).

Cardiovascular issues such as myocarditis (inflammation of the heart muscle), pericarditis (inflammation of the pericardium), and heart failure.

Hepatitis (liver inflammation)

Skin lesions (or fluid-filled blisters)

Hemorrhage (loss of blood, inside or outside the body)

Myelitis (inflammation of the spinal cord)

Cranial nerve palsies (lack of function of a nerve)

Guillain-Barré syndrome (an autoimmune disorder affecting the nerves).

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Did you know?

According to research, females who smoke have a higher likelihood, around 2 to 3 times, of experiencing severe pain, particularly in the joints, during both the acute and chronic stages of Chikungunya infection.

Alternative Therapies For Chikungunya

It's important to note that these therapies should be used in conjunction with conventional medical care and under the guidance of a healthcare professional. Here are some alternative therapies that may be considered:

Physiotherapy: Chikungunya can cause joint pain and stiffness. Physiotherapy techniques such as gentle stretching exercises and range-of-motion movements can help improve chronic CHIKV-associated severe pain and joint mobility.

Acupuncture: Acupuncture involves inserting thin needles into specific points on the body. Some studies suggest that acupuncture may help alleviate pain and inflammation associated with chikungunya. Seek out a licensed acupuncturist for this treatment.

Aromatherapy: Essential oils such as lavender, chamomile, and eucalyptus may have soothing and anti-inflammatory properties. They can be used in a diffuser, added to a warm bath, or diluted with a carrier oil and applied topically. However, it's important to note that essential oils should be used with caution and diluted properly, as they can be potent and may cause skin irritation or other adverse effects

Frequently Asked Questions

How long does it take to recover from chikungunya?

When does a chikungunya mosquito bite?

Can Chikungunya spread from person to person?

Is chikungunya life threatening?

Can Chikungunya be cured?

Is there a vaccine for Chikungunya?

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Yellow fever

Also known as Yellow jack, Yellow plague, Saffron Scourge, Fievre jaune, Bronze John and Black vomit

Overview

Yellow fever is a mosquito-borne viral illness commonly seen in tropical and subtropical areas of South America and Africa. The "yellow" in the name refers to jaundice, which is one of the key symptoms of yellow fever seen in certain patients. Many people do not experience symptoms, but the most common symptoms that occur are fever, muscle pain with prominent backache, headache, loss of appetite, and nausea or vomiting. The virus transmission is primarily via Aedes and Haemagogus mosquitos. It has an incubation period of 3-6 days, which means it takes around 3 to 6 days for the symptoms to appear post infection.

Yellow fever is difficult to diagnose, especially during the early stages. More severe cases can be confused with severe malaria, leptospirosis, viral hepatitis, and other hemorrhagic fevers.Tests that help in the diagnosis of yellow fever are polymerase chain reaction (PCR) testing of blood. Sometimes, urine testing can also help detect the virus in the early stages of the disease.

The yellow fever vaccine is recommended if a person is traveling to an area where yellow fever is found and a country that requires to have a certificate of vaccination against yellow fever. The vaccine provides immunity only after 10 days of vaccination. It confers lifelong immunity to people residing in yellow fever endemic countries.

Key Facts

Usually seen in

All age group

Gender affected

Both men and women

Body part(s) involved

Whole body

Mimicking Conditions

Malaria

Leptospirosis

Viral hepatitis

Dengue

Necessary health tests/imaging

Antigen detection IgM

Polymerase chain reaction

Enzyme-linked immunosorbent assay (ELISA)

Lumbar puncture

Computed tomography (CT) scan

Liver function tests (LFT)

Electrocardiograph (ECG

Complete blood count (CBC):

Treatment

Paracetamol

Ibuprofen

Aspirin

Naproxen

Specialists to consult

General physician

Pediatrician

Infectious disease specialist

Symptoms Of Yellow Fever

The first symptoms of yellow fever usually develop 3 to 6 days after being infected. They include:

Muscle pain and backache

Feeling sick or vomiting

Fatigue (feeling tired)

General body aches

Nausea

Severe headache

Eyes being sensitive to light

Most people with the initial symptoms improve within one week. For some people after recovery, weakness and fatigue (feeling tired) might last for several months. Yellow fever can be deadly among those who develop severe disease

Up to 1 in 4 people might develop a more severe form of the disease with symptoms such as:

Yellowing of the skin and eyes (jaundice)

Organ failure

Bleeding from the mouth, nose, eyes, or ears

High fever

Shock

Don’t ignore any symptoms. Instead get tested. Lab tests are just a click away.

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Causes Of Yellow Fever

The yellow fever virus is an arbovirus of the flavivirus genus and is transmitted by mosquitoes, belonging to the Aedes and Haemogogus species. Different mosquito species live in different habitat: some lives in the wild, some are domestic and some in both habitat. There are 3 types of transmission cycles:

Sylvatic (or jungle) yellow fever: In tropical rainforests, monkeys, which are the primary reservoir of yellow fever, are bitten by wild mosquitoes of the Aedes and Haemogogus species, they pass the virus on to other monkeys. The humans traveling in the forest are bitten by infected mosquitoes and later develop yellow fever.

Intermediate yellow fever: During this type of transmission, semi-domestic mosquitoes (those that breed both in the wild and around households) infect both monkeys and people. Increased contact between people and infected mosquitoes leads to increased transmission. This is the most common type of outbreak in Africa.

Urban yellow fever: Large epidemics occur when infected people introduce the virus into heavily populated areas with a high density of Aedes aegypti mosquitoes and where most people have little or no immunity, due to lack of vaccination or prior exposure to yellow fever.

Is Your Home A Mosquito Magnet?

If you always wonder why there are so many mosquitoes in your house even if your home is clean, then the answer could be that your house is a mosquito magnet. Yes, there are some secret breeding spots for mosquitoes in your house that you have been overlooking. Read to know more.

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Risk Factors For Yellow Fever

1. Being unvaccinated

Unvaccinated young children are prone to yellow fever and its complications including death. Unvaccinated pregnant women and nonimmune people can become infected.

2. International traveling

Traveling to countries where yellow fever is common and less controlled puts you at a higher risk of developing the disease.

3. Countries experiencing a yellow fever outbreak

Countries experiencing or recovering from a natural disaster. Damage to health infrastructures interrupts routine immunization and greatly increases the risk of infection.

Diagnosis Of Yellow Fever

Yellow fever is difficult to diagnose, especially during its early stages. A more severe case can be confused with severe malaria, leptospirosis, viral hepatitis, other hemorrhagic fevers, and infection with other flaviviruses (such as dengue hemorrhagic fever).

1. History and physical examination

The diagnosis requires a thorough travel history and record of immunization. The doctor may evaluate the present symptoms such as headache, malaise, jaundice, and myalgias with severe back pain. The incubation period of the virus is usually 3-7 days, with most individuals having a mild flu-like illness. In severe 15% of cases, symptoms include chills, low back pain, headache, and fever. During the physical examination, the doctor may check the Faget sign or pulse fever dissociation, facial flushing, and conjunctival injection. During the most toxic phase, patients develop jaundice, dark urine, and vomiting. Bleeding may occur from mucous membranes and in the gastrointestinal tract.

2. Lab tests

Laboratory confirmation is important after the physical evaluation is done by the doctor.

Antigen detection: Rapid detection methods include the detection of yellow fever antigen using a monoclonal enzyme immunoassay in serum specimens.It is accomplished by testing serum to detect virus-specific IgM and neutralizing antibodies.

Polymerase chain reaction: This improved technique not only ensures the specific detection of a wide range of yellow fever virus genotypes but also may increase the sensitivity of detection.

Enzyme-linked immunosorbent assay (ELISA): This is a common test that is able to detect different types of antibodies produced at different stages of the infection. This test uses the binding of antibodies to antigens to identify and measure certain substances.

3. Other tests

Lumbar puncture: In case of altered mentation, a lumbar puncture is performed. A lumbar puncture is sometimes called a cerebrospinal tap a medical procedure that can involve collecting a sample of cerebrospinal fluid (CSF).

Computed tomography (CT) scan: A CT scan uses computers and rotating X-ray machines to create cross-sectional images of the body. In case the brain is involved in yellow fever, a CT scan is performed.

Liver function tests (LFT): If the liver is involved, the coagulation profile may be abnormal.

Chest X-ray: A chest x-ray is done in patients with respiratory distress because of pulmonary edema.

Electrocardiograph (ECG): This test is performed in case of prolonged QT and PR intervals. Arrhythmias are common when the myocardium is affected.

Complete blood count (CBC): The blood test may also show a reduction in the number of infection-fighting white blood cells (leucopenia). This can occur because the yellow fever virus affects bone marrow (the spongy material at the center of some bones that produces blood cells).

Specialist To Visit

Patients exhibiting the signs and symptoms of yellow fever should visit a general physician. If needed, your doctor may recommend you to go to a specialist such as:

Infectious disease specialist: A doctor who is trained in internal medicine and specializes in diagnosing, treating, and managing infectious diseases.

Pediatrician: A pediatrician is a children’s specialist who diagnoses and treats malignancies, infections, and genetic defects.

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Prevention Of Yellow Fever

The most effective way to prevent infection from yellow fever virus is to prevent mosquito bites. Mosquitoes bite during the day and night.

Vector control

This can be done by using insect repellants, wearing long sleeves shirts and pants, stopping mosquito breeding both indoors and outdoors by avoiding water lodging, and preventing mosquito bites while traveling overseas.

Have you tried these latest range of mosquito repellants like mosquito repellent bands, patches and more? If not, have a look!

Check Out!

Vaccination

Yellow fever can be prevented by taking vaccination against it. A single injection of yellow fever vaccine given subcutaneously provides immunity to 100% of its recipients. The vaccine provides immunity only after 10 days of vaccination. However, a booster dose is required every ten years by persons residing in nonendemic countries. A further dose of vaccine is recommended for a small number of travelers who are visiting yellow fever risk areas, including those who were previously vaccinated when they were:

Pregnant

Under 2 years old

Living with HIV

Had a weakened immune system

There are some groups of people who cannot have the yellow fever vaccine when it's recommended include:

People whose immune system is weakened by treatment, such as steroids and chemotherapy

People who had a severe reaction to a previous dose of yellow fever vaccine

People with a thymus gland disorder or who've had their thymus gland removed

Epidemic preparedness and response

Prompt detection of yellow fever and rapid response through emergency vaccination campaigns are essential for controlling outbreaks. A confirmed case of yellow fever in an unvaccinated population is considered an outbreak. A confirmed case in any context must be fully investigated.

Treatment Of Yellow Fever

There is no specific treatment, but severe cases require aggressive supportive care and hydration can be helpful in getting relief:

Rest, drink fluids, and use pain relievers and medication to reduce fever and relieve aching.

Avoid certain medications, such as aspirin or other nonsteroidal anti-inflammatory drugs, like ibuprofen or naproxen which may increase the risk of bleeding.

People with severe symptoms of yellow fever infection should be hospitalized for close observation and supportive care.

People with yellow fever should be protected from further mosquito exposure (for example, they should stay indoors or under a mosquito net) during the first few days of illness, so they do not contribute to the disease transmission cycle.

Paracetamol and ibuprofen can be taken for controlling fever and the pain caused by the virus, for children liquid paracetamol can be used.

If a person is having a high temperature increase the intake of fluids to eliminate the risk of dehydration.

Home-care For Yellow Fever

No specific treatment exists for yellow fever, which is one reason that preventative measures such as vaccination are so important. Supportive treatment is aimed at controlling the symptoms and includes rest, fluids, and the use of medicines to help relieve fever and aching.

There is no specific home care treatment for yellow fever. The patient requires care and time to time medicines and few precautions. Home care is to be taken to make the disease tolerable:

Get plenty of rest

A sponge bath can reduce discomfort due to fever

Drink plenty of water

Pain relievers and analgesics such as acetaminophen

To reduce itching from the rash, one can use witch hazel on the rashes or add oatmeal to a bath

Talking with a doctor openly in case of any questions related to the disease

Taking adequate sleep

Dietary modifications

Drink a minimum of 8 glasses of water daily.

Avoid refined foods, such as white bread, pasta, and sugar.

Use healthy oils in cooking, such as olive oil, coconut oil, or ghee.

Reduce or eliminate trans fats found in processed and packaged foods like biscuits, namkeens, and cakes.

Limit caffeine-containing beverages like coffee. Avoid alcohol and tobacco.

Alternative Therapies For Yellow Fever

Home remedies

The following home remedies can help in recovery from yellow fever:

Garlic (Lehsun): It is known for its anti-inflammatory property; and thus, very good medicine for a mosquito bite.

Tomato (Tamatar): They have a good source of water content and thus provide enough water to the body. It helps in getting relief in nausea or vomiting caused due to yellow fever.

Coconut water (Nariyal pani): It is the best supplement for yellow fever, as it has the ability to turn yellow eyes to normal.

Watermelon (Tarbuz): It has cooling properties, a great substitute for water loss in the body due to nausea or vomiting or appetite loss that appears during yellow fever.

Bitter gourd (Karela): It is the best method for reducing inflammation. It is advisable to drink at least two tablespoons of bitter gourd juice, twice a day.

Frequently Asked Questions

How long does yellow fever vaccination last?

What are the side effects of yellow fever vaccination?

Who should not get the yellow fever vaccine?

Where does the yellow fever virus occur?

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Choking

Also known as Strangle, and Clogged up

Overview

Choking happens when an object or a liquid blocks the throat or windpipe blocking the flow of air. The symptoms of choking are coughing, inability to talk, difficulty breathing and turning blue (cyanosis).

Children often choke as a result of placing foreign objects into their mouths. Adults can choke from eating or drinking too rapidly or when laughing while eating or drinking.

If someone is choking, the best way to give that person first aid is by encouraging them to cough, bend the person forward and give up backflow to dislodge the blockage. If the person is still choking, give abdominal thrusts by holding it around the waist and pressing the belly inward and outward.

Choking can be prevented by following various preventive measures like cutting food into smaller pieces, chewing food slowly and thoroughly, and avoiding laughing and talking while chewing and swallowing.

Causes Of Choking

Most episodes of choking are simply due to some mistakes while eating. The various causes of choking are discussed below:

1. Mechanical

Choking is the result of mechanical obstruction of the airways preventing normal breathing can be due to eating food too quickly, laughing while eating, or consuming a large chunk of food.

2. Neurological

Swallowing is a complex interplay of signals from the brain to the muscles of the mouth and throat. Disorders related to the brain and nerves can create an imbalance in this mechanism and lead to choking.

3. Allergic

A few allergic reactions can cause swelling at the back of the mouth that can block airflow and cause a choking sensation.

4. Musculoskeletal

Weakening of the muscles of the mouth or throat can make swallowing less effective and can lead to choking.

5. Other causes of choking

Stroke

Head injury

Dementia

Multiple sclerosis

Symptoms Of Choking

The signs and symptoms of choking vary according to the severity of the obstruction. These include

Difficulty in breathing

Difficulty in speaking

Neck or throat pain

Coughing

Dizziness

A red puffy face

Bluish tint to the lips, skin, or nails due to lack of oxygen

Look of shock or confusion

Strained or noisy breathing

Squeaky sounds while breathing

Types Of Choking

Choking can be classified into two types:

Partial airway obstruction or mild choking

In partial airway obstruction, the patient may be able to breathe and cough, although there may be a 'crowing' noise coming as the air passes through a narrowed space. In this case, the person could clear the blockage by coughing.

Complete airway obstruction or severe choking

In the case of severe choking, the person won't be able to speak, cry, cough, or breathe, and without help, they'll eventually become unconscious.

Risk Factors For Choking

1. Inattention while eating

If a person is laughing, not chewing the food properly, or distracted by other people's activities then it can easily increase the risk of choking.

2. Swallowing inedible objects

Swallowing inedible objects can sometimes pass through your system without notice. In some cases, the objects can get stuck in the food pipe that connects the mouth and stomach or can block the airway causing choking.

3. Dysphagia (difficulty swallowing)

In the case of dysphagia, there's a risk of food, drink, or saliva going down the wrong way. Ultimately this can block the airway, making it difficult to breathe and causing a person to cough or choke.

4. Neurological and muscular disorders

Neurological disorders like cerebral palsy and seizure disorder increase the chances of choking. Any damage to the nervous system can interfere with the nerves responsible for controlling swallowing.

5. Gastroesophageal reflux disease (GERD)

GERD is a condition in which acid-containing contents in the stomach persistently leak back up into the esophagus (the tube from the throat to the stomach). In some cases of GERD, a person may experience pain in the chest or trouble swallowing. A feeling of food stuck or tightness in the throat might be experienced.

6. Dentures

Dentures can make it difficult to sense whether food is fully chewed before it is swallowed. If dentures are poorly fit, individuals are unable to chew their food properly which can lead to choking.

Diagnosis Of Choking

A medical practitioner will carry out an initial assessment of swallowing to assess the reasons for choking. They may refer for further tests and treatments.

1. History

A medical practitioner will assess the history of the swallowing difficulties by determining the ability to swallow solids, liquids, or both and ask about the symptoms the individual is facing.

2. Lab tests

Swallow tests: These tests can be helpful in the initial assessment of swallowing abilities. The doctor will tell the [patient to swallow water and the time taken to drink water and the number of swallows required will be recorded.

Manometry and 24-hour pH study: This test helps in evaluating the functioning of the esophagus. A small tube with pressure sensors is passed through the nose into the esophagus to measure the amount of acid that flows back from the stomach. This can help in determining the cause of choking difficulties.

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3. Imaging tests

Barium X-ray: In this test the patient is told to drink a barium solution that coats the esophagus, making it easier to visualize on X-rays. This test helps in visualizing the changes in the shape of your esophagus. The results are recorded, allowing the choking problems to be studied in detail.

Endoscopy: In this test, a thin, flexible lighted instrument (endoscope) is passed down the throat so that the doctor can visualize the esophagus.

Fiber-optic endoscopic evaluation of swallowing (FEES): This test is usually a first choice for studying swallowing disorders as it is easy to use and well tolerated with no radiation exposure. First, an endoscope (a thin and flexible tube with a light and a camera at one end)is used to look down and identify any blockages in the nose and upper airways. Second, swallowing is assessed with different textures and sizes of food and liquid.

Videofluoroscopic Swallow Study (VFSS): This test, also known as a modified barium swallow, is another gold standard that allows dynamic x-ray examination of the oral cavity, pharynx, and esophagus. It permits evaluation of the patient’s airway before, during, and after swallowing.

Computed Tomography (CT scan): This procedure uses a computer linked to an x-ray machine to make a series of detailed pictures of areas inside the body. A neck CT scan uses a special X-ray machine to make images of the soft tissues and organs of the neck, including the muscles, throat, tonsils, airways, thyroid, and other glands.

Magnetic resonance imaging (MRI) scan: The procedure uses strong magnetic fields and radio waves to produce detailed images of the inside of the body. A neck MRI scan makes images of the soft tissues and organs of the neck, including the muscles, throat, tonsils, airways, thyroid, and other glands.

Prevention Of Choking

Prevention of choking in adults:

Cut or chop food into smaller pieces.

Chew food slowly.

Avoid laughing and talking while eating.

Avoid intake of alcohol before and after meals.

If you wear dentures, take extra care to chew the food slowly and properly.

Prevention of choking in children:

Children under 4 years of age are at higher risk of choking, but older children can also choke. Children with disabilities or with some chronic illness might also be at higher risk of choking than other children.

1. Avoidance of food choking hazards

Children under four years of age are at higher risk of choking on food because they do not have the back teeth that are required for grinding hard food down to small pieces. They are easily distracted while eating and have small airways that can easily block. Foods that are needed to be avoided if your child is under 4 years of age:

Hard fruits and vegetables like raw carrot

Small and round fruits and vegetables like whole cherry tomatoes, whole grapes, berries

Smooth and sticky foods like peanut butter or some sticky spreads

Pieces and bones of meat, chicken, and fish

Round and cylindrical foods like hot dogs and sausages

Whole nuts and seeds

Hard-to-chew foods like hard cookies, chips, candies, and popcorn

2. Make food safer to eat

Peel the skin and remove the seeds of the fruits. Grate hard fruits and vegetables such as raw carrots and apples or cook to soften and cut into smaller pieces.

In the case of meat, serve tender, moist meat that is cut into smaller pieces. Remove all bones from the meat before serving.

Give them finely chopped or crushed nuts and seeds until they are four years old.

3. Watch the child while eating and drinking

Seat your child comfortably in a chair while eating and drinking

Do not let the child eat while walking, running, lying down, or while in a moving car as this reduces the risk of choking

Keep the mealtime calm with minimal distractions and encourage the child to chew properly

Avoid giving the baby a milk bottle in bed. As soon as the babies fall asleep with a bottle in their mouth, this can draw liquid into their lungs and choking can occur.

4. Avoidance of non-food choking hazards

Toddlers and young children explore the world by putting anything and everything in their mouths. Keep the children out of reach of a few things to create a safer environment.

Keep small and round-shaped objects out of reach of children including buttons, bottle caps, coins, jewelry, small magnets, and marbles

Check for broken pieces of toys or games around the space where the child is playing.

Follow age recommendations on toy packages

Teach children not to put small objects in their mouths during their playtime

Encourage kids not to put pencils, crayons, or erasers in their mouths when coloring or drawing.

Make your home a “Childproof home” by getting down on your hands and knees in every room of your home for a kid's-eye view.

Remove or lock away items that could be dangerous.

Did you know?

Latex balloons can be a choking hazard for toddlers and young children. If a child chews on a deflated balloon and then suddenly breathes in, a broken latex balloon can fill up a child’s airway and form an airtight seal. This can make rescue efforts very hard. Choose mylar or foil balloons instead.

Specialist To Visit

Choking can be caused due to several reasons. In case of frequent choking, doctors can help you diagnose the exact cause and provide treatment including

General physicians

Neurologists

Gastroenterologists

Pediatrician (in the case of children)

A neurologist is a specialist in conditions that affect the brain, nerves, and spinal cord

A gastroenterologist is a specialist who is a medical practitioner qualified to diagnose and treat disorders of the stomach and intestines.

A pediatrician is a doctor who specializes in child care from birth until age 18.

When to see a doctor?

You should contact your doctor immediately if you have the following symptoms:

Difficulty in breathing

Difficulty in swallowing

Confusion or disorientation

Neck or throat pain

Coughing

Fatigue

Noisy breathing

Seek medical help from our trusted team of doctors.

Book your appointment now

Treatment Of Choking

The primary management of choking is to expel objects or foods blocking the throat. Also, treating the underlying causes is important to stop the episodes of choking.

1. The Heimlich Maneuver

In the case of a person coughing forcefully, encourage them to continue coughing to clear the object.

Give the person 5 backflows by bending them forward and hitting firmly on their back with the heel of your hand between the shoulder blades to dislodge the object.

In the case that a person is not able to cough, speak or breathe, however, needs immediate help. Give them abdominal thrusts, also known as the Heimlich maneuver, to prevent suffocation.

Steps of The Heimlich Maneuver

Stand behind the person who is choking

Place your arms around the waist and bend them forward

Clench your fists and place them above the belly of the person

Put the other hand on top of your fist and pull sharply inwards and upwards

Repeat the above steps at least 5 times

Learn more about First aid for choking and how you can save a person's life.

Click to read more

2. Cardiopulmonary resuscitation (CPR)

CPR is given when the person is unresponsive and is not breathing or only gasping for air. It is a vital and essential skill that can save someone’s life.

The two key elements of CPR are pressing on the chest, also called compressions, and providing breaths.

CPR on adults

Unless someone is trained in CPR including rescue breaths and feels confident using these skills, then only the person should give chest compressions with rescue breaths.

CPR on adults can be classified into two types:

Hands-only CPR

CPR with rescue breaths

Hands-only CPR (Chest compression)

To carry out hands-only CPR, the steps are:

Kneel down next to the person and place the heel of your hand at the center of their chest. Place the palm of the other hand right on the top of the hand placed above the chest to interlock the fingers

Position yourself in such a way that your shoulders are directly above your hands

Using your own body weight press straight down by 2 to 2.5 inches on their chest

Keeping your hands on their chest, and allow their chest to return to its original position

Repeat these compressions at a rate of 100 to 120 times a minute until the help arrives

CPR with rescue breaths

Giving breaths during CPR can help maintain a supply of oxygen in the lungs. This helps in the circulation of oxygen in the vital organs. The preferred method to give breaths is by using a mask; however, mouth-to-mouth breaths can also be given.

To carry out CPR with rescue breaths, the steps are as follows:

Place the heel of your hand on the center of the person's chest, then place the other hand palm on top and press down by 5 to 6 cm and give 100-120 compression at a steady rate

After every 30 chest compressions, give 2 rescue breaths

For giving rescue breaths, tilt the person's head gently and lift the chin up with 2 fingers and pinch the person’s nose. Seal your mouth over their mouth and blow steadily into their mouth for about 1 second

Continue with this pattern of cycles of 30 chest compressions and 2 rescue breaths until the person begins to recover or help arrives

Note: For children, it is recommended to carry out CPR with rescue breaths.

3. Intubation

A breathing tube is passed into a person's windpipe (trachea). This helps push the object obstructing the airway out of the way enough to provide air to the lungs.

If intubation is unsuccessful in a person then the doctor may perform a surgical procedure called cricothyrotomy which involves placing a tube through an incision in the cricothyroid membrane (CTM) to establish an airway for oxygenation and ventilation.

Complications Of Choking

Choking if not addressed immediately can lead to the following complications:

1. Aspiration Pneumonia

This is a chest infection that can develop after accidentally inhaling something, such as a small piece of food. It causes irritation in the lungs or damages them.

2. Hypoxia

The most feared complication of foreign body airway obstruction is hypoxia which results in respiratory arrest, anoxic brain injury, and death.

3. Abdominal injury

The complications with the Heimlich maneuver include injury to the abdomen and regurgitation of stomach contents.

Frequently Asked Questions

What is most commonly choked on food?

Is choking a common emergency?

How do you prevent choking?

What age group is most at risk for choking?

Does choking increase with age?

Key Facts

Usually seen in

Children are aged 1- 4 years and adults over 65 years.

Gender affected

Both men and women

Body part(s) involved

Throat

Pharynx

Larynx

Trachea

Lower respiratory tract

Mimicking Conditions

Dysphagia (Swallowing difficulties)

Pseudodysphagia (Lump in the throat)

Phagophobia (Swallowing/ choking phobia)

Necessary health tests/imaging

Lab tests

Swallow tests

Manometry and 24-hour pH study

Imaging tests

Barium X-ray

Endoscopy

Fiber-optic endoscopic evaluation of swallowing (FEES)

Videofluoroscopic Swallow Study (VFSS)

Computed Tomography (CT scan)

Magnetic resonance imaging (MRI) scan

Treatment

The Heimlich Maneuver

Cardiopulmonary resuscitation (CPR)

Breathes

Compression

Intubation

Specialists to consult

General physicians

Neurologists

Gastroenterologists

Pediatrician (in the case of children)

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Zika virus disease

Also known as Zika fever, Zika, Zika disease and ZIKV disease

Overview

Zika virus disease is a mosquito-borne viral infection caused by the Zika virus. Its name comes from the Zika forest of Uganda, where the virus was first isolated in 1947. The virus spreads to people primarily through the bite of an infected Aedes aegypti mosquito, the same mosquito that causes chikungunya, dengue, and yellow fever. However, it can also spread from mother to child during pregnancy or through sexual intercourse.

It is reported that 4 out of 5 suffering from Zika virus disease do not experience any symptoms. And in people who show the symptoms, it presents as fever, rash, conjunctivitis, muscle pain, and joint pain. The virus can be diagnosed through RT-PCR and IgM testing.

There is no vaccine or specific treatment for Zika infection. However, disease can be prevented by reducing mosquito bites. This can be done by applying mosquito repellents, sleeping under nets, wearing long sleeve & using mesh on the windows. Special precautionary measures should be taken by pregnant women to avoid complications such as birth defects.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but more common in women

Body part(s) involved

Whole body

Mimicking Conditions

Dengue

Yellow fever

West Nile fever

Japanese encephalitis

Tick-borne encephalitis

Necessary health tests/imaging

RT-PCR test

Ig M test

Plaque reduction neutralisation tests (PRNT)

Treatment

Fluid therapy

Paracetamol

Specialists to consult

General physician

Infectious disease specialist

Gynaecologist

Symptoms Of Zika Virus Disease

The incubation period (the time from exposure to symptoms) of Zika virus disease is 3 to 14 days. Symptoms are usually indistinguishable from other diseases such as dengue & chikungunya and persist for 2 to 7 days. The symptoms include:

Fever

Rash

Conjunctivitis

Muscle pain

Joint pain

Malaise

Headache

Patients might also experience some other symptoms such as:

Abdominal pain

Diarrhoea

Constipation

Photophobia

Small ulcers on the oral mucosa

Hearing impairment

Vomiting

Causes Of Zika Virus Disease

Most people get the Zika infection through mosquito bites. It is primarily transmitted through the bite of an infected Aedes aegypti and Aedes albopictus mosquito. These mosquitoes lay eggs & breed in or near stagnant water. Standing water in coolers, buckets, flower vases, and pots provide breeding sites to these infected mosquitoes.

A person can get the virus in his blood through the bite of an infected mosquito. The virus usually remains in the blood for one week. These mosquitoes mostly bite during the morning and early afternoon.

The basic reproduction number (R0, a measure of transmissibility) of Zika virus has been estimated to be between 1.4 and 6.6. R0 tells you the average number of people who will contract a contagious disease from one person with that disease. For example, if a disease has an R0 of 18, a person who has the disease will transmit it to an average of 18 other people.

Note: R0 (R naught) is the basic reproduction number, also known as basic reproduction ratio or rate, which is used to measure the transmissibility of infectious agents.

The other ways through which people can get the infection include:

Through unprotected sexual intercourse

Through contaminated blood transfusions

From mother to child

Don’t ignore any symptoms. Instead get tested. Lab tests are just a click away.

Book Now!

Risk Factors For Zika Virus Disease

The factors that increase the risk of Zika virus disease include:

Unprotected sex

Travelling to the areas where there are Zika outbreaks

Staying in Zika-infected area

Blood transfusion

Did you know?

Zika virus disease was declared as a public health emergency because the disease is linked with a congenital defect, microcephaly in which babies are born with undersized brains and skulls. Moreover, the Indian population was at a high risk of Zika virus infection. Read to know more about the Zika virus threat in India.

Read Now!

Diagnosis Of Zika Virus Disease

Zika virus disease is usually advised to be diagnosed within a week of developing symptoms or in case you or your partner have recently travelled to a contaminated area.

The most common testing methods includes:

1. Reverse transcription polymerase chain reaction (RT-PCR): This method detects RNA (genetic material) of the Zika virus. It is a rapid, sensitive and specific method for early detection. The test can be done with urine, saliva & blood samples. Studies suggest that the genetic material of the Zika virus can be detected for a longer time in the urine and saliva of patients for a longer duration as compared to blood. This test can detect the virus during the first 3 to 5 days from the onset of infection.

2. Serology: It detects the antibodies such as immunoglobulin M (IgM) in the blood produced by the virus. The method can detect the presence of antibodies after 4 days of illness. IgM levels are variable, but generally become positive starting in the first week after onset of symptoms and continuing for up to 12 weeks post symptom onset or exposure, but may persist for months to years. Generally, it is not used much as it cannot differentiate with other flaviviruses such as dengue, chikungunya, and yellow fever.

3. Plaque reduction neutralisation tests (PRNT): These are quantitative assays that measure virus-specific neutralising antibody titers. PRNTs can resolve false-positive IgM antibody results that cause non specific infections and help identify the exact virus that has caused the infection. Thus, it is a confirmatory diagnostic method.

Examination during pregnancy

During pregnancy, several tests can be done to identify congenital Zika virus infection. These include:

Ultrasound: For Zika infected (or suspected) pregnant women, serial ultrasounds (every 3 to 4 weeks) are recommended. The test can detect various brain related abnormalities of the foetus such as microcephaly and intracranial calcifications. Microcephaly can be detected in the late second & early third trimester of pregnancy. Early detection (18 to 20 weeks of gestation) is also possible.

Amniocentesis: In this procedure, amniotic fluid (fluid that surrounds the foetus) is tested for the possible Zika virus infection of the baby. It is done after 15 weeks of gestation as early detection increases the chances of infection.

Several tests such as anemia, diabetes, hepatitis B and C, and HIV conducted during pregnancy can minimise or prevent various health threats.

Read to know about some of the basic tests and their importance conducted during pregnancy.

Click To Read!

Prevention Of Zika Virus Disease

A. Avoid mosquito bites

1. Use mosquito repellents

These are available in the form of patches, bands, creams & lotions. A mosquito repellant provides protection from mosquitoes both indoors and outdoors. They can be chemical based or natural. Commonly available mosquito repellants in the market are:

DEET

Oil of lemon eucalyptus

Picaridin

IR3535

Tips to follow while using repellants

Avoid spraying the repellant on the skin under clothing.

Apply sunscreen first, if you are applying it with a repellant.

Read complete instructions to avoid any reaction.

Do not apply insect repellent to a child’s hands, eyes, mouth, cuts, or irritated skin.

Are you applying mosquito repellants correctly? Learn more about it.

Click Here!

2. Avoid stagnant water

Mosquitoes lay eggs in and around standing water. The following measures can be taken to avoid standing water.

Drain out water from buckets and mugs after washing & bathing.

Cover up water storage containers with tight lids.

Remove standing water from flower pots, AC trays, and coolers.

Clean roof gutters, home coolers and swimming pools regularly.

Keep native larvivorous fishes in the pools as they feed on mosquitoes.

3. Restrict entry of mosquitoes from outdoors

The infected mosquitoes breeding eggs outside in the trash containers can enter the house. The best way is to prevent their entry. This can be done by taking following measures:

Use nets and screens for doors and windows.

Keep windows and doors close.

Fix all the holes of doors and windows, if any.

Cover baby carriers with net.

4. Cover yourself up

One can avoid the mosquito bite by wearing protective clothing. While you are dressing up, follow the measures such as:

Wear full sleeve clothes.

Wear light colored clothes.

Allow the clothes to dry completely before wearing.

Treat clothes with insecticide such as permethrin.

5. Sleep under mosquito nets

It is one of the conventional and effective ways to prevent mosquito bites. These nets can be mounted on your bed. The fine mesh of the nets restricts the entry of mosquitoes.

Have you tried these latest range of mosquito repellants like mosquito repellent bands, patches and more? If not, have a look!

Check Out Here!

B. Follow safe sexual practices

Zika virus disease can be transmitted through vaginal, oral & anal sex. Sharing of sex toys can also pass the virus to other person. The virus can stay in semen (viral persistence in testes can last upto 160 days) and vaginal secretions for a longer time than any other body fluids (urine & blood). The following preventive measures can be taken to reduce the chances of infection.

Use condoms while having vaginal, oral and anal sex (from start to end).

Abstain from any sort of sexual activity, if infected.

Avoid sharing of sex toys.

Use dental dams while having oral sex.

Condoms can not only act as an effecitve contraceptive but also protects you from a wide range of sexually transmitted diseases. But, are you using condoms in the right way?

Click To Read!

Specialist To Visit

In most cases, the symptoms of Zika infection are usually mild and often go away on their own. However, visiting a doctor and early intervention may lead to slow progression and early resolution of disease. The specialists who can help treat this infection include:

General physician

Infectious disease specialist

In case of pregnancy, women should visit her obstetrician-gynaecologist as the Zika infection is known to cause several complications in the foetus.

If you are facing any discomfort, seek advice from our world-class medical professionals.

Consult Now!

Treatment Of Zika Virus Disease

There is no specific treatment or vaccine available for Zika virus disease. The treatment is usually aimed to reduce the symptoms. Most of the patients usually recover on their own by taking proper rest & supportive care.

People are advised to take plenty of fluids such as water, fruit juices, buttermilk, and coconut water to prevent dehydration.

As the infection causes tiredness and fever, proper rest should be taken by the patients.

In case of pain and fever, paracetamol can be taken.

Pregnant women living in the areas of active Zika transmission or having symptoms should immediately consult their doctors.

Note: Non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or aspirin should be avoided until your doctor confirms the absence of dengue fever.

Home-care For Zika Virus Disease

Once you have Zika virus, there are very few chances that you will experience any symptom. Symptoms are usually mild and rarely require hospitalisation. Try to take plenty of water and proper rest. Abstain from any kind of sexual activity as it may transmits the infection to your partner. Do not plan to conceive for at least 2 to 3 months after the recovery. Control mosquitoes both inside and outside your home. Pregnant women should regularly meet their gynaecologist to screen any foetal abnormality or birth defects.

If you are taking care of a Zika infected patient, follow these precautionary measures to reduce the transmission.

Do not touch blood or body fluids such as urine and vomit of infected person.

Wash hands properly after meeting the infected person.

Remove and wash clothes timely and immediately, if they are exposed to any blood or other fluids of an infected person.

Sanitise the person’s environment and belongings daily.

Take necessary steps to avoid mosquito bites such as keeping doors and windows closed and using mosquito nets.

Is your home a mosquito magnet?

If you always wonder why there are so many mosquitoes in your house even if your home is clean, then the answer could be that your house is a mosquito magnet. Yes, there are some secret breeding spots for mosquitoes in your house that you have been overlooking. Read to know more.

Click Here!

Complications Of Zika Virus Disease

People suffering from Zika virus disease usually recover on their own. The disease is mild and rarely requires hospitalisation. But, in some cases, the diseases can cause several complications. Pregnant women are at high risk of developing complications.

Congenital Zika syndrome

There is a strong link between Zika virus infection during pregnancy & birth defects in children. An infected pregnant woman can pass the virus to her developing baby. It can cause a group of birth defects in the child known as congenital Zika syndrome. It can affect the growth & development of the developing baby. The possible abnormalities include:

Smaller brains and collapsed skull, the condition is known as microcephaly

Decreased brain tissue

Scarring at the back of eye

Reduced mobility of the joints

Reduced movement of the body immediately after the birth

Epilepsy

Intellectual disability

Respiratory infection

Dysphagia

Neural tube defects

Cerebral palsy

Low birth weight

Vision problems

Guillain-Barré syndrome (GBS)

Zika virus disease can cause GBS, which is a neurological disorder in which nerve cells are damaged by the immune system. It can lead to muscle weakness. In advanced stages, muscles that control breathing can also be affected. Usually, patients recover from GBS within several months. Rarely, it causes permanent damage.

GBS is a rare complication of Zika virus infection. It occurs in 2-3 patients out of 10,000 affected with the infection.

Other neurological disorders

Zika virus disease can also lead to some central nervous system related disorders such as:

Encephalitis

Meningoencephalitis

Retinopathies

Neuropathy

Myelitis

Thrombocytopenia

Very rarely, Zika virus disease can cause thrombocytopenia. People with this disorder have less number of platelets which can result in bleeding, bruising and slow blood clotting.

Here’s more about thrombocytopenia or low platelet count.

Click To Read!

Pregnancy loss

The infection of Zika virus in pregnant women increases the chances of miscarriages, preterm birth & still birth.

Alternative Therapies For Zika Virus Disease

Home remedies for zika virus disease

Garlic (Lehsun): It has anti-inflammatory properties which aids in fighting Zika infection. Allicin, an ingredient of garlic boosts the immunity. It helps in the reduction of muscle pain & fever. You can simply include it in your food. It can also be taken in a powdered form.

Papaya (Papita): Papaya enhances the immunity which helps in fighting with infections. It also acts as an antioxidant.

Note: Papaya should not be consumed during pregnancy.

Vitamin C: Foods rich in Vitamin C such as strawberries & kiwi also enhances the immunity and may aid in faster recovery.

Here are 10 Vitamin C rich foods in less than Rs 5 per day.

Click To Know!

Frequently Asked Questions

Does Zika virus stay in the body lifelong?

Am I suffering from dengue or Zika?

How long should I wait to get pregnant after Zika infection or returning from a Zika-prone country?

At what stage does Zika affect pregnancy?

What is the status of the Zika virus vaccine?

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Zinc deficiency

Overview

Zinc is a micronutrient that plays an important role in various bodily functions such as reproduction, immune function, and wound repair. It is also necessary for the growth and development of fetus during pregnancy, childhood, and adolescence.

Zinc deficiency refers to the low levels of zinc (less than 0.66 to 1.10 mcg/ml) in the body. The deficiency of zinc can be congenital (present from birth) or acquired.

Zinc can not be synthesized by our body, so it has to be taken from outside sources. The recommended dietary allownace (RDA) of zinc varies from 3 mg/day in children to 8 mg/day and 11 mg/day in women and men respectively. However, it is higher in pregnant and lactating women.

Its deficiency can be easily reversed by consuming foods rich in zinc such as oysters, red meat, poultry, dairy products, legumes, beans, cashews, chia seeds, and pumpkin seeds. In case of severe deficiency, supplements may be prescribed by your doctor.

Key Facts

Usually seen in

All age groups but more common in children

Body part(s) involved

Whole body

Mimicking Conditions

Hypothyroidism

Depression

Iron deficiency

Vitamin B12 deficiency

Folate deficiency

Vitamin D deficiency

Vitamin A deficiency

Necessary health tests/imaging

Blood tests: Zinc level, Oral zinc tolerance tests & Zinc dependant enzymes

Urine tests

Hair analysis

Treatment

Diet

Supplementation

Specialists to consult

General physician

Internal medicine specialist

Gynecologist

Symptoms Of Zinc Deficiency

The symptoms of zinc deficiency start appearing after months of having low levels of zinc. The symptoms vary as per the levels of zinc and are non-specific, often resembling other medical conditions. Therefore, it is necessary to conduct a medical examination for confirmation.

People with zinc deficiency may experience:

Skin rash

Skin ulcers

Hair loss

Diarrhea

Frequent cold and infections

Weight loss

Delayed wound healing

Decrease in the sense of smell or taste

Loss of appetite

Eye and skin lesions

Vision problems

Mental lethargy

Hypogonadism (in males)

Impotence

In children and adolescents there can be:

Growth retardation

Delayed puberty

Difficulty in learning

Did you know?

Zinc plays a crucial role in the formation of testosterone, a male sex hormone. Due to which, lack of zinc can also cause erectile dysfunction (ED). Read more about erectile dysfunction in detail.

Tap To Read!

Causes Of Zinc Deficiency

Zinc deficiency is mostly seen in developing and underdeveloped countries due to malnutrition. However, cases are also seen in developed countries as a result of various chronic illnesses. Zinc deficiency can be acquired or congenital.

Acquired zinc deficiency

The main causes of acquired zinc deficiency can be:

Decreased intake of zinc

Decreased absorption of zinc

Increased demand of zinc

Excessive loss of zinc

1. Decreased intake of zinc

Inadequate intake of zinc is mostly related to:

Low intake of zinc rich foods

Strict vegetarian diets

Parenteral nutrition

Anorexia nervosa (eating disorder)

Vegetarians mostly have low levels of zinc because the body has the tendency to extract zinc from meat more efficiently. Eldery people also suffer from zinc deficiency because of limited access to certain foods.

2. Decreased absorption of zinc

A person may also have zinc deficiency even if he/she is taking adequate amounts of zinc. This can be due to the excessive consumption of certain food items or medications which can hinder the absorptions of zinc, and presence of certain disorders. These include:

Phytates containing foods such as legumes, seeds, soy products, and whole grains

Oxalates containing foods such as spinach, okra, nuts, and tea

Calcium and phosphates containing foods such as dairy, nuts and seeds

Medications such as thiazide diuretics (chlorthalidone or hydrochlorothiazide), sodium valproate, antibiotics, and penicillamine

Diseases such as Crohn’s disease, short bowel syndrome, hookworm infestation and pancreatic insufficiency

3. Increased demand of zinc

The demand of zinc increases during pregnancy and lactation as it is required in the growth and development of the baby. The demands of the body increases as below:

Pregnant women (18 years of age and younger): 12 mg per day

Pregnant women (19 years of age and older): 11 mg per day

Breastfeeding women (18 years of age and younger): 13 mg per day

Breastfeeding women (19 years of age and older): 12 mg per day

Zinc, if not taken in adequate amounts during pregnancy and breastfeeding, can cause certain fetal defects and low birth weight.

Are you eating the right type of food during pregnancy? Read in detail about various foods that should be eaten and avoided for a healthy pregnancy.

Tap To Read!

4. Increased loss of zinc

In some cases, there can be excessive loss of zinc from the body which can also be a cause of zinc deficiency. This includes:

Dialysis

Hemodialysis

Hemolysis

Diarrhea

Urinary loss (due to diuretics or alcohol use)

Congenital zinc deficiency

Although zinc deficiency is commonly caused by dietary factors, several inherited conditions have also been found. Acrodermatitis enteropathica is one of the common inherited condition seen in humans.

Acrodermatitis enteropathica: It is a rare form of zinc deficiency.which causes impaired absorption of zinc. It occurs in both congenital and acquired forms. The congenital form results from intestinal disorders due to genetic abnormality, whereas the acquired forms can result due to:

Lack of secretion of zinc in the breast milk

After surgery of intestine

Adopting special intravenous nutritional programs

Risk Factors For Zinc Deficiency

People with gastrointestinal disease

There is a decrease in the absorption of zinc in people suffering from gastrointestinal disease such as ulcerative colitis, Crohn’s disease, and short bowel syndrome. People with these diseases or those who have undergone gastrointestinal surgery are more prone to zinc deficiency.

Certain diseases

Some diseases may decrease the zinc absorption and increase the loss of zinc, making the patient vulnerable to zinc deficiency. These include sickle cell anemia, chronic kidney disease, liver disease, chronic diarrhea, HIV infection, diabetes, malabsorption syndrome and cancer.

Vegetarians

The absorption of zinc from vegetarian diets is less than non-vegetarian diets. Also, the food consumed by vegetarians mostly contains phytates that inhibit the absorption of zinc. Due to this, vegetarians are at a higher risk of developing zinc deficiency.

Pregnant and breastfeeding women

Zinc is required for fetal growth and development. Pregnant and breastfeeding women are at high risk of zinc deficiency due to high fetal demand during this phase.

Alcoholics

About 30-50% of people who consume alcohol suffer from zinc deficiency as alcohol decreases the absorption of zinc and increases its excretion in urine.

Malnutrition

Zinc is a micronutrient that cannot be synthesized by the body. It has to be taken from outside sources. People living in developing or underdeveloped countries have a limited access to thsese food which increase the risk of zinc deficiency.

Consuming excessive fiber

An adequate amount of fiber in the diet is very essential for a healthy digestive system. But, excessive consumption of fiber can also hamper the absorption of essential nutrients such as zinc.

Old age

The elderly people especially above 75 years of age are at a higher risk of having zinc deficiency. This is because of slow metabolism, poor appetite, and less diversification in the diet.

Stress

Prolonged stress is also found to reduce the levels of zinc in the body.

Exclusively breastfed older infants

Breast milk provides 2 mg/day of zinc which is sufficient only for initial 4-6 months. The dietary requirement for zinc for the older infants aged 7-12 months increases. At this age, if the infant is only having breast milk they can suffer from zinc deficiency.

Did you know?

A woman won't always have milk immediately after delivery. It usually takes 3-4 days for a normal flow of milk to start if you are a first-time mum. Read some more interesting facts about breastfeeding.

Read Now!

Diagnosis Of Zinc Deficiency

Blood tests

Zinc level: This test checks the amount of zinc in the blood which does not necessarily reflect its level within the cells. Zinc deficient people can have normal zinc levels in the blood. The level also varies as per circadian rhythm, drugs and meals taken. It is usually high in the morning and low in the evening. The normal range is 0.60-1.20 mcg/mL for children and 0.66-1.10 mcg/mL for adults.

In the presence of zinc deficiency, the absorption of copper is increased. Alongwith the serum level of zinc, levels of copper and serum copper/zinc ratio is also measured. Serum copper level over 120g/dl and a serum copper/zinc ratio of 1.5 also indicate zinc deficiency.

Additionally, several blood tests are also done to rule out other conditions or vitamin deficiencies. These include:

Complete blood count (CBC)

Serum electrolytes

Oral zinc tolerance test: In this test, the levels of zinc are measured after administering zinc. This test helps to detect zinc deficiency caused due to decreased absorption of zinc in the body.

Zinc dependent enzymes: The activities of various zinc-dependent enzymes are also measured to assess zinc deficiency. Alkaline phosphatase, carboxypeptidase, and thymidine kinase are three such enzymes. A quantitative measurement of these enzymes also gives an idea of zinc deficiency.

Urine tests

The excretion of zinc in urine is decreased as a result of zinc deficiency. The determination of zinc in a 24-hr urine sample also helps in diagnosing zinc deficiency. However, this is not a reliable method for determining acute cases of zinc deficiency.

Hair analysis

Zinc level is also measured in hair. Chronic zinc deficiency is reflected more accurately in hair than in blood.

Brittle nails and hair loss can be a sign of vitamin deficiency

A vitamin deficiency occurs when the body fails to absorb or doesn’t get the essential vitamins from the diet. This is when you may need to supplement your diet with vitamins to meet the body’s requirements and lead a healthy life. Look out for more symptoms of vitamin deficiency and get your vitamins checked.

Click To Read!

Specialist To Visit

Although zinc deficiency is not an emergency condition, you may consult the doctor in case you:

Have nausea

Have consistent headache

Experience unconsciousness

Have diarrhea from several days

If you are pregnant or breastfeeding, and suspect deficiency of zinc, consult your doctor immediately as zinc plays an important role in the growth and development of the fetus and newborn baby.

Specialists you may consult are:

General physician

Internal medicine specialist

Gynecologist (in case of pregnancy and breastfeeding women)

If you are noticing any symptoms of zinc deficiency, seek advice from our world-class medical professionals.

Consult Now!

Prevention Of Zinc Deficiency

Zinc deficiency can be easily prevented by taking the recommended amount of zinc either through dietary sources or supplements.

Oysters contain the maximum amount of zinc per serving compared to any other food.

Beef, red meat, poultry, and certain types of seafood (such as crab and lobster) also have a good amount of zinc.

Many grains, plants and dairy based foods are also good sources of zinc. These include oats, legumes, chickpeas, beans, cashews, almonds, peas, chia seeds, and pumpkin seeds.

Note: However, some food items such as whole-grain breads, cereals, legumes contain phytates, which inhibit the absorption of zinc. Thus, the amount of zinc absorbed from grains and plant based foods is lower than that from animal based foods.

The best way to prevent zinc deficiency is to add foods that are rich in zinc. Here are some common and naturally available food items and their zinc content.

Click To Read!

Treatment Of Zinc Deficiency

Patients suffering from zinc deficiency can manage it by increasing the intake of zinc through diet. If dietary modifications fail to show any improvement in your condition, your doctor might recommend supplementation.

1. Supplementation

The treatment of zinc deficiency usually begins with oral supplementation which has proven to reduce the symptoms. The recommended daily intake of zinc is:

3 mg/day for children less than 4 years

5 mg/day for children between 4 to 8 years

8 mg/day for children between 9 to13 years

11 mg/day for men

9 mg/day for women (non-pregnant and non-lactating)

11 to 12 mg/day for pregnant women

Higher doses of zinc (more than 50 mg/kg) is required in patients who have severe deficiency. It is mostly needed in patients having chronic illnesses such as Crohn's disease and short bowel syndrome. High levels of zinc can interfere with copper and iron metabolism, so it is important to monitor the levels of zinc regularly in the patients taking zinc supplements. Supplements are taken for a lifetime in a condition called acrodermatitis enteropathica.

Zinc supplements are available in the form of:

Zinc sulfate

Zinc acetate

Zinc aspartate

Zinc orotate

Zinc gluconate

Parenteral zinc supplementation is recommended in rare cases such as intestinal failure or if the patient is on total parenteral nutrition (TPN).

Interactions of zinc supplementation with medications

Zinc supplements can interact with several types of medications. Patients on zinc supplementation should discuss the intake of these medications with their health-care provider for dose adjustment.

Antibiotics: Antibiotics such as quinolone & tetracycline antibiotics inhibit the absorption of zinc. It is advised to take these antibiotics at least 2 hours before or 4–6 hours after taking a zinc supplement to minimize this interaction.

Penicillamine: Penicillamine is a drug used to treat rheumatoid arthritis. It also reduces the absorption of zinc. Patients should take zinc supplements at least 2 hours before or after taking penicillamine to reduce the interaction.

Diuretics: Some diuretics such as chlorthalidone and hydrochlorothiazide increase urinary zinc excretion. Prolonged use of these diuretics may affect the zinc levels adversely. So, the zinc status should be carefully monitored in patients who are on diuretics.

Complications Of Zinc Deficiency

1. Age-related macular degeneration (AMD): AMD is an eye disorder that causes vision loss. Studies suggest that zinc supplements help in the slow progression of AMD.

2. Growth failure: Since zinc is required for normal growth and development of the child, a low level of zinc for a long period of time can hamper its overall growth and development.

3. Skin problems: Skin complications associated with zinc deficiency include acrodermatitis enteropathica, cheilitis, and dermatitis.

4. Diabetes mellitus and obesity: A prolonged and severe zinc deficiency is also associated with an increased risk of diabetes and obesity. The exact mechanism behind this correlation is not known.

5. Attention deficit hyperactivity disorder (ADHD): Zinc deficiency in children can cause ADHD in children. ADHD is accompanied by lack of activity and impaired socialization in children.

Read more about other causes, symptoms and management of ADHD.

Other complications associated with zinc deficiency are:

Delayed wound healing

Recurrent infections such as pneumonia and malaria

Low bone mineral density

Hypogonadism

Herpes simplex virus infections

Wilson’s disease

HIV infection

Acne

Diarrhea

Zinc has antioxidant properties which protect from free radicals. Low levels of zinc also increases the risk of cancers and heart disease.

Note: Maternal zinc deficiency during pregnancy can cause abortion, preterm bith, still birth and fetal neural tube defects. Babies born to such mothers have low birth weight.

Is there any relation between zinc deficiency and COVID-19?

Zinc also possesses antiviral and antiinflammatory properties. Deficiency of zinc may reduce the immunity (the ability of the body to fight infections). People with low levels of zinc are more prone to coronavirus infection. Zinc supplementation is hence used as an adjuvant therapy in faster recovery, treatment and prevention of COVID-19 because of its following potential benefits. Zinc helps by:

Restricting the entry of virus in the body

Inhibiting multiplication of the virus

Modulating immune response

To know more about COVID-19, its treatment & latest updates/news, check out our coronavirus section.

Click To Read!

Alternative Therapies For Zinc Deficiency

Home remedies

1. Holy basil (Tulsi): It is considered as the “Queen of herbs” in Ayurveda. It contains zinc along with Vitamin A and C, calcium, and iron.

2. Indian pennywort (Brahmi): It is an Ayurvedic herb that is rich in zinc. It is known to exhibit antioxidant properties which helps in increasing memory, concentration, and brain power.

3. Asparagus racemosus (Shatavari): It is known for its fertility properties but it is also a very good source of zinc. It contains 0.54 mg zinc per 100 gm serving. It boosts immunity and also helps to fight stress, anxiety, and depression.

4. False daisy (Bhringraj): It is known for its moisturizing and nourishing properties. It is also a source of zinc along with other micronutrients such as copper, sodium, iron, and potassium.

Homeopathy

Several homeopathic medications such as Zincum aceticum and Zincum metallicum are also available for zinc deficiency.

Living With Zinc Deficiency

Zinc deficiency can be easily reversed through proper supplementation and diet. You can keep the following points in mind while managing zinc deficiency.

Cook your food wisely

Changing the way of cooking certain foods can increase the absorption of zinc. For example soaking beans before cooking or leavening foods can lower the phytates concentration, making it easier for the body to process zinc.

Consult a doctor

A person having zinc deficiency can have other nutritional deficiencies. Consult your doctor as soon as you notice any other symptoms of nutritional deficiencies.

Be cautious of toxicity

Overdose of zinc supplements can also cause toxicity and lead to symptoms such as nausea and vomiting. To avoid this, zinc supplements should always be taken as per your doctor's recommendation. The dose of zinc varies as per your age and other conditions such as pregnancy and breastfeeding. The patients who are on zinc supplements should get their zinc level tested every three months.

Do not self medicate

Before taking any zinc supplement, talk to your doctors as the dose varies as per your medical condition. The dose also varies, if you are on some other medications.

Avoid certain foods

The foods that are high in calcium and phosphorus such as milk, cheese, yogurt, dried beans, lentils, and nuts delay the absorption of zinc. So, avoid taking zinc supplements with such food items.

Be aware of allergy

Some patients taking zinc supplements can have allergy reactions which can be experienced as:

Hives

Difficulty in breathing

Swelling of face, lips, tongue, and throat

Upset stomach

Consult your doctor immediately, if you have any of these symptoms.

Manage the interactions with medications

Certain medications such as antibiotics, penicillamine, and chlorthalidone can reduce the absorption of zinc in the body. It is very important to discuss all the dietary supplements and medications you are already taking before initiating zinc therapy.

Frequently Asked Questions

Who is at increased risk of zinc deficiency?

What are the food sources of zinc for vegetarians?

How much zinc is required by the body?

For how long do you take zinc supplements?

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Cholera

Overview

Cholera is an acute diarrheal infection that is caused by ingesting food and water contaminated by bacteria Vibrio cholerae.

Signs and symptoms of cholera infection include a rapid onset of massive diarrhea (rice water appearance), dehydration, vomiting, irritability, low blood pressure, and rapid heart rate amongst others.

Maintaining adequate hydration through oral or iv rehydration solutions (ORS and Ringer lactate solution) is the cornerstone approach of the treatment. Antibiotics are prescribed in severe cases once the hydration status is maintained.

Preventive measures include maintaining proper hand hygiene, drinking safe water and consuming non-contaminated foods. Oral cholera vaccine is also available but its use is usually limited to areas of cholera outbreaks.

Causes Of Cholera

Cholera is caused by a bacteria called Vibrio cholerae. There are approximately 200 strains of this bacteria. However, only two strains i.e O1 and O139 are known to be associated with cholera outbreaks. Both strains cause the same level of illness.

Where are these bacteria found?

The bacteria are usually found in water that is contaminated with feces of an infected person. These bacteria are also found in the rivers that have saline water as they grow best in the presence of salt.

What is the mode of transmission?

Cholera can be transferred from person to person by infected fecal matter entering the mouth or via water or food contaminated with Vibrio cholera bacteria.

What are the common sources of cholera infection in a community?

Drinking water from sources such as unprotected wells, boreholes, and standpipes contaminated by feces during transportation or supply

Food, drinks, and ice made from contaminated water

Cooking and eating in utensils washed in contaminated water

Food that is stored for a long period of time at room temperature

Seafood especially crustaceans and shellfish grown in contaminated water

Raw fruit and vegetables that are irrigated with water containing human waste or rinsed with contaminated water

Is cholera contagious?

Cholera usually does not spread through direct physical contact. However, during outbreaks, it becomes highly contagious. It can spread indirectly and directly due to widespread fecal contamination of food, water, and items like contaminated bedding, clothing, utensils etc.

What does bacteria do inside the body?

All individuals are not affected by the bacteria as the majority are killed by gastric acid. In case, bacteria survive, it forms colonies in the small intestine. These colonies produce cholera toxin which is responsible for most of the symptoms.

Symptoms Of Cholera

Cholera is asymptomatic in most of the individuals. However, even the asymptomatic individual can shed the bacteria into the environment through their feces for up to 10 days.

The majority of individuals who develop symptoms often have mild to moderate manifestations. The incubation period (the period between exposure to an infection to the appearance of the first symptom) can range from 12 hours to 5 days.

The classical symptom of cholera is massive and smelly diarrhea which is termed as “rice water stool”. The term is coined due to its similarity with the water in which rice is washed.

The various signs and symptoms of cholera infection include:

Acute watery diarrhea

Fishy smell from stools

Dehydration

Vomiting

Thirst

Leg cramps

Restlessness or irritability

Muscle cramps

Sleepiness and Tiredness

Dry mouth

Wrinkled skin

Rapid deep breathing

Rapid heart rate

Fever (rarely seen and indicates some secondary infection)

Hypoglycemia (mostly observed in children)

Low blood pressure

Other signs and symptoms that may occur in severe cases, include the following:

Sunken eyes

Low or no urine output

Skin pinch goes back very slowly

Lethargic or unconscious

Absent or weak pulse

Respiratory distress

Seizures

Shock

Here are some tips that help prevent dehydration in diarrhea!

Read Along

Risk Factors For Cholera

Several social, environmental, and biological risk factors can increase the risk of cholera. They are discussed as follows:

1. Poor sanitation

Lack of access to clean water and poor disposal facilities of feces increases the risk of cholera transmission.

Approximately 97% of cholera cases are seen in countries having the lowest level of water and sanitation services in the year between 2010 to 2021.

2. Open air defecation

Open-air defecation is associated with an increased risk of surface water contamination and hence more risk of waterborne diseases like cholera.

3. Source of water supply

People using improved (piped household, protected well or spring, or collected rainwater) water supply is at a lesser risk of contracting cholera.

4. Monsoon Season

The risk of contracting cholera is high during monsoons. This is because of the contamination of drinking water by sewage or polluted water bodies.

Here are some common monsoon diseases according to their modes of transmission with invaluable monsoon health tips to keep in mind.

Tap To Know

5. Improper hand hygiene

Avoiding handwashing with soap and water after toileting, before eating, and during handling food increases the risk of transmission of cholera bacteria.

Here are 5 simple hand hygiene tips.

Tap To Know

6. Certain Medications

Cholera bacteria are not able to survive in the acidic environment of the stomach. So, individuals that are on any acid-neutralizing therapy such as proton pump inhibitors and antihistamines are at higher risk of infection. Such medications are also known to be associated to increase the severity of symptoms.

7. Consuming Seafood

Individuals who consume raw or partially cooked seafood, crabs or shellfish, dried fish, and seafood salad have more chances of contracting cholera.

Here are some fish oil supplements that help fulfilling your needs without increasing the risk of waterborne disease.

Order Now

8. Bottle feeding

Studies suggest that bottle-fed infants and children are more prone to infection than ones breastfeeding. This is due to the lack of exposure to contaminated bottle feedings for breastfed infants. Breastfeeding also provides protective functions that boost immunity to fight infections.

Most cases of cholera are seen in infants aged 6 to 11 months who are on their weaning journey.

9. Achlorhydria

Individuals having a condition called achlorhydria – the absence of hydrochloric acid in digestive stomach juices are more prone to contracting cholera. This is because cholera bacteria grow rapidly in a low acidic environment.

10. Vitamin A deficiency

The deficiency of Vitamin A is also associated with an increased risk of cholera.

11. Human immunodeficiency virus (HIV) infection

Studies suggest an increased risk of infection in people with HIV due to low immunity.

12. Socioeconomic status

People with low incomes are more prone to cholera due to a lack of access to clean water.

People are at high risk of cholera include:

Healthcare personnel treating cholera patients

Cholera response workers

Travelers in an area of active cholera transmission

Did you know?

There is a strong link between cholera and the human O blood group. The blood group O does not increase the risk of cholera but it impacts the severity of the disease. This association is proved by several previous outbreaks. In 1991 during an outbreak in Peru, the number of hospitalized patients was more with blood group O. Similarly, the Ganges delta has very less cases of cholera during outbreaks due to the low prevalence of people with blood group O.

Diagnosis Of Cholera

The diagnosis of cholera is important as it may turn into a widespread outbreak. It cannot be distinguished from any other infection-causing watery diarrhea without testing a stool sample.

Stool culture

It is the most widely used method for the diagnosis of cholera. In this, stool samples are incubated with a solution that isolates the bacteria from it. The appearance of yellow clumps indicates cholera.

The exact strain of bacteria is identified through further testing. This confirmatory test is helpful in differentiating cholera from other bacterial, protozoa, or viral causes of dysentery.

Darkfield microscopy

It involves an examination of stools under a dark field microscope. It is a rapid method. The vibrio-shaped cells with motility indicate cholera bacteria.

Dipstick test

This test is often used in endemic areas. It involves placing a dipstick strip into a sample of stool. The two red lines on the dipstick confirm the presence of cholera. It takes between 2 and 15 minutes for the test to make a diagnosis.

The sensitivity and specificity of this test is not optimal. That is why, the fecal specimens should always be confirmed using culture-based methods.

Prevention Of Cholera

Cholera is a preventable disease. There are several measures that can be taken at an individual and community level to prevent the outbreaks.

1. Preventing cholera at an individual level

Ensure safe drinking water

Drink only filtered or boiled water

Use filtered or boiled water to prepare food, brush teeth, and make ice

Avoid using water bottles without a seal

Store water in a clean and covered container

Maintain hand hygiene

Cholera can be prevented by following basic hand hygiene. It is advised to thoroughly wash the hands with soap and water:

After using the washroom

Before, during and after preparing food

Before and after eating food

Before and after feeding your children

After changing your child’s diaper or washing their stools

After taking care of someone suffering from cholera

Note: In case soap and water are not available (as in traveling), alcohol-based hand rub with at least 60% alcohol can be used.

Buy sanitizers and hand wash from the comfort of your home.

Shop Now

Be cautious while using a washroom

Use toilets to get rid of the feces instead of open defecation

Dispose off the used diapers of children in toilet

In case a toilet is not available, pee or poop at least 30 meters away from any body of water.

Cook and consume food vigilantly

Prepare food in filtered or boiled water

Wash fruits and vegetables with filtered or boiled water

Consume fruits and raw vegetables after peeling

Cook food thoroughly especially seafood such as shellfish that has the maximum chances of contamination.

Eat hot food

Maintain cleanliness

Clean kitchen surfaces and utensils thoroughly with soap and water

Use kitchen utensils and surfaces to cook food after drying

Wash clothes 30 meters away from drinking water sources

Disinfect any stool contaminated surfaces with household bleach

2. Preventing cholera at community level

A multifaceted community approach involving the following helps to mitigate the risk of cholera:

Implementing WaSH Services

Almost all cases of cholera arise due to poor access to safe drinking water and inadequate sanitation. WaSH is an acronym that stands for water, sanitation and hygiene. Availability of adequate and safe water and effective solid and liquid waste management plays a major role in decreasing the risk of contracting cholera.

Promoting surveillance

Since cholera is a highly infectious disease, close monitoring of the cases by the government agencies at local level helps in preventing the outbreaks. It should be a part of a disease surveillance system that involves the sharing of information at global level.

Any clinically suspected individual should be tested for cholera. Detection can be done using rapid diagnostic tests (RDTs) where positive cases indicate a cholera alert. It aids as a tool to control the cases by implementing the preventive strategies early.

Engaging community

The local or central government should launch effective and engaging programmes with an aim to prevent cholera at mass scale. People and communities are a part of the process of developing and implementing strategies.

The aim of the programmes are educating people about the:

Basic hygiene measures such as handwashing with soap

Sanitation interventions such as safe disposal of feces of the children

Safe preparation and handling of food

Risk and symptoms of cholera

Funeral practices for individuals who die from cholera to prevent infection among attendees.

Provision of Vaccination

The cholera vaccines are available in oral dosage form and denoted as oral cholera vaccine (OCV). The World Health Organisation (WHO) suggests using these vaccines in the cholera endemic areas. All three vaccines require two doses for full protection.

Dukoral: This vaccine is given along with a buffer solution. It can be given to all the individuals that are over 2 years of age. The time duration between the two doses is 7 days to 6 weeks. This vaccine (2 doses) provides protection for 2 years.

Shancol and Euvichol: They have the same composition. Both of these vaccines are given without a buffer solution. Individuals over one year of age can take this vaccine.

While, a two-dose OCV, has obtained license for use in India, mass vaccination covering the entire population in the country has not been implemented as of yet. This is due to factors like

Cholera has a tendency of localized outbreaks

Mortality due to cholera has considerably reduced over time due to increasing use of oral rehydration salt solution

Specialist To Visit

Individuals should consult the doctor immediately in case of any symptoms of watery diarrhea or returning from any cholera-endemic country.

The doctors that might help include:

General physician

Internal medicine specialist

Gastroenterologist

Pediatrician

A general physician will examine your symptoms and initiate treatment.

In case of severe cases, they may refer you to an Internal Medicine specialist who provides comprehensive care for adult patients, managing complex cases and addressing underlying health conditions.

Gastroenterologists can also be consulted as they have expertise in diagnosing and treating gastrointestinal disorders like cholera.

A pediatrician can be consulted for medical treatment and preventive healthcare services for children and adolescents.

Consult India’s best doctors online.

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Treatment Of Cholera

The success of cholera treatment depends upon the time to initiate the treatment. Prompt treatment reduces the risk of severe dehydration and its complications.

The main aim of the therapy is to restore the hydration status of the patient, combat infection and support overall recovery.

1. Rehydration

The goal of the therapy is to maintain normal hydration status by replacing ongoing losses.

Immediate administration of oral rehydration solution (ORS) is recommended.

Make ORS in sterile water (previously boiled or chlorine treated)

ORS should be taken sip by sip frequently

Interesting fact!

The approximate amount of ORS (in milliliters) needed over 4 hours can also be calculated by multiplying the patient’s weight in kg by 75.

In case ORS is not available, drink water, broth, and/or other fluids

Avoid taking sugary drinks such as juice, soft drinks, or sports drinks as they could worsen diarrhea

ResoMal should be given instead of ORS in severely malnourished people

Breastfeeding should be encouraged for infants

Explore our wide range of oral rehydration solutions (ORS).

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2. Intravenous (I.V). Fluids

The severely dehydrated individuals (fluid loss greater than 10% of body weight) are prone to shock.

Such patients need rapid administration of intravenous fluids to compensate the fluid loss.

3. Antibiotics

Antibiotics therapy is initiated once an appropriate volume status has been achieved.

They are known to reduce the duration and severity of diarrhea. The use of antibiotics is associated with reducing the volume of stool by 50%.

Studies also suggest that antibiotics reduce the duration of shedding of bacteria in stool.

The common examples of antibiotics used are

Tetracycline

Doxycycline

In case of antibiotic resistance, the following antibiotics may be prescribed

Ciprofloxacin

Azithromycin

Erythromycin

The antibiotic therapy is usually given for about 3-5 days.

Note: Tetracycline is not recommended in pregnant women and children under 5 years of age because it causes permanent discolouration of teeth.

4. Zinc

In cholera, zinc deficiency can lead to reduced water and electrolyte absorption. Therefore, zinc plays an important role in recovery from the symptoms. Zinc combined with ORS reduces the duration, severity, and recurrences of episodes of diarrhea.

5. Nutritional interventions

It includes taking a high-energy diet immediately after initial restoration of fluids. It helps in preventing malnutrition and several other complications such as hypokalemia (reduced level of potassium) and hypoglycemia (low blood glucose).

Complications Of Cholera

Most of the complications develop due to severe volume depletion in the body. The fluid loss can reach up to 1 liter per hour in adults and 20 ml/kg/hr in children. This can lead to complications like:

Hypovolemic shock

Metabolic acidosis (build up of acid in the body due to imbalance in the acid base balance as a result of electrolyte loss)

Hypotension (low blood pressure)

Hypoglycemia (low blood glucose)

Keep a tab of your blood glucose from the comfort of your home.

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In rare cases, the severe hypotension can even lead to:

Stroke

Kidney dysfunction

Persistent vomiting can lead to aspiration pneumonia (condition in which food or liquid is breathed into the airways of lungs, instead of being swallowed)

Frequently Asked Questions

Where in the world are we seeing cholera outbreaks?

What makes a country cholera-endemic and epidemic?

Does past infection with cholera make a person immune?

Who is most susceptible to cholera?

Key Facts

Usually seen in

Children below 5 years of age

Gender affected

Both males and females

Body part(s) involved

Small intestine

Large intestine

Mimicking Conditions

Escherichia coli infection

Salmonellosis

Shigellosis

Typhoid fever

Rotavirus infection

Necessary health tests/imaging

Stool culture

Dark Field microscopy

Dipstick test

Treatment

Rehydration: Oral rehydration solution and I.V. fluids

Antibiotics: Tetracycline, Doxycycline, Azithromycin, Ciprofloxacin, and Erythromycin

Zinc

Nutritional interventions

Specialists to consult

General physician

Gastroenterologist

Internal medicine specialist

Pediatrician

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Colon cancer

Also known as Colorectal cancer, Bowel cancer and CRC

Overview

Colon cancer is a condition in which there is an uncontrolled growth and multiplication of cells in the colon (large intestine). The colon is the lower and final part of the digestive tract where the body draws out water and salt from solid waste. The waste then moves through the rectum and exits the body through the anus.

Common risk factors for colon cancer include advanced age, a family history of colon cancer, colon polyps, and long-standing ulcerative colitis. Most colon cancers develop from polyps lining the colon. While the polyps are initially non-cancerous and harmless, over a period of time they can develop into cancer.

Colon polyps and early cancer may have no cancer-specific early signs or symptoms. Therefore, regular colorectal cancer screening is important. Diagnosis of colon cancer is done by colonoscopy, which visualizes the entire colon along with biopsy, which confirms the cancerous tissue.

The treatment and prognosis of colon cancer depends on the location, size, stage and extent of cancer spread, as well as the overall health of the patient. In early stages of colon cancer, the tumor is removed through surgery. If not treated at the right time, it can spread to other parts of the body, especially the lungs and liver. The treatment in advanced stages involves chemotherapy, radiation therapy, immunotherapy and/or their combinations.

Key Facts

Usually seen in

Adults above 50 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Colon

Rectum

Mimicking Conditions

Hemorrhoids

Crohn’s disease

Ulcerative colitis

Arteriovenous malformation

Carcinoid tumors

Gastrointestinal lymphoma

Ischemic bowel disease

Ileus

Small intestine carcinoma

Small intestine diverticulosis

Necessary health tests/imaging

Stool based tests

Colonoscopy

Flexible sigmoidoscopy

CT colonography

Biomarker test

Biopsy

Ultrasound

Magnetic resonance imaging (MRI)

Blood tests

Chest X ray

Treatment

Surgery

Ablation technique: Radiofrequency ablation, Microwave ablation & Cryoablation

Chemotherapy: 5-Fluorouracil (5FU), Leucovorin & Oxaliplatin

Radiation therapy

Targeted therapy: Bevacizumab, Cetuximab, Regorafenib & Encorafenib

Immunotherapy: Ipilimumab, Pembrolizumab & Nivolumab

Specialists to consult

Oncologist

Radiation oncologist

Oncosurgeon

Colorectal surgeon

See All

Symptoms Of Colon Cancer

Colon cancer always doesn't have symptoms. Therefore, regular screening is very important for early diagnosis. If symptoms persists, they may include:

Abdominal pain

Body aches

Cramps

Diarrhea

Constipation

Feeling of incomplete evacuation

Unexplained weight loss

Rectal bleeding or blood in the stools

Tiredness or fatigue

The symptoms alone do not confirm cancer. So, it is necessary to consult the doctor in case you are experiencing any of the symptoms.

Here are some of the common signs and symptoms of cancer you need to know.

Click To Know!

Causes Of Colon Cancer

Every cell of the body follows a process of growth, division, and death. Cancer develops when cells multiply uncontrollably without dying. The exact cause of the abnormal multiplication of cells in colon and rectum is not known. One such reason is changes in the DNA that affects oncogenes – genes that help the cell to stay alive. Disturbance in the oncogenes predisposes the person to colon cancer.

Mostly, colorectal cancer begins as precancerous polyps. These polyps slowly develop into cancerous tissue. The early diagnosis at the precancerous stage can prevent the development of cancer.

Read about the common causes of colorectal cancer.

Tap To Read!

Risk Factors For Colon Cancer

There are various risk factors that are associated with an increased chance of colon cancer:

Non-modifiable factors

1. Age

The chances of precancerous polyps and colon cancer increases as we grow old. The average age at which colon cancer is diagnosed is 68 years and 72 years for men and women respectively. People above the age of 65 have three times more chances of having colon cancer than the people at the age of 50 to 64 years. However, sometimes even younger adults can develop colon cancer.

2. Gender and race

Studies suggest that men have 30 times higher risk of developing colon cancer than women. Also, the mortality rate from colon cancer is also higher in men.

Race also determines the chances of developing colon cancer. Non-Hispanic blacks are at higher risk than Asians and non-Hispanic whites.

3. Medical history of cancer

The chances of developing colon cancer are more if you have a previous history of colon cancer or polyps. People with larger polyps are more prone to develop colon cancer.

4. Health conditions

Certain health conditions also increase the chances of colon cancer. This include:

Inflammatory bowel diseases (IBDs): It causes inflammation in the gut and includes diseases such as ulcerative colitis and Crohn’s disease. People diagnosed with any sort of IBDs have 2-6 times higher chances of having colon cancer. The risk increases if the disease is severe and prolonged.

Colon polyps: 95% of the colorectal cancer develops from polyps – tissue growths from the lining of the colon. The chances increase with large polyp size and age of the patient.

Diabetes mellitus: Diabetes induces chronic inflammation which may trigger the growth of cancer cells in the colon.

Cholecystectomy: It refers to the surgical removal of gallbladder. Gallbladder stores bile and releases it when required. After the removal of gallbladder, there is a continuous flow of bile acids which can damage the cells of the colon and predispose to colon cancer.

5. Genetic conditions

The two most important genetic disorders that are responsible for colon cancer include:

Nonpolyposis colorectal cancer (NPCC): Also known as Lynch syndrome, it is an inherited abnormality in a gene that normally repairs our body's DNA.

Familial adenomatous polyposis (FAP): It is a rare inherited disorder in which there are chances of developing thousands of polyps in the colon. It is estimated that people with a history of untreated FAP in their early life may get colon cancer by the age of 35-40 years.

Other genetic conditions include:

Gardner syndrome, which is a different type of FAP

Juvenile polyposis syndrome

Muir–Torre syndrome, which is a variant of Lynch syndrome

MUTYH-polyposis cancare

Peutz-Jeghers syndrome

Turcot syndrome, another variant

6. Family history

It is estimated that people with first-degree (parents, siblings, and children) relatives diagnosed with colon cancer have two times higher risk of developing it. However, second and third degree affected relatives can also increase the risk. The risk increases if the relatives are diagnosed with colon cancer before the age of 60. The severity of risk depend upon:

Generational distance from the affected relative

The age at which relative developed colon cancer

The number of family members affected

Diagnosis of other cancers such as ovarian, pancreatic, endometrial, and urinary tract in the family

Modifiable or lifestyle factors

1. Unhealthy diet

Since colon is a part of the digestive system, diet plays a key role in maintaining its health. Excessive consumption of saturated fats, red meat, and processed meat increases the chances of colon cancer. Diet low in fiber, fruits, vegetables, calcium, and Vitamin D also contribute to developing colon cancer.

2. Alcohol

Excessive consumption of alcohol also increases the risk of colon cancer. Studies suggest that the risk of colon cancer increases by 20% in individuals having 2-3 drinks daily. The risk increases further, if you are used to drinking 4 or more alcoholic drinks in a day.

3. Smoking

People who smoke have a 2 to 3 fold increased risk for developing colon cancer in comparison to non-smokers. The risk increases with the dose and time of exposure to the tobacco.

4. Sedentary lifestyle

Lack of physical activity is also closely linked with colon cancer. Regular physical activity has been shown to improve immunity, reduce inflammation and stress, regulate metabolic rate and hormone levels and prevent obesity and, as a result, may help protect against cancer development.

5. Being overweight/obese

Excessive weight and obesity are a known risk factor for colon cancer. Overweight/obese men and women have about 50% and 20% greater risk of developing colorectal cancer in comparison to people with normal weight, respectively.

6. Gut microbiota

The gut microbiota or gut flora comprises a population of diverse microorganisms (bacteria, viruses, fungi, and protozoa) inhabiting the gastrointestinal tract. The key functions of gut microbiota is to metabolise toxins, synthesize vitamins, and defend against infection. However, change in the composition and functionality of the normal gut microbiota may lead to initiation, promotion and progression of colon cancer.

Note: It is also found that radiation therapy that focuses on the abdomen also increases the chances of colon cancer.

Did you know?

Excessive sugar can also put you at risk of cancer. This is because diets high in sugars may promote carcinogenesis (cancer generation) by stimulating inappropriate synthesis of insulin and insulin-like growth factor-I (IGF-I), in addition to oxidative stress and weight gain. Here’s everything you need to know in detail about the role of sugar in cancer.

Click To Read!

Diagnosis Of Colon Cancer

The colon cancer is developed gradually in the following stages:

Stage 0 ( cancer in situ): The cancer cells are limited to the inner lining of the colon.

Stage I: The cancer cells start attacking the muscular layer of the colon or rectum.

Stage II A: Tumor starts growing into the outermost layers of the colon or rectum.

Stage II B: The tumor starts growing into the innermost layers of the colon or rectum.

Stage II C: The tumor starts spreading to the nearby tissues.

Stage III A: The tumor starts growing into the muscular layers of the intestine and starts invading the nearby 1-3 lymph nodes.

Stage III B: The tumor starts growing into the bowel wall or to surrounding organs and 1-3 lymph nodes.

Stage III C: The cancer has spread to 4 or more lymph nodes.

Stage IV A: The cancer has spread to one distant part of the body such as lungs and liver.

Stage IV B: The cancer has spread to more than one distant part of the body.

Stage IV C: The cancer has spread to the lining of the abdominal cavity.

The screening tests for colon cancer are recommended for all the individuals aged between 45-75 years. Individuals who have higher risks or are older than 75 years, should consult their doctor about their screening. The type of screening tests used usually depends on:

Preferences of the patient

Medical condition of the patient

Personal or family history of colorectal cancer

Resources available

The common screening tests include:

A. Stool based tests

These tests examine the stool for any signs of colon cancer. They are easier than colonoscopy because patients can perform it at home. However, colonoscopy is recommended in case stool-based tests come positive. This include:

1. Fecal immunochemical test (FIT): This test detects the hidden blood in the stool using antibodies. The stool is collected at home using a kit provided by your healthcare provider.

2. Guaiac-based fecal occult blood test (gFOBT): This test uses a chemical known as guaiac to detect blood in the stool. The sample is collected at home using a home kit which is then evaluated in the lab. gFOBT test results are affected by the diet and some drugs. So, a person going for this test are advised to avoid the following:

NSAIDs such as ibuprofen and aspirin 7 days before testing as they can give false-positive results because of their bleeding tendencies.

Vitamin C either from citrus fruits or supplements 3-7 days from testing as it can interfere with the chemical used in the test.

Red meat as they can give false-positive results.

3. FIT-DNA test: Also known as stool DNA test or multitarget stool DNA (MT-sDNA) test, this test combines FIT test alongwith a test that detects abnormal DNA in the stool. Colon cancer or polyps cells have DNA mutations in certain cells. This test detects these mutations along with the hidden blood in the stool.

B. Colonoscopy

This test uses a long, thin and flexible tube with a camera on its end to check polyps and cancer in the rectum and the colon. During colonoscopy, abnormal tissues can also be removed. This examination requires bowel cleansing before the test. This test is also used as a follow up test and after positive screening tests to complete and confirm the screening results. It is recommended to be done once in every 10 years in the person without having any risk factors.

C. Flexible sigmoidoscopy

This test detects polyps and cancer in the rectum and sigmoid colon using a sigmoidoscope. A sigmoidoscope is a short tube with a camera and tool attached to it. The tool is used to remove polyps and abnormal tissues. Special preparations such as cleansing of rectum and colon are required before the test.

D. CT colonography (virtual colonoscopy)

This test captures the images of the entire colon using X-rays. The images are then studied by a doctor using the computer screen. Colonoscopy is usually performed to remove polyps after CT colonography, if it confirms the presence of polyps or cancer.

E. Biopsy

In biopsy, a small amount of tissue is studied under a microscope. The tissue can be collected either through colonoscopy or surgery. Sometimes, the tissue is taken using needle biopsy. It uses a needle to collect the tissue through the skin. CT scan or ultrasound helps to find the location of the tumor.

F. Biomarker testing

This test is used to detect certain genes, proteins, and other factors that are highly specific to the tumor. The test is performed on a tumor sample taken from biopsy.

G. Blood test

People having colon cancer often become anemic because of the continuous bleeding in the rectum and colon. A complete blood count test indicates the status of red blood cells (RBCs) in the blood. This helps in the detection of anemia.

Blood test is also used to detect the level of carcinoembryonic antigen (CEA) – a protein that indicates the spread of tumor to other parts of the body. However, it is not highly specific to cancer, so it is mostly used in the patients who are already taking the treatment. This helps in tracking the progress of the treatment.

H. Magnetic resonance imaging (MRI)

MRI uses a magnetic field to produce detailed images of the body using a dye. The dye helps in obtaining a clear picture of the organs. It is used to measure the tumor size and to track the location of colon cancer.

I. Ultrasound

Ultrasound uses sound waves to produce a detailed image of the internal organs. It is used to find the locations in which a tumor has spread. Endorectal ultrasound is most commonly used to detect how deep colon cancer has spread.

J. Chest X-rays

X-ray of the chest is used to detect if the colon cancer has spread to the lungs.

Apart from these diagnostic tests, some methods are also there that can help find out whether one has the cancer-causing gene. Read more about inherited cancers and the role of genetic cancer tests.

Click To Read!

Specialist To Visit

Early detection of colon cancer gives more treatment options. Precancerous polyps can be easily removed before they turn into cancer. Therefore, it is very important to consult at the right time.

Regular screening and consultation is recommended for people with risk factors such as older adults (above 45 years of age). Doctors specializing in different areas of cancer treatment include:

Oncologist

Radiation oncologist

Oncosurgeon

Colorectal surgeon

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

Consult Now!

Prevention Of Colon Cancer

There is no sure shot way to prevent colon cancer. However, some measures can decrease the risk of developing colon cancer that include:

1. Go for regular screening

Most of the colon cancer develops from its precancerous polyps stage with no symptoms. The most effective way to prevent colon cancer is regular screening, starting from 45 years of age. This helps in the detection and removal of the polyps in its initial stage before turning into cancer.

2. Eat a healthy diet

A diet low in saturated and trans fats, high in fiber such as fruits, vegetables and whole grains and rich in calcium and Vitamin D is known to be associated with decreased risk of colon cancer. Diet that includes red meat (beef, pork or lamb) and processed meat increases the risk of colon cancer. Avoiding such foods can help in the prevention of colon cancer.

Here's more superfoods that can help in fighting cancer.

Check Now!

3. Consult doctor before taking NSAIDs

Do consult your healthcare provider before starting certain medications such as NSAIDs because they can cause side effects such as gastrointestinal bleeding and ulcers. However, some studies suggest that medications such as ibuprofen, naproxen, and aspirin can decrease the risk of colon cancer.

4. Maintain a healthy body weight

Since, overweight and obesity are linked with colon cancer, maintaining a healthy weight through physical activity, exercise, and a good diet helps in the prevention of colon cancer.

Weight loss is 99% mental and 1% physical. Start your journey today.

Click Here!

5. Quit alcohol and smoking

Long term use of alcohol and smoking is associated with an increased risk of cancers. Quitting both can help in the prevention of colon cancer as well as some other types of cancers such as lung cancer, mouth cancer, etc.

Tobacco is injurious to health. Say no to tobacco. Try our smoking cessation product range.

Check Out!

6. Increase the intake of vitamins and minerals

Some studies suggest that vitamins and minerals such as folic acid, Vitamin D, calcium, and magnesium decrease the chances of colon cancer. One can prevent colon cancer by taking foods rich in these nutrients such as milk, cheese, and eggs.

There are certain myths associated with cancer such as cancer always ends up with the death of the patient. Watch the video by our expert as he debunks more myths of cancer.

Treatment Of Colon Cancer

There are various treatment options for colon cancer which are given considering the risk factors, stage of colon cancer, side effects, and age of the patient. The treatment options include:

1. Surgery

It includes removal of cancer through an operation. It is one of the most commonly used methods in all the stages of colon cancer. It can be performed in either of the two ways:

Local excision: In this, the tumor is removed through the tube inserted in the colon with a cutting tool at its end. It is mostly used in the early stages of cancer.

Resection of colon: In this, a part of the colon is also removed along with the cancer. It is used when the tumor is large.

2. Ablation technique

This technique is used to kill small tumors which are usually less than 4 cm in size. Ablation technique includes:

Radiofrequency ablation: In this, the tumor is killed by a needle inserted through the skin. The needle is guided by a CT scan or ultrasound. The technique uses radio waves to kill the cancer cells.

Microwave ablation: This technique uses electromagnetic waves that create high temperature in the body. The high temperature kills cancer cells. This treatment is usually used to kill large tumors (upto 6 cms).

Ethanol (alcohol) ablation: It is also known as percutaneous ethanol injection (PEI). In this procedure, concentrated alcohol is injected into the tumor using a needle. The needle is guided through an ultrasound or CT scan. In some cases, multiple exposure of alcohol is required to kill cancer cells.

Cryoablation (cryosurgery or cryotherapy): This technique uses a probe to freeze and kill cancer cells. The probe is guided into the skin using ultrasound with a needle.

3. Chemotherapy

Chemotherapy involves the use of anticancer drugs to kill cancer cells. They are available in the form of oral formulations and injections. Injections can be given directly into the vein over a few minutes or as an infusion over a long period of time. The medicines used to treat colon cancer include:

5-Fluorouracil (5FU)

Leucovorin

Oxaliplatin

Capecitabine

Irinotecan

Cetuximab

Panitumumab

Regorafenib

These drugs are either used alone or in combinations. Chemotherapy is given in cycles that are often 2 to 3 weeks long. The duration of chemotherapy depends upon the type of drugs used and the side effects. The way in which chemotherapy is given depends upon the overall health of the patient and the stage of cancer.

How is chemotherapy given?

Anticancer drugs can be given in either of the two ways:

Systemic chemotherapy: In this, the medicines are taken through the mouth or injected into the bloodstream. The drug reaches the tumor site through the blood and kills cancer cells.

Regional chemotherapy: Drugs are directly injected into the artery that has access to the tumor site. This helps in reducing the side effects. One such example of regional chemotherapy is hepatic artery infusion in which a drug is directly injected into the hepatic artery. This is used in the conditions where cancer has spread to the liver.

How chemotherapy is used in the entire course of colon cancer?

Adjuvant chemotherapy: It is given after surgery to kill small cancer cells that might have left because of their small size. It reduces the chances of relapse of cancer after the surgery.

Neoadjuvant chemotherapy: This is given before the radiation therapy to reduce the size of the tumor. This makes it easy to remove the tumor through radiation.

What are the side effects of chemotherapy?

The side effects of the chemotherapy depends upon:

Type of drug

Dose of drug

Duration of therapy

Some of the common side effects include:

Hair loss

Mouth ulcers

Loss of appetite or weight loss

Nausea and vomiting

Diarrhea

Nail changes

Skin changes

Hand-foot syndrome

Neuropathy

Tiredness

Easy bleeding

Allergic reactions

It is important to discuss the side effects with your cancer team so that the right treatment can be given timely.

4. Radiation therapy

It involves the use of high energy rays such as X-rays to kill cancer cells. It can be used before, during and after the surgery. In various cases, it is given along with chemotherapy (chemoradiation). In the advanced stages, when colon cancer has spread to other organs such as lungs, brain, and bones, radiotherapy is useful. It can be given in two ways:

External beam radiation therapy (EBRT): EBRT is the most commonly used radiation therapy for colon cancer. In this, intense radiation is given from outside the body using a machine. This technique is used if there are a small number of tumors where surgery is contraindicated.

Internal radiation therapy: In this, a radioactive substance is placed in the rectum near cancer cells. This helps in specific exposure of the radiation to the targeted site. This therapy has lesser side effects.

Radiation therapy can have some short and long-term side effects such as:

Skin irritation

Nausea

Rectal irritation

Bowel incontinence

Bladder irritation

Tiredness

Sexual problems

5. Targeted therapy

It also involves the use of drugs to identify and kill specific cancer cells due to which it has lesser side effects than chemotherapy and radiation therapy. Various drugs used in targeted therapy include:

1. Monoclonal antibodies: These are specialized proteins that can attach to the cancer cells and inhibit their growth. They are given by infusion. Monoclonal antibodies can be:

Vascular endothelial growth factor (VEGF) inhibitors: They kill cancer cells by inhibiting VEGF – a substance that helps in the formation of new blood vessels and aids in the growth of cancer. Some of the common examples are bevacizumab and ramucirumab.

Epidermal growth factor receptor (EGFR) inhibitors: This class of monoclonal antibodies stop the growth of tumor cells by inhibiting EGFR, a protein that helps in the growth and multiplication of cancer cells. Some of the common examples are cetuximab and panitumumab.

2. Angiogenesis inhibitors: This class inhibits the formation of new blood vessels that cancer cells require to grow and multiply. Examples include Ziv-aflibercept and regorafenib.

3. Protein kinase inhibitors: They block the special proteins that are needed for multiplication of cancer cells. Encorafenib is one such drug used in colon cancer.

6. Immunotherapy

This therapy involves the use of drugs that modulate the immune system. Drugs given during immunotherapy boosts the immune system of the patient that helps in fighting the cancer cells. It is mostly used in advanced stages of colon cancer. Some of the common examples are ipilimumab, pembrolizumab and nivolumab.

Walking may improve quality of life of people with advanced cancer

According to a study, walking for just 30 minutes thrice a week was found to improve the quality of life for people suffering from advanced cancers. Read the complete article to know more about it.

Click To Read!

Complications Of Colon Cancer

Colon cancer, if diagnosed at an early stage can be treated easily. But, in case treatment is not taken for a long period of time, it can be life threatening. It is important to screen and diagnose in case of any related symptoms or risk factors. The complications of colon cancer include:

Iron deficiency anemia

Jaundice

Bowel obstruction

Blockage of the colon

Spreading of cancer to other tissues (metastasis)

Relapse of cancer

Development of secondary tumor in the colon

Perforation of the colon

Home-care For Colon Cancer

Cancer affects physically, socially, emotionally, and financially. There are certain changes in the life of the patient that affects him/her along with the family. The medications should be taken as prescribed by a doctor.

There are several foods that are known to boost immunity and help in fighting cancer cells. However, these foods should be used after consulting with a doctor. These include:

Green tea

It contains antioxidants that help in boosting the immunity. Caffeine-free products should be used. Green tea is contraindicated in certain people such as people suffering from glaucoma. It should always be initiated before consulting your doctor.

Reishi mushroom

It is known to have cancer fighting properties along with immune boosting effects.

Turmeric (Haldi)

It is also shown to have some anti-cancer and anti-inflammatory properties. Curcumin present in turmeric helps in the prevention of colon cancer. It also aids in killing cancer cells.

Probiotics

Since microbiota plays a very important role in the progression of colon cancer, probiotics can be used for prevention or as an adjuvant therapy in the treatment of colon cancer. Probiotics such as Lactobacillus, Streptococcus, Enterococcus, Lactococcus, Bifidobacterium and Leuconostoc play a very important role in maintaining the health of the colon. Individuals who consume yogurt have lesser chances of developing colon cancer.

Here’s more about the health benefits of probiotics.

Click To Read!

Polyphenols

They are found in various plants and are known to have anti-cancer properties. Many foods contain polyphenols including cereals and legumes (barley, corn, nuts, oats, rice, sorghum, wheat, beans, and pulses), oilseeds (rapeseed, canola, flaxseed, and olive seeds), fruits and vegetables, and beverages (fruit juices, tea, and coffee). They also poesses antioxidant properties and thus, reduces the risk of colon cancer.

Ways to take care of yourself

Spend at least 15-30 minutes each day to do something that you like. It could be going for a walk, performing yoga, taking a nap, watching a movie, or talking with friends etc.

Understand your feelings and emotions. It helps you in understanding your needs.

Join a support group either in person, on phone, or through online.

Learn more about the types, stages, and treatment of cancer to be more aware of your condition and be prepared mentally.

Connect with a cancer survivor as it can boost your confidence and spread positivity to help you recover fast.

Note down atleast one positive feeling or gesture that you received from a nurse, doctor, or a co-patient.

Role of caregivers

Caregivers play a very important role in the overall disease outcome of the patient diagnosed with colon cancer. The need for caregiver support increases with the age of the patient. Older patients require the support of caregivers as they are less proactive through the treatment approach and decision making. The important role of caregivers are:

Providing emotional support so that patient does not feel alone

Making decisions about diseases management options

Participating in doctor appointments

Providing professional support as they are trained in handling patients

Giving the medicines to the patient on time, change dressings, help to take bath, and check the surgery sites

Helping with meals

Alternative Therapies For Colon Cancer

Acupuncture

It helps in alleviating cancer related symptoms such as nausea and vomiting which are the most common side effects of chemotherapy. It also reduces pain, shortness of breath, and breathlessness. This can be used after medical therapy or during chemotherapy and radiation therapy.

Mind-body therapies

It includes relaxation techniques, yoga, meditation, tai chi, and art therapies. They are shown to reduce nausea and vomiting, pain, fatigue, anxiety, insomnia, depressive symptoms and improving overall quality of life. It is very helpful in patients undergoing surgery, chemotherapy, and radiation therapy.

Find out the amazing health benefits of Yoga.

Click To Read!

Living With Colon Cancer

Managing physical effects

Every cancer therapy has numerous physical changes. It is important to discuss every little change happening in your body to your doctor. This helps doctors in modulating your treatment regimen to alleviate the symptoms. Continuous follow up even after the end of therapy is recommended to track long term effects and relapse of cancer.

Managing the fear of side effects

Every cancer therapy has side effects which may vary depending on various factors. It is completely common to have fear from side effects. However, there are various options available to manage the side effects effectively. These include:

Take an active role in your treatment plan. This helps you in knowing about possible side effects well in advance.

Talk about the side effects to your doctor that may help you in alleviating and preventing the side effects.

Maintain a journal in which you can write about your experiences.

Talk about your fear to your loved ones. This will reduce your anxiety.

Managing emotional and social effects

Diagnosis of cancer can have emotional and social effects on the patient. This includes stress, anxiety, depression, sadness, and a feeling of helplessness. Some of the easy steps that can be taken to manage your emotional health is to:

Engage yourself in activities you like such as crafting, painting, and singing.

Do regular exercise as it helps in reducing stress.

Join any support group either online or offline.

Ask help from a professional counselor.

Meet someone who is undergoing the same type of treatment.

Listen to a podcast related to survival stories of the patients with colon cancer

Managing the cost of cancer treatment

Cancer treatment can be very expensive and this can give anxiety and stress to the patient and his/her family. This can be managed through:

Understanding the cost of therapy well in advance.

Communicating any financial issues with the cancer team. This will help doctors to look for affordable alternatives.

Finding financial support resources though oncology social workers, oncology nurses, doctors, or online.

Taking help through your health insurance partners.

Watching for recurrence

Follow up care even after the completion of treatment is required to check relapse, managing long term side effects and overall health. The first 5 years after treatment is very crucial for colon cancer. Follow up care includes regular physical examinations, tests, and counseling. Cancer rehabilitation is also required to give:

Physical therapy

Emotional counseling

Managing the long term pain

Nutritional guidance

Frequently Asked Questions

Can colon cancer be cured?

Where is colon cancer pain felt?

Can colon cancer be inherited?

How do I know about my colon cancer?

Which type of food items can cause polyps?

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Color blindness

Also known as Daltonism, Color vision deficiency, Color vision problem

Overview

Color blindness is the difficulty in telling the difference between certain colors or shades. Very rarely color blindness makes a person unable to see any colors.

Color blindness is mostly an inherited genetic condition. In some cases, it can be acquired in life due to the side effects of certain medications, industrial and environmental chemicals, or chronic illnesses.

Individuals with color blindness encounter some common difficulties in day-to-day life like choosing fresh vegetables, fruits, and flowers, driving a car, and selecting clothes.

Currently, there is no treatment for this condition. However, specific photographic frames eyeglasses and contact lenses can be used to improve the distinguish between some colors.

Key Facts

Usually seen in

Individuals between 70 and greater

Gender affected

Both men and women but is more common in men

Body part(s) involved

Eyes

Prevalence

World: 300 million (2023)

Mimicking Conditions

Stationary Night Blindness (CSNB)

Retinitis Pigmentosa (RP)

Necessary health tests/imaging

Screening tests

Ishihara test

Lantern tests

Anomaloscope

Color arrangement tests

Treatment

Memorizing

Special glasses or contacts

Visual aids apps and technology

See All

Symptoms Of Color Blindness

The symptoms of color blindness vary from person to person. Many people have such mild symptoms that they don’t even realize they have color blindness. The symptoms of color blindness may include:

Difficulty in telling colors apart

Trouble seeing the brightness of colors

Inability to distinguish different shades of red and green or blue and yellow

Feeling of eyes or head getting hurt while looking at a red or green background

Identification of colors may become worse in low-level light, conversely, colors may be easier to distinguish in natural daylight.

In the rarest cases, color blindness may affect the sharpness of vision.

Causes Of Color Blindness

The retina (the light-sensitive layer at the back of the eyeball) of the eyes has two types of photoreceptor cells. They are called the rods and the cones. The rods detect lightness and darkness whereas the cones detect colors. There are three types of cones that are able to interpret the primary colors ie. red, green, and blue:

Red-sensing cones (L cones): These cones perceive long wavelengths of light (around 560 nanometers).

Green-sensing cones (M cones): These cones perceive middle wavelengths (around 530 nanometers).

Blue-sensing cones (S cones): These cones perceive short wavelengths (around 420 nanometers).

These cone cells send information through the optic nerve to the brain. The brain then uses this input to determine our color perception.

Color blindness can occur when one or more types of cone cells are absent, not working properly, or detect a different color than normal. Mild color blindness happens when one cone cell does not work right. Severe color blindness occurs when all three cone cells are absent or defective.

Types Of Color Blindness

The different types of color blindness are:

Red-green color blindness

This is the most common color blindness that makes it hard for the individual to differentiate between red and green.

There are 4 types of red-green color blindness:

Protanomaly: This leads to reduced sensitivity to red light, and makes the red look less bright. This type is mild and usually doesn’t interfere with normal activities.

Deuteranomaly: This leads to reduced sensitivity to green light. This is the most common type of red-green color blindness. This type is mild and doesn’t usually get in the way of normal activities.

Protanopia and deuteranopia: In both of these types the individual is unable to tell the difference between both red and green at all.

Blue-yellow color blindness

This is a less common type of color blindness in which an individual is unable to differentiate between blue and green, and between yellow and red.

There are 2 types of blue-yellow color blindness:

Tritanomaly: This leads to reduced sensitivity to blue light.

Tritanopia: This is unable to tell the difference between blue and green and yellow and pink. This color blindness makes the color look less bright.

Blue cone monochromacy

This is the rarest form of color blindness. In this type of color blindness, there is a lack of working L cones or M cones. There are only S cones. Individuals having this kind of color blindness often find it hard to tell the difference between colors and see mostly grays.

Rod monochromacy (achromatopsia)

Achromatopsia is a condition when all or most of the cones are missing or not working properly. This is also called monochromacy, and it’s quite rare. For them, their world consists of different shades of gray ranging from black to white, rather like seeing the world on an old black-and-white television set. An individual may also have other vision issues that may greatly impact their quality of life.

Risk Factors For Color Blindness

The various risk factors of color blindness can be inherited (a person is born with it) or acquired (developed later in life). The causes are different in each case.

Inherited color blindness

Most people with color blindness are born with it. This is called a congenital condition. A change (mutation) to the genes leads to inherited color blindness. The most common form, red-green color blindness, follows an X-linked recessive inheritance pattern. The genetics for red-green color blindness are:

In males

A male baby will have red-green color blindness if the mother has the condition

There is a 50% chance of inheriting red-green color blindness if the mother is a carrier (the mother carries one copy of the genetic mutation but doesn’t have the condition). The other copy is normal, hence there is a 50% chance.

The condition would not be present if the father has the condition as the father contributes the Y chromosome to male babies and the X chromosome to female babies.

In females

A female baby will inherit red-green color blindness if both parents have the condition.

The female baby would be a carrier in case the father has the condition but the mother does not.

There will be a 50 percent chance of inheritance of red-green color blindness (50% chance) or a carrier (50% chance) if the father has the condition and the mother is a carrier.

Acquired color blindness

This color blindness mostly develops as a blue-yellow color deficiency, and has many associated risk factors including

Aging: The ability to distinguish different colors deteriorates slowly with age.

Chronic illnesses: Having eye-related diseases such as age-related macular degeneration or glaucoma increases the likelihood of color blindness. Having health issues like diabetes, multiple sclerosis, Alzheimer’s disease, autoimmune diseases, high blood pressure, heart problems, nervous disorders, and physiological issues multiplies the chances of color blindness.

Stroke: Accidents or strokes that damage the retina or affect a particular area of the brain or eye can lead to color blindness.

Medications: Certain medications for high blood pressure, diabetes, hypertension, erectile dysfunction, tuberculosis, and specific antibiotics and barbiturates, can alter the vision of the eyes.

Industrial and environmental chemicals: Exposure to chemicals such as carbon monoxide, carbon disulfide, organic solvents, and some containing lead may also increase the risk of color blindness.

Uncontrollable diabetes can lead to loss of vision. Here is a list of a few pointers to remember for a healthy vision.

Click To Read

Diagnosis Of Color Blindness

Accurately diagnosing color blindness is important to reduce further complications. Diagnosis includes

History

A complete history provides important information to determine whether the patient has a family history or is having certain diseases and taking certain medications.

Screening tests

The tests for color vision deficiency are:

Ishihara test: This is the most well-known test for color blindness. A set of images called the Ishihara color plates is used for the detection of color blindness. The individual is told to look at the images, which have numbers embedded in dots of color. The color of the numbers is a different color than the background. If the person cannot see the numbers, then the individual is probably colorblind.

Lantern tests: This test is also called a Farnsworth Lantern [FALANT] test which is used for detecting individuals that are unable to distinguish between red and green. During this test color pairs (including red, green, and white) are shown and the outcome is based on the number of color-naming errors.

Anomaloscope: A simple instrument anomaloscope is used to diagnose color blindness. In this test, two different light sources have to be matched to the same color. They are optical instruments in which the observer must manipulate stimulus control knobs to match two colored fields in color and brightness. This is a standard instrument for the diagnosis of color vision defects.

Color arrangement tests: This test is also called the hue test. The doctor will provide you with blocks that are different colors. The doctor will ask you to arrange them in rainbow order, from red to purple. If the individual is facing trouble putting them in the correct order, there are chances of having a type of color blindness.

Celebs affected

Mark Zuckerberg

Mark Zuckerberg is the Chief Executive Officer of Facebook. According to The New Yorker, Zuckerberg is red-green colorblind, which means the color he can see the most is blue. Blue also happens to be the color that dominates Facebook.

Bill Clinton

Bill Clinton served as the President of the United States from 1993 to 2001. He reportedly finds trouble distinguishing between red and green colors.

Prevention Of Color Blindness

There is no way to prevent color blindness that has been present since birth. But there are chances to reduce the occurrence of color blindness later in life by getting regular eye examinations and steering clear of avoidable risk factors.

World Sight Day is observed on 10th October of every year. The aim is to raise awareness of blindness and vision impairment. Are you taking care of your eyes?

Here are five simple tips to prevent vision problems.

Click Here To Check

Specialist To Visit

You should contact your doctor immediately if you have the following symptoms:

Difficulty in telling colors apart

Trouble seeing the brightness of colors

Doctors that can help you diagnose and treat color blindness include:

General Physician

Ophthalmologist

Optometrist

An ophthalmologist or an optometrist is a medical practitioner who specializes in eye and vision care. The doctor helps detect any problems related to eyes and vision early.

If you or your loved ones are noticing any of the above symptoms, seek medical help from our trusted team of doctors.

Book Your Appointment Now

Treatment Of Color Blindness

Currently, there is no cure for color blindness that is present from birth (inherited color blindness). In many cases, most people with color blindness learn to adapt and live with the same condition.

If color blindness is happening because of another health problem (acquired color blindness), the doctor will treat the condition causing the problem. If someone is taking a medicine that causes color blindness, your doctor may suggest altering the ratio if required or switching to a different medicine.

Here are some ways to work around poor color vision:

Special glasses or contacts may also help some people with red-green deficiency see the difference between colors.

EnChroma glasses

These glasses were created for doctors to use during laser surgery procedures. They were originally created as sunglasses with lenses coated in a special material that exaggerated the wavelengths of light.

It was discovered that the coating on these lenses might help people with poor color vision to see the differences in pigment but to varying extents.

These glasses work by filtering out certain wavelengths of light to help people better distinguish red and green colors. The glasses do not help in restoring normal color vision, but they may make certain hues appear more vibrant.

These glasses are now used as color-correcting glasses designed to alleviate symptoms of red–green color blindness. But the options are highly limited and expensive to be used by all individuals.

Contact lenses

Contact lenses for color blindness are the most common choice for many patients, as it is easy to use and painless too.

Are you worried while using contact lenses? Here is a list of a few common mistakes which lens wearers should avoid to take care of their eyes.

Click Here To Know

Visual aids apps and technology

Certain apps can be used to take a photo with the phone and then tap on the part of the photo to find out the color of that area.

Newer Interventions

Research has been going on gene therapy (a technique that uses genes to treat, prevent or cure a disease or medical disorder) for people who have inherited color blindness. If modern gene therapy does catch on, treatments for color blindness may eventually be approved and could open the door to color vision enhancement.

Potential gene replacement therapy for red-green color blindness has already been tested in animals.

Complications Of Color Blindness

Individuals with a severe form of color blindness can face complications like:

Achromatopsia: It is a condition characterized by the partial or total absence of color vision. The individual cannot perceive colors except black, white, and shades of gray.

Nystagmus: It is a condition in which your eyes make rapid, repetitive, uncontrolled movements. In some cases of color blindness, individuals may face involuntary back-and-forth eye movements.

Photophobia: The discomfort in bright light can be due to color blindness.

Living With Color Blindness

If color blindness occurs as a result of illness or injury, treating the underlying cause may help to improve color blindness. However, there’s no cure for inherited color blindness.

People with color blindness often consciously apply certain techniques or use specific tools to make life easier by

By memorizing the order of color objects

Having a caregiver who can sort the clothing or other items

A few tips that can help in managing everyday challenges:

1. Aim for right lighting

Lighting makes a big difference in the abilities of those with a vision deficiency. Yellow or dull lighting can make it even harder to perceive color. Glares can make it difficult to perceive colors properly. In areas where the lighting can be controlled, aim for bright, and natural light.

2. Use of smartphones and apps

With the help of advancements in technology, smartphone apps can assist people with color vision deficiencies in identifying colors. Certain apps are very useful while shopping or picking out clothes in the morning. The app is mainly designed for color-blind individuals and helps in

Matching clothes

All sorts of color identification in day-to-day life

3. Look for Color Blind glasses

This is not a cure for color blindness. However, colorblind glasses are the best option. These glasses are just like the normal glasses available in multiple shapes and colors. These glasses work by filtering out the overlapping wavelengths that result in color blindness and help in seeing the world as a normal-sighted person and conquering everyday tasks.

4. Handling challenges in school

If the child is colorblind coordinate with teachers and ask the following points to help their children:

Let the child sit front and center to have a good view of the blackboard

Label paints and other art supplies with basic names

Create handouts that only use black ink on a white sheet of paper

5. Shopping for fruits and vegetables

Suppose you find difficulties in distinguishing between fruits and vegetables due to color. In that case, you can search online or ask a worker at your grocery store for help in determining your favorite fruits and vegetables.

6. Cooking tips

For color-deficient individuals, it is difficult to determine if the food is fully cooked and ready to eat and if fruits and vegetables are ripe or rotten. The best practice to follow is while cooking, always follow temperature guidelines. Instead of determining if a piece of chicken has been cooked thoroughly based on the center of the meat's color, use a meat thermometer.

7. Addressing work challenges

Reading and designing PowerPoints at work, or working on graphs and images and reading company documents may possess a challenge. A color-blind employee can speak with the boss about ways the company can be more inclusive, such as changing company document templates to colors that aren't as difficult to comprehend.

8. Dealing with gadgets

Most advanced electronics these days have ways to signal a low or full battery without relying on color. For example, Apple computers have a setting called “Differentiate without colors.” Android phones also offer a higher version that offers color correction based on what colors the user is not able to see.

9. Reading traffic lights

For reading the traffic lights a color-blind person needs to rely on the position rather than the color. For traffic lights that run from top to bottom: the top stops, the middle is caution, and the bottom is gone.

Suggestions for improved traffic lighting

There should be a simple tweak in the traffic lights to make color-deficient individuals perceive the light easier:

The new traffic lighting system should have two colors for each sign. The “stop” sign should have the center red and a peripheral yellow rim. The “go” sign should have a central green and a peripheral blue rim. Thus most color-blind individuals (red-green) will detect the yellow rim for “stop” and the blue rim for “go”.

The traffic lights should have only these two signals: “stop” and “go”, eliminating the intermediate orange sign.

These simple ideas can be helpful in assisting color-blind individuals.

Frequently Asked Questions

Can color blindness be cured?

What are the five symptoms of color blindness?

Can colorblind people drive?

What causes color blindness?

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Common cold

Also known as Cold and Upper respiratory tract infection (URTI)

Overview

Common cold is one of the most common ailments that every one of us might have had at some point in our lives. Although mostly caused by viruses, cold can also be triggered due to changes in weather or an underlying respiratory infection. It can spread by close contact with infected people or touching contaminated objects.

Sneezing, sore throat, feeling of being unwell, and nasal discharge are the most common symptoms associated with a cold. To diagnose a cold, assessing the physical symptoms is usually sufficient. In most cases, there is no need for any laboratory test.

Treatment of cold is mainly based on relieving the symptoms. Home care measures like steam inhalation, staying hydrated, gargling, use of nasal spray and taking adequate rest are effective in speedy recovery from the cold.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Nose

Throat

Sinuses

Mimicking Conditions

Allergic rhinitis

Sinusitis

Treatment

Antihistamines and decongestants: Phenylephrine, Chlorpheniramine & Fexofenadine

Expectorants and antitussives: Guaifenesin & Dextromethorphan

Pain relief medications: Paracetamol, Ibuprofen & Aspirin

Specialists to consult

General physician

ENT specialist

Pulmonologist

Infectious disease specialist

Allergist

Symptoms Of Common Cold

The cold or common cold, as the name suggests, is so common that according to studies, an average adult gets 4-6 colds per year, whereas children get 6-8 colds in a year. A cold is most commonly characterised by the following symptoms:

Stuffy nose

Sore throat

Sneezing

Cough (productive or dry)

Watery eyes

Malaise or a general feeling of being unwell

Slight body aches or a mild headache

Nasal discharge that is more than usual

Note: Discharge usually starts out clear and becomes thicker and yellow or green as the cold progresses.

Occasionally, the common cold can also present with the following symptoms:

Postnasal drip or drainage at the back of throat

Earache

Sinus pressure

Loss of appetite

Loss of smell or taste

Oversensitivity to the ambient temperature

Chills (feeling cold with or without fever)

Low grade fever (below 102°F)

Chest discomfort

Difficulty in breathing deeply

Causes Of Common Cold

The most common causes of the common cold are viruses, especially RNA viruses. Some of the common viruses that cause cold are:

Rhinovirus

Coronavirus

Influenza virus

Parainfluenza virus

Adenovirus

Coxsackievirus

Human bocavirus (HBoV)

Some common colds may also be caused by bacteria, but it is quite rare. Rhinoviruses are known to be the most common causative agents of cold in children and adults.

Is it common cold or COVID-19?

COVID-19 shares many symptoms with the common cold. Both are caused by respiratory viruses and spread from person to person through droplets that come out of the nose and mouth. It can be difficult to tell the difference between the two just based on symptoms, especially in mild to moderate cases. Some signs that could indicate that the illness is COVID-19 rather than a cold include fever or chills, persistent dry cough and shortness of breath. However, a fever can also indicate flu, pneumonia, or any other infection. Hence, it is best to undergo testing if COVID-19 is a possibility. Click here to learn more about COVID-19.

Read Now!

Risk Factors For Common Cold

Following factors can increase your risk of catching a cold.

Infants, toddlers and young children are at a higher risk of catching a cold

Although one can get a cold anytime of the year, it is more prevalent in winters

Close contact with the infected person

Exposure at closed overcrowded places like play groups, schools, offices or aeroplanes

Low humidity or dry weather which makes the nasal passages drier and more susceptible to an infection

Smoking or secondhand smoke

Poor hand hygiene

Exposure to contaminated objects

Allergies

Chronic respiratory illness

Low immunity

Lack of sleep

Stress

Diagnosis Of Common Cold

The diagnosis of a cold is done on the basis of your medical history and physical examination. Usually, laboratory tests in case of a cold are of no or very little significance. However, there are some rapid tests suggested for the detection of influenza, parainfluenza, and adenovirus antigens in nasal secretions. Rhinovirus, influenza viruses, and adenoviruses are also detected by taking a throat swab.

Common cold is not the same as flu

Common cold shares many symptoms with a potentially more serious condition called “flu” (influenza). Recognizing when your illness is mild like a cold or when it’s more serious like the flu is crucial. Here are 2 quick tips that will help you differentiate your cold from the flu.

Click To Read!

Prevention Of Common Cold

You cannot always prevent a cold. However, by following some simple preventive tips, you can avoid catching a cold from other people.

Do not come in close contact with people who have a cold, particularly during the initial days of catching a cold as they are highly infectious around this time and may spread the infection.

Wash your hands frequently in a day, especially after coming in close contact with someone who has a cold or after touching an object which is contaminated. It is also important to wash your hands before and after meals.

Do not touch your eyes, nose, and mouth to avoid infecting yourself with the cold virus as your hands are the easiest way viruses and other infected particles enter your body.

Do not use personal belongings of an infected individual such as towels and handkerchiefs to avoid contracting the common cold.

Sometimes, a dry environment can also trigger a cold; therefore, keep a check on the humidity of your environment to prevent drying of sinuses.

If you have a cold, it is advised to cover your nose and mouth with a handkerchief or a tissue while coughing or sneezing.

Discard the used tissue in a closed lid bin and wash hands. It is also advised to stay away from vulnerable people suffering from asthma or other chronic lung diseases.

Did you know?

Colds are highly contagious. They most often spread when droplets of fluid that contain a cold virus are transferred by touch. These droplets may also be inhaled. Here's more on how to prevent the common cold.

Read To Know!

Specialist To Visit

Usually, the cold gets better on its own without any treatment in 7 to 10 days. However, you can visit a doctor if your cold tends to get worse with time or if you have a high fever, chest pain, shortness of breath or trouble breathing. Also, let your doctor know if your symptoms worsen with each passing day. You can consult the following specialists:

General physician

ENT specialist

Pulmonologist

Infectious disease specialist

Allergist

Consulting a doctor becomes even more important for people who are suffering from a chronic disease of the airways such as asthma or chronic obstructive pulmonary disease (COPD). Get medical help, if you notice any of the following symptoms like:

High fever

Ear pain

Sinus related headaches

Severe symptoms of a cold that are unusual

Cough that worsens while other cold symptoms improve

A flare-up of any chronic lung problem such as COPD or asthma

Consult India’s best doctors online from a single click.

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Treatment Of Common Cold

There is no definitive treatment available against colds caused due to the invasion of viruses. For such cases, medications are considered helpful but they can only provide relief from the symptoms. Here are some common treatment options suggested by professionals in case of cold.

1. Antihistamines and decongestants

If you have a cold, antihistamines and decongestants can give you symptomatic relief with reduced nasal discharge, nose-blowing, sneezing, duration, and severity of symptoms. Some of the common examples include:

Phenylephrine

Chlorpheniramine

Fexofenadine

2. Expectorants & antitussives

If your cold is accompanied by cough, you may need either antitussive or an expectorant depending upon the type of cough you have. Some of the common examples are:

Guaifenesin

Dextromethorphan

3. Pain relief medications

Non steroidal anti-inflammatory drugs (NSAIDs) can help ease symptoms like body aches, inflammation, and fever. Examples include:

Paracetamol

Ibuprofen

Aspirin

Note: Never give aspirin to children as it can lead to Reye’s syndrome, a rare but very serious illness in kids that affects the liver and brain.

Did you know?

Antibiotics are generally of no use in treating common cold. They may be of significance only when your cold is followed by a secondary bacterial infection such as sinus infection. Antibiotics, however, should only be taken after consulting your doctor to avoid antibiotic resistance in the future.

Home-care For Common Cold

Over-the-counter medications can provide temporary relief of symptoms and should be used as soon as you feel a cold coming on.

1. Increase your intake of fluids

If you have a cold, then drinking plenty of fluids will help in thinning of the mucus and its easy drainage from the nose. It is advised to include plenty of liquids, especially warm drinks, to soothe your sore throat and manage your cold symptoms better.

2. Take proper rest

Adequate sleep is vital to healing. Sometimes, over exhaustion and fatigue could aggravate the cold symptoms. Sleep can help in producing natural fighter cells in the body that fight infections.

3. Use nasal saline solution or spray

You can use non-medicated nasal saline sprays or solutions to keep your nasal passages moist and free of any thickened mucus and get rid of blocked nasal passages.

4. Keep the ambient air humid

You can use a humidifier to keep your ambient air moist to prevent drying of nasal passages. You can also inhale steam to get relief from the cold symptoms.

5. Use a neti pot

A neti pot is a container that helps in flushing out the mucus. You can use it by bending your head towards your side over the sink and keep the spout of the neti pot in your upper nostril. After this pour water (salt water solution) into your upper nostril and let the water flow or drain down towards the lower nose.

6. Sleep in elevated position

The sleeping position which is at a slightly elevated slope helps in better drainage of your mucus. You can keep pillows under your head to help fluids flow in your sinuses and prevent congestion.

7. Gargle

Garging with salt water or povidone-iodine can help in reducing the incidence of upper respiratory tract infections.

8. Eat foods that support your immune system

Foods that are rich in Vitamin C and zinc helps you in recovering from the cold. Foods that are rich in Vitamin C such as oranges, lemon, bell peppers and strawberries can help you get relief from the symptoms of a cold.

9. Pay extra attention to hygiene

Keeping good hygiene will not only help in preventing cold but also helps in preventing the cold from spreading to other person. Make sure you keep your hands clean at all times and disinfect the frequently touched items/surfaces.

Fight the viral cold better with these effective and easy natural remedies.

Click Here!

Complications Of Common Cold

Colds usually get better in a few days to weeks, with or without medication. However, a cold virus can make way for several other infections in the body such as:

Acute ear infection (otitis media)

Acute sinusitis

Acute bronchitis

Strep throat

Pneumonia

Croup or bronchiolitis in children

If you are already suffering from any respiratory problems such as asthma, chronic bronchitis, or emphysema, cold may worsen the symptoms of these diseases.

Did you know?

If your cold refuse to go away, it could be a sign of sinusitis. Sinus infection or sinusitis occurs when the air-filled spaces inside your nose and head (called sinuses) get inflamed or swollen. Both viruses or bacteria can cause this inflammation. Here's more about sinusitis.

Click To Know!

Alternative Therapies Of Common Cold

Here are some of the home remedies that can help you recover faster from a cold.

Lemon (Nimbu): Lemons are amongst the most famous remedies for cold and fever as they are rich in antioxidants and Vitamin C. They increase the body’s resistance to cold and cough and reduce the duration of illness.

You can take lemon juice in warm water with a tablespoon of honey. You can take this solution twice or thrice a day.

Ginger (Adrak): It has anti-inflammatory and antioxidant properties. To cure a cold, you can cut a small piece of ginger and boil it in water. Strain this mixture and consume this decoction twice or thrice a day. You can also chew raw ginger or consume it in the form of supplements.

Garlic (Lehsun): Garlic is an excellent source of anti-inflammatory agents. It has antispasmodic and antiseptic action as well.

You can take 3-4 cloves of garlic and boil it in water and consume it once a day.You can also take 3-4 drops of garlic oil diluted in water and take it twice or thrice a day.

Turmeric (Haldi): Turmeric is also an excellent remedy for colds. You can mix half a teaspoon of turmeric in warm milk and consume it once a day. If you are suffering from a runny nose, you can take smoke from the burning turmeric for quick relief.

Bitter gourd (Karela): Roots of bitter gourd are effective in treating a cold. You can mix a paste of bitter gourd, tulsi leaves, and equal parts honey and take it once daily at night for a month.

Lady finger (Bhindi): Lady finger or okra is rich in mucilage and helps in treating throat allergies, swelling, and pain associated with cold. To relieve the common cold, you can add a few cut lady fingers into boiling water and consume this decoction once daily.

Vitamin C: Regular intake of Vitamin C is helpful in preventing colds. If you already have a cold then taking Vitamin C can help you relieve the symptoms and shorten the duration of the cold. You can take 1-2 tablets of Vitamin C daily, or as prescribed by your doctor.

Frequently Asked Questions

How long does a cold last?

Are cold and flu the same?

Why do colds become worse in winters?

What foods should I avoid if I have a cold?

How to know if your cold is viral or bacterial?

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Conjunctivitis

Also known as pink eye, conjunctivitis infective, contagious ophthalmia

Overview

Conjunctivitis is an infection of conjunctiva, a transparent membrane that lines the eyelid and covers the white part of your eyeball. When small blood vessels in the conjunctiva become inflamed, they become more prominent. This is what causes the whites of your eyes to appear reddish or pink, hence the name pink eye.

Conjunctivitis is marked by burning and itching in the eyes along with mucus or pus discharge. There is a constant urge to rub the affected eye and in some cases pain may also be present. It may be caused due to certain infectious agents such as viruses, bacteria or non-infectious causes such as dust, fumes or other allergens. Diagnosis is usually confirmed by physical examination by your doctor and treatment depends upon the infective cause of the condition. While viral conjunctivitis does not require any treatment, bacterial infection may require anti-infective agents in the form of eye drops or ointments.

You can prevent conjunctivitis by keeping your hands clean and avoid sharing personal belongings such as eyewear, eyedrops, makeup with infected individuals. Cautious use of contact lenses is also important to prevent contracting this infection. Conjunctivitis, which gets worse with each passing day, should be taken seriously and treated by an ophthalmologist as it poses a risk of complications such as uveitis and corneal perforation.

Key Facts

Usually seen in

All age groups

Gender affected

Both men & women

Body part(s) involved

Eyes

Prevalence

Worldwide: 1% (2013)

Mimicking Conditions

Glaucoma

Iritis

Keratitis

Episcleritis

Scleritis

Pterygium

Corneal ulcer

Corneal abrasion

Corneal foreign body

Subconjunctival hemorrhage

Blepharitis

Hordeolum

Chalazion

Contact lens overwear

Dry eye

Treatment

Antibiotics: Chloramphenicol, Ciprofloxacin, Moxifloxacin

Corticosteroids: Loteprednol etabonate, Fluorometholone

NSAIDs: Ketorolac

Specialists to consult

Ophthalmologist

Symptoms Of Conjunctivitis

Conjunctiva refers to the mucous membrane that covers the outer surface of your eyes and is responsible for maintaining a healthy eye and vision. Conjunctivitis refers to the inflammation and infection of the conjunctiva. You may suspect conjunctivitis if you have:

Pink or red color in the white of the eyes

Burning, irritation or itching in the eyes

Discharge of mucus or pus from the eyes

Swelling of the layer lining the white part of the eye and the eyelid(inside part of the eyelid)

Increased production of tears

A constant feeling of a foreign object in your eyes

A constant urge to rub your eyes

Thick mucous discharge that crusts over of lashes especially after waking up making the eye difficult to open

Pain and tearing in eyes

Increased sensitivity to light

Eye pain, medically known as ophthalmalgia, is a common complaint that causes discomfort in and around the eyes. Here are common causes of eye pain.

Click To Read!

Causes Of Conjunctivitis

Conjunctivitis may be caused by pathogens such as bacteria,viruses or some allergens and irritants. Some of the most common causes of conjunctivitis are described below:

1. Infectious causes of conjunctivitis

These types of conjunctivitis are contagious ie. They can easily spread from an infected person or by something an infected person has touched, such as a used tissue. The various types of infectious causes are as follows:

Bacterial conjunctivitis is very common in children and some of the common bacterias responsible for conjunctivitis are Staphylococcal species such as Staphylococcus aureus, H. influenza, S. pneumoniae, and Moraxella catarrhalis. Bacteria such as Streptococcus pneumoniae and Haemophilus influenzae cause conjunctivitis in adults.

Viral conjunctivitis is also quite common in adults. This type of conjunctivitis is very contagious and often spreads in schools and other crowded places. Viruses such as Adenoviruses, Herpes simplex, Herpes zoster, and Enterovirus are known to cause conjunctivitis.

2. Non-infectious causes of conjunctivitis

These conjunctivitis are not contagious and are usually caused by some allergen or irritant:

Allergic conjunctivitis is the body's reaction to allergens or allergic substances. It affects both eyes and is a response to an allergy causing substance such as pollens, dust mites, molds, dander from pets, medicines or cosmetics etc. Allergic conjunctivitis is more common in people with other allergic conditions, like hay fever, asthma, and eczema. One may also experience symptoms like sneezing and watery nasal discharge along with symptoms of conjunctivitis.

Giant papillary conjunctivitis is a type of allergic conjunctivitis caused by the long term presence of a foreign body in the eye. People who wear inflexible contact lenses, use soft contact lenses that are not changed frequently or have a prosthetic eye are more prone to develop this kind of conjunctivitis.

Irritant conjunctivitis is caused by irritants like smoke, dust, fumes. Toxins like chemicals from the chemical industry or the chemicals/gases used in a laboratory or caustic materials like bleach can cause conjunctivitis and in some cases a chemical splash can lead to permanent damage to the eye as well.

Did you know?

The Coronavirus that has caused the COVID -19 Pandemic has been found to cause conjunctivitis as well. Conjunctivitis can be found in people with COVID-19 before they have other typical symptoms. To learn more about Covid

Read Now!

Risk Factors Of Conjunctivitis

You are at a high risk of contracting conjunctivitis if you:

Are exposed to people who are infected with conjunctivitis

Share items such as towels, pillow cases, makeup products with the infected individual

Have sinusitis

Have certain immunodeficiency diseases, trauma, other eye diseases and exposure to congenital sexually transmitted disease increases your risk of this condition

Wear contact lenses for extended hours particularly during their sleep which put you at a high risk of bacterial corneal infection

Did you know?

Pinkeye in newborns/neonatal conjunctivitis/ophthalmia neonatorum is a severe form of conjunctivitis that occurs in newborn babies or within the first month after birth. If a pregnant woman is suffering from a sexually transmitted disease like chlamydia or gonorrhea, the infant is exposed to them during delivery. It is a serious condition that could lead to eye damage. In such a case, consult the child's pediatrician or ophthalmologist for timely treatment under expert guidance.

Consult Our Specialist!

Diagnosis Of Conjunctivitis

Conjunctivitis is usually confirmed by a physical examination by your eye doctor or ophthalmologist.

Lab tests such as eyelid cultures are rarely performed. Eyelid cultures are usually carried out when you are facing recurrent infections of conjunctivitis or the infection is not getting better with medications. In certain cases an RT-PCR test may be advised for conjunctivitis caused by the viruses.

An ophthalmologist or an optician? Who do you visit to get your routine eye check-up? If your answer is an optician, you have to read this article without fail.

Click Here!

Celebs affected

Bipasha Basu Grover

In the year, 2012, Bollywood Actress Bipasha Basu contracted conjunctivitis while she was promoting her newly launched song. The actress had to cancel her shoot due to it.

Justin Bieber

Canadian singer Justin Bieber took to Instagram to share about conjunctivitis. He posted a selfie stating that he contracted the infection in the left eye in the year 2017.

Prevention Of Conjunctivitis

You can follow these easy tips to prevent conjunctivitis:

Keep your hands clean by washing them often with soap and water for at least 20 seconds.

It is advised to wash your hands thoroughly before and after cleaning, and before putting eye drops or ointment to your eye which is infected.

Do not share eye drops, or personal items such as makeup, sunglasses with the person infected to prevent the occurence of conjunctivitis.

Do not touch or rub your eyes. This is responsible for spreading the infections and making it even worse.

Do not wear contact lenses for long-hours.

Myth: Wearing dark sunglasses can prevent conjunctivitis

Fact: Wearing dark glasses is advised in cases of severe conjunctivitis so as to protect the eyes from light. This is because, once infected the eyes tend to become sensitive to the light which in turn can hamper the recovery. Also, wearing glasses can protect the eyes from dust and other particles which can worsen the condition. Here’s more ways to protect your eyes.

Read Article Here!

Specialist To Visit

It is a must to visit your doctor at the earliest in the case of the following conditions:

Pain in the eye

Increased sensitivity to light or blurry vision, which remains even after wiping the tears or discharge from the eyes

Bloodshot or intense redness in the eyes

If your symptoms don’t improve or get worse, which includes pink eyes that do not improve even after 24 hours of taking antibiotics

If your newborn is suffering from conjunctivitis

If you have a weakened immune system for example an HIV infection or if you are undergoing a cancer treatment, or other medical conditions and are suffering from conjunctivitis

To get relief from the symptoms, you can visit

General Physician

Ophthalmologist

If you can't go for an in-person visit, you can do a "video visit" instead. Online consultations are becoming more and more popular.

Consult India’s best doctors here.

Book Appointment Now!

Treatment Of Conjunctivitis

The treatment of conjunctivitis depends on the cause of the symptoms. There are mainly three types of conjunctivitis namely viral, bacterial and allergic conjunctivitis. Different treatment options for these types of conjunctivitis are as follows:

1. Antibiotics

These are effective against bacterial conjunctivitis which causes red and itchy eyes. These can be given either in drops, ointment or oral form. Example of this class of drugs include:

Chloramphenicol

Ciprofloxacin

Moxifloxacin

2. Corticosteroids

These are mostly prescribed to relieve conjunctivitis caused due to an allergen such as dust or irritant. It is also used to ease inflammation as well as pain due to the infection. Some of the commonly prescribed steroids for conjunctivitis include:

Loteprednol etabonate

Fluorometholone

3. NSAIDs

As conjunctivitis can cause pain in the eyes along with redness and swelling, painkillers such as non-steroidal anti-inflammatory drugs (NSAIDs) are commonly recommended to get rid of pain as well as inflammation in the eyes. Your doctor may recommend ophthalmological NSAIDS such as ketorolac.

Note: For viral conjunctivitis, you just need to use cold compress. It usually does not respond to the antibiotic treatment and runs its course before it starts getting better.

Stop taking antibiotics for every common health problem

Antibiotics are the common medicines which are used to treat various health problems like running nose, stuffed-up head, and the annoying cough, which is not good. Antibiotics are the medicines that are effective only for bacterial infections and not viral infections. Here’s more on when to take and when not to take antibiotics.

Click To Read!

Home-care For Conjunctivitis

Here are some of the easy at home tips that can help you recover faster from conjunctivitis:

Keep your hands clean to prevent worsening the infection.

Wash away any discharge from or around your eye(s) with the help of cotton or a clean, wet washcloth. Discard cotton balls after use, and wash the used cloth with detergent and hot water.

Do not use the same eye drop for your non-infected eye.

Wash your personal belongings such as bedsheets, pillowcases, sheets, washcloths, and face towels with hot water and detergent; Make sure to clean your hands after you handle these items.

Do not wear contact lenses until your ophthalmologist advises you to start wearing them again.

Do not use contaminated objects such as towels shared by others.

Make sure to clean your eyeglasses before using them.

Avoid using swimming pools or watching television for extended hours.

If you have conjunctivitis, there are steps you can take to avoid reinfection once the infection goes away:

Throw away and replace any eye or face makeup or makeup brushes you used while infected.

Throw away disposable contact lenses and cases that you used while your eyes were infected.

Throw away contact lens solutions that you used while your eyes were infected.

Clean extended wear lenses as directed.

Clean eyeglasses and cases that you used while infected.

Complications Of Conjunctivitis

Though complications arising due to acute conjunctivitis are rare, there may be certain cases in which complications may occur.

Patients suffering from Herpes Zoster Virus conjunctivitis are at the highest risk of complications such as uveitis

Conjunctivitis caused by gonorrhea, chlamydia, or certain types of the adenovirus can can be serious and lethal to eyesight, because they can scar the cornea or cause secondary corneal perforation

If you fail to show any improvement even after 5 to 7 days of the treatment then you must visit an ophthalmologist.

Alternative Therapies For Conjunctivitis

Some of the common home/herbal remedies for treating conjunctivitis are:

Indian gooseberry: Indian gooseberry or amla is useful in the treatment of conjunctivitis. You can mix a cup of amla juice with two teaspoons of honey and consume this mixture two times in a day.

Vegetable juice: Raw juices of some vegetables such as spinach, parsley or carrot can help you recover fast from conjunctivitis. You can take these juices separately or combine these juices for maximum benefits.

Vitamin rich foods: Certain vitamins such as Vitamin A and Vitamin B2 are quite useful in conjunctivitis. You can include Vitamin A rich foods such as carrots, pumpkin, tomatoes, green leafy vegetables and Vitamin B2 rich foods such as milk, almonds, citrus fruits and bananas in your diet.

Coriander: A decoction of coriander can be made by soaking dried coriander in water. This makes for excellent eyewash that gives relief in conjunctivitis.

All the herbal remedies or home treatments should be taken only after consulting your doctor.

Frequently Asked Questions

How did I catch conjunctivitis?

How to know if my conjunctivitis is caused by a virus or a bacteria?

How long will my conjunctivitis last?

How can you get rid of conjunctivitis fast?

Which eye drops should I use for conjunctivitis?

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Dandruff

Also known as pityriasis capitis

Overview

Dandruff is a common hair problem that needs no introduction. It affects around 50% of people worldwide at some point in their life, irrespective of their gender and ethnicity.

Dandruff is a scalp disorder which causes the scalp to flake and/or itch. The dead cells on the scalp tend to stick to each other due to surface debris and oil on the scalp. This in turn leads to flakes with itchy scalp and also causes the hair to shed at a faster than normal rate.

Dandruff is seen to mostly occur between puberty to middle-age as this is the phase when the sebaceous glands are most active. The severity of dandruff may fluctuate with the season but it usually worsens during winter.

If left untreated, it can cause fungal infections of the skin & may also lead to severe hair fall. The common treatment options for dandruff include use of home remedies and medicated shampoos.

Key Facts

Usually seen in

All age group

Gender affected

Both men & women

Body part(s) involved

Scalp

Hair

Prevalence

Worldwide: 50% (2010)

India: 7.6–18.7% (2015)

Mimicking Conditions

Psoriasis

Dermatitis

Eczema

Alopecia

Seborrheic dermatitis

Ringworm

Scalp folliculitis

Head Lice

Treatment

Antifungal agents: Zinc Pyrithione, Ketoconazole, Climbazole, Selenium Sulphide, Clotrimazole & Piroctone Olamine

Anti-proliferative agents: Coal tar

Keratolytics: Salicylic acid

Specialists to consult

Dermatologist

Trichologist

Symptoms Of Dandruff

Dandruff is a common scalp disorder characterised by:

Flaky white to yellowish scales on the scalp

Itching of the scalp

Dry or oily scalp

Flakes due to dry scalp tend to be smaller and whiter. Dandruff flakes are larger and usually yellow-tinged due to oily scalp.

Signs your dandruff may be severe:

Large areas of redness or swelling on the scalp

Severe itching and worsened flakes over time

Having symptoms even after using anti-dandruff shampoo for a month

Did you know?

The word dandruff (also known as dandriffe) is derived from Anglo-Saxon origin. It is a combination of two words - ‘tan’ meaning ‘tetter’ and ‘drof’ meaning ‘dirty’. Also, scalps with dandruff shed up to about 8 lakh cells/sq cm compared to only about 5 lakh cells/sq cm in normal scalps. There are natural ways to tackle dandruff.

Read More!

Causes Of Dandruff

The causes of dandruff vary from person to person, but it is usually a result of improper handling of hair and scalp. According to experts, the cause of dandruff is rapid maturing and shedding of scalp cells precipitated by excessive oil secretion.

Broadly speaking, the causes can be categorised into:

1. Microbial factors

A) Fungal infection

Malassezia, a fungi, is one of the leading causes of dandruff. It is known to stimulate the enzyme lipase which is responsible for the production of saturated fats and unsaturated fats. While saturated fats aid in the growth and division of the fungal cells, unsaturated fats are responsible for skin inflammation and irritation. Moreover, it also alters the normal shedding of the dead cells leading to visible white flakes.

B) Bacterial infection

Bacteria that can be found on the scalp and may lead to dandruff include Propionibacterium acnes and Staphylococcus epidermidis.

2. Non-microbial factors

Dry scalp

Oily or irritated skin/hair

Poor hair hygiene

Use of hair cosmetics/tools

Scalp disorders like psoriasis and eczema

Infrequent shampooing

Extreme weather conditions

Risk Factors For Dandruff

You are more likely to have dandruff if:

1. Age

Dandruff usually begins during teenage years and continues through middle age.That doesn't mean older adults don't get dandruff. For some people, the problem can be lifelong.

2. Being male

Dandruff is more prevalent in males than in females.

3. Certain chronic illnesses

Parkinson's disease and other diseases that affect the nervous system also seem to increase risk of dandruff. So does having HIV or a weakened immune system.

4. Other conditions

Stress and fatigue

Your scalp feels oily

You experience intense itching even when the scalp does not feel dry

Your hair looks greasy at most times

Not brushing your hair properly

Leaving oily hair unattended

Using harsh shampoos

Using styling tools too often

Diagnosis Of Dandruff

Dandruff is diagnosed by a simple physical examination of the scalp. You may even be asked a few questions about your hair care routine and symptoms. It will be done by a dermatologist (skin specialist) or a trichologist (hair and scalp specialist). Your dandruff may be classified as mild or severe and on the basis of it, your doctor may prescribe appropriate treatment. There are no blood tests or imaging tests to diagnose dandruff.

Celebs affected

Tyra Banks

American TV personality & Model, Tyra Banks, has been pretty vocal about her struggle with dandruff. She once said that her hair is dirty & full of dandrfull & every time she scratches her scalp, a gook of nasty danruff can be seen in her nails.

Prevention Of Dandruff

By taking adequate measures to improve hair health, you can minimize the chances of dandruff.

Cut down on high sugar foods, fats and alcohol

Develop a hair and scalp care routine according to your hair type. If you tend to have an oily scalp, frquent shampooing may help prevent dandruff. Gently massage your scalp to loosen flakes. Rinse thoroughly. If your hair tends to be dry and your scalp is sensitive, shampoo less frequently and condition your scalp in between washings.

Limit hair-styling products. Hair-styling products can build up on your hair and scalp, making them oilier.

Brush your hair often to improve circulation in the scalp.

Do not share combs

When going out, cover your hair as dirt and grease aggravates the problem

Specialist To Visit

If you have dry and itchy scalp or white flakes on your scalp, then do consult a doctor to treat your condition. The best doctor to visit for your skin and hair related problems are:

Dermatologist

Trichologist

Dandruff may get worse if fungus Malassezia increases in number. Consult a dermatologist if:

Dandruff does not get controlled in spite of frequent cleansing with over-the-counter shampoos.

Flakiness also spreads to eyebrows, ears, and eyelid margins (seborrheic dermatitis).

The scalp is red, swollen, or extremely itchy.

Did you know that dandruff is not contagious?

Unlike popular belief, dandruff does not spread from one person to another. You cannot catch this scalp condition or pass it along to someone else through person-to-person contact or even by sharing pillowcases.Talk to our professional and get help.

Consult Now!

Treatment Of Dandruff

In most patients, dandruff can be controlled by daily washing with gentle anti dandruff shampoo. If your dandruff is severe, the doctor may prescribe medicated shampoos that contain chemicals such as Zinc Pyrithione, Selenium sulphide, Ketoconazole, Coal Tar and Salicylic Acid.

These treatment options are aimed at treating the cause of the dandruff and managing the symptoms.

1. Antifungal agents

As the name suggests, this class of drugs are aimed at treating the fungus which is responsible for the dandruff. Most of these drugs work by affecting the membrane of the fungus which leads to death of the microbes thereby aiding in the treatment. Examples of this class of drugs include:

Zinc Pyrithione helps to prevent itching and flaking

Ketoconazole acts as a broad spectrum antifungal agent by disrupting the membrane function

Climbazole works by hindering the normal functioning of the fungal cell membrane

Selenium Sulphide based shampoos can discolor the hair and scalp.

Clotrimazole inhibits the synthesis of ergosterol (a type of fat) thereby aiding in the treatment

Piroctone Olamine inhibits the degradation of sebum triglycerides to oleic acid and arachidonic acid which are responsible for inflammation and itching

2. Anti-proliferative agents

Coal tar is used in the form of tar based shampoos and it is one of the most common examples of this class of anti-dandruff chemicals. It contains more than 10,000 of chemical compounds that inhibit proliferation (division of the microbes) and inflammation. This is mainly used to relieve the symptoms of dandruff.

3. Keratolytics

It acts as a keratolytic agent which is known to cause the skin to shed dead cells from the top layer by increasing the moisture in the scap. As it prevents clumping of the dead cells together it helps to clear dandruff from the scalp. Salicylic acid is one of the most common examples of keratolytic agents.

These drugs are available in various forms such as shampoos, lotions/applications, creams, herbal oils and gels.

Home Care For Dandruff

By making small changes in your lifestyle, you can get rid of dandruff effectively. Here are some effective ways to manage dandruff:

1. Brush your hair regularly

Brushing your hair ensures that blood circulation in your scalp is maintained. When you brush your hair, you remove dead cells from your head. But brushes with sharp ends will cause swelling and reddish patches in your scalp. Use a paddle brush. Brushes that have balls in the ends are even milder.

2. Avoid harsh shampoos

Certain chemicals in shampoos can lead to dry and irritable skin and precipitate itching and dandruff. Choose a mild herbal shampoo that is gentle on the hair and has a compatible pH balance.

3. Avoid styling tools

Heat and chemicals make your hair weak and damage the scalp. Straightening, blow-drying, and perming or any kind of artificial heat can cause irreparable damage and precipitate dandruff.

4. Pick an anti-dandruff shampoo

Some commonly recommended anti-dandruff shampoos available over the counter are Pyrithione zinc shampoos, Tar-based shampoos and Ketoconazole shampoo. It is recommended to use these shampoos daily however as dandruff gets better, alternate it with some other shampoo to avoid loss of hair health.

5. Eat healthy

Enrich your diet with optimum portions of green vegetables, fish oil, lean proteins and fruits. Include green leafy veggies such as broccoli, kale, lettuce to your daily diet. It encourages and improves your skin, hair, nails and overall health. Lean proteins (eggs, nuts, beans) help in building healthy skin and hair. So add these to your daily servings in some or the other form.

6. Get a little sun

Sunlight may be good for controlling dandruff. But because exposure to ultraviolet light damages your skin and increases your risk of skin cancer, don't sunbathe. Instead, just spend a little time outdoors. And be sure to wear sunscreen on your face and body.

Complications Of Dandruff

Dandruff should not be taken lightly because

It may be pointing towards overgrowth of a fungus (called Malassezia) which despite being present on the scalp of most people does not cause any symptoms

It can slow down your hair growth

It denotes a microinflammation, which might be easily overlooked as there are no readily observable symptoms.

So if you have dandruff or itchy scalp with white flakes, do consult a dermatologist to know the cause of it and get it treated before it becomes severe in nature.

Alternative Therapies For Dandruff

Home remedies for dandruff

1. Vinegar: To clean your scalp of dead skin and fungi, mix half a cup of white/apple cider vinegar with equal volume of water and pour the mixture over your hair. Leave it on for 10 minutes, then scrub and rinse off with a mild shampoo or just water.

2. Fenugreek (Methi): Make a paste of two tablespoons of fenugreek powder and half-cup water. Apply on the scalp and leave it in for 30-45 minutes; rinse off with a mild shampoo to strengthen and clean your hair thoroughly.

3. Lemon (Nimbu): Massage the juice of two lemons into the scalp and then rinse off with a mixture of lemon juice and water. Besides its antifungal properties, the acidity of the lemon will restore the natural pH balance of the scalp.

4. Salt/Baking soda: Generously sprinkle some salt (table or Epsom)/baking soda on the scalp and a massage gently to exfoliate the scalp. Rinse off with a mild shampoo for a clean look.

5. Neem: Add about two handfuls of neem leaves to water (half litre), bring it to a boil and then let it soak overnight. Wash your hair with strained liquor. Neem is antifungal and relieves itching.

6. Curd (Dahi): Apply fermented curd on the scalp and leave it in for about an hour. Then rinse off with shampoo. The acidic nature of curd will fight dandruff and act as a conditioner as well.

7. Orange (Santra) peel: Apply a mixture of orange peel and lemon on the scalp and wash off after 30 minutes. The acidic nature of the mixture conditions the hair and combats dandruff.

8. Honey (Sahed): Use 1/4 teaspoonful of water mixed with 1 tablespoon honey to massage the scalp for 2-3 minutes and rinse off after 3 hours for shiny dandruff free hair.

9. Coconut (nariyal) oil and camphor (kapoor): Take 2-3 teaspoons of warm coconut oil and dissolve a pinch of camphor in it. Massage gently on the scalp at night. Wash your hair in the morning with a mild shampoo. Repeat it once or twice a week.

10. Tea tree oil: Mix tea tree oil with water in the ratio (1:3) and spray it on your scalp. Pat the excess of the water but do not rinse it off.

Do Natural Hair Fall Solutions Really Work?

Here are a few top 11 hair fall solutions that start directly from home ingredients. According to the American Association of Dermatology, for any person, it is normal to shed around 100 strands of hair a day. However, if a person sheds more than the usual number on a daily basis, then it is a sign of hair fall. When suffering from hair fall, the primary treatment option starts at home. Most people tend to swear by home remedies to prevent hair fall and aid hair growth. But do these home remedies really work? Read to know more about them.

Check Article Here!

Frequently Asked Questions

If I have dandruff, can I oil my hair?

What is dandruff a sign of?

Should I wash my hair everyday if I have dandruff?

Can dandruff cause hair loss?

How do I know if it's dandruff or dry scalp?

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Dry eyes

Also known as Dry eye disease (DED), Dry eye syndrome (DES), Keratoconjunctivitis sicca (KCS), Keratitis sicca and Ocular surface disease

Overview

Tears produced by the eyes are necessary to keep them moist and comfortable. Dry eyes is a very common condition characterized by reduced tear production, excessive tear evaporation, and an abnormality in the production of mucus or lipids (fats or oils) normally found in the tear layer, or a combination of these.

Dry eyes cause several irritating symptoms such as stinging and burning sensation in the eye, blurred vision, and gritty or scratch feeling in the eye that affects quality of life.

This condition can result due to advancing age or several underlying systemic diseases such as Sjogren’s syndrome, arthritis, lupus, thyroid disorders etc. Various lifestyle factors such as exposure to dust, pollution, sun rays, computer screens, cigarette smoke also plays an important role in the development of dry eyes.

Dry eyes can be prevented and managed by adopting lifestyle changes such as limiting screen time, regular blinking, washing eyes frequently, staying hydrated, using a humidifier at home, and wearing glasses to protect the eyes. Artificial tears available as eyedrops is the mainstay therapy for this condition.

Any related symptoms of Dry eyes should not be ignored as it can lead to corneal ulcers, scarring, and even vision loss.

Key Facts

Usually seen in

All age groups but more common in elderly

Gender affected

Both men and women but more common in women

Body part(s) involved

Eyes

Prevalence

Worldwide: 5-34% (2015)

India:18.4% to 54.3% (2018)

Mimicking Conditions

Conjunctivitis

Anterior blepharitis

Demodex blepharitis

Cicatricial conjunctivitis

Bullous Keratopathy

Contact lens-related keratoconjunctivitis

Eyelid malposition

Keratitis

Necessary health tests/imaging

Patient history and physical examination

Examination of tear stability: Tear break up time (TBUT)

Examination of tear volume: Schrimer’s test, Tear film meniscus & Slit lamp test

Examination of tear films: Tear film osmolarity

Examination of the ocular surface: Fluorescein staining & Lissamine green staining

Examination of eye-lids: Blink rate & Meibomian gland evaluation

Evaluation of systemic disease

Treatment

Artificial tears

Anti-inflammatory medications

Topical corticosteroids

Topical cyclosporine A

Antibiotics: Doxycycline, Minocycline & Azithromycin

Punctal plugs: Temporary/dissolving plugs & Semi-permanent plugs

Surgery

See All

Symptoms Of Dry Eyes

The symptoms of the dry eyes are often nonspecific and it does not always start with dryness. In fact, in various cases patients experience watery eyes as a symptom of dry eyes. This is because too much drying of the eyes causes the body to produce more tears to compensate for the water loss.

The other signs and symptoms of dry eyes include:

Blurred vision that fluctuates throughout the day

Stinging and burning sensation in the eyes

Gritty or scratch feeling in the eyes

Red eyes

Itching in the eyes (particularly in the cornea)

Photophobia (increase sensitivity to light)

Feeling of having some foreign substance in the eyes

Stringy mucus near the eyes

Sticky eyelids especially during morning

Blepharitis (inflammation in the eyelids)

Tired eyes with a desire to close eyes more often

Feeling of heavy eyelids

Difficulty in opening the eyelids

Sharp and dull pain behind the eyes

Difficulty in wearing contact lenses

Do you wear contact lenses? Have a look at some of the common mistakes that contact lens wearers make!

Read Now!

Causes Of Dry Eyes

Tears play a very important role in maintaining the overall health of the eyes by:

Providing a smooth surface for optimal vision

Protecting the cornea (the transparent, protective front part of the eye)

Lubricating the eyes

Tears form a multilayered film made of the following three layers that keep the eye smoothly lubricated:

The superficial layer is made of lipids (fats or oils) lining the upper and lower eyelids. This layer seals the tear film to reduce evaporation.

The middle layer is basically a dilute salt water solution. This layer helps in keeping the eyes moist, as well in flushing out any dust, debris, or foreign objects that may get into the eye.

The innermost mucosa layer, made up of mucus. This mucus helps the overlying watery layer to spread evenly over the eye.

Dry eyes develop when there is a problem in either of the layers, imbalance between tear production and drainage or loss of tear film stability. The various causes are discussed below in detail:

1. Inadequate amount of tears: The reduced tear volume around the eyelids is the main cause of dry eyes. The various reasons for this are:

Aging

Health conditions like Sjögren's syndrome, rheumatoid arthritis (RA), lupus, scleroderma, sarcoidosis, xerophthalmia due to Vitamin A deficiency tend to decrease tear production

Medications like antihistamines, decongestants, antidepressants, antihypertensives, and oral contraceptives.

2. Excessive tear evaporation: The symptoms of dry eyes can also develop due to increased evaporation of tears. This can occur due to the following:

Less blinking: Long hours of reading, driving or working on a computer can reduce blinking and trigger evaporation of tears. Conditions like Parkinson's disease also reduce the frequency of blinking.

Meibomian gland dysfunction: Meibonian glands are small oil glands on the edge of the eyelids. They produce the oil/ lipid layer that forms the superficial layer of tear film that protects against evaporation of tears.

Blockage of these glands, more commonly associated with conditions like rosacea, psoriasis, scalp and face dermatitis or taking oral isotretinoin medication leaves inadequate lipid/oil to cover the watery tear layer to prevent its evaporation.

Blepharitis: An infection along the eyelids or the eyelashes makes the bacteria break down the oil, leaving insufficient oil to prevent any evaporative loss of tears and dry eyes.

Certain health conditions: Conditions such as stroke or Bell's palsy, make it difficult to shut the eyes. Hence, the eyes may become dry due to tear evaporation.

3. Abnormality in the production of mucus or lipids found in the tear layer: Chemical burns to the eye or some autoimmune conditions, like Stevens-Johnson syndrome and cicatricial pemphigoid can lead to abnormal production of lipids in the tear layer. This leads to poor spreading of the tears over the surface of the eye, thereby causing dryness despite the presence of sufficient tears.

4. Combination of the above factors

Risk Factors For Dry Eyes

1. Age

The risk of developing dry eyes increases with advancing age due to decreased tear production as a part of the natural aging process. People above 65 years of age mostly start experiencing symptoms of dry eyes.

2. Gender

Women are more likely to develop dry eyes due to hormonal changes in their lifetime caused by pregnancy and menopause. The use of oral contraceptives is also linked to being associated with dry eyes.

Want to know your health status? Get our women wellness package now!

Click Now!

3. Screen time

The exposure to digital screens is a well known risk factor for dry eyes. The continuous exposure to screen decreases blinking and triggers tear evaporation which is a significant factor for Dry eyes.

4. Ethnicity

Studies suggest that dry eyes is more common in Asians as compared to the white population.

5. Medical conditions

Several inflammatory and autoimmune conditions are also associated with an increased risk of dry eyes. They include:

Rheumatoid arthritis

Diabetes

Thyroid dysfunction

Blepharitis (inflammation of the eyelids)

Rosacea

Seborrhoeic dermatitis

Staphylococcal infection

Demodex mite infestation

Bell's palsy

Sjorgen’s syndrome

Graft v/s host disease

Herpes infection

Hepatitis C

Androgen insufficiency

Heat or chemical burns

Acne

Gout

6. Medications

The use of certain medications are also closely associated with dryness of the eyes due to decreased tear production. This includes medications for high blood pressure, allergies, anxiety, depression, cough, insomnia.

7. External exposure

Exposure to dry climate, chemical fumes, pollution, and sun increase the risk of developing dry eyes. Smoking and secondhand smoking both are the risk factors of dry eyes as it exposes the eyes to harmful irritants.

The people living in air conditioners also have a higher chance of having dry eyes.

8. Contact lens

The use of contact lenses decreases the sensation of cornea and can lead to dry eyes.

9. Previous eye surgery

Any eye surgery in the past such as LASIK (laser) surgery, lid surgery, or cataract surgery can decrease tear production and lead to dry eyes.

10. Eye drops

The excessive use of topical medications in the eyes for some other eye conditions such as glaucoma is also associated with the risk of dry eyes.

11. Diet

Vitamin A and omega-3-fatty acids play a very vital role in maintaining the health of the eye. So, deficiencies of both can lead to dryness in the eyes.

Vitamin A deficiency is also called xerophthalmia, which can start from dry eyes and even progress to blindness in severe cases.

Did you know?

Studies suggest that spending too much time on electronic gadgets like television, smartphones and computers could increase the risk of diabetes in children. Read about it in detail.

Know Now!

Diagnosis Of Dry Eyes

The symptoms of dry eyes are very similar to eye infections and allergies. So, it is very necessary to distinguish between these diseases through specific clinical tests. Antiallergic medications, if given in dry eyes because of incorrect diagnosis may worsen the condition of the eye.

1.Patient history and physical examination

The doctor takes patient history which includes information about the medications taken by patients, medical problems, and environmental factors which may contribute to the symptoms of dry eyes. The doctor also checks for:

The amount of tears eyes are making

The structure of eyelids

Time, place, and diurnal variation of symptoms

Workplace stress

Living conditions (dry, dusty air and air conditioning)

Systemic diseases

Medication history

2. Examination of tear stability

Tear break up time (TBUT)

This test diagnoses how long the tear film lasts after blinking. For this, a small amount of dye is placed in the eyes. The time up to which the dyed tear film covers the whole eye after blinking is recorded. The tear film does not last long in case of Dry eyes.

3. Examination of tear volume

Schrimer’s test

This test assesses the quantity of tears produced by the eyes. In this, the eyes are desensitized by putting eye drops and then a small piece of paper is placed on the edge of the eyelid. The eyes are allowed to close for 5 minutes. The amount of moisture on the paper indicates the quantity of tears.

Tear film meniscus

In this test, the height of the tear film is determined which helps in diagnosing the amount of tears produced by the eye.

Tear meniscus height is 0.2 ± 0.09 mm in patients with dry eyes and 0.5 ± 0.02 mm in patients with healthy eyes. A foamy tear film is an indicator of an altered lipid layer in patients with meibomian gland dysfunction.

Slit lamp test

In this, the quantity of tears produced by the eyes is measured through a microscope known as a slit lamp. A liquid is put into the eyes which helps in clear visualization of the tears. The practitioner looks in the eye and eyelids by directing a bright light into the eyes.

4. Examination of tear films

Tear film osmolarity

In this, the osmolarity of tears is determined. Tear osmolarity is a measurement of the concentration of salt in the tears. Normal osmolarity is essential for normal tear production. The value of osmolarity increases with the severity of the Dry eyes.

5. Examination of the ocular surface

The surface of the eye is examined using a microscope (slit lamp) and dyes. Dyes help in visualizing the surface clearly. The common dyes used to study eyes are fluorescein and lissamine green.

Fluorescein staining

It is mostly used to assess corneal damage. The dye fluorescein is instilled into the tear film and studied after 1 to 3 minutes.

Lissamine green staining

It is mostly used to assess conjunctiva and lid margin damage. The dye fluorescein is instilled into the tear film and studied after 1 to 3 minutes.

6. Examination of eye-lids

Blink rate

Blinking plays a very significant role in keeping the eye moist by distributing the tear fluid over the eye surface. The normal blink rate is:

While speaking: 15.5 ± 13.7 blinks/minute

During reading and computer work: 5.3 ± 4.5 blinks/minute

The reduced interval between blinks by about 2.6 to 6 seconds indicates dry eyes.

Meibomian gland evaluation

Meibomian glands play a very significant role in maintaining overall health and stability of the eye. The gland produces meibum, the reduction of which can cause evaporative Dry eyes due to altered lipid composition.

The function of the meibomian gland can be determined by evaluating meibum quantity and quality. The turbid and viscous appearance of meibum indicates dysfunction of the gland.

Differentiating between insufficient tear production and excessive tear evaporation

The above tests also help in determining the cause of dry eyes:

The reduced tear meniscus and low schirmer test indicates deficiency of tears.

Altered lid margins, thickened meibomian gland secretion, reduced tear film break up time are an indicator of hyper evaporative dry eye.

Ocular surface damage and elevated tear film osmolarity can occur with both forms.

Evaluation for systemic disease

There are various diseases that may cause dry eyes, particularly primary Sjogren's syndrome. In various cases secondary Sjogren syndrome caused by other conditions may also cause dry eyes. Such conditions include:

Rheumatoid arthritis

Lupus

Progressive systemic sclerosis

Dermatomyositis

Other systemic abnormalities such as Parkinson's disease, androgen deficiency, thyroid disease, and diabetes have also been associated with Dry eyes. The clinical diagnosis of these diseases are also done, in case of any suspicion.

Celebs affected

Venus Williams

Venus Williams, a successful American tennis player suffered from dry eyes due to Sjogren syndrome. She admitted in an interview that she had difficulty wearing contact lenses due to this condition.

Jennifer Aniston

Jennifer Anistion, a celebrated American actress also suffered from dry eyes. She admitted in an interview that she was addicted to eye drops.

Did you know?

People with diabetes have been found to be at an increased risk of blindness and other eye problems such as glaucoma, cataract and retinopathy. However, effective management of diabetes and by following a set of precautions you can preserve your vision in the years to come. Here are a few ways to avoid eye complications in diabetes.

Read To Know!

Specialist To Visit

It is very important to consult doctor in case:

You are experiencing burning, stinging, scratching or watery eyes especially in windy conditions

Your symptoms are not going away by various proven home remedies

Your vision is fluctuating while using digital devices even after using glasses

You are facing difficulty in performing normal day to day activities

The doctors that may help to diagnose the dry eyes include:

General physician

Optometrist

Ophthalmologist

Most people are unaware of the right eye specialist. Know about different eye specialists in detail.

Tap To Know!

Prevention Of Dry Eyes

1. Blink consciously

Blinking helps in spreading tears over the ocular surface and also keeps foreign matter and irritants out of the eyes. The act of blinking frequently, especially while using digital screens helps in keeping the eyes moist and prevents dryness.

2. Boost the humidity

The dry climate often triggers dry eyes. The humidity can be increased by keeping the bowls of water around the room both at home and workplace. This helps in making the air humid.

3. Avoid straining the eyes

Eyes strain when they are used to concentrate on something for a long period of time. Such eye straining activities should be minimized or avoided, if possible. This includes avoiding:

using computers, smartphones, tablets and gaming consoles for a long time

driving for a long time

reading for a long time or in dim light

4. Protect your eyes

Eyes should be protected to avoid direct contact with triggers. This can be done by wearing protective glasses while using the screen, using sunglasses while going outside to reduce exposure to dry winds, sun, and smoke which can irritate your eyes.

5. Limit screen time

Prolonged and continuous daily use of digital screens is one of the leading causes of eye disorders popularly known as computer vision syndrome (CVS). Dry eyes can be prevented by following the 20/20/20 rule. The rule states that take a 20-second break from your digital device every 20 minutes and look at something 20 feet away. Set an alarm on your smartphone as a reminder.

Here are several other ways that helps in preventing eye strain caused due to CVS:

Click To Read!

6. Quit smoking

Cigarette smoking exposes the eye to harmful chemicals that can cause dry eyes. It can be prevented by quitting both active and passive smoking.

Tobacco Threatens..!! Say No To Tobacco Now. How? Let Us Help.

Click Here!

Treatment Of Dry eyes

The treatment of dry eyes involves various steps and is based upon the severity of the conditions of the eye.

Avoiding the triggers of dry eyes such as cigarette smoke, dry heating air, air conditioning etc is an important part of the protocol.

1. Artificial tears

They are the mainstay therapy that are used in all grades of Dry eyes irrespective of the severity. They are benzalkonium chloride (preservative) free eye drops that are designed to increase the tear film stability. They are the preparations containing polyvinyl alcohol, povidone, hydroxypropyl guar, cellulose derivatives, and hyaluronic acid as the main agent. These drops are available in the form of gels, ointments, and solutions.

In case of meibomian gland dysfunction, artificial tears containing lipids such as triglycerides, phospholipids, and castor oil are used.

2. Anti-inflammatory medications

Inflammation in the ocular surface and lacrimal gland is observed even in moderately severe dry eyes. For this, anti-inflammatory treatment is required in cases of moderate to severe conditions of the eye.

3. Topical corticosteroids

Studies have shown that instillation of corticosteroids for 2 to 4 weeks are helpful in reducing the symptoms of dry eyes. But, this therapy is used only for short-term use as long term therapy is associated with some complications.

4. Topical cyclosporine A

Cyclosporine A is an immunosuppressant that aids in reducing inflammation. Topical application of cyclosporine increases production of tear and also reduces symptoms like blurry vision, ocular dryness, and foreign body sensation.

In case of cyclosporine intolerant patients, tacrolimus eye drops are used.

5. Antibiotics

Several antibiotics with anti-inflammatory properties are also used to treat Dry eyes. They are used in case of meibomian gland dysfunction and blepharitis associated with Dry eyes. Some of the common antibiotics used for dry eyes are:

Doxycycline

Minocycline

Azithromycin

6. Punctal plugs

These are tiny devices that are inserted into the tear ducts of the eye. They reduce drainage of the tears that help in keeping the eye moist. There are two types of punctal plugs

Temporary/dissolving plugs

These plugs are made of dissolving material such as collagen that ultimately absorbs into the body. They can last in the eye from a few days to months.

Semi-permanent plugs

These plugs stay in the eyes for years as they are made of longer lasting material such as silicone or acrylic. They can be removed by your ophthalmologist if needed.

7. Surgery

Various surgical options for treatment of dry eyes syndrome are:

Tarsorrhaphy: It refers to surgical joining of upper and lower eyelids partially or completely to promote corneal healing

Amniotic membrane transplantation: In this procedure a piece of amniotic membrane is applied to the surface of the eye in order to reconstruct the ocular surface.

Keratoplasty: This is a surgery performed on the cornea, especially corneal transplantation. It is used in severe cases where persistent corneal ulceration and perforation are seen.

Home-care For Dry eyes

1. Avoid self medication

There are various medications that can cause dryness of the eye. It is necessary to consult your doctor while taking any medication.

2. Focus on your diet

There are certain fatty acids, vitamins, and minerals that keep the eyes hydrated. These types of foods should be included in your diet. These include:

Omega fatty acids (fish, oils, and dairy products)

Vitamin A (pumpkins, apricots, carrots, tomatoes, spinach, and dairy products)

Vitamin C (citrus fruits and juices such as orange, grapefruit, lemon, lime), apples, bananas, tomatoes, and cooked spinach)

Zinc (whole grains, dairy products, sweet corn, peas, lentils, and nuts)

Good sources of lutein and zeaxanthin include eggs, corn, kiwi fruit, grapes zucchini, and leafy greens such as spinach, kale, collards, and broccoli.

Vitamin E (whole grain cereals, almonds, hazelnuts, sunflower seeds, sweet potato, and peanut butter)

3. Keep yourself hydrated

Water helps in the formation of tears. Dehydration can trigger the symptoms of dry eyes especially if you are living in a hot and dry environment.

4. Take adequate sleep

Not getting enough sleep can lead to dry and itchy eyes. It is also observed that the eyes may produce less tears after a night of insufficient sleep. Adequate sleep may help in faster recovery of the patient having dry eyes.

A sound sleep keeps the mind calmer and also helps in preventing uninvited headaches on weekends. Explore our range of products that may help you to get better sleep.

Get Help!

5. Maintain eye lid hygiene

Eyelids should be kept clean. Hot compresses on eyelids and warming masks are advised as they are known to increase tear film stability and thickness of the lipid layer.

6. Avoid dry environment

Dry climate triggers dryness in the eyes. Such situations can be avoided like avoiding air getting blown in your eyes by directing car heaters away from your face.

Complications Of Dry Eyes

1. Eye complications

The inadequate tear production can lead to several complications in the eye which can range from mild to severe. Initially, dry eyes cause little discomfort, but without the proper medical attention, the condition can damage the cornea.

The complications of the dry eyes include:

Fluctuations in vision

Scarring of the cornea

Infectious keratitis (infection of cornea caused by bacteria, viruses, fungi and parasites)

Eye ulceration

Eye infections

Eye inflammation

Wound in the cornea

Conjunctivitis

Vision loss

2. Other complications

The chronic dry eyes affects quality of life and can lead to:

Anxiety

Depression

Sleep disorders

Mood disorders

Dyslipidemia

Migraine headaches

Alternative Therapies For Dry eyes

Herbal-based drugs

Goji berries

This tree is native to Asia and its fruits, commonly known as goji berries are known for its medicinal and nutritional values. The administration of goji berry extract has been found to relieve Dry eyes. This is confirmed by various tests such as Schirmer's test score and tear breakup time (TBUT).

Polygonum cuspidatum

It is a plant that is found in North America and Asia and is frequently used in traditional Japanese and Chinese medicine. Studies have shown that the administration of the extract of this plant helps in preserving the eye through its anti-inflammatory properties.

Chamomile

The washing of eyes with chamomile tea is used for the treatment of eye infections and other eye diseases.

Living With Dry eyes

1. Try home remedies

There are various home remedies which provide relief in dry eyes. This includes applying warm compress to the eyes, taking fish oil supplements, drinking plenty of water, and increasing the humidity at work or in your house by using a humidifier.

2. Try scleral contact lens

The people who wear contact lenses and develop dry eyes should use scleral lenses instead of traditional lenses. These lenses are placed over the white part of the eye known as sclera. They protect the eyes and keep them hydrated for a long period of time.

3. Take regular breaks

It is very important to take frequent short breaks and blink eyes regularly while reading or working on computer screens. Keep your eyes closed for sometime when possible such as during a phone call. This will decrease the strain on your eyes.

4. Adjust the position of computer screens

The total eye surface exposure and tear evaporation is reduced when we look down. This helps in keeping the eye moist. The same can be applied while working on computer screens by keeping them at a low level.

5. Make necessary light adjustments

The people having dry eyes suffer from photosensitivity which is triggered by bright lights. This can be reduced by avoiding bright bulbs immediately overhead. This will help in reducing brightness and also minimize reflection on surfaces such as on computer screens.

6. Stay away from vents

It is advised to stay away from vents as the dry air blowing directly in your eyes can make dry eyes worse.

7. Keep eye drops handy

The patient of dry eyes should always keep the eye drops with them so that it can be used whenever the person starts to feel drying of eyes.

8. Join a support group

Connecting with people having similar condition can help in discovering various things that could help in faster recovery.

Frequently Asked Questions

How do I prevent dry eyes while wearing contact lenses?

Can dry eyes be cured?

Are the symptoms of dry eyes become more prevalent in particular seasons?

Can dry eyes cause blindness?

Do watery eyes can be a symptom of dry eyes?

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Dry Skin

Also known as Xeroderma, Xerosis, Xerosis cutis and Asteatosis

Overview

Dry skin refers to rough, flaky, itchy, or scaly skin. It is caused by disturbed skin barrier and lack of natural lipids in the skin. Dry skin can be seasonal or can develop due to some underlying medical conditions such as dermatitis, psoriasis, hypothyroidism, hyperthyroidism, diabetes, etc.

The symptoms of dry skin can be triggered by using harsh cleansers, cold weather, and frequent exposure of water. The people who are working in certain occupations such as catering, hairdressings, healthcare, construction, woodwork, and rubber industry are at higher risk of developing dry skin due to continuous exposure to water and harsh chemicals. Stress, anxiety, and lack of water intake can also make the skin more prone to dryness.

Dry skin can be easily managed and treated through self care and medical help. Keeping the skin moist through moisturizer and protecting the skin from sun round the year are the fundamental keys to manage it. Wearing loose cotton clothes over tight synthetic fabrics are also of great help.

If not treated timely, dry skin can make it more prone to infections, severe itching and more severe skin conditions like eczema, contact dermatitis etc.

Key Facts

Usually seen in

Infants and children

Adults above 60 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Skin

Prevalence

Worldwide: 29.4% (2018)

Mimicking Conditions

Ichthyosis vulgaris

Atopic dermatitis

Stasis dermatitis

Irritant contact dermatitis

Allergic contact dermatitis

Nummular dermatitis

Scabies

Tinea corporis

Psoriasis

Cutaneous T-cell lymphoma

Necessary health tests/imaging

Physical examination and medical history

Biopsy: Shave biopsy, Punch biopsy & Excisions

Treatment

Moisturizers: Glycerin, Urea, Lanolin & Propylene glycol

Medications: Clobetasone, Hydrocortisone, Betamethasone & Clobetasol

See All

Symptoms Of Dry Skin

Dry skin is mostly seasonal, typically occurring during winters. The symptoms may vary based on a person's age, skin tone, health conditions, living environment and can include:

1. Dryness

As the name itself suggests, the typical sign of dry skin is dryness of skin because of lack of moisture and natural oils. It also causes fine lines on the skin that sometimes itches.

2. Flaking

Excessive loss of moisture also causes flaking of skin that gives a rough texture to the skin.

3. Cracking

Dry skin can also cause cracks to form due to shrinking of the skin. These cracks can become deep and may bleed also.

4. Itching

Dry skin also causes itching. Some people experience itching all the time that interferes with routine chores such as driving, sleeping, etc.

Irritated with continuous itching? Check out some home remedies to fight it better.

Tap To Read!

5. Pain

The already cracked and flaked skin often feels painful as well. The exposure to even water causes burning sensation to the skin of people affected with dry skin.

6. Wrinkles

The skin of people with dry skin loses its strength due to loss of water and develops a rough texture. This is most common at old age.

7. Peeling

Peeling refers to the renewal of the uppermost layer of skin – epidermis. It is a natural process to shed dead skin cells. Dry skin increases the shedding process which causes skin to peel off easily.

8. Skin infections

The people affected with dry skin are more prone to skin infections due to the breaks and cracks in the skin. The cracks allow the penetration of microbes inside the skin that can lead to infections such as fungal skin infections.

Read in detail about fungal skin infections.

Click To Read!

Causes Of Dry Skin

Before understanding the causes of dry skin, it is important to know the structure and composition of skin:

The natural skin barrier consists of specialized cells known as corneocytes. These corneocytes are fixed in the lipid rich layer of the skin. The disturbance in the size, number, and arrangement of corneocytes impairs the skin barrier.

The normal skin should be able to store 10-20% of water content. The changes in water holding capacity, both too high and too low also affects the skin barrier.

The composition of lipids in the uppermost layer is also affected by various factors like age, genetic disposition, diet (e.g., percentage of essential fatty acids) as well as drugs (e.g., cholesterol-lowering agents).

Dry skin is caused due to disturbance in this natural barrier function and/or lack of moisturizing factors in the skin. The various causes that can either alter the lipid composition or can decrease the content of moisturizing factors can be grouped as:

A. External causes

1. Skin cleansing: Excessive exposure to water can remove natural oils from the skin, making it dry. The following daily activities can cause it:

Frequently taking long hot showers

Excessive scrubbing of the skin

Frequent washing of the hands

Using harsh soaps

Using alkaline soaps and detergents

Excessive use of sanitizers

2. Environmental factors: Some environmental factors can also cause dry skin. These include:

Living in cold weather where humidity is low

Intense exposure to sunlight

Using air conditioning system

3. Occupational factors: Some people have constant exposure to the agents that remove moisture from the skin and cause dry skin. This includes people working in hairdressings, housekeeping, catering, metal workers, construction, agriculture etc. Healthcare professionals are also at increased risk of dry skin because they have to wash their hands frequently.

B. Internal causes

These are the uncontrollable factors and include various disorders that can cause dry skin. This can be:

1. Dermatological causes

Inflammatory skin disorders: There are various skin disorders that can cause dry skin such as :

Atopic dermatitis

Allergic contact dermatitis

Irritant contact dermatitis

Seborrheic dermatitis

Perioral dermatitis

Dyshidrotic eczema

Nummular eczema

Psoriasis

Scabies

Skin infections

Xeroderma pigmentosum

Cutaneous T cell lymphoma

Lichen planus

Urticaria

Drug eruptions

Genodermatoses: It refers to rare inherited skin diseases that can influence the texture, color and structure of skin depending upon the type. Common example include ichthyosis in which the skin becomes severely dry.

Infectious dermatose: These are the skin conditions that are caused by bacteria, virus, fungi, or parasites. In the chronic stage, they also cause dry skin. The disease includes pediculosis and scabies.

Neoplasms: Some forms of cancers such as cutaneous lymphoma (cancer of white blood cells) can also cause dry skin.

2. Psychiatric causes

Obsessive compulsive disorder (OCD): Some patients of OCD have the addiction of excessive cleaning and washing which can be the cause of dry skin.

Eating disorders: It includes anorexia nervosa which is characterized by self starvation that can lead to lack of essential nutrients and vitamins required to keep the skin healthy.

Alcohol addiction: The excessive consumption of alcohol causes dehydration which can eventually lead to dry skin. It can also worsen underlying skin conditions. Heavy drinking can cause alcohol use disorder (AUD) which increases the chances of several skin disorders such as dry skin, skin infections and skin cancers. According to The National Institute on Alcohol Abuse and Alcoholism, heavy drinking refers to :

Females: More than 3 drinks per day or more than 7 drinks per week.

Males: More than 4 drinks per day or more than 14 drinks per week.

3. Dietary causes

Malnutrition: Dietary causes such as deficiencies of Vitamin A, Vitamin D, zinc and iron can also cause dry skin.

Dehydration: Insufficient fluid intake and excessive perspiration can also cause dry skin.

4. Drug-related causes

Retinoids, topical corticosteroids (prolonged use), diuretics, lipid-lowering agents, calcium antagonists, beta blockers, antirheumatic drugs, contraceptives/antiandrogens, cytostatic agents, radiation dermatitis (following radiation therapy), immunomodulators can also make the skin dry.

5. Internal diseases/conditions

1. Endocrine and metabolic disorders: There are various diseases that can cause dry, cracked and flaky skin. These disorders include:

Chronic kidney disease

Diabetes mellitus

Liver disorders (primary biliary cholangitis, primary sclerotic cholangitis, drug-induced cholestasis, extrahepatic cholestasis)

Hyperparathyroidism

Hypothyroidism

Malabsorption

2. Inflammatory causes: The diseases that cause inflammation can also cause dry skin. They include chronic inflammatory bowel disease (gluten sensitivity) and rheumatic disease.

3. Infections: Some infections can also make the skin dry. It includes diarrheal diseases, helminths, Hepatitis B and C infections, and HIV infection.

4. Hormonal changes: The hormonal changes in the conditions such as menopause, andropause, and pregnancy causes the skin to lose its elasticity and mositure leading to dry skin.

5. Other medical conditions: Conditions such as polycythemia vera, essential thrombocytosis, Hodgkin’s disease, non-Hodgkin’s lymphoma, and multiple myeloma can also be a cause of dry skin.

Did you know?

Diabetes can cause several skin complications including dry skin , multiple spots around an area, extremely dry skin, red or yellow patches, skin hardening, groups of blisters or boils, open wounds, an outbreak of reddish bumps, scaly patches around eyelids or ash-like skin. Know more about the possible causes and ways to manage it.

Read To Know!

Diagnosis Of Dry Skin

1. Physical examination and medical history

Dry skin is usually diagnosed through visually examining the skin. The doctor will gather complete information about your medical history. The doctor also discusses medications you are taking, your bathing habits, occupation, family history etc. This will help the health care provider in guiding the treatment plan.

2. Blood tests

Based on the medical information, some tests such as thyroid test, blood glucose tests can also be suggested to find the exact cause.

3. Biopsy

In severe cases, skin biopsy is also used to confirm the diagnosis and decide the treatment. It also helps in distinguishing the similar appearing conditions. In this, a piece of skin tissue is removed and examined under the microscope. It can be of following types:

Shave biopsy: This technique uses a thin slice removed from the top of the skin.

Punch biopsy: It is generally used to diagnose rashes and uses a small cylindrical piece of tissue from the affected skin.

Excisions: It uses larger and deeper tissues for examination. It is mostly utilized for detecting skin cancers.

Did you know?

There are various types of skin specialists. But, people often use skin specialists and dermatologists interchangeably. But in reality, there is much more to skin specialists than just being a dermatologist. Confused? Well, you do not have to be because we are here to shed light on this.

Click To Know!

Specialist To Visit

In most of the cases, dry skin resolves with lifestyle modifications and home remedies. Consult your healthcare provider if:

Dry skin persists even after OTC medications and self-care tips

Skin becomes inflamed or painful

Dry skin develops as a result of side effects of cancer treatment

You are unable to do your regular activities as a result of itching

You have open sores

The specialist doctors that can help in this condition include:

Dermatologist

General physician

Consult India’s best doctors online from the comfort of your home.

Consult Now!

Prevention Of Dry Skin

The following measures can prevent the skin from drying.

Skin cleansing and moisturizing

Cleansing of skin followed by moisturizing plays a very important role in maintaining the skin texture and its overall health. The following measures should be taken care of to prevent dry skin:

Use lukewarm water for bathing instead of warm/hot water

Take full-body bath for a maximum of 5 min only

Avoid bubble bath

Use mild, non-alkaline soap, lipid-replenishing syndets/shower and bath oils

Use soaps that contain humectants

Avoid friction caused by rubbing with sponges

Use gentle and fragrance free skin care products for face

Avoid cleaning your face more than twice daily

Apply moisturizer regularly after bathing and washing hands

Avoid skin contact with alcohol containing lotions, perfumes, and other products

Wear proper clothing

Clothes also affect the skin conditions as the skin is in direct contact with the clothes. For keeping the skin healthy, avoid potential triggers that can lead to itching and dryness of skin.

Prefer cotton clothes over synthetic fabrics

Avoid wool based clothing, if possible

Avoid tight clothes

Use gloves for hands and feets

Eat wisely

The type of food we eat plays a very important role in keeping the skin healthy. A balanced diet that includes sufficient fruits and vegetables nourishes the skin and keeps it moist and healthy. Citrus fruits, very hot and spicy food, excessive hot drinks and alcohol should be avoided as they can dehydrate the skin.

Lifestyle modifications

Stress, anxiety, and lack of water can also modulate the skin conditions and make it more prone to acne and dry skin. The basic lifestyle changes can help prevent dry skin.

Consume sufficient amount of water

Take proper rest

Do regular moderate exercise

Avoid excessive smoking and alcohol consumption

Avoid direct exposure to sun especially during afternoons

Use sunscreens which give appropriate protection

Watch the video by our expert to know about the right sunscreen.

Treatment Of Dry Skin

The treatment of dry skin focuses on the following motives:

Repair the natural lipid barrier of the skin

Supply water in the uppermost layer of the skin

Increase the water holding holding capacity of the skin

Reduce itching

Repair stratum corneum (uppermost layer of the skin)

Most cases of dry skin can be managed by topical applications that are used directly on skin. Various types of topical preparations are as follows:

Humectants: They promote water transfer from dermis to epidermis. Examples include glycerin, urea, ammonium lactate, hyaluronic acid, and gelatin. Silicone preparations are also available as humectants. They are not greasy and have good tolerance.

Occlusives: These are the preparations that prevent water loss from the skin by creating a hydrophobic layer over it. The common examples include lanolin, paraffin, petroleum jelly, cholesterol, and stearyl alcohol.

Emollients: These agents fill gaps and fissures in the skin. Dimethicone and propylene glycol are common examples.

Relipidating agents: The topical formulations also contain relipidating ingredients that ensures the availability of lipid in the uppermost layer of the skin. The common examples are cholesterol and fatty acids such as evening primrose, shea, jojoba, borage, olive, wheat germ, and sunflower.

Other ingredients: The preparations also contain several other ingredients that serve different purposes.

Oats: It is rich in water, proteins, lipids, mineral salts, and vitamins. It keeps the skin hydrated and also prevents deprivation of essential vitamins and minerals. It is also used to increase the compatibility between the components in the preparation.

Allantoin: It possesses hydrating properties which keeps the skin moist.

A-bisabolol: It has anti-inflammatory and bactericidal properties. It helps in repairing the damaged skin and also prevents bacterial skin infections.

Know how to buy the right moisturizer and the correct method of application.

Tap To Know!

Topical steroids: Topical steroids and calcineurin inhibitors are also prescribed in case of itching and dermatitis. These reduce the inflammation and irritation. They are available in different forms such as:

Creams

Gels

Lotions

Ointments

Taps and bandages

Solutions

The common examples include:

Clobetasone

Hydrocortisone

Beclomethasone

Betamethasone

Clobetasol

Fluticasone

Mometasone

In severe cases, oral or injectable medications are also given.

Home-care For Dry Skin

Eat a healthy diet

Foods to include

The type of food we eat plays a very important role in keeping the skin healthy. Dry skin can also be a sign of deficiency of certain nutrients such as Vitamin A, Vitamin C, Vitamin D, zinc, and selenium. Hence, it is advised to take a nutrient rich diet to keep the skin moist and healthy. This should include sweet potato, kiwi, cod liver oil, almond oat milk, baked beans, avocado, and green tea.

Foods to avoid

Certain food items can hamper the skin care treatment by dehydrating the skin. Excessive consumption of coffee, sugar, salty foods, and refined carbs should be avoided as it restricts the blood flow to the skin or extracts water from it.

Manage stress

Stress can also promote skin breakouts and acne which can also result in dry skin. The following measures can be taken to manage the stress effectively.

Get enough sleep

Do things you enjoy such as painting, playing, singing, crafting etc

Go for a walk

Perform yoga

Shave carefully

It is advisable to apply moisturizer gel or cream before shaving. To have a soft and smooth skin, use a clean, sharp razor and shave in the direction the hair grows, not against it.

Say no to smoking

Smoking can damage the skin through restricting the blood supply. Excessive smoking destroys collagen and elastin that gives the skin strength and elasticity. Thus, it is important to quit smoking to keep the skin healthy.

Read about the various practical ways to quit smoking.

Click To Read!

Complications Of Dry Skin

Dry skin can be mostly treated with self care and medications. However, if left untreated or ignored, it can lead to the following complications:

Infections

If dry skin persists for a long period of time, it creates cracks in the skin. The damaged skin is more prone to the exposure of various microbes such as fungi and bacteria. It can eventually lead to several infections.

Permanent changes to the skin

Dry skin causes itching and frequent scratching can transform the skin permanently. It can cause changes such as thickened patches on the skin and discolouration of the skin.

Allergic contact dermatitis

Dry skin can also lead to allergic contact dermatitis due to compromised skin barrier.

Atopic eczema (atopic dermatitis)

The excessively dry skin can lead to atopic eczema. It is an inflammatory condition that is characterized by a rash along with itching and dry skin.

Eczema craquele

Also known as asteatotic eczema. The disease gets its name due to the cracked skin which is the characteristic of this condition. It is most commonly seen in old people. People having dry skin with other systemic diseases such as hypothyroidism, zinc deficiency, and lymphoma have the high chances of developing it.

Nummular dermatitis/discoid eczema

The disease is characterized by scattered, well-defined, coin-shaped and coin-sized plaques. It is mostly seen in people who wash their hands excessively.

Pruritus/Itching

Dry skin can also lead to consistent itching which can cause discomfort and frustration. In severe cases, it can also lead to anxiety and depression as it hampers daily chores and activity.

Overheating

Prolonged dryness impairs the skin barrier and can lead to overheating in the body. It is most commonly seen in some forms of ichthyosis.

Alternative Therapies Of Dry Skin

Home remedies

Sunflower seed oil: Studies have shown that sunflower seed oil acts as a moisturizer when applied on the skin.

Coconut oil (Nariyal tel): It is a natural oil that is also widely used to moist dry skin. It acts as an emollient due to the presence of saturated fatty acids in it. Some studies suggest that its safety and efficacy is similar to that of petroleum jelly. It improves skin hydration and increases natural lipids in the skin. It can also be safely applied to the sensitive parts of the body such as under the eyes and around the mouth.

Oatmeal bath: Oatmeal has antioxidant and antiinflammatory properties which helps to relieve symptoms of dry skin such as redness and itching. The powdered oatmeal added to the bath helps to reduce dry skin. It is also available in the form of creams.

Milk: Milk contains fat that improves skin barrier. A diet including milk could improve dry skin. However more research is needed to confirm this.

Honey: It also possesses moisturizing, healing and anti-inflammatory properties. It can be applied directly on the skin.

Petroleum jelly: It is also known as mineral oil and has been known from years for its moisturizing properties. Studies have found that it improves skin barrier in older people. This study supports the use of mineral oil in dry skin.

Aloe vera gel: It also provides relief from dry skin. It can be applied directly over the affected area before going to bed at night.

Antioxidants: Dry skin causes cracking and flaking of the skin which exposes it to certain toxic elements of the atmosphere. Diet rich in antioxidants makes the skin healthier. Some of the common foods that can improve skin health include:

Tomatoes

Carrots

Beans

Peas

Lentils

Berries

Living With Dry Skin

Dry skin can be acute or chronic. Many people might experience it throughout their lives. Most cases can be managed with gentle cleansing and adequate moisturization. Recognizing and avoiding triggers, including harsh soaps/detergents, extreme climate, rough/tight clothing, excess alcohol, spicy foods, citrus fruits, and stress also helps in relieving symptoms and prevents complications. The following measures that can be included in the lifestyle to reduce the symptoms of dry skin:

Consult dermatologist

Sometimes, dry skin can be a result of an underlying disease. It is very important to consult a dermatologist for the right diagnosis. It also helps the doctor in making the right treatment plan that suits your skin.

Frequent moisturization

Moisturization plays a very integral role in healing the skin damaged by dry skin. Make sure to apply the moisturizer after taking a bath, washing hands and whenever you feel the skin has become dry. Moisturizer should be gently massaged into the skin. You can also discuss with your doctor about the dose and method of application.

Use of mild cleansers

Cleansers play a key role in changing the skin texture. Soaps and detergents should be wisely chosen. Syndet cleansers are shown to reduce itching as they are less irritating than traditional soaps. The people having dry skin should avoid traditional soaps as they can worsen the skin conditions. Medicated soaps prescribed by the doctor should be used in case of severely damaged skin.

Use humidifier

Dry skin causes the skin to lose its moisture, especially in the cold atmosphere. The humidity level can be artificially increased with the help of humidifiers. Portable humidifiers are also available that can be placed near you while you sleep.

Wear gloves

The over exposure of the skin to the water removes the natural oil from the skin and makes it dry. It also reduces the effect of moisturizer. It is wise to wear gloves while doing activities such as washing dishes, gardening, cooking etc.

Wearing gloves in the winter also keeps the skin warm and prevents the skin from drying.

Explore some interesting and simple skin care tips for dry skin in winter.

Click To Read!

Use sunscreens

Sun emits UV rays which can worsen the damaged skin affected by dry skin. Clothing such as long sleeves, pants and hats also reduces the exposure of the skin from the sunrays. Always apply sunscreens that offer wide spectrum protection. Sunscreen with SPF 30 or higher provides good protection to the skin.

Wear proper clothing

Loose and cotton clothes over synthetic and tight ones should be used as it relieves irritation. Tight and synthetic clothing rub against the skin that makes the skin more cracked and inflamed.

Do not self medicate

The application of several drugs such as anti-acne medications can cause dry skin. It is always advisable to consult your dermatologist before applying medicated cream over the skin.

Frequently Asked Questions

What deficiencies can cause dry skin?

What is the role of sunscreen in keeping the skin moist?

Which foods help to treat dry skin?

What is the difference between xeroderma (dry skin) and xeroderma pigmentosum?

Which type of food can cause dry skin?

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Dysentery

Also known as Bloody Diarrhea, Shigellosis

Overview

Dysentery is a painful intestinal infection that causes loose and watery stools along with blood and mucus. It is a highly infectious disease that is caused by bacteria or parasites. Poor sanitation, poor hand hygiene, consuming food and water contaminated with fecal matter and various other factors increase the chances of contracting the disease.

WHO report states that 165 million episodes of dysentery are estimated to occur each year, with a higher prevalence in tropical or developing countries, especially among children. Dysentery is also a common factor of mortality in children below 5 years, but it can affect people of all ages.

Antibiotics and antiparasitics along with supportive care with fluids and electrolytes are used to treat dysentery. The infection is highly contagious and can easily spread from the infected person to others. Hence it is very essential to follow good hygiene measures to control its spread.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Large intestine

Small intestine

Rectum

Stomach

Prevalence

Worldwide: 165 million episodes (2016)

Mimicking Conditions

Diarrhea

Cholera

Ulcerative colitis

Irritable bowel syndrome

Hepatitis

Necessary health tests/imaging

Stool examination R/M

Culture stool

Complete blood count (CBC)

Treatment

Antibiotics and antiparasitics: Ciprofloxacin, Azithromycin & Norfloxacin-Tinidazole

Antipyretics: Paracetamol

Electrolyte supplements: Oral rehydration salts (ORS)

Anti-diarrhea drugs: Loperamide

See All

Symptoms Of Dysentery

The symptoms of dysentery may take up to 3 days to manifest once the person contracts the infection. A person suffering from a bout of dysentery will generally experience the following symptoms:

Loose, watery stools

Frequent bouts of defecation

Stools with blood and mucus

Pain while passing stools

Cramping and painful sensation in the stomach

Bouts of nausea and vomiting

Fever and chills

Weakness

Dehydration

Decreased urine output

Dry skin and mucous membranes (such as dry mouth)

Muscle cramps

Weight loss

Causes Of Dysentery

Dysentery is a highly infectious disease that spreads via human-to-human transmission and most commonly via the hand-to-mouth route. It is usually caused by drinking water or eating food from sources contaminated with the organisms that cause the dysentery.

Types Of Dysentery

There are two types of dysentery based on the organism that causes it:

1. Bacillary dysentery

Bacillary dysentery, as the name suggests, is caused by a bacterias.These bacterias include shigella (causes shigellosis), campylobacter (causes campylobacteriosis) and salmonella (causes salmonellosis). The frequency of each bacteria causing dysentery varies from region to region in the world.

2. Amoebic dysentery

Amoebic dysentery, as the name suggests is caused by an amoeba (single-celled parasite) known as Entamoeba histolytica.

Risk Factors For Dysentery

Patients having dysentery have germs in their stools while they have diarrhea and for up to a week or two after the diarrhea has gone away. Dysentery is very contagious as just a small amount of germs can make someone contract the disease. People can get infected by:

Catching germs on their hands and then touching their food or mouth. This can happen by touching surfaces contaminated with germs from stool from a sick person, such as taps, toilet seats, flush handles etc or while changing the diaper of a sick child or taking care of a patient.

Eating foods that are raw, uncooked or prepared by someone who is sick with dysentery. Fruits and vegetables can also get contaminated if they are washed with dirty water or grown in soil polluted by human excreta.

Drinking water that is contaminated with stool containing the germs. There is a high risk if the water for household use isn't properly separated from waste water.

Swallowing infected water while swimming in a river, lake or public swimming pool.

Any sexual activity that involves direct anal-oral contact with an infected or recently recovered patient.

When you are sick with diarrhea you lose fluids and salts from the body at a fast pace, so it is important to take as much fluids as possible.

Click To Know The Tips!

Diagnosis Of Dysentery

Often, dysentery can be confused with other conditions affecting the gastrointestinal tract. This is because there is considerable overlap in the presenting symptoms of dysentery with other diseases of the stomach and intestine.

Diagnostic lab tests: A diagnosis of dysentery is confirmed by detecting the presence of causative organisms, such as shigella or Entamoeba histolytica. stool examination R/M and culture stool are lab tests that detect the presence of microorganisms in a stool sample and determine their sensitivity to antibiotics.

Supportive lab tests: Additional lab tests, such as complete blood count (CBC), may be performed to determine the level of infection in the body and rule out other causes that may cause similar symptoms.

Celebs affected

King Henry V

King Henry V of England passed away at the tender age of 36 years due to complications of dysentery

Prevention Of Dysentery

Dysentery can be prevented by following good hygiene practices, such as:

Always wash hands with soap and water before eating meals and after visiting the toilet.

Avoid roadside, uncooked, unhygienic food.

Thoroughly wash vegetables before cooking.

Do not eat raw food. When eating fruits or vegetables, always remove and discard their outer peel.

Drink only purified or mineral water.

Avoid ice if you are not sure it is made from clean water.

Do not use unhygienic toilets.

Avoid sharing towels and other personal care items.

Specialist To Visit

If you have symptoms of dysentery, you must seek medical intervention to prevent serious health complications. Sick children may need treatment under a pediatrician. Adult patients may need to seek medical care from:

General physician

Gastroenterologist

Consult India’s best doctors here from the comfort of your home.

Book Appointment!

Treatment Of Dysentery

The treatment for dysentery aims to provide supportive care and to destroy the causative organisms.

1. Antibiotics and antiparasitics

Depending upon the cause of dysentery, your doctor might recommend antibiotics or antiparasitics to treat the infection. Antibiotics are used in the treatment of bacterial dysentery or shigellosis whereas antiparasitic medications are used in the treatment of amoebic dysentery.

Examples of antibiotics & antiparasitics include:

Ciprofloxacin

Azithromycin

Norfloxacin-Tinidazole

Ofloxacin-Ornidazole

Trimethoprim-sulfamethoxazole

Metronidazole

2. Supportive care

Antipyretics such as paracetamol are used to treat fever occurring with dysentery.

Electrolyte supplements such as oral rehydration salts(ORS) are useful in the prevention and treatment of dehydration.

Anti-diarrhea drugs such as loperamide must not be used without a doctor’s recommendation as such medicines may worsen dysentery.

Home-care For Dysentery

Patients with dysentery must consume only light foods which are easy to digest and avoid oily or spicy foods. Raw fruits and vegetables must be thoroughly washed before consumption. Liquid foods, such as coconut water, buttermilk, etc., must be consumed in plenty to prevent dehydration.

If you are suffering from an episode of dysentery, you can do the following things to care for yourself at home:

Drink purified water only.

Keep yourself hydrated; drink plenty of water or electrolyte solutions.

Take an ample amount of rest.

When you start feeling better, eat light foods that are easy to digest.

Wash your hands thoroughly with soap and water before every meal and every time you visit the toilet.

During the episode of diarrhea, you should be cautious about what to have and what not to have. This is because while some foods are likely to be beneficial for you, certain foods may worsen your symptoms.

Click Here To Know More!

Complications Of Dysentery

Severe dysentery can cause the following complications:

Extreme weakness and dehydration

Hypovolemic shock can occur when the body has lost too much of its fluid volume. Hypovolemic shock can cause a person to lose consciousness and even become comatose. It can even cause death if not treated in time.

Toxic megacolon is a serious and life-threatening condition in which the large intestine distends excessively.

Secondary infections of the gastrointestinal tract

Gastrointestinal bleeding may occur from any part of the stomach or intestine. Bleeding in the gastrointestinal tract causes stools to turn black.

Severely low levels of potassium which can cause life-threatening changes in heartbeat

Seizures

Postinfectious arthritis in which the patient can develop joint pain, eye irritation, and painful urination

Hemolytic uremic syndrome (HUS) is a type of kidney damage in which the causative bacteria make a toxin that destroys red blood cells

In rare cases, amoebic dysentery can result in liver abscess ie.collection of pus in the liver or parasites spreading to the lungs or brain

Sepsis or spread of infection more commonly in people with weak immune systems due to disease (like HIV) or medical treatment (like chemotherapy for cancer)

Alternative Therapies For Dysentery

The role of alternative therapies in the treatment of dysentery is limited. Dysentery is known as ‘Pravahika’ in Ayurveda. They help by eliminating the causative organism, facilitating normal absorption of nutrients in the intestine, and also stimulating digestive enzymes to aid easy digestion. These medicines must be taken as prescribed by an Ayurvedic practitioner.

Ayurvedic medicines found to be useful in the treatment of dysentery are:

Kutajghan Vati

Bilvadi Churna with Takra

Chitrakadi Gutika

Living With Dysentery

Dysentery can be serious and can lead to life-threatening complications if left untreated. Hence it is very important to seek medical help as soon as possible. An episode of dysentery may leave a person feeling very weak and tired. One should rest at home and consume plenty of fluids and electrolytes to prevent dehydration.

At the same time it is very important to protect your family from dysentery as it is very contagious and can easily spread from person to person. You can follow the given tips to prevent passing on the infection to others:

Handwashing is of utmost importance to stop the spread of infection. Wash your hands thoroughly with soap and water after going to the toilet.

Clean toilet seats, flush handles, taps and sinks with detergent and hot water after use, followed by a household disinfectant.

Wash all dirty clothes, bedding and towels separately with hot water.

Until you've been completely free from any symptoms for at least 48 hours you should take the following precautions -

1. If possible, stay isolated from your family

2. Stay away from work or school

3. Do not prepare food for others

4. Do not go in a swimming pool

5. Avoid sexual contact

Dehydration caused by dysentery can be prevented and effectively treated by giving ORS. Here’s more on everything you need to know about ORS and its role in dehydration and diarrhea.

Click Here To Read!

Frequently Asked Questions

What is the difference between diarrhea and dysentery?

What foods should I avoid to prevent dysentery?

I am travelling to a country with poor sanitation. What care should I take?

When to seek medical care for dysentery?

If I have dysentery, will I pass it on to my family?

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Dehydration

Overview

Dehydration is simply a lack of water in the body. Our bodies are made up of roughly 60% water, which is required for almost every bodily function. Water can be lost from the body as a result of excessive sweating on a hot summer day or strenuous exercise. Even fever or excessive urination can cause a decrease in the body's overall water level.

Dry mouth, excessive thirst, tiredness, dark-colored urine, and less frequent urination are all symptoms of dehydration. But if left unattended, it can cause headaches, bad breath, dry skin, and in rare cases, lead to a medical emergency.

So, if you experience dehydration, you can even try out some simple and effective home remedies to help restore mineral and fluid balance in the body. Medical attention is required in case of severe dehydration

Key Facts

Usually seen in

All age groups

Gender affected

Both male and female

Body part(s) involved

Skin

Lungs

Kidneys

GI tract

Necessary health tests/imaging

Physical examination

Urinalysis

Blood tests- Electrolyte profile, blood urea nitrogen/creatinine

Treatment

Electrolytes: Oral rehydration salts (ORS)

IV fluids

Medications: Acetaminophen, Antidiarrheal, and Antiemetic

Specialists to consult

General physician

Pediatrician

Gastroenterologist

Symptoms Of Dehydration

Symptoms of dehydration in adults and children include:

Fatigue

Thirst

Dry skin and lips

Dark urine or decreased urine output

Headaches

Muscle cramps

Lightheadedness

Dizziness

Fainting or passing out

Palpitations

A sudden drop in blood pressure when you suddenly stand from a seated or lying down position.

Signs of dehydration in infants may include:

Wrinkled skin

Urinates only one to two times per day which means- less changing of diapers

Being drowsy or irritable

A sunken soft spot (fontanelle) on top of their head

Sunken eyes

Few or no tears when they cry

Cool, discolored hands and feet

Sleeping too much

Here are some of the common signs and symptoms of dehydration in adults explained in detail.

Click to read

Causes Of Dehydration

The adult human body is composed of up to 60% water. To keep cells and tissues healthy, it must maintain a delicate balance of fluids and electrolytes (including sodium chloride, potassium, calcium, and sodium bicarbonate). Water is primarily absorbed through the digestive tract. The kidneys remove waste and excess fluid and excrete it as urine.

Dehydration occurs when your body loses more fluid and electrolytes than it takes in, and you don't have enough to function normally. A lack of fluid disrupts that balance and jeopardizes your body's ability to regulate its temperature and function properly.

The various causes of dehydration include:

Prolonged physical activity with excessive sweating without consuming adequate water, especially in a hot and/or dry environment

Prolonged exposure to dry air, e.g., in high-flying aeroplanes (5% to 12% relative humidity)

Blood loss due to physical trauma

High altitude

Diarrhea

Vomiting

Long term fasting

Recent rapid weight loss

Inability to swallow

Excessive use of caffeine and other stimulants

Excessive consumption of alcoholic beverages

Severe burns

Some infectious diseases that may cause dehydration include:

Gastroenteritis

Cholera

Typhoid fever

Yellow fever

Malaria

Medical conditions that are usually associated with dehydration include:

Diabetes mellitus

Diabetes insipidus

Addison disease

Salt-wasting nephropathies

Hypoaldosteronism

Intestinal obstruction

Acute pancreatitis

Types of Dehydration

Dehydration is classified under three categories depending on

1. Hypotonic (deficiency of electrolytes especially sodium)

2. Hypertonic (primarily loss of water)

3. Isotonic (loss of both water and electrolytes in equal ratio)

Risk Factors For Dehydration

Although dehydration can happen to anyone, some people are at a greater risk. Those at most risk include:

Babies and infants - Babies have a low body weight and are sensitive to even minor fluid loss

Older people - Older persons may be less aware that they are becoming dehydrated and they need to keep drinking water to avoid being dehydrated.

People with long-term health conditions - Individuals who have a chronic illness, such as diabetes or alcoholism, may be at a higher risk of developing dehydration.

Athletes - Athletes can lose a significant amount of bodily fluid through sweat when they work out for a long time.

Diagnosis Of Dehydration

The doctor often diagnoses dehydration based on physical signs and symptoms.

Physical examination- Absence of tears, sunken eyes, palpated pressure, dry mucous membrane, thirst, change in blood pressure, and so on are all part of the physical examination.

However, to pinpoint the level of dehydration, the doctor may request a few tests, such as:

Blood tests- Blood samples may be used to rule out the root cause of infection (either virus, bacteria, or fungal) such as the levels of your electrolytes, blood urea nitrogen/creatinine, etc.

Urinalysis- Urine tests can determine whether or not you are dehydrated and to what extent. They can also look for signs of a bladder infection and crystal formations or kidney stones etc.

Urine toxicology- Some medicines can lead to dehydration too like Marijuana. For example- methamphetamine is a drug that is used to diagnose urine toxicology.

Note: Babies and kids may not show the same signs of dehydration that adults do. If your baby or child is showing signs of dehydration, contact their doctor for advice.

Celebs affected

Dilip Kumar

The late superstar actor Dilip Kumar, who worked in many Bollywood films, was hospitalized after he suffered from dehydration.

Ileana D'Cruz

Actor Ileana D'Cruz, had suffered from severe dehydration. She stated in a post that she was treated with three bags of IV fluids, which are specifically prepared liquids to treat dehydration.

Prevention Of Dehydration

Here are some ways to keep dehydration at bay:

Examine the inside of your mouth for signs of dehydration. A healthy mucus membrane should be red, moist, and have good turgor. You can check this by looking inside your mouth.

Drink the recommended amount of fluids even if you are not physically active. Don't put off drinking until you're thirsty. Drink fluids throughout the day, whether you're thirsty or not.

If you plan to exercise or participate in sports, increase your water intake. Drink water or electrolytes after exercise as well.

Have extra electrolytes on hand whenever you are ill, such as when you have a fever, vomiting, dysentery, or diarrhea, as this can result in fluids or electrolyte loss.

Here are a few tips to prevent dehydration from dysentery or diarrhea.

Click here

In hot weather, dress coolly and avoid being out in direct sunlight if possible. Also, in hot weather, drink more water.

Eat a balanced diet that includes fruits and vegetables. They are high in water, salt, and vitamins and can help prevent dehydration.

Limit your intake of coffee, alcohol, and caffeinated beverages. They are diuretics, which means they remove water.

Prevention tips for babies and children:

Children also get dehydrated just like adults. If your child is very physically active or it's a warm day, make sure your child consumes plenty of water or other fluids.

You can try a baby version of a sports drink, like Pedialyte or Equalyte.

Buy Now

Specialist To Visit

You must seek medical attention right away if you, your child, or an adult exhibit severe dehydration symptoms, such as lethargy or diminished responsiveness, to avoid life-threatening health issues.

Immediately call your doctor if you experience any of the following signs:

Unusually fatigued (lethargic) or confused

Failing to urinate for eight hours

Fast heartbeat

Standing up makes you feel dizzy, but it doesn't go away after a short while.

You should also see a physician if your infant has had three or more recent episodes of vomiting or if they have had six or more episodes of diarrhea in the previous 24 hours. Children that are ill may require pediatrician supervision.

The doctors you need to seek medical care from:

General Physician

Pediatrician (in case of infants)

Gastroenterologist

Consult India’s best doctors here from the comfort of your home.

Book an Appointment

Treatment Of Dehydration

The treatment of dehydration depends on age, the severity of dehydration, and its cause. You also may be treated for diarrhea, vomiting, or a high fever if the illness caused dehydration.

For Babies:

Feed your infant a lot of liquids, such as formula or breast milk. Prefer giving children smaller amounts of fluid more regularly.

Don't dilute your baby's formula (if you use it). Extra water can be given to formula-fed and solid-fed babies.

Avoid giving your baby fruit juice, particularly if they have diarrhea and vomiting, as it can aggravate their condition.

In addition to their regular feed (breastmilk, formula milk, and water), giving your infant regular sips of oral rehydration solution (ORS) will help to replace lost fluids, salts, and sugars.

For Infants and Children:

The most important treatment for young children suffering from vomiting or diarrhea is to keep them hydrated. This entails providing ample amounts of breast milk, formula, electrolyte solution, or other fluids.

Infants and children who have become dehydrated due to diarrhea, vomiting, or fever should not be given only water. Because it can dilute the already low mineral levels in their body, exacerbating the problem. Instead, they should have diluted squash or oral rehydration salts (ORS).

Struggling with dehydration? Watch our expert doctor share the recipe for making ORS at home.

Tap here

Take lesser quantities more regularly if you or your child is having trouble keeping fluids down due to vomiting. To give your child small amounts of fluid, you may find it easier to use a spoon or a syringe.

Mild dehydration:

Dehydration causes the loss of sugar, salts, and water. It is frequently treated by drinking rehydration solutions that contain electrolytes and aid in the restoration of electrolytes such as sodium and potassium.

Here’s more on everything you need to know about ORS and its role in dehydration.

Click here to read

Severe dehydration:

For moderate to severe dehydration, you may need IV (intravenous) fluids. Severe dehydration is a medical emergency. It needs to be treated right away with IV fluids in a hospital.

Note: Even if patients get intravenous (IV) rehydration, they should start drinking ORS as soon as they are able.

In particular, babies, infants, and elderly people will need urgent treatment if they become dehydrated.

Feeling dehydrated? What to do if you feel dehydrated?

Read here

Medications:

Based on the cause of dehydration, you may be given medicines such as acetaminophen (to treat fever), and antidiarrheal medicines, antiemetic medicines (to treat vomiting), etc.

Coconut water- Coconut water has adequate potassium and glucose content along with chloride and sodium, which make it a perfectly healthy drink for dehydration and diarrhea.

Lemon water- Also known as nimbu paani, acts as one of the best home remedies for dehydration as it not only ups your water intake and helps you to stay hydrated but also prevents dehydration. The addition of salt and sugar to lemon water helps you to replenish the lost salts in the body along with increasing your vitamins and minerals level.

Orange juice- It contains vitamin C, which flushes the toxins from the body and electrolytes such as sodium and potassium which help replenish the nutrient levels in the body.

Yogurt- Add a pinch of salt to your yogurt and have it daily to prevent dehydration. Yogurt is rich in electrolytes and thus can help combat dehydration.

Chamomile- It is not simply an analgesic and de-stressing herb, but also serves as a rehydrating agent. You can also drink it as a decaffeinated tea to replenish lost fluids and maintain your hydration.

Home-care For Dehydration

A few measures and lifestyle changes can help in the prevention of dehydration:

Drink as much water as possible each day (8–10 glasses of 8 ounces).

Be hydrated, especially if you're unwell.

Increase your fluid consumption if it's hot and humid outside, to replenish the water lost by sweating.

Rest in cool places, and avoid exercising if you feel dehydrated.

Avoid drinking coffee, soda, or any other beverage with a high sugar content if you are dehydrated and also have gastroenteritis or another illness. Both caffeine and soda may irritate the gastrointestinal tract.

Consume bland foods during dehydrated conditions.

Have sports drinks if you feel dehydrated after strenuous physical activity.

Along with these lifestyle changes, there are certain foods also that can help you deal with dehydration at home. They include:

Bananas- Intake of bananas, which are high in water and potassium content, can not only help to replenish potassium levels in the body but also prevent dehydration.

Buttermilk- Buttermilk is packed with nutrients like magnesium along with being loaded with high water content. It is not only easy on the stomach but acts as a natural probiotic that aids in dealing with diarrhea and indigestion, which could be the reason for dehydration

Barley Water- Barley grains contain antioxidants, vitamins, and minerals such as potassium, magnesium, and phosphorus in good amounts which helps to restore minerals and water when taken in the form of barley water.

Homemade ORS- You will need a half teaspoon of salt, 6 teaspoons of sugar and 4 cups of water. Mix all these ingredients until salt and sugar get dissolved completely. Drink the solution multiple times a day. You can consume 3 liters of this solution in a day.

Feeling lazy about homemade ORS? Here is our wide range of ORS powder!

Tap here to buy online

Asparagus (shatavari)- Asparagus provides a wonderful source of water, fiber, and electrolytes, all of which can help prevent dehydration. It assists in replenishing the lost fluids due to dehydration and regulates the body's fluid balance. It also acts as an antioxidant to help protect the body's cells from damage caused by dehydration.

Willow Bark- It has anti-inflammatory and pain-relieving properties. It might be useful in easing some of the signs of dehydration, like headaches and aches in the muscles.

Ginger (Adrak)-It has anti-inflammatory and antioxidant properties. It may also help to relieve nausea, which can be a symptom of dehydration.

Want to know more about home remedies for dehydration?

Click here to read

Complications Of Dehydration

Left untreated, dehydration can lead to serious complications. These include

Heat-related illnesses such as heat cramps, heat exhaustion, or heatstroke.

Urinary and kidney problems such as kidney stones or kidney failure.

Electrolyte imbalances (such as sodium and potassium)- that can lead to heart rhythm disturbances and seizures.

Shock, coma, or death.

Low blood volume shock (hypovolemic shock)- It occurs when low blood volume causes a drop in blood pressure and a drop in the amount of oxygen in your body.

Altered mental status, confused thinking.

Can dehydration affect brain activity?

As the brain is composed of about 75% water, dehydration can lead to a decrease in blood volume and blood pressure, reducing the flow of oxygen and nutrients to the brain. Studies have shown that even mild dehydration can lead to impaired cognitive performance such as attention, concentration, and memory.

Say bye-bye to dehydration! Check out our widest range of hydrating drinks, especially for summer.

Buy now

Alternative Therapies For Dehydration

1. Acupuncture and acupressure

Acupuncture and acupressure are two techniques commonly used to manage chronic vomiting. During acupuncture, a therapist inserts thin needles into specific points on the body. Acupressure aims to stimulate the same points of the body but uses pressure instead of needles to do so. Both techniques stimulate nerve fibers, which transmit signals to the brain and spinal cord and are believed to decrease nausea.

2. Aromatherapy therapy

This type of therapy may help relieve nausea and vomiting, although studies on its effectiveness are mixed. To practice aromatherapy, try deep breathing with an open essential oil bottle, or an essential oil diffuser, or add a few drops to a cotton ball. If you have asthma or another respiratory condition, ask your doctor before diffusing essential oils.

Buy essential oil products online to get rid of the unwelcoming feeling of nausea and vomiting.

Fill your cart now

Frequently Asked Questions

Does dehydration cause headaches too?

What color is urine when dehydrated?

How long does our body take to rehydrate?

Why do infants and young children have a higher risk of dehydration?

What are the most common illnesses that cause dehydration?

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Dementia

Also known as Memory Loss and Forgetfulness

Overview

Dementia is a progressive, chronic brain condition that leads to loss of memory, ability to think, and behavioral disturbances. In severe cases, it can also impact the ability to perform simple day-to-day activities.

Worldwide, around 50 million people have dementia, and this number is expected to hit 152 million by 2050. Although there are many types of dementia, Alzheimer's disease associated dementia is the most common and accounts for 60-70% of all cases.

There are numerous factors that can be behind dementia. These include but are not limited to poor blood supply, abnormal protein accumulation and degenerative changes in the brain. The condition may start with something as simple as not being able to remember important dates or events and may increase in severity where a person may forget to wear clothes or eat food on time.

Being diagnosed with dementia can be a life-altering and challenging situation for the patient and his/her caregivers. Dementia is a progressive condition and can worsen with time. The treatments currently available are known to slow the progression of the disease, but cannot entirely stop it.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Brain

Prevalence

Worldwide: 50 Million (2020)

India: 4.1 million (2019)

Mimicking Conditions

Depression

Delirium

Mild cognitive impairments

Stress

Senility

Nutritional deficiency

Necessary health tests/imaging

Thyroid profile total

Vitamin B-12

Vitamin D (25-OH)

Complete blood count (CBC)

Erythrocyte sedimentation rate

Protein electrophoresis CSF

CT scan (Head)

MRI brain

MR angiography brain

CT angiography brain

Electro-Encephalograph (EEG)

Electrocardiography (ECG)

Echocardiography

Treatment

Acetylcholinesterase inhibitors: Donepezil, Galantamine & Rivastigmine

Nerve-protecting medicine: Citicoline

N-methyl-D-aspartate (NMDA) agonists: Memantine

Antioxidant drugs: Ginkgo biloba & Coenzyme Q10

Nootropic drugs: Piracetam

Statins

Ibuprofen

See All

Symptoms Of Dementia

A person can be suspected to have dementia if he/she exhibits the following symptoms:

A progressive loss of memory, which may start as simple forgetfulness and gradually increase to an extent where the person cannot recollect vital information, such as his/her name, address, etc.

Problems in performing basic tasks, such as grooming, wearing clothes, eating, etc., that he/she could complete with ease previously.

Difficulty establishing new memories and learning new things.

Loss of ability to communicate effectively. The patient may struggle to remember even simple words.

The patient is often confused and disoriented.

Other psychological symptoms, such as anxiety, depression, inappropriate behavior, paranoia, and hallucinations, may also be present.

Causes Of Dementia

There are many causes of dementia and result in various neurological disorders like:

Dementia of Alzheimer’s disease

This is the most common type of dementia and accounts for 70-80% of all cases of dementia. Patients with Alzheimer’s disease have abnormalities in their brain, like deposition of beta-amyloid proteins or plaques and tangles in the brain which damage healthy neurons and are thought to cause the symptoms. Another feature is the loss of connection between neurons in the brain which transmit messages between different parts of the brain, and from the brain to muscles and organs in the body.

Fronto-temporal dementia

Degeneration of nerve cells in the brain’s frontal and temporal lobes leads to this type of dementia with associated personality changes, mood alterations, and abnormal behavior.

Vascular dementia

When the blood supply to the brain is hampered by a stroke, injury, or abnormal blood pressure, it damages the neurons and leads to memory problems, resulting in cognitive decline.

Lewy-body dementia

Lewy bodies are abnormal clumps of protein found in the brain in neurological diseases like Alzheimer’s disease or Parkinson’s disease. This type of dementia is associated with stiffness and rigidity in the body and slow, uncoordinated movements.

Other brain disorders

Certain neurological conditions, such as traumatic brain injury, Huntington’s disease, Creutzfeldt-Jakob disease, etc., may also cause symptoms of dementia like memory loss, speech difficulties, etc.

Mixed dementia

This is a type of dementia that occurs due to an overlap of different causes.

Progressive dementia

All types of dementia described above are progressive types that often begin with mild symptoms. There is no possibility of a complete cure for such types of dementia.

Reversible type dementia

These types of dementia can be improved if the underlying causative factor is taken care of. These dementias can be due to nutritional deficiencies, infections, medications effect, hormonal imbalances, brain tumors, hydrocephalus, excess fluid buildup in the brain, poisoning, etc. Correcting these causative agents usually helps improve the symptoms.

Risk Factors For Dementia

Certain factors are known to increase the risk of dementia, such as:

Age: The risk of dementia increases with increasing age, especially after 65 years. However, it is not a part of the normal aging process, which is a common misconception.

Family history: Chances of dementia are higher if a close family member suffers from dementia due to the same genetic sequencing.

Chronic illness or diseases: Comorbid conditions like diabetes, hypertension, etc., increase the risk of dementia.

Nutritional deficiencies: A diet deficient in vitamin B complex can increase the risk of dementia.

Alcohol abuse: Excessive alcohol consumption can increase the risk of dementia.

Medications: Certain antidepressant medications like amitriptyline, anti-allergy medications like diphenhydramine,benzodiazepines, anticholinergics, opioids may increase the risk of dementia.

Did you know?

Risk factors of heart disease can put you at risk of Alzheimer’s. These include sedentary lifestyle, obesity, smoking, high blood pressure, high blood cholesterol, and uncontrolled type 2 diabetes. Scientists believe that for most people, Alzheimer’s disease is caused by a combination of genetic, lifestyle and environmental factors that affect the brain over time.

Consult Now!

Diagnosis Of Dementia

To evaluate a person with memory loss, the doctor takes a detailed history about the onset of symptoms, notes family history, and evaluates the patient's neurological and psychological condition with physical and cognitive assessments. Certain supporting lab tests and imaging studies may be required to establish the cause of dementia.

Lab Tests: Laboratory tests to evaluate dementia include Thyroid profile total, Vitamin B-12, Vitamin D (25-OH), Complete blood count (CBC), Erythrocyte sedimentation rate, Protein electrophoresis CSF, etc. check for infectious conditions, autoimmune conditions, or nutritional deficiencies as these are other potential causes of dementia. Depending on the test results, further more detailed tests may be recommended to confirm the findings.

Imaging Studies: CT scan (Head), MRI brain, MR angiography brain, CT angiography brain are useful to study the structural changes to the brain and surrounding vasculature in-depth.

Others: EEG (Electro-Encephalograph), Electrocardiography (ECG), and Echocardiography may be required to evaluate brain and heart activity.

With timely preventive health check-ups, one can spot and address risk factors for certain diseases that might crop up with old age. Read more on the need for preventive health check ups for the elderly.

Read Now!

Celebs affected

Ronald Reagan

Ronald Reagan served as the 40th president of the United States from 1981 to 1989. He had Alzheimer’s dementia.

Margaret Thatcher

Former British Prime Minister, also known as ‘The Iron Lady’ Margaret Thatcher battled with dementia in the later years of her life.

Treatment Of Dementia

The treatment for dementia mainly consists of supportive care and treating the causative factors wherever possible. Medical management consists of the following:

Medicines to Improve Cognitive Functions

The common types of medications prescribed to patients with dementia to improve their cognitive symptoms.

Acetylcholinesterase inhibitors: These drugs prevent the breakdown of acetylcholinesterase enzymes which helps in taking care of the symptoms but do not have any effect on the progression of the disease. Examples of drugs in this class are Donepezil, Galantamine, and Rivastigmine.

Nerve-protecting medicine: This class of drugs nourishes the nerve cells, protects them from damage, and improves their survival. Examples include Citicoline.

N-methyl-D-aspartate (NMDA) agonists: These are drugs that decrease the activity of glutamate, thereby controlling the symptoms. The formulations that belong to this class are Memantine.

Antioxidant drugs: These drugs help to improve the symptoms of dementia by fighting the free radicals that could be responsible for symptoms such as decline in memory. The class of drugs which are popular include Coenzyme Q10, Ginkgo biloba, Saint John’s Wort, etc

Nootropic drugs: These drugs which include piracetam target α-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid (AMPA ) receptors, that play a key role in the transmission of signals across synapses in the brain. By stimulating or suppressing certain signal transmissions in the brain, piracetam may help to decrease cognitive impairment and improve mental acuity.

Ibuprofen: It is a cyclooxygenase (COX) inhibitor designed to relieve pain, decrease inflammation, and reduce fever. It decreases the production of nitric oxide (NO), protects neurons against glutamate toxicity, and decreases the production of proinflammatory cytokines thereby controlling the symptoms of dementia.

Statins: This class of drugs are known to help in the treatment of certain types of dementia caused by small blockages in blood vessels that carry blood to the brain. Statins may help to reduce these blockages and improve the symptoms.

Medicines to Calm Anxiety and Improve Sleep

Often, patients with dementia also suffer from anxiety, irritability, depression, and sleep disturbances. Anti-anxiety or antidepressant medications that help calm these symptoms are prescribed.

Other Medicines for Reversible Causes of Dementia

Supplements: Sometimes dementia is caused by nutritional deficiencies. Correcting these with vitamin supplements such as Polybion SF Syrup and Meg-B12 Capsules can help reverse dementia.

Antidiabetics & antihypertensives: Treating diabetes with oral hypoglycemic drugs or insulin and hypertension with antihypertensives is essential if dementia is found to be a complication of these comorbidities.

Antibiotics & anti-inflammatory drugs: Any infection or inflammatory condition in the body must be treated with appropriate antibiotics and anti-inflammatory drugs if dementia results from an infection or inflammation in the body.

Prevention Of Dementia

Certain types of dementia cannot be entirely prevented. Making healthy lifestyle choices can help prevent dementia that originates from a poor lifestyle. These lifestyle choices are:

Consuming a balanced diet rich in vitamins and minerals.

Regularly exercising for an active physical and social life.

Brain-stimulating exercises, such as solving puzzles, reading, etc.

Avoiding heavy smoking and excessive alcohol consumption.

Taking proper treatment for comorbid conditions like diabetes, hypertension, thyroid issues, anxiety, etc.

Establishing a sleep schedule for adequate, sound sleep.

1mg Protip : Add berries to your diet to improve brain function.

Berries can lower the risk of brain damage and improve cognitive function. These fruits are rich in antioxidants called anthocyanosides that fight memory impairment. The next time you go shopping, fill your basket with berries such as blueberries, strawberries, gooseberries, mulberries and blackberries.

Explore Products Now!

Specialist To Visit

The symptoms of dementia are often observed by close family members or loved ones. When a person starts forgetting important or routine things often and displays changes in behavior, speech, and other cognitive abilities, it is essential to evaluate him/her for probable dementia. The specialists who can diagnose and treat dementia are:

Neurologist

Neuro-psychologist

Psychiatrist

Consult India's best doctors online. Book an appointment now!

Book Now!

Alternatives Therapies Of Dementia

Exercise and Yoga: Performing light exercises can help enhance mood, manage anxiety in patients with dementia, and maintain their physical activity status. These light exercises can include home-based aerobic routine, dancing as a form of exercise, lifting light weights, and yoga such as Pranayama.

Physiotherapy and Occupational Therapy: Certain modifications suggested by physiotherapists or occupational therapists may need to be implemented in a patient’s home or work environment to make it safer and prevent injuries due to falls.

Massage Therapy and Aromatherapy: Massage therapy and aromatherapy induce relaxation and may be helpful for patients with dementia.

Ayurveda: Dementia is known as Smrutibuddhirhass in Ayurveda. Panchkarma and medicinal herbs like Shankhpushpi, Guduchi, Bhrahmi, Ashwagandha, Shatavari, etc., may be useful in treating dementia.

Living with Dementia

Often, receiving a diagnosis of dementia can be a life-altering and challenging situation for patients and their caregivers. Coming to terms with the diagnosis can invoke feelings of anxiety, depression, anger, rage, guilt, etc. However, it is important to remember that a diagnosis of dementia does not necessarily mean the end of life. It is possible to live a happy life even after being diagnosed with dementia.

Make sure that the person understands the diagnosis and its health implications.

Motivate the patient to stay socially active, such as going to a movie or taking a walk in a park. Engage them in community activities like attending functions or help them join a support group.

Encourage them to spend time with friends and family.

Love, understanding, patience, and reassurance are cornerstones of living with a loved one who has dementia.

Home Care For Dementia

It is important to ensure safety and quality of life for patients suffering from dementia. Caring for a relative or loved one who is suffering from dementia can be challenging and often tiresome. Here are a few things that can help with home care for dementia patients.

1. Encourage the person to maintain a diary or calendar to note down important things or days, which will help them remember.

2. Always keep the atmosphere at home pleasant, positive, and caring. Never make the patient feel that they are a burden.

3. Ensure that the patient has access to important data, such as identity documents, home address, important telephone numbers, etc., at all times. This can help in situations where the patient loses his/her way home or is unable to remember their identity or whereabouts.

4. People with dementia are often at an increased risk of falls due to concurrent motor issues. Hence, take care and ensure that their surroundings are well-lit, spacious, and free of obstacles.

5. Do not allow a patient with dementia to drive or operate heavy machinery.

Even though the disease mostly affects people in their old age, Alzheimer’s disease is not a part of the natural ageing process. Know about the 7 lifestyle changes to lower the risk of Alzheimer's disease.

Click Here To Know!

Complications Of Dementia

Dementia is a progressive condition that can worsen with time. The treatments currently available are known to slow the progression of the disease but cannot entirely stop it. Dementia can cause the following complications as it worsens gradually.

Safety issues: Patients with dementia are at an increased risk of injuries even while performing activities like walking, cooking, cleaning, etc.

Personal hygiene: In the later stages, patients with dementia struggle with basic human hygiene, such as brushing, bathing, grooming, and using the bathroom.

Nutritional challenges: With advanced dementia, a person may forget to eat and may lose interest in eating. This can lead to a variety of malnutrition-related problems.

Aspiration or choking: Trouble swallowing food can lead to aspiration or choking and cause pneumonia in the lungs.

Frequently Asked Questions

Does dementia affect only the elderly?

Are there any foods that can improve memory?

Can dementia patients ever get their memory back?

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Dengue

Also known as Dengue Fever (DF), Breakbone Fever, Dengue Hemorrhagic Fever (DHF), Dengue Shock Syndrome (DSS)

Overview

Dengue is a mosquito-borne viral disease. It spreads from one person to the other only when an Aedes mosquito infected with the dengue virus bites a healthy person especially during day time. It does not spread by touch, cough or secretions.

Dengue presents as high-grade fever, pain in the eyes, skin rash, headache, body aches, and pain in the joints. In severe cases, it can lead to difficulty in breathing, severe abdominal pain and bleeding. Most patients with dengue fever have mild illness and can be managed at home by maintaining fluid intake, monitoring symptoms and taking medicines. However, at times, it may cause a potentially serious complication, called severe dengue (hemorrhage and shock).

The disease can be prevented by ensuring proper measures to prevent mosquito breeding and water stagnation. Also, use of mosquito nets and repellents can help you to prevent mosquito bites. People suffering from dengue fever should take adequate rest, eat a healthy diet, take plenty of fluids and monitor platelet count and blood pressure closely.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Liver

Lungs

Brain

Spleen

Prevalence

Worldwide: 390 million (2019)

India: 8·8–12·9 Million (2017)

Mimicking Conditions

Malaria

Zika

Chikungunya

Influenza (flu)

Measles

Necessary health tests/imaging

Dengue antigen test

Dengue antibody IgM test

Dengue antibody IgG test

Dengue RNA PCR test

Complete Blood Count

Treatment

Paracetamol

Fluid replacement (hydration)

Platelet transfusion

See All

Symptoms Of Dengue

The symptoms of dengue can be confused with other common illnesess such as flu, malaria, and chikungunya. However, dengue should be suspected if you develop a sudden onset of high-grade fever (above 104 degree celcius) along with rash, nausea and body ache.

According to the WHO, dengue can be categorised into 3 phases:

Febrile phase

Critical phase

Recovery phase

1. Febrile phase

This phase usually lasts 2-7 days and is often accompanied by:

Generalized body ache

Eye pain (pain with eye movement)

Muscle pain

Joint pain

Headache

Loss of appetite

Nausea

Vomiting

Facial flushing

Skin rashes

Respiratory symptoms (cough, sore throat, congestion, etc)

2. Critical phase

The fever usually decreases around the 3rd to 7th day of illness. This marks the beginning of the critical phase. It is followed by extreme fatigue which can last for a few days to weeks. There could also be a rapid decrease in the platelet & leucocyte (white blood cell) count. In some cases, there can be severe organ impairment & internal bleeding.

3. Recovery phase

Post critical phase, there is an improvement in the condition of the patient in the following 48-72 hours. In this phase, there is an improvement in the appetite and gastrointestinal symptoms. There might be a reappearance of skin rash in the recovery phase.

Note: In younger children, these symptoms are generally mild but older kids and adults may have moderate to severe symptoms depending on the intensity of the infection.

Signs of severe dengue

As per the CDC, about 1 in 20 people who get sick with dengue may develop a severe form of dengue. After the first sign of dengue appears, it may take around 3-7 days for the disease to turn into a severe condition. This is the critical phase which can even lead to a drop in the temperature which is not a sign that a person is recovering but a sign that special care is needed.

The warning signs which indicate severe dengue are:

Severe abdominal pain

Rash all over the body

Bleeding gums

Blood in vomit

Rapid heart rate

Low blood pressure

Difficulty in breathing

Fatigue/ restlessness

Severe bleeding

In case you suffer from any of these symptoms, it is advised to immediately get admitted to a hospital and follow your doctor’s suggestions without fail.

Suspect that your fever is due to dengue? Get a dengue test from the comfort of your home.

BOOK TEST HERE

Causes Of Dengue

Dengue is a viral infection caused by the bite of a female Aedes Aegypti mosquito. The virus that causes dengue is known as dengue virus (DENV), which belongs to the family of Flaviviridae viruses. There are four different types of dengue virus namely DENV-1, DENV-2, DENV-3 and DENV-4.

When the mosquito infected with dengue virus bites a healthy person, the virus spreads into the bloodstream causing the infection. The mosquito that causes dengue can be identified by characteristic black and white markings over its body. It breeds in stagnant water and is mostly seen during early hours of the day. Infection with any one of the serotypes confers lifelong immunity from that particular strain.

Risk Factors For Dengue

You may be at a high risk of suffering from dengue if:

There are several cases of dengue in your locality.

Your area has pooled water or if you work in construction sites as the risk of breeding mosquitoes is high in such areas.

You travel to places where the prevalence of dengue is high.

Diagnosis Of Dengue

If a person is down with high fever, nausea, rash, and bodyache, then it is wise to get a blood test done. In most cases, a complete blood count (including a platelet count) is recommended if your doctor suspects dengue. However, it is a nonspecific test because it doesn’t help to confirm the presence of the dengue virus or detect the type of virus.

To detect the presence of the dengue virus in the blood, you need to undergo definitive tests which include:

1. Dengue antigen test

Also known as dengue NS1 antigen test, this blood test helps to detect the dengue virus early in the course of an infection. It should be done within the first five days of the appearance of symptoms because after 5 to 7 days the chances of false positive and negative results are high.

Book Test Here

2. Dengue antibody IgM test

This test looks for IgM (antibodies) in the blood, which appear in the early course of the disease (acute infection). The test can also help to differentiate between primary (first time infection) and secondary (second time infection with the other serotypes) infection.

Book Test Here

3. Dengue antibody IgG test

The test is used to detect infection in the later course of the disease because the level of IgG in the blood tends to increase slowly. Usually, the level increases 6 to 10 days after the infection and the antibodies can remain in the blood for around 90 days or for the rest of your life.

Book Test Here

4. Dengue RNA PCR test

It is a primary test used to detect dengue virus in the early course of the infection. A positive result not only confirms the infection but also helps to identify the different serotypes of the dengue virus. The test is around 90% sensitive and 95% specific.

Book Test Here

Celebs affected

Here is a list of a few popular celebrities who presently have this condition or have suffered from it in the past.

Lisa Haydon

In 2014, numerous news releases stated that Lisa Haydon had to skip promotion of “The Shaukeens” movie after she was diagnosed with dengue. She later recovered completely.

Ranveer Singh

Ranveer Singh was hospitalized in 2013 after he suffered from a serious bout of dengue fever. However, he soon recovered and started shooting for his movie, as per the reports online.

Prevention Of Dengue

The best way to prevent dengue is to prevent mosquitoes in your immediate surroundings. To achieve this, you need to:

1. Prevent water stagnation

Look around the house and get rid of any source of water stagnation since the mosquitoes breed in stagnating water. Drain your buckets of water after bathing or washing ensuring that mugs and buckets are dry. Fix any leaking taps in the bathroom and kitchen so that the area remains dry and water does not collect in containers. Drain the water from water coolers and keep it dry. Do not overwater potted plants to prevent water stagnation in the soil.

2. Use mosquito nets

Use mosquito nets at night to prevent getting bitten by mosquitoes. You can use them during the day for babies and elderly who tend to take a nap in the afternoon. You should cover up and close any holes in the windows and doors from where mosquitoes might enter. Wire mesh screens can be used on windows to block out mosquitoes.

3. Apply mosquito repellents

Use mosquito repellent cream especially for kids who go out to play. Mosquito repellent liquidators are also widely available in the market and used for driving out mosquitoes from the house. Apart from the mosquito repellents available in the markets, there are few natural ways to get rid of mosquitoes like burning camphor, lighting lavender candles, using citronella or eucalyptus essential oil and keeping a potted tulsi plant near the window.

4. Cover up

Use full-sleeved clothes and full-length pants as much as possible so that most areas of your body are covered. In case you have kids, take special care to ensure their bodies are covered as much as possible.

Mosquito Repellants: Use It Right

Not sure if you are using your mosquito repellent the correct way?

CHECK OUT HERE

Specialist To Visit

A normal fever usually may cause throat pain, runny nose, weakness, mild body aches, and high body temperature. On the contrary, a dengue-infected person will show flu-like symptoms such as high-grade fever, severe bodyache along with rashes all over the body.

If you experience any signs and symptoms of dengue, it is important to consult your doctor at the earliest. Usually, your family doctor or general physician is the right doctor to go to. In some cases, you may also need to consult an internal medicine specialist.

Consult NOW

Treatment Of Dengue

There is no specific treatment for dengue. This is the reason why the treatment is aimed at relieving the symptoms. Most patients with dengue fever have mild illness and can be treated at home by following strict dietary guidelines and course of medication. In case of severe dengue, where the platelet count drops severely (a condition known as thrombocytopenia), platelet transfusion is advised.

1. Take sufficient rest

As dengue causes severe fatigue and high fever, make sure you rest as much as possible and give your body sufficient time to recover.

2. Bring down your fever

Antipyretic drugs like paracetamol can help to bring down the temperature and also relieve body aches.

Drugs such as aspirin and other painkillers should be avoided as they may increase the risk of bleeding/hemorrhage.

Antibiotics are generally not required.

Sponging the person with cool water can help to reduce fever.

3. Stay hydrated

Dehydration is a common complication of dengue as water is lost due to fever, vomiting and not drinking enough fluids. So to prevent it, make sure you stay hydrated by drinking fluids in the form of coconut water, buttermilk, fruit juices, lemon water, milk and drinks with electrolytes along with water.

If you experience any of these signs of severe dehydration, then it is wise to consult a doctor immeditely to prevent complications.

4. Monitor your condition

The period after the fever starts to subside is critical. Some people develop warning signs such as vomiting (at least 3 times in 24 hours), difficulty in breathing, bleeding from the nose or gums and blood in vomit/stool within a day or two after the fever goes down. This is seen in around 1 in 20 people with dengue and may require hospitalization as it could be life-threatening. So be extra careful and keep a close eye on the warning signs.

REMEMBER! Severe dengue is a medical emergency and warrants immediate medical care at a hospital.

5. Try home remedies

Few home remedies are found to be quite popular in the treatment of dengue fever as they have been known to increase the platelet count.

Papaya leaves: According to a research (Subenthiran S, et al), the juice of papaya leaves is known to inhibit the growth of dengue virus and increase platelet count.

Giloy: Packed with anti-inflammatory and antipyretic (fever reducer) properties, giloy juice is known to aid in the management of dengue fever. It not only increases platelet count but also improves immunity aiding in quick recovery.

Kiwi: Many people believe that eating kiwi fruit daily improves platelet count. However, there is no research study to prove its efficacy in increasing the platelet count. The fruit is rich in Vitamin C which not only acts as a potent antioxidant but also boosts immunity.

Watch this video to know more about the tests, treatment and what to eat and avoid in dengue.

Did You Know?

You could pass on the dengue infection to your family. This is because the dengue virus could be present in the blood of the infected person during the first week of an infection. So if a mosquito bites the person, it can spread the virus to other people by biting them. Protect your family from mosquito bites by using mosquito repellents.

Buy Now

Complications Of Dengue

Rarely, severe dengue can be complicated by organ damage and internal bleeding (dengue hemorrhagic fever). This results in sudden drop in blood pressure, feeble pulse, hypovolemia and eventually dengue shock syndrome.

The World Health Organization (WHO) has laid down criteria for a diagnosis of dengue hemorrhagic fever. These are:

Low platelet count (<1 lac)

Fever for 2 to 7 days

Hemorrhagic manifestations (internal bleeding)

In the early stages, the platelet count is usually within normal range but hemoglobin level may be high. If the hemoglobin level is raised (>14g/dL), a doctor should be consulted even if the platelet count is in the normal range. The platelet count begins to fall once the fever starts to come down. Even when the platelet count is falling, there is no need to panic.

REMEMBER! There is no role of platelet transfusions in a patient who has no active bleeding. Do not insist your doctor for platelet transfusion in the absence of bleeding.

Frequently Asked Questions

When should I suspect that I have dengue?

What blood test should be done to detect dengue?

Can I have dengue if my platelet count is normal ?

My fever is gone. Does this mean I don’t have to worry now?

Can dengue be managed at home?

When is the patient of dengue hospitalized?

I had dengue recently. Can I get it again?

Is there a vaccine for dengue?

Is dengue vaccine available for use in India?

Is dengue contagious?

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Dental pain

Also known as Toothache, Odontogenic Pain, Tooth Pain

Overview

Most of us might have experienced toothache at least once in our lifetime. A toothache or dental pain is any pain that originates from the tooth and its surrounding structures such as the gums.The intensity of pain may range from mild dull aching to severe excruciating pain.

Toothache can occur from various dental causes like tooth cavity, tooth fracture, broken old fillings, gum infections, grinding of teeth etc. Rarely, pain is experienced in teeth because of non dental causes like sinusitis, heart attack, lockjaw, trigeminal neuralgia etc. Therefore, it is important to differentiate dental pain from such conditions that cause referred pain in the teeth.

Dental pain can happen at any age, but it is more common in school going children or the elderly population. Following good oral hygiene practices is one of the simple yet effective ways to keep teeth and gums healthy and prevent dental pain. In case when dental pain is experienced, painkillers and some home remedies might provide temporary relief but a dental consultation followed by required dental procedures are highly recommended.

Key Facts

Usually seen in

Children below 15 years of age

Adults above 65 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Teeth

Gums

Prevalence

Worldwide: 9.4% (2015)

Mimicking Conditions

Sinusitis

Migraine

Otalgia or ear pain

Trigeminal neuralgia

Post-traumatic neuropathy

Temporomandibular joint disorder

Orofacial neurovascular pain

Cardiac pain

Necessary health tests/imaging

Tooth X-Ray

X-Ray TM joints

CBCT

Complete blood count (CBC)

Erythrocyte sedimentation rate (ESR)

Diabetes screening

Treatment

Pain releivers: NSAIDs, opoids & antyi sensitivity toothpastes

Antibiotics

Mouthwashes

Dental procedures: Scaling & planing, cavity filling, root canal treatment & tooth extraction

See All

Symptoms Of Dental Pain

Dental pain can vary in intensity from mild to severe. It can also range from dull-aching pain to sharp-shooting pain based on the causative factors. A range of symptoms can be seen with dental pain such as:

Dull-aching toothache that may radiate to the gums or jaws.

Pain that worsens while biting or chewing food.

Pain exacerbated by excessively hot or cold foods or sweets.

Pain accompanied by bleeding or discharge from the gums.

Swelling of the gums or face, which may be accompanied by a fever.

Occasionally, a bad mouth odor and bad taste in the mouth may be present, along with toothache.

Causes Of Dental Pain

There can be multiple causes of dental pain such as:

Fracture of the tooth

Dental caries or tooth decay that cause cavities and infection in the tooth

Periodontal or gum infections

A dental abscess, i.e., a collection of pus or fluid near the tooth, which occurs in tooth infections

Erosion of tooth enamel and gum recession

Lack of space for eruption of wisdom teeth

Accumulation of food particles and debris between the teeth

Repetitive clenching or grinding of teeth

Loose or fractured old filling or a cracked tooth cap

Ill-fitted dentures or braces

Risk Factors For Dental Pain

Dental pain is most commonly seen in children and adolescents, with a prevalence rate ranging around 9.4%. It is more common in the lower socio-economic population who have limited access to quality healthcare. Dental pain is also common in the elderly population and is the primary reason for dental procedures in the elderly population.

Additionally, the risk of dental problems is more often associated with the following:

Poor oral hygiene

Excessive consumption of sweets, starchy or acidic food and drinks

Smoking

Diabetes

Weak immune system due to certain medications (such as chemotherapy for cancer) or certain diseases (such as HIV)

Xerostomia or dry mouth due to inadequate salivation which can happen after injury to head or neck, after radiation therapy or as side effect of certain drugs

Heartburn or gastroesophageal reflux disease (GERD) can cause stomach acid to flow into the mouth, leading to dissolution of enamel and thereby causing tooth damage.

Eating disorders like Anorexia and Bulimia can lead to wearing of teeth and cavities. They also affect production of saliva.

Many parents are in a dilemma about their child’s dental care. They know they don’t want their kid to get cavities but don’t know how to go about preventing them. Here are some tips to ensure your toddler gets proper tooth care.

Click Here To Know More!

Diagnosis Of Dental Pain

When you visit your dentist for dental pain, they will perform a thorough oral examination and get a detailed history of symptoms.

Some of the common tests used to diagnose dental pain include:

A tooth percussion test is done by gently tapping the tooth with the end of mouth mirror to check the response.

To perform a tooth mobility test, the dentist carefully tries to move your tooth to check whether it is loose.

A tooth sensitivity test involves checking the response of the tooth to hot or cold stimuli.

Additional investigations may be needed to evaluate the condition further which include imaging studies and lab tests.

Imaging studies: Dental X-Ray and X-Ray TM Joints help visualize the teeth and jaws to know what abnormalities may potentially be causing the pain. A detailed visualization is possible with CBCT (Cone Beam Computed Tomography). This method is used when individual x-rays of teeth alone are unable to identify the cause of dental pain.

Laboratory tests: Sometimes, lab tests such as complete blood count (CBC), erythrocyte sedimentation rate (ESR) and diabetes screening may help diagnosis in treatment planning.

Celebs affected

Ray J

Celebrity rapper Ray J complained of toothaches while filming the reality show ‘Celebrity Big Brother’. He was hospitalized and diagnosed with an abscessed tooth, cracked filling in another tooth, and gum disease.

Ariana Grande

American singer Ariana Grande has undergone extraction of three wisdom teeth that were causing unbearable pain.

Prevention Of Dental Pain

Since most of the toothaches occur due to poor oral hygiene, good dental hygiene practices can mostly prevent dental pain. You can keep your teeth and gums healthy by-

Brushing gently with fluoride-containing toothpaste at least twice a day

Flossing regularly to clean the spaces between the teeth

Rinsing and gargling after meals to prevent lodging of food particles and debris between the teeth

Avoiding excessive sugar, starch or acidic food and beverages in your diet

Reducing consumption of sticky foods like caramel or chocolate that get stuck in grooves and pits of teeth for a long duration

When consuming sweet foods, it is better to consume them with the meal rather than as a snack.

Avoiding frequent snacking. When you eat or drink beverages other than water,bacteria in the mouth create acids that can dissolve tooth enamel. Frequent snacking throughout the day can keep your teeth under constant attack.

Avoiding extremely hot or cold foods if you have sensitivity issues

Avoiding chewing on very hard foods like ice or sugarcane that can cause tooth fractures. Using teeth for opening food packets or cracking open nutshells can also increase the chances of a tooth fracture.

Regular appointments with the dentist for professional cleaning of teeth and examinations.

Application of dental sealants or protective coatings on teeth and fluoride treatment if advised by the dentist.

Brushing twice is good but brushing right is the key

Brushing your teeth twice a day is important, but it is NOT enough to start your day on a healthy note. It is equally important to brush your teeth THE RIGHT WAY as it helps to destroy harmful bacteria present in the mouth along with cleaning the teeth and gums effectively. But do you know what is the right way to brush your teeth, if you do then are you following the steps regularly? Well, before you answer this question, read the article.

Read Article Here!

Specialist To Visit

Toothaches can be very uncomfortable but the pain isn’t permanent as long as it’s treated. Your dentist can relieve your pain and prevent any infections from spreading. It is not advised to delay your visit to the dentist as cavities can get worse over time.

It is necessary to seek dental or medical care if you have:

Toothache that lasts more than 2 days

Toothache that is severe and persistent in nature

Pain that does not go away after taking painkillers

Fractured or broken tooth

Extreme tooth sensitivity

Swelling around the tooth, in the jaw or face

Bad odor or foul taste in the mouth

Toothache accompanied by fever and chills

Earache or pain when you open your mouth wide

Trouble swallowing or excessive pain or bleeding from gums

A facial rash associated with a toothache

Recent head or face injury in addition to dental injury

Doctors/specialists who can help you to diagnose and treat dental problems or any other associated medical issues are:

Dentist

General physician

Consult India’s best doctor online from the comfort of your home.

Consult Now!

Treatment Of Dental Pain

The treatment for dental pain is broadly divided into providing pain relief and treating the underlying cause.

1. Medicines for dental pain relief

NSAID painkillers are prescribed to provide relief from mild to moderate dental pain.

Opioid painkillers or combination medicines are prescribed to treat severe dental pain.

Anti sensitivity toothpastes can provide some relief from sensitivity of teeth.

2. Treatment of underlying cause

Antibiotics are prescribed by dentists to treat dental infections

Mouthwashes are also recommended to combat infections

3. Dental procedures

These procedures can be advised if needed and may include:

Scaling and planing- In case of plaque accumulation and gum infection,the dentist may carry out professional cleaning or scaling of teeth or numb the gums to remove plaque buildup below the gum line.

Cavity filling - For a shallow cavity in the tooth, the dentist will remove the decay and seal the tooth with a filling.

Root canal treatment (RCT) - In case of a deep cavity that infects the pulp of the tooth, the dentist will perform a root canal treatment. In this procedure, all the vital contents of the tooth (nerves and blood vessels) are removed and the root canal system is sealed with an inert filling material. RCT is usually followed by a dental cap or crown.

Tooth extraction - If the tooth is badly damaged and cannot be saved, it may be advised to get it extracted.

Home-care For Dental Pain

If you have mild dental pain, home remedies may provide considerable relief. Home remedies are also useful in alleviating symptoms of severe disease. You can do the following at home to help ease dental pain:

For many people, rinsing the mouth with lukewarm saline water is an effective first-line treatment. Saline water is a natural disinfectant, which helps in reducing inflammation and ease any pain or swelling.You can mix 1/2 teaspoon of salt in a glass of lukewarm water and use it as a mouthwash.

Applying an ice pack or cold compress externally can help reduce inflammation and swelling and thereby give some relief in pain.

Avoid eating foods that are hard to chew. Do not chew on the painful side.

You can apply clove oil or peppermint oil to the affected area. It is known to help with pain relief from toothaches.

Do not consume excessively hot or cold foods or sweets as these may worsen the sensitivity and increase your pain.

Gently brush your teeth at least twice a day. Rinse and gargle after every meal to avoid food particles from getting stuck in between the teeth.

Complications Of Dental Pain

A toothache on its own does not cause any severe complications and in most cases, tooth infections can be easily treated.

Sometimes, tooth infection can cause an abscess in which pus is collected inside the tooth or gums. In very rare cases, delay in treatment can cause this infection to spread to other areas of the body resulting in any of the following complications:

Sinusitis: can occur rarely from untreated upper teeth infection

Osteomyelitis: Infection of the bone surrounding the tooth

Ludwig angina: Submandibular space infection

Cavernous sinus thrombosis: Infection of the blood vessels within the sinuses

Cellulitis: An infection of the skin and fat directly beneath the skin

Parapharyngeal abscess: An abscess at the back of the mouth

Septicemia: Medical condition in which the immune system overreacts to an infection in the blood

These conditions can be life threatening and require immediate attention and intervention.

The following signs and symptoms may indicate any possible spread of infection to other parts of the body:

High fever

Chills

Swelling of the face or the jaw

Foul-smelling discharge from the tooth

Nausea

Vomiting

Severe headache

Itching or burning sensation on the skin

Drooping eyelids

Double vision

Confusion

Alternative Therapies For Dental Pain

1. Ayurveda: Dental or oral health is called ‘Danta Swasthya’ in Ayurveda. There are various Ayurvedic practices which can be opted for good oral health, such as:

Chewing sticks of medicinal trees, like Neem, Meswak, etc., are used as an alternative to conventional brushing techniques. While chewing these sticks, the medicinal extracts get released into the mouth, which helps promote and maintain healthy teeth and gums.

Oil pulling is an ancient practice that involves swishing oils inside the mouth. Sunflower oil, sesame oil, or coconut oil is used for oil pulling. This has been used as a traditional remedy to prevent teeth and gum diseases.

Medicinal condiments and herbs like clove, garlic, vanilla extract, peppermint, wheatgrass, thyme are found to be useful in relieving dental pain and are famously used as home remedies to treat toothaches.

2. Homeopathy: Homeopathy is an alternative form of medicine that follows the principle of ‘like kills like’. Homeopathy doctors prescribe diluted tinctures that elicit symptoms similar to those the patient is already experiencing.

Tinctures of Belladonna and Arnica Montana are found to be useful in relieving toothaches.

Calcarea carbonica, Chamomilla, Antimonium crudum, etc., are also helpful in relieving dental pain.

Arsenicum album is effective in treating gum diseases, such as bleeding gums.

You can prevent tooth pain by following basic oral hygiene such as brushing and flossing your teeth twice a day and regularly visiting your dentist’s clinic. However, if you are suffering from a toothache, then you can try these simple home remedies to get some relief in pain naturally.

Click Here!

Living With Dental Pain

Dental Pain or Toothache is one of the commonest pain experienced by patients worldwide. It’s normal to occasionally battle with tooth pain because of sensitive teeth, gums infections or dental cavities. Though good and consistent oral hygiene measures help in preventing a lot of dental problems, sometimes, as much as one tries to brush twice a day, floss every day, and eat a healthy diet, one can still suffer from dental issues. For eg. Some may be genetically predisposed to have more brittle,sensitive teeth or more acidic saliva. Unfortunately, some can suffer from any form of accident resulting in fracture of teeth and thereby resulting in dental pain.

Dental pain can come with a lot of annoyance and irritation. Continuous pain can lead to avoidance of food and thereby causing nutritional deficiencies or weight loss. Due to heightened dental sensitivity patients may not be able to enjoy their favorite sweets or ice-cream. Another cause of concern in patients with dental infections is bad breath or foul odor coming from the mouth. This can lead to extreme social embarrassment or isolation.

Prevention of a disease is always better than its cure. Good oral hygiene practices and routine visits to the dentist are essential to keep the teeth and gums healthy life-long. In cases where dental problems happen in spite of taking precautions, one should not be disheartened as most dental problems are easily treatable and have a good outlook. Home remedies and a prompt visit to the dentist without much delay can go a long way in getting relief from toothache.

Frequently Asked Questions

What is the sensitivity of teeth and what does it feel like?

My child broke half his tooth while playing. What should I do?

What are some home remedies for instant pain relief from toothache?

Can a toothache be cured at home or I need to visit a dentist?

Why is my toothache so severe?

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Depression

Also known as Melancholia and Pessimism

Overview

Depression is a mood disorder that drains you of hope, motivation and energy and keeps you in a consistent feeling of sadness. It starts with subtle signs like difficulty in focusing, poor recalling abilities, feeling low quite often, and changes in appetite. Most of the people tend to ignore these signs, till it manifests as a clinical illness and can have serious health implications.

Depression is a complex disorder most likely triggered by overlapping biological, psychological, and environmental factors. It is much more common than we think and anyone can suffer from depression, even a person who appears to live in relatively ideal circumstances.

Depression is not something to be embarrassed or ashamed about. It is a bodily disorder and needs medical intervention like any other disease. Timely and right medical treatment along with self care can go a long way in managing it. So speak up, treating depression as a taboo will only make matters worse.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Brain

Prevalence

Worldwide: 280 million (2021)

India: 57 million (2020)

Mimicking Conditions

Bipolar disorder

Persistent depressive disorder (PDD)

Adjustment disorder with depressed mood

Neurological conditions (Dementia, Parkinson’s disease and multiple sclerosis)

Thyroid dysfunction

Drugs and substance abuse

Hypopituitarism

Necessary health tests/imaging

Psychiatric evaluation

Blood tests: Complete blood cell (CBC) count, Vitamin B-12, Blood alcohol level & Toxic screening test

Imaging tests: CT scan & MRI of the brain

Treatment

SSRIs: Fluoxetine, Sertraline & Paroxetine

SNRIs: Duloxetine, Milnacipran & Venlafaxine

MAO inhibitors: Phenelzine, Isocarboxazid & Tranylcypromine

Tricyclic antidepressants: Nortriptyline, Amitriptyline & Imipramine

Atypical depressants: Mirtazapine, Agomelatine & Bupropion

Psychotherapy: Cognitive behavioral therapy (CBT) & Interpersonal therapy (IPT)

Surgical and other interventions: Electro-convulsive therapy (ECT), Transcranial magnetic stimulation (TMS) & Vagus nerve stimulation (VNS)

See All

Symptoms Of Depression

Depression is a mental illness which starts with subtle signs like difficulty in focusing, poor recalling abilities, feeling low quite often and changes in appetite. Most of the people tend to ignore these signs, till it manifests as a clinical illness and can have serious and life changing health implications.

Here are the most common and early signs of depression. If you or anyone in your family is experiencing these signs, you may need to consult a therapist or a psychiatrist.

1. Getting irritated very often

Many people think that depression leads to just sadness. But some people with depression can get angry often, feel irritated over trivial issues and argue over small things. While these signs could be due to stress as well, if you notice an increased irritability in your behavior, do not ignore it. Take a moment to consider the possibility that you may be depressed.

2. Loss of interest

A common sign of depression is that you have a lack of interest in otherwise pleasurable activities like your favorite hobbies, meeting friends and in sex. People tend to avoid social gatherings, become more withdrawn and lose the inclinations towards achieving simple everyday goals.

3. Changes in appetite

One of the classical signs of depression is a dramatic change in appetite. This can reflect as eating too much or too little. If you have a weight gain or loss of more than 5% of your body weight in one month, it could be a warning sign of depression. Some people take up eating as a way to compensate for how they feel while others experience a loss of interest in food.

4. Being too pessimistic

If you find yourself criticizing and cribbing about almost everything all the time and if you tend to hold a negative or demotivating opinion on everything, it could be a sign of depression.

5. Sleep disturbances

Most of the people with depression first consult their doctor because of sleeping disturbances they’ve experienced. While having troubled sleep for a couple of nights is a normal phenomenon, persistent sleep difficulties or insomnia can be a symptom of depression. Many people with depression struggle to fall asleep, or stay asleep, despite feeling exhausted. Other people with depression sleep too much.

6. Having aches and pains

Your brain is designed in such a manner that when you are struggling with mental health issues, you tend to develop signs of physical illness too. Many people with depression experience unexplained body aches, muscle pains and headaches. But they attribute these to a physical health problem and pop painkillers instead.

7. Feeling tired all the time

Depression can make you feel fatigued and tired all the time and lower your energy levels. Most of the people attribute this to excessive workload or increasing age and do not address it in a timely manner. Remember that if small tasks tire you or take longer to complete, you may be depressed.

8. Feeling of guilt

Blaming yourself without a logical reasoning for all the events in your life is an unhealthy trait. If you blame yourself responsible for all personal, professional and childhood issues, you may be depressed. Many people with depression also feel worthless. Always pay close attention to your inner thought process. If you feel you are being excessively harsh, critical or illogical, it could be a sign of depression.

9. Difficulty in concentration

Many people with depression face forgetfulness and misplace things like their keys or paperwork very frequently. People with early signs of depression experience difficulty concentrating and focusing for example when giving or receiving direction or comprehending what they’re reading, and an inability to remember specific details.

Additional signs include:

Low mood/sadness

Crying spells

Diminished interest in play and activities

Problems with concentration

Excessive tiredness/fatigue/weakness

Behavior symptoms such as anger and aggression/agitation

Self-accusation/self-criticism

Work difficulty

Expectation of punishment

Decreased appetite

Anorexia

Decreased sleep/change in sleeping pattern

Increased appetite, weight gain, and excessive sleep

Past failure/sense of failure

Anhedonia (inability to feel pleasure in normally pleasurable activities)

Anxiety symptoms

Irritability

Hopelessness

Physical symptoms/multiple complaints such as headache, abdominal pain, and chest pain

Suicidal ideations/thoughts

Psychotic features in the form of persecutory delusions

Catatonia (inability to move normally or speak)

Depersonalization

Obsessive compulsive symptoms

Guilt

Attempted suicide

Recent deterioration in school performance

Dissatisfaction

Self dislike

Indecisiveness

Social withdrawal

Loss of libido

Body image changes

Poor interaction

Decreased interest in school

Low self esteem

Death wishes

Worthlessness

Loss of energy

Note: Depressive episodes can be categorized as mild, moderate, or severe depending on the number and severity of symptoms, as well as the impact on the individual’s functioning. Common signs and symptoms of depression in children and teenagers are similar to those of adults.

Myth: Children cannot get depressed

Fact: No age group is immune to depression. Children as young as 5 years of age have shown signs of depression and it need not always be a reaction to a major environmental stressor. Children often show more behavioral symptoms (such as crying, irritability and tantrums) or physical symptoms (such as nausea, lack of appetite, stomach ache and headache), instead of saying that they are feeling sad or have negative thoughts. Social media is also a major contributor to childhood depression in the current time. Read the article to know more.

Click To Read!

Causes Of Depression

The exact cause of depression is not yet known. Depression can occur spontaneously, without any obvious reason. Some experts think it could be due to imbalance in the brain chemicals, while some believe it could be due to a genetic defect. Some believe that a person’s environment and emotions play a crucial role in developing depression.

Hence, depression can be defined in ‘bio-psycho-social’ terms, meaning that it is a complex disorder most likely triggered by overlapping biological, psychological, and environmental factors.

What happens in the brain?

Our brain is made up of millions of nerve cells, also known as neurons. These cells are responsible for relaying chemical signals back and forth from the brain to various parts of the body. The neurons interact with each other via chemical messengers known as neurotransmitters (in simple terms brain chemicals). These messages help the brain to have thoughts, emotions and sensations, which play a key role in your brain function and mental wellbeing.

What happens during depression?

In depression, it is believed that there is an imbalance in the brain chemicals. There is either too much or too little of these neurotransmitters, which affect your ability to think, feel and emote. These neurotransmitters include dopamine, serotonin, and norepinephrine. Medications to manage depression often focus on altering the levels of these chemicals in the brain.

In some people with depression, brain scans show a smaller hippocampus, which plays a major role in long-term memory. Exposure to stress and other risk factors can impair the growth of nerve cells in the hippocampus and trigger depression.

Types Of Depression

1. Major depression

It is a condition that is characterized by a combination of symptoms along with a sad mood which interferes with your everyday routine. This includes the ability to sleep, eat, work, and other activities. Episodes of depression can occur once to several times in a lifetime and continue for more than two weeks.

2. Dysthymic disorder

In this, the person suffers from a low to moderate level of depression that may last for at least 2 years. Although the symptoms are not as severe as major depression, the condition is resistant to treatment. People with this type of depression may develop major depression.

3. Unspecified depression

As the name suggests, this type of depression includes people with symptoms of depression but not quite serious enough to be classified as major depression.

4. Adjustment disorder with depression

This includes depression that occurs due to a major life stressor or crisis such as death of a family member, diagnosis of a critical condition, etc.

5. Bipolar depression (mania)

A disorder associated with episodes of mood swings ranging from depressive lows to manic highs. Manic episodes may include symptoms such as high energy, reduced need for sleep and loss of touch with reality. Depressive episodes may include symptoms such as low energy, low motivation, and loss of interest in daily activities. Mood episodes last days to months at a time and may also be associated with suicidal thoughts.

6. Seasonal affective disorder (SAD)

A mood disorder characterized by depression that occurs at the same time every year. Seasonal affective disorder occurs in climates where there is less sunlight at certain times of the year. Symptoms include fatigue, depression, hopelessness, and social withdrawal.

Risk Factors For Depression

Anyone can suffer from depression, even a person who appears to live in relatively ideal circumstances. However, there are many potential factors that can trigger or influence depression:

1. Family history and genetics

Genetic makeup and heredity are thought to be significant factors that influence depression. Some types of depression run in families, especially bipolar disorder. While studies suggest that there is a strong genetic component that increases the risk of getting depression, other factors are usually needed to trigger the symptoms.

2. Psychological and social factors

History of physical, emotional or sexual abuse

Social isolation or loneliness

Low socioeconomic status

Stressful life events like loss of a loved one, divorce, loss of a job & financial issues

Sometimes, even positive events like marriage, shifting places, graduation, or retirement can also cause depression as they alter the daily routine which can trigger feelings

3. Medical conditions

Physical health and certain medical conditions like ongoing or chronic physical pain or disease, sleep disorder, thyroid disorder, diabetes, liver disease, multiple sclerosis, Addison's disease, Parkinson’s disease, and cancer can cause symptoms of depression.

4. Inflammation

Inflammation caused by diseases or stress may cause chemical changes in the brain that can trigger or worsen depression in certain people. It can also affect response to drug therapy.

5. Traumatic brain injury (TBI)

TBIs or concussions following any injury to the head from falls, accidents, and workplace and sports-related injuries are thought to trigger depression.

6. Certain medications

Some medications that treat hypertension (high blood pressure), cancer, and seizures can cause depression. Even some psychiatric medicines such as certain sleeping aids and medications used to treat alcoholism and anxiety, can trigger depression.

7. Personality

People who are easily overwhelmed, have trouble coping with stress or anxiety, have low self-esteem or who are generally pessimistic or self critical are more prone to depression.

8. History of other mental health conditions

Anxiety disorder, eating disorders or post-traumatic stress disorder, substance use disorders and learning disabilities are commonly associated with or can perpetuate depression.

9. Lifestyle factors

Recreational drugs and alcohol can also cause depression or make it worse.

Working late till night and getting up late or spending less time outdoors can disrupt the circadian rhythm which may trigger depression. Along with disruption in circadian rhythm, reduced sunlight can also lead to a drop in serotonin and melatonin levels in the body, which can disrupt mood and sound sleep.

10. Poor diet

A poor or imbalanced diet with deficiency of vital vitamins and minerals are known to cause depression. Low levels of omega-3 fatty acids, Vitamin D and an imbalanced ratio of omega-6 to omega-3 fatty acids are associated with increased rates of depression. Also, high levels of sugar intake are thought to trigger depression.

Why are women at a higher risk than men?

According to the World Health Organization (WHO), the burden of depression is 50% higher for females than males. Depression is widely prevalent in women in India across all age groups.

Psychosocial and social factors that contribute to the increased vulnerability of women to depression include:

Stress

Victimization

Sex-specific socialization

Coping style

Disadvantaged social status

Perceived stigma of mental illness

Domestic violence

Women have the greatest risk for developing depressive disorders during their child-bearing years. This could be attributed to the hormone changes associated with menstrual cycles, pregnancy, and giving birth. The following types of depression can occur in females:

1. Premenstrual dysphoric disorder: Premenstrual dysphoric disorder is a severe form of premenstrual disorder which affects women in the days or weeks before having their menstrual periods.

2. Antenatal depression: It is also known as prenatal or perinatal depression. It affects women during pregnancy, and can lead to postpartum depression if not treated timely or properly.

3. Postpartum psychiatric disorders: They can be divided into three categories: postpartum blues, postpartum depression and postpartum psychosis.

Postpartum blues

Postpartum blues or so-called "baby blues" happen in many women in the days right after delivery. The mother can get overwhelmed and have sudden mood swings. She may feel impatient, irritable, restless, lonely, sad or may cry without any reason. Postpartum blues do not always require any treatment and may resolve in a few days to a week. Love and reassurance, support from the family in sharing childcare duties, and talking to other new mothers can be of great help.

Postpartum depression

Postpartum depression can start soon after childbirth or as a continuation of antenatal depression and needs to be treated.The global prevalence of postpartum depression has been estimated as 100‒150 per 1000 births.

A woman can have similar but stronger feelings as experienced in the baby blues. Symptoms of postpartum depression often can get worse and last for as long as one year. Postpartum depression can predispose to chronic or recurrent depression, which may affect the mother-infant relationship and child growth and development. Children of mothers with postpartum depression have greater cognitive, behavioral and interpersonal problems compared with the children of non-depressed mothers. Hence, timely treatment with medication and counseling is very important

Postpartum psychosis

Postpartum psychosis, which has a global prevalence ranging from 0.89 to 2.6 per 1000 births, is a severe disorder that begins postpartum. New mothers suffering from postpartum psychosis may feel agitated, angry and show strange behavior. They can also suffer from hallucinations, delusions, insomnia, and rarely have suicidal or homicidal thoughts as well. They require medical attention right away.

Young Vs old: Who is more depressed?

The average age for onset of depression across the world varies from 24 to 35 years. In India, the average age of onset of depression is 31.9 years.

There is currently a trend of an increasingly younger age of depression onset. For example, 40% of depressed individuals have their first depressive episode prior to the age of 20, 50% have their first episode between 20 - 50 years of age and the remaining 10%, after 50 years of age.

Adolescent depression

Over the years, it is recognized that the age of onset of depression is decreasing and it is now increasingly being recognized in children and adolescents.

Factors associated with depression in children and adolescents are:

Stress at school

Lower academic performance

Failure in examination

Stress in the family

Change of house/residence

Death of a family member

Prolonged absence or death of a parent

Serious illness

End of a relationship

Did you know?

Coronavirus is known to cause neurologic symptoms in many patients. In addition to these, the pandemic has resulted in a psychological toll due to isolation, lockdowns, loss of loved ones, unemployment, and financial issues. These factors have led to a spike in cases of depression.

Read More About COVID-19!

Celebs affected

Deepika Padukone

The Bollywood actress spoke about her battle with depression in 2015 and how counseling helped her to fight it and emerge as a winner.

Shah Rukh Khan

The superstar of Bollywood was also vocal about being in depression when he suffered a shoulder injury in 2010.

Diagnosis Of Depression

The diagnosis of depression is based on history and physical findings. No diagnostic laboratory tests are available to diagnose major depressive disorder.

1. Psychiatric evaluation

It is a comprehensive evaluation needed to diagnose emotional, behavioral, or developmental disorders. The evaluation may include description of behaviors (like how long does the changed behavior last, and what are the conditions in which the behaviors most often happen), and complete medical history, including description of the person's overall physical health, list of any other illnesses or conditions present, and any current ongoing treatments.

DSM 5 Guidelines\*\*

These are the 9 symptoms listed in the DSM-5. Five must be present to make the diagnosis of major depressive disorder (one of the symptoms should be depressed mood or loss of interest or pleasure):

Sleep disturbance

Interest/pleasure reduction

Guilt feelings or thoughts of worthlessness

Energy changes/fatigue

Concentration/attention impairment

Appetite/weight changes

Psychomotor disturbances

Suicidal thoughts

Depressed mood

2. Blood tests

The diagnosis of depression is based on history and physical findings. No diagnostic laboratory tests are available to diagnose major depressive disorder. However, laboratory tests can help in the exclusion of any underlying medical conditions that can manifest as depression. These include:

Complete blood cell (CBC) count

Thyroid-stimulating hormone (TSH)

Vitamin B-12

Rapid plasma reagin (RPR)

Toxic screening (to rule out active substance abuse)

HIV test

Electrolytes, including calcium, phosphate, and magnesium levels

Blood urea nitrogen (BUN) and creatinine

Liver function tests (LFTs)

Blood alcohol level

Blood and urine toxicology screen

Arterial blood gas (ABG)

Dexamethasone suppression test (Cushing disease, but also positive in depression)

Cosyntropin (ACTH) stimulation test (Addison disease)

Book A Test!

3. Imaging tests

Just like blood tests, imaging tests can help to rule out the other medical causes and conditions. These include:

CT scan

MRI of the brain

Specialist To Visit

If you have some of these classic symptoms of depression and if your symptoms are severe and have lasted longer than a few weeks, you should seek help. The best place to start is with your doctor.

Doctors/specialist you can visit include:

General physician

Psychiatrist

Clinical psychologist

Book a consultation with our doctors now and solve your problems.

Consult Now!

Treatment Of Depression

Depression is among the most treatable of mental disorders. The treatment of depression involves both pharmacological (medical) and psychological approaches.

1. Medical therapy

The drugs used to treat depression are known as antidepressants. These drugs may produce some improvement within the first week or two of use yet full benefits may not be seen for two to three months. If a patient feels little or no improvement after several weeks, his or her psychiatrist can alter the dose of the medication or add or substitute another antidepressant. In some situations, other psychotropic medications may be helpful. It is important to let your doctor know if a medication does not work or if you experience side effects.

Also, the possible reasons for no improvement in the symptoms post treatment include:

Not taking the antidepressants for the recommended period because ideally, antidepressants might take 8 to 12 weeks to show any effect.

Not taking the medications regularly.

Taking the medicines in low doses (under dosing).

Always discuss with your doctor prior to making any dose changes.

Concurrent substance abuse which might contribute to the non responsiveness of depressive symptoms.

Some underlying medical disorder which has been unaddressed.

Antidepressants can be classified into typical antidepressants and atypical antidepressants.

A) Typical antidepressants

These are further divided into:

1. Selective serotonin reuptake inhibitors (SSRIs)

SSRIs are used as frontline drugs for the treatment of depression and anxiety. These drugs increase the level of serotonin and brain derived neurotrophic factor (BDNF). Examples of this class of drugs include:

Escitalopram

Fluoxetine

Sertraline

Paroxetine

2. Serotonin and nor-adrenaline reuptake inhibitors (SNRIs)

As the name suggests, SNRIs are the drugs that aid in the treatment of depression by increasing the level of serotonin and noradrenaline in the body. The list of drugs that fall under this category include:

Duloxetine

Milnacipran

Venlafaxine

3. Monoamine oxidase (MAO) inhibitors

This type of antidepressant primarily increases the level of noradrenaline, thereby improving the symptoms of depression. However, these drugs also increase the level of serotonin in the body. Some of the commonly prescribed MAO inhibitors include:

Phenelzine

Isocarboxazid

Tranylcypromine

4. Tricyclic antidepressants (TCA)

This class of antidepressants work by increasing levels of the hormone noradrenaline in the body. These are outdated medications (not used currently). Examples of these drugs include:

Nortriptyline

Amitriptyline

Imipramine

Note: Selegiline, a newer MAOI that sticks on the skin as a patch, may cause fewer side effects than other MAOIs do.

B) Atypical antidepressants

As this class of drugs do not have a specific action mechanism they are known as atypical antidepressants. Some of the common examples of these medications are:

Mirtazapine

Agomelatine

Bupropion

Atomoxetine

Here are 8 things about antidepressants everyone needs to know.

Read To Know!

2. Psychotherapy

Also known as talk therapy or psychological therapy, it is a common approach used for treating depression by talking about your condition and related issues in the form of counseling sessions with a mental health professional.

Cognitive behavioral therapy (CBT): This type of psychological therapy helps teach the patient coping skills to manage their difficult conditions. The therapy focuses on the cognitive component. This helps the patient to change their thinking about a particular situation and the behavioral component which further helps them to change their reactions to any situation.

Interpersonal therapy (IPT): This is a time-limited approach that focuses on improving the symptoms of depression and treating mood disorders. In this, a therapist emphatically engages the patient to improve their communication with others and solve the problem.

3. Surgical and other interventions

Electro-convulsive therapy (ECT): Also known as shock therapy, this mode of treatment is the best for acute depression. It is also useful for patients who do not respond to drug therapy, are psychotic, or are suicidal or dangerous to themselves. Onset of action may be more rapid than that of drug treatments, with benefit often seen within 1 week of commencing treatment.

Transcranial magnetic stimulation (TMS): It is usually reserved for those who haven't responded to antidepressants. During TMS, a treatment coil placed against your scalp, it sends brief magnetic pulses to stimulate nerve cells in your brain that are involved in mood regulation and depression.

Vagus nerve stimulation (VNS): This approach is also used in refractory cases. Like ECT, it uses electrical stimulation to relieve the symptoms of depression. The difference is that the device is surgically implanted in your body. VNS is FDA-approved for the long-term (not acute) depression of chronic depression that does not respond to at least two antidepressant trials. Its effects may take up to 9 months to appear and studies have shown that a meaningful response seems to occur only in about 1 in 3 people.

Complications Of Depression

Depression in elderly can lead to severe health complications which include:

Excess disability

Forgetfulness

Increased symptoms from medical illness

Suicidal thoughts

Myth: Depression is caused by evil spells (jaadu-tona)

Fact: Like hypertension and diabetes, depressive disorders are caused by a chemical disturbance in a part of the body (in this case the brain is the part of the body affected). These disorders are not caused by black magic and do not need treatments by spiritual healers (ojha-tantrik/jhaad-phoonk). Getting the right professional guidance can help you in treating depression.

Consult Now!

Alternative Therapies For Depression

Yoga

1. Setubandhasana (Bridge pose)

Lying flat on your back with hands on your sides, bend your knees so that your feet are flat on the ground and as close to your buttocks as possible.

Slowly raise your hips with your hands lying on the side and hold the pose for 5 breaths.

2. Marjariasana (Cat stretch)

Lying on the floor face-down, get up on all fours with palms planted on the ground and knees bent so that you resemble a cat. Your back should be gently arched.

Now breathe normally for 5 counts.

This pose relaxes stomach and spine muscles.

3. Sukhasana (Easy pose)

This one is to give you calmness in your mind and body.

Sit cross legged in a comfortable place with your spine straight and palms on your knees like you would be sitting for meditation.

Then breathe normally and focus on the breath entering and exiting your body.

4. Balasana (Child pose)

For this pose, you have to sit on your heels with your knees bent.

With your arms resting on your thighs, bend your torso towards the floor with your nose touching the floor.

Bring your arms to your sides near your feet with your palms facing upward.

Breathe deeply for 5 to 10 counts.

5. Savasana (Corpse pose)

This one is the easiest and leads to deep relaxation.

Just lie down on your back and leave your hands loose on your sides.

Let your body relax and sink while taking deep breaths.

You can also try a supported Savasana where a blanket or a pillow is placed along the length of your back.

6. Paschimottanasana (Seated forward bend)

Besides reducing depression and anxiety, this pose will help in digestion, stretching of back and leg muscles and promotes healthy kidneys and uterus.

While sitting with your legs stretched out straight in front of you, bend your torso forward and downward with your nose touching your knees.

Stretch out your hands parallel and above your legs to hold your feet with your palms.

Did you know?

A 2017 report from the World Health Organization stated that depression is the leading cause of disability in the world, affecting more than 300 million people worldwide. Here are some natural ways to fight depression.

Check Here Now!

Living With Depression

Here is a list of practical ways that will help you cope with depression effectively:

1. Speak up

To effectively fight depression, it is important for you to seek social help.

Connect with your friends and family. Try to talk as much and share your problems.

Talking about your worries will help to lessen the burden of your problem.

2. Engage in activities that make you happy

Depression wipes you off the energy and the zeal to engage yourself in activities that once were your passion. Not trying to pull yourself out of this state shall only worsen your depression.

Engage yourself in activities that keep you happy to fight depression effectively.

Stay active by opting for activities that relax and energize you.

3. Don’t be harsh on yourself

Depression puts you at an increased risk of self-hate and embarrassment. It makes you think negatively and very critically over all issues.

It is important that you remain compassionate towards your own self and not demean or discourage yourself from connecting with others.

Research suggests that supporting others has been found to boost one’s mood and makes one feel happy.

To overcome this condition, it is important for you to love your own self.

4. Get moving

Depression tends to keep you in bed or glued to your couch. The less you move around the more worse it may get.

Go for a 20 minute walk everyday with a friend or alone. You could also pick a sport that interests you or any other physical activity that would keep you moving.

Exercise has been found to increase the production of neurochemicals such as endorphins that elevate the mood and make you happy.

5. Get some sunshine

Studies suggest that sunlight has a therapeutic effect on those suffering from depression. Sunlight has been found to boost depressed mood and serves as a therapy.

Take short walks outdoors in the sunlight. Instead of opting to have coffee/ tea in a dark room, try doing the same in the sun.

If you practice yoga, do it during the early morning hours and enjoy the benefits of sunlight as well.

6. Have mood enhancing foods

While fighting depression, include foods that are rich in B complex, Vitamin C and omega-3 fatty acids.

Omega-3 rich foods (rich in EPA and DHA) have been found to stabilize mood swings. Include foods such as fatty fish or fish oil supplements to your diet.

Do not skip your meals. Make sure you eat after regular hours (2-3 hours).

Minimize the intake of sugars and refined carbs such as bakery items, pasta and french fries as they may lead to energy crash.

7. Seek medical help

In severe cases, when all the above mentioned practical tips fail to get results it is better that you seek help from a therapist.

Medical help will help you combat the situation and keep your symptoms in check.

Depression and related conditions

Diabetes

Did you know depression occurrence is two to three times higher in people with diabetes mellitus?

The prevalence rates of depression could be up to three-times higher in patients with type 1 diabetes and twice as high in people with type 2 diabetes compared with the general population worldwide. The presence of depression and anxiety in diabetic patients is known to worsen the prognosis of diabetes, increase the non-compliance to the medical treatment, poor quality of life and mortality.

The common cause could be stress and inflammation, as both promote depression and type 2 diabetes, giving a feasible common link between them.

Heart disease

Depression is known to be associated with poorer outcomes of coronary heart disease (CHD). Depression can act as a risk factor for a poor prognosis after a heart attack or unstable angina (chest pain at rest due to reduced blood flow to the heart). It was also found that the risk of death in heart attack survivors with depression was three times that of those without depression.

It has been linked to low-grade inflammation, which is involved in the clogging of arteries and the rupture of cholesterol-filled plaque.

Depression also boosts the production of stress hormones, which dull the response of the heart and arteries to demands for increased blood flow. It activates blood cell fragments known as platelets, making them more likely to clump and form clots in the bloodstream.

Depression and other mental disorders

Anxiety disorders

Comorbid anxiety is common in patients with depressive disorders. It complicates the clinical presentation of depressive disorders and can contribute to treatment resistance. Studies have shown that more than 70% of individuals with depressive disorders also have anxiety symptoms and 40 to 70% simultaneously met criteria for at least one type of anxiety disorder. The concurrent presence of anxiety symptoms or anxiety disorders often complicates the treatment of depressive disorders.

Schizophrenia

Although technically, depression and schizophrenia are totally different, it is seen that depressed mood is commonly associated with first-episode schizophrenia. Schizophrenia is a chronic mental disorder that affects how a person thinks, feels, behaves, and interacts with his/her surroundings. Moreover, it is reported that these symptoms impair the everyday life of the patient as well as the quality of life which requires medical treatment as well as hospitalization, in some cases.

Eating disorders

Both depressive disorders and eating disorders are multidimensional and heterogeneous disorders. Research shows that 32-39% of people with anorexia nervosa, 36-50% of people with bulimia nervosa, and 33% of people with binge eating disorder are also diagnosed with major depressive disorder. They are much more common among women and girls, but men and boys account for about 5 to 15 percent of those with anorexia or bulimia and about 35 percent of those with binge eating disorder.

Substance abuse

It’s no secret that there is a strong connection between substance use and mental illness. A strong link of depression with substance use and impairment would suggest that depressed substance users may require enhanced treatment interventions.

Phobias

Phobias are a form of anxiety disorder, wherein a patient will have an irrational, and all-encompassing fear of a person, place, thing, or a specific situation. Unfortunately, depression and anxiety are closely linked. Some of the common phobias include:

Aviophobia/aerophobia (fear of flying)

Emetophobia (fear of vomiting)

Amaxophobia (fear of driving)

Frequently Asked Questions

What is the number one cause of depression?

Which hormone is responsible for depression?

What raises serotonin levels in the brain?

What part of your brain is affected by depression?

Which gender is more likely to be depressed?

Is depression a genetic disease?

Do I need to take antidepressants forever?

What happens if you take antidepressants without depression?

What are protective factors for depression?

How can I boost my mood naturally?

Can depression be cured?

Is depression an illness or a state of mind?

Can depression be caused by something other than stress?

Are all antidepressants sedative in nature?

Can depression be controlled by willpower and involvement?

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Diabetes

Also known as Diabetes Mellitus, Hyperglycemia, High Blood Sugar

Overview

Diabetes, also known as diabetes mellitus, is a long-term metabolic disorder that causes high levels of glucose in the blood. It occurs when the pancreas – which produces the hormone insulin – either fails to produce (any or enough) insulin or fails to effectively use the insulin to keep the blood glucose in control.

There are two main types of diabetes: Type 1 and Type 2. Type 1 diabetes is known as juvenile diabetes or childhood diabetes because it occurs most frequently in children and young people. Type 2 diabetes accounts for the vast majority (around 90%) of diabetes worldwide and affects people in their 20s to 80s.

If diagnosed with diabetes (fasting >126 mg/dl and/or post meal >200 mg/dl), you may need to undergo several health tests periodically. The common lab tests include blood tests and urine tests. Diabetes can be treated with lifestyle modifications, oral medications, and a few injectables. High blood glucose, if left unchecked over the long term, can cause damage to the eyes, nerves, kidneys, legs, and heart.

Diabetes requires lifelong commitment towards following a healthy lifestyle, taking medicines on time, and getting regular checkups to detect any complications.

Key Facts

Usually seen in

Type 1 diabetes: Children below 15 years of age

Type 2 diabetes: Adults between 20 to 80 years of age

Gender affected

Both men and women

Body part(s) involved

Pancreas

Eyes

Nerves

Feet

Heart

Kidneys

Reproductive system

Prevalence

Worldwide: 463 Million (2019)

India: 77 Million (2019)

Mimicking Conditions

Metabolic syndrome

Hypothyroidism

Hemochromatosis

Pancreatitis

Cystic fibrosis

Infections

Cushing Syndrome

Necessary health tests/imaging

Glucose-Fasting Blood (FBG) Test

Glucose Postprandial Blood (PPBG) Test

Glycosylated Hemoglobin (HbA1c) Test

Glucose-Random Blood (RBG) Test

Treatment

Biguanides: Metformin

Sulfonylureas: Glimepiride & Glipizide

Thiazolidinediones: Pioglitazone

Meglitinides: Repaglinide & Nateglinide

Alpha-glucosidase inhibitors: Acarbose & Miglitol

DPP-4 inhibitors: Sitagliptin & Saxagliptin

Incretin mimetics: Exenatide, Liraglutide & Dulaglutide

Rapid acting insulin: Lispro & Glulisine

Short acting insulin: Insulin regular & Semilente

Intermediate acting insulin: Lente & Insulin Isophane

Long acting insulin: Ultralente & protamine zinc

Ultra-long acting insulin: Glargine, Detemir & Degludec

Insulin pumps

Transplants

Bariatic surgery

See All

Symptoms Of Diabetes

Irrespective of the types, some of the common symptoms of diabetes include:

Frequent urination

Excessive thirst

Sudden losss of weight

Increased hunger

Blurry eyesight

Bedwetting

Lack of energy/fatigue

Delayed healing of cuts and other injuries

Dry skin

Fungal infections

Causes Of Diabetes

Type 1 diabetes

It is known to be caused due to an autoimmune reaction in which the immune system attacks the insulin-producing beta cells of the pancreas and leads to destruction. As a result, there is very little or no insulin production, which affects the blood glucose control.

Although the exact cause of this process is not yet fully understood, it is believed that genes as well as environmental factors such as viral infection, toxins or dietary factors play a role. It occurs most commonly in children and young people.

Type 2 diabetes

It is caused because of the inability of the body to respond properly to insulin, leading to insulin resistance. This causes the hormone insulin to be ineffective, which in turn, causes the body to produce more insulin. As a result, the pancreas fails to keep up the body’s demand for more insulin. This gradually causes inadequate production of insulin leading to high blood glucose.

Most cases of type 2 diabetes go through a stage known as prediabetes, in which the cells don’t respond normally to insulin.

Other types of diabetes

Apart from Type 1 and Type 2 Diabetes, there are other forms you should be aware of. These include:

1. Prediabetes

As the name suggests, prediabetes is a condition where the blood glucose levels are higher than normal but not high enough to be classified as diabetes. In simple terms, it is a stage that, if left ignored, can develop into type 2 diabetes and diabetes-related complications. This is the reason why it is also known as ‘non-diabetic hyperglycaemia’ or ‘intermediate hyperglycaemia’. There are no clear symptoms of prediabetes, so you may have it and not know it. However, early treatment with lifestyle modifications can actually help to keep your blood glucose levels within the normal range.

2. Gestational diabetes

Gestational diabetes mellitus (GDM), defined as diabetes diagnosed during pregnancy, affects a significant proportion of pregnant women worldwide. Women usually develop gestational diabetes between the second or third trimester of pregnancy. The risk of developing this condition during your future pregnancies may also be higher. It also increases the risk of brain and spinal cord anomalies, obesity and glucose intolerance (diabetes) in the child. Due to the major repercussions in mother and baby, it is important for every pregnant woman to be aware of GDM.

3. Monogenic diabetes

As the name implies, monogenic diabetes results from a single gene rather than the contributions of multiple genes and environmental factors as seen in type 1 and type 2 diabetes. It is much less common and represents 1.5–2% of all cases. It is often misdiagnosed as either type 1 or type 2 diabetes. These monogenic forms present a broad spectrum from neonatal diabetes mellitus (or ‘monogenic diabetes of infancy’), maturity onset diabetes of the young (MODY) and rare diabetes associated syndromic diseases.

Note: Impaired glucose tolerance (IGT) and impaired fasting glycaemia (IFG) are intermediate conditions in the transition between normality and diabetes. People with IGT or IFG are at a high risk of progressing to type 2 diabetes, although this is not inevitable.

Risk Factors For Diabetes

Depending upon the type, there are several risk factors for diabetes. These include:

1. Type 1 diabetes

Although there are not many risk factors of type 1 diabetes, some factors that are known to up the risk include:

Presence of certain types of genes

Environmental triggers or a virus (any sort of infection or bacteria), which can initiate an autoimmune reaction

Presence of autoantibodies (antibodies that mistakenly attack your own body’s tissues or organs)

Geographic location (certain countries, such as Finland and Sweden, have higher rates of type 1 diabetes)

Family history of diabetes

2. Type 2 diabetes

Although type 2 diabetes is common in adults, it is also seen in older children due to childhood obesity becoming more common. The list of factors that increase the risk of type 2 diabetes include:

Being overweight or obese

Being a smoker

Family history of diabetes

Family history of high cholesterol, hypertension or cardiovascular disease

Having a sedentary lifestyle

Suffering from polycystic ovarian syndrome (PCOS)

Suffering from prediabetes

Being pregnant

Recurrent wounds/ulcers, which fail to heal

Stress

History of diabetes in pregnancy

History of impaired glucose tolerance

3. Gestational diabetes

According to the IDF, women with prior GDM are at a 7.4-fold risk of type 2 diabetes compared to women with normal blood glucose levels during pregnancy. This risk is higher 3 to 6 years post delivery. Certain factors that put you at high risk of gestational diabetes include:

BMI (Body Mass Index) that exceeds 30

Excessive weight gain during pregnancy

Family history of diabetes

History of giving birth to a baby weighing 4.5kg or more

Expecting more than one baby (twins/triplets)

Family history of hypertension

History of miscarriages or stillbirth

History of conditions related to insulin resistance or polycystic ovarian syndrome (PCOS)

History of habitual smoking

Giving birth to a child with congenital abnormality

Did you know?

Drug or chemical-induced diabetes is a type of diabetes that is caused due to drugs or chemicals such as immunosuppressive drugs (in organ transplant patients), water pills and steroids. Consult a doctor to know more about it.

Consult Now

Diagnosis Of Diabetes

The common lab tests include blood tests and urine tests. Blood tests are:

1. Random blood sugar test

The random blood glucose test is done to measure the levels of glucose circulating in the blood. This test is done to diagnose diabetes. You can take this test at any time of the day as it doesn’t need you to fast unlike other tests for diabetes. However, other tests are required to confirm the diagnosis. The test is done as a part of routine preventive health check-up or if you have symptoms of high blood glucose/hyperglycemia.

According to the American Diabetes Association guidelines for diabetes testing, the values for random blood glucose test are as follows:

Normal: Less than 140 mg/dl

Prediabetes: Between 140 and 200 mg/dl

Diabetes: Greater than or equal to 200 mg/dl

Pregnant women: Greater than or equal to 200 mg/dl

2. Fasting plasma glucose test (FPGT)

The fasting blood glucose test is one of the most common tests prescribed for diabetes. It is a blood test that measures the levels of glucose in the blood in the fasting state (empty stomach). Ideally, it is advised to not eat or drink anything (except water) for 8-12 hours before the test. It is the simplest as well as the fastest test to diagnose and monitor diabetes.

According to the American Diabetes Association guidelines for diabetes testing, the values for FPGT are as follows:

Normal: Less than 100 mg/dl

Prediabetes: Between 100 mg/dl to 125 mg/dl

Diabetes: Greater than or equal to126 mg/dl

Pregnant women: Between 90-140 mg/dl

3. Postprandial blood glucose (PPBG) test

It is performed to measure glucose levels in the blood after a period of 2 hours from the start of the last meal. It is usually recommended to screen for prediabetes and diabetes types 1 and 2. It is also used to monitor treatment efficacy in patients undergoing treatment for diabetes. The test is usually recommended when the blood glucose level falls between 140 and 200 mg/dl.

According to the American Diabetes Association guidelines for diabetes testing, the values for PPBG are as follows:

Normal: Less than 140 mg/dl

Impaired glucose tolerance (prediabetes): Between 140 and 200 mg/dl

Diabetes: Greater than or equal to 200 mg/dl

4. Hemoglobin A1c (HbA1c) test

It is a blood test that measures a person’s average blood glucose level over the past 2 to 3 months. It is ideally used to check how well your diabetes is managed with medication. However, if your fasting and postprandial levels are high, then HbA1c is advised to confirm the diagnosis.

According to the American Diabetes Association guidelines for diabetes testing, the values for HbA1c are as follows:

Normal: Less than 5.7%

Prediabetes: Between 5.7% to 6.4%

Diabetes: Greater than or equal to 6.5%

Pregnant women: Between 6% to 6.5%

5. Oral glucose tolerance test (OGTT)

The test is used to check the blood glucose levels before and 2 hours after you have a sweet drink (which in most cases is a glucose solution). The test tells your doctor how well your body processes the glucose (sugar) which in turn aids in the diagnosis of diabetes.

According to the American Diabetes Association guidelines for diabetes testing, the values for OGTT are as follows:

Normal : Less than 140 mg/dl

Prediabetes: Between 140 mg/dl to 199 mg/dl

Diabetes: Greater than or equal to 200 mg/dl

Pregnant women: Greater than or equal to 200 mg/dl

Watch this video to know why blood glucose tests are important for diabetics as well as non-diabetics.

6. Other tests

If diagnosed with diabetes, you may need to undergo several health tests periodically. These include:

1. Blood pressure

According to the American Heart Association, your blood pressure has to be less than 120/80 mmHg. This is because patients who keep their blood pressure under control are less likely to suffer from diabetes-related complications such as heart attacks, blindness, or kidney damage.

Get your blood pressure checked at every doctor’s visit or twice every month. You should also self monitor your blood pressure and maintain a blood pressure diary if you have high blood pressure coexisting with diabetes.

To keep a tab on your blood pressure (BP) level, get a digital BP monitor.

Buy Now

2. Eye examination

You should visit an ophthalmologist (eye specialist) once every year for a detailed eye examination. The doctor would check for any damage to the nerve tissues on the back of the eye (retina). Diabetes may lead to diabetic retinopathy and cataract.

3. Foot examination

You must visit your doctor for a foot examination at least once every year to get your pulse and reflexes checked in your feet. You may also be examined for any unhealed cut, infections, sores or loss of feeling anywhere in your feet. Here are a few footcare tips for diabetes.

4. Lipid profile test

Cholesterol is a waxy substance present in your blood as HDL (good cholesterol) and LDL (bad cholesterol). With diabetes, the LDL levels and triglycerides tend to increase while the HDL levels decrease, increasing the risk of heart disease and stroke.

5. Kidney function tests

You should get a yearly check for your kidneys through kidney function tests (blood tests) and a urine test. This is because, in diabetics, the blood vessels in the kidneys get injured and your kidneys cannot clean your blood properly. As a result, your body will retain more water, salt and protein than it should, which in turn can affect your kidney’s health.

6. Dental checkup

Get yourself examined every 6 months by a dentist for your gums, teeth and regular cleaning. This is because high levels of glucose in blood can lead to pain, burning and redness in the mouth and also increase the risk of various oral problems such as gingivitis (inflamed gums), periodontitis (gum disease), oral thrush, and dry mouth.

7. Liver function tests (LFT)

It should be done once annually as it helps determine the health of your liver by measuring the levels of proteins, liver enzymes, or bilirubin in your blood. Type 2 diabetes is associated with impairment in liver function by increasing the level of the liver enzymes and the risk of fatty liver disease, liver cirrhosis and liver failure.

8. Vitamin B12 test

In case you are taking metformin for a long time, then you must get your Vitamin B12 levels checked as the use of metformin may cause Vitamin B12 deficiency. Periodic measurement of Vitamin B12 levels should be considered especially if you have anemia or peripheral neuropathy.

Prevention Of Diabetes

With simple lifestyle changes such as diet control, staying active, keeping a tab on your weight and staying away from vices, you can lower your risk of type 2 diabetes. Here are a few tips to get started.

1. Make healthy food choices

Taking care of your diet is one of the most essential components to manage and prevent diabetes.

Switch to oils with high volume of monounsaturated fats & polyunsaturated fats like olive oil, canola oil, soybean oil or rice bran oil. Limit intake to one tablespoon a day.

Restrict intake of foods with high glycemic index like white breads, white rice, fatty foods, and soda.

Consume foods with low glycemic index like multigrain flour, whole grains, daals, most fruits, non-starchy vegetables and carrots.

Limit consumption of fast food such as chips, processed foods, etc.

2. Watch your weight

Losing weight can help to regulate blood sugar levels. If you have type 2 diabetes, losing just 4-6 kgs can lower your glucose levels.

The way fat is distributed in the body can also impact diabetes risk and management. People who have abdominal adiposity (fat around belly) are more prone to type 2 diabetes than those with fat mostly in the thighs, hips, and buttocks.

3. Exercise regularly

Regular exercise is a good way to keep your body healthy and prevent diabetes. Exercise at least three times a week for about 30 to 45 minutes. Warm up for 5 minutes before starting to exercise and cool down for 5 minutes after exercise.

Be more active throughout the day. This includes parking your car further from your house/office, opting for stairs instead of the elevator or walking instead of sitting while talking on the phone.

4. Manage stress better

Stress can make blood sugar levels harder to control. Avoid unnecessary stress by indulging in activities that can help you relieve stress such as reading, traveling, sports, and other hobbies.

You can also try relaxation techniques such as meditation and yoga to alleviate anxiety and stress. You may join a yoga club or take out 10-15 minutes every day to practice meditation.

Finding it hard to deal with stress? Try our wide-range of stress management products.

Explore Here

5. Go for regular health check-ups

As most of the symptoms of diabetes are not detected until late in its course, it is wise to get a preventive health checkup to know about diabetes. You should get a health check every 6 months to a year if you have any risk factors of diabetes like hypertension, obesity or heart disease.

6. Quit smoking

Smoking has been found to directly increase the risk of several diabetes complications such as cardiovascular diseases, stroke, eye diseases, nerve damage, and kidney damage. It has also been found to reduce blood flow to the feet and other body extremities. This can lead to foot problems and slow down the healing of injuries. Irregular blood flow can lead to infections and unwanted mouth ulcers, which puts you at risk of oral health problems.

Hence, it is wise to quit smoking to lower your risk of diabetic complications. Talk to your doctor for measures that can help you to quit smoking.

Tobacco is injurious to the health. Say no to tobacco. Try our smoking cessation product range.

Check Now

Celebs affected

Arvind Kejriwal

Delhi CM Arvind Kejriwal mentioned on twitter that he also suffers from diabetes and takes insulin to keep his blood glucose level under control.

Tom Hanks

The Oscar winning Hollywood actor, Tom revealed that he was diagnosed with type 2 diabetes on the American Talk show "The Late Show" in the year 2013 and he always makes sure to follow strict plan to manage diabetes.

Specialist To Visit

If you have been experiencing symptoms such as tingling sensation or numbness of the limbs, feeling excessively hungry or thirsty, or unexplained weight loss, then it is wise to consult following specialists:

Endocrinologist

Diabetologist

If you are already diagnosed with diabetes, then getting a regular health check-up is a must. This is because, chronic or uncontrolled diabetes can impact other major organs of the body such as the eyes, legs, nerves, kidneys, and gums. So if you suffer from any complications due to diabetes, then getting in touch with the respective specialist can help you to manage and prevent these problems. Some of the common specialists who can help are:

Nephrologist

Neurologist

Podiatrist

Dentist

Ophthalmologist

Dietician

Consult India's best doctor's online with a single click. Click here to book an appointment.

Consult Now

Treatment Of Diabetes

Diabetes can be treated with medications and injections along with few lifestyle modifications. Based on your blood glucose level, your doctor might recommend medicines/injections to control diabetes. Some of the common types of medicines for diabetes include:

A. Oral antidiabetics

1. Biguanides

This class of drugs help to improve glucose control by suppressing glucose production by the liver, decreasing the absorption of glucose by the intestine and increasing the insulin sensitivity. Metformin is generally the first medication prescribed for type 2 diabetes.

2. Sulphonylureas

These drugs are known to increase the secretion of insulin by the pancreas to manage diabetes. Some of the common examples of drugs belonging to this class include:

Glimepiride

Glipizide

3. Thiazolidinediones

This class of drugs helps control diabetes by increasing insulin sensitivity in the muscles and fat tissues. Examples of this class of drugs include:

Pioglitazone

4. Meglitinides

This class of drugs increases secretion of insulin by the pancreas to treat diabetes. Some of the common examples include:

Repaglinide

Nateglinide

5. Alpha-glucosidase inhibitors

As the name suggests, these drugs inhibit the enzyme alpha glucosidase thereby decreasing the absorption of glucose by the intestine. Some of the commonly available drugs under this class include:

Acarbose

Miglitol

6. DPP-4 inhibitors

This class of drugs works by improving the secretion of insulin by the pancreas thereby helping in the treatment of diabetes. Examples of this class of drugs are:

Sitagliptin

Saxagliptin

7. Incretin mimetics

These oral antidiabetics are known to increase the secretion of the hormone insulin and help in controlling diabetes. Commonly known as glucagon-like peptide 1 (GLP-1) receptor agonists or GLP-1 analogues, this class includes drugs such as:

Exenatide

Liraglutide

Dulaglutide

B. Insulin injections

This includes insulin (mainly human insulin) which increases the uptake of glucose by the cells and helps to control diabetes. There are 5 different types of insulin available currently which are recommended based on the severity of the condition. These include:

Rapid Acting insulin (Examples: lispro, glulisine, etc)

Short Acting insulin (Examples: insulin regular, semilente)

Intermediate Acting insulin (Examples: lente, insulin Isophane, etc)

Long Acting Insulin (Examples: ultralente, protamine zinc)

Ultra-Long Acting Insulin (Examples: glargine, detemir, degludec, etc)

Here’s more on how to use insulin injection for diabetes.

Click To Read

C. Insulin pumps

Insulin pumps are small-sized computer devices which deliver small doses of short acting insulin in a continuous manner, just like how pancreas works. It provides a steady flow through day and night, called as basal insulin, and an extra dose during meals, called as bolus, based on the body’s requirement of insulin. All you need to do is attach it to your body using an infusion set. Talk to your doctor if you want to know more about insulin pumps to manage your diabetes.

D. Transplants

Some people who have type 1 diabetes, a pancreas transplant may be an option. Islet transplants are being studied as well. With a successful pancreas transplant, you would no longer need insulin therapy. But transplants aren't always successful and in some cases these may pose serious health risks.

E. Bariatric surgery

Also known as weight loss surgery, bariatric surgery helps to cut down the fat through surgery. Although it is not specifically considered a treatment for type 2 diabetes, people with type 2 diabetes who are obese and have a body mass index higher than 35 may benefit from this surgery.

Here’s more on what weight loss surgery is and who can go for it.

Read To Know

Home-care For Diabetes

Diet in diabetes

Whether you’re trying to prevent or control diabetes, your nutritional needs are virtually the same as everyone else, so no special foods are necessary. However, certain modifications in terms of quantity and type of food might be required.

1. Eat more

Healthy fats from nuts, olive oil, fish oils, flax seeds, or avocados

Fruits and vegetables—ideally fresh, the more colorful the better; whole fruit rather than juices

High-fiber cereals and breads made from whole grains

Fish and shellfish, organic chicken or turkey

High-quality protein such as eggs, beans, low-fat dairy, and unsweetened yogurt

2. Eat less

Trans fats from partially hydrogenated or deep-fried foods

Packaged and fast foods, especially those high in sugar, baked goods, sweets, chips, desserts

White bread, sugary cereals, refined pastas or rice

Processed meat and red meat

Low-fat products that have replaced fat with added sugar, such as fat-free yogurt

3. Choose high-fiber, slow-release carbs

Carbohydrates have a big impact on your blood sugar levels—more so than fats and proteins—so you need to be smart about what types of carbs you eat. Limit refined carbohydrates like white bread, pasta, and rice, as well as soda, candy, packaged meals, and snack foods. Focus on high-fiber complex carbohydrates—also known as slow-release carbs. They are digested more slowly, thus preventing your body from producing too much insulin.

Dr. Beena Bansal (MBBS, MD, DM, Endocrinology) tells us about some simple ways to curb our food cravings. Watch the video now!

Fruits in diabetes

There is mixed perception about intake of fruits for diabetes. Some people believe that diabetics should completely cut down fruits from their diet while some think that one can include as much fruits as they want in their diet as it doesn’t have any impact on blood glucose level. However, neither is true. It is best to include fruits as an integral part of your daily meal plan while keeping a tab on the carbohydrate content. Here is a quick guide to help you out with your daily needs of fruits:

Whole fruits

1 small apple

1 small chickoo

1 small orange

1 small guava

1 small pear

Cut fruits

Half banana

1 slice mango

1 cup papaya

3/4th cup muskmelon

1 ¼ cup watermelon

Watch the video to know more about which fruits to eat and which fruits to avoid.

Exercise in diabetes

Exercises are designed to help people with diabetes avoid problems which can result from unwise exercise choices. Aerobic activity is one of the effective exercise options to control diabetes. When done at moderate intensity it raises your heart rate and makes you sweat thereby helping you to maintain an optimum blood glucose level.

Some of the common forms of aerobic exercises are:

Brisk (fast-paced) walking

Light jogging

Bike riding

Playing tennis or badminton

Swimming/ water aerobics

Gymming

Roti Vs Rice: Which is Healthier?

Ms. Chhavi Kohli, a well-known diabetes educator, talks about the difference in nutrient content between rice and roti and how diabetic patients can include rice in their daily diet. She also explains about the right amount of rice to be eaten and the health benefits of eating brown rice over white rice.

Watch Now

Complications Of Diabetes

Insulin deficit, if left unchecked over the long term, can cause damage to many of the body’s organs, leading to disabling and life-threatening health complications such as:

1. Diabetes retinopathy (Eyes): High blood glucose levels shall put you at an increased risk of eye problems such as blurred vision. It can affect the shape of your lens and damage the blood vessels in your eyes. Diabetic retinopathy can also increase the risk of cataract and glaucoma.

2. Diabetic foot (Feet): Diabetes (both type 1 and 2) causes damage to blood vessels and peripheral nerves that can result in problems in the legs and feet. Two main conditions associated with diabetes are peripheral artery disease (PAD) and peripheral neuropathy leading to increased risk of foot problems. PAD means narrowing and hardening of blood vessels whereas peripheral neuropathy refers to damage to the small nerves in feet due to diabetes. In addition to these, diabetic patients may experience varied foot problems like overgrowth in the form of corns, calluses, ulcers, painful events such as bunions and fungal infections.

3. Diabetic nephropathy (Kidneys): Diabetic kidney disease, also known as diabetic nephropathy, is one of the most common complications of diabetes. Excess glucose can cause thickening of blood vessels in the kidneys. It also causes thickening of the filtration units (glomerulus) that affects the normal functioning of the kidneys. Healthy kidneys do not allow excess proteins to pass through the filters. But when the filtration process is impacted, microalbumin, a type of protein, is excreted through urine. This gradually increases the pressure on the kidneys and in the long run leads to chronic kidney disease and kidney failure.

4. Diabetic neuropathy (Nerves): High blood glucose levels can impair the blood flow to the nerves by causing damage to the small blood vessels. As a result, it can cause symptoms such as numbness, decreased sensation and pain in the extremities. Early diagnosis and treatment can help prevent or delay these complications.

5. Atherosclerosis (Blood vessels): High blood glucose levels can cause damage to larger blood vessels of the heart. This not only impairs the blood flow to the heart but can also increase the risk of atherosclerosis, which leads to narrowing of arterial walls throughout the body. This narrowing of arteries can lead to decreased blood flow to the heart muscle (causing a heart attack) or to the brain (leading to stroke), or to extremities (leading to pain and decreased healing of infections).

6. Diabetic ketoacidosis: It is a life-threatening disease in which a person’s cells do not get enough sugar required for energy. As a result, the body starts to break down fats to get the required energy. This causes the production of a compound called ketones which are released in the blood. It occurs when there isn’t enough insulin in the body to use glucose. This is a sign that your diabetes is getting out of control. Although it can happen to anyone with diabetes it is more common in people with type 1 diabetes.

7. Erectile dysfunction (ED): In a person suffering from diabetes, there is a high chance of getting ED around 10-15 years earlier than non-diabetics. This can be attributed to factors such as longer duration of diabetes, old age, poor glycemic control, and neuropathy. It is caused due to hormonal, neurological, vascular and psychological effects of high blood glucose levels on the body. ED can cause an increase in mental stress, lead to disordered interpersonal relationships and interfere with sexual life, thus affecting the overall quality of life in diabetics.

Gestational Diabetes Mellitus (GDM)

GDM not only imposes immediate risks for both mother and fetus but can also affect the future health of both the mother and child throughout their life. The immediate complications for the mother include:

Preeclampsia (characterized by high blood pressure)

Need for cesarean sections

Polyhydramnios (excessive amniotic fluid)

Oligohydramnios (deficiency of amniotic fluid)

The health complications in the baby include:

Hyperinsulinemia (high insulin level)

Macrosomia (the baby who is significantly larger in size than normal)

Shoulder dystocia (infant’s shoulder gets lodged in the mother’s pelvis during delivery)

Neonatal hypoglycemia (low blood glucose level)

Respiratory distress syndrome (immature lungs)

Stillbirth

Alternative Therapies For Diabetes

Ayurveda

The science of Ayurveda manages diabetes through a combination of activities that include exercise (Vyayam), dietary regulation (Pathya), panchakarma (bio-purification) and medicines. It is best to consult an ayurveda consultant before taking any ayurvedic medicine for diabetes. Some household herbs and spices that you can include in your diet include:

Powdered Jamun seeds can be taken with water or buttermilk (chaach).

Methi (Fenugreek) seeds are taken with water 15-20 minutes before each meal. Methi has soluble fibers that slow down the digestion and absorption of glucose.

Bael leaves are squeezed to prepare fresh juice that can be taken along with a pinch of black pepper.

Dalchini (Cinnamon) in powdered form can be taken with water as it helps in improving sugar as well as cholesterol level.

Concentrated amla juice taken along with bitter gourd juice, helps in releasing more insulin.

Karela (Bitter gourd) juice is recommended to be taken every morning.

Homeopathy

Defined as a complementary medicine, homeopathy majorly concentrates on improving the functioning of the pancreas to produce insulin. Homeopathy experts rely on the patient’s history and temperament to devise a constitutional medication. However, it is recommended to use the homeopathic medicines only if prescribed by the homeopath and that too alongside the usual course of medications suggested.

Yoga

Yoga asanas help you to ease stressful thoughts and help you to improve mental health in diabetics. Restorative yoga involves yoga poses and healing through relaxation techniques with conscious breathing and power yoga has been found to benefit for losing weight (a risk factor for diabetics). It has been studied for controlling both the symptoms and complications associated with type 2 diabetes mellitus.

Acupuncture

This technique uses needles to treat chronic pain. Acupuncture may be effective in treating not only diabetes, but also in preventing and managing complications of the disease.

Massage therapy

Massage therapy could be incorporated into relaxation therapy, but it also serves another purpose that can be particularly useful for diabetics. The extreme stress-reducing benefits of massage can help in controlling the counter-regulatory stress hormones and help the body to use insulin more effectively.

Living with Diabetes

As diabetes is a chronic health problem, it is imperative to make small changes in your lifestyle to manage the condition in a better way. Here are a few measures to include in your care plan.

1. Learn about the condition

It is very important for a person with diabetes to accept it bravely and at the same time be well-informed about the condition. Learn about the symptoms, the risks of potential complications, practical ways to manage diabetes and the importance of treatment. This includes reaching out to your doctor for more information, working out with a nutritionist for a customized meal plan or joining support groups to share your stories and be on top of your game when it comes to diabetes management.

2. Take care of your mental health

Stress, anxiety and depression are some of the common mental problems seen in people with diabetes. According to the CDC, diabetics are around 2 to 3 times more likely to suffer from depression than those without diabetes. And most of those with stress, anxiety and depression do not get diagnosed or treated which in turn can hamper their diabetes control and increase the risk of health complications.

Hence, it is important to keep a tab on your mental health and look out for any warning signs of depression which include feeling sad, loss of interest, being extremely tired, difficulty in concentrating and being irritable and anxious. If you have any of these symptoms, do consult your doctor immediately for appropriate diagnosis and treatment.

Also, keep stress and anxiety at bay with simple tips such as:

Indulging in some relaxation techniques like meditation or yoga.

Talking to your friends or family about your stress.

Trying out a new hobby like gardening, dancing, playing a music instrument, etc.

Spending some “ME” time by doing things you like such as reading a book or taking a stroll in a park.

3. Be ready to tackle emergencies

Getting sick is a part and parcel of life however, if you suffer from diabetes you need to be extra careful as diabetics are more prone to infections. So it is wise to plan out your sick days beforehand by stocking up on your medicines (including the OTC medications) and healthy foods and drinks. Moreover, as the blood glucose level can be hard to manage when sick, make sure to record your reading daily and take your medicine without fail.

There are times when diabetics who are on medicines or take insulin can have low blood glucose levels. Also, skipping meals, eating less or exercising more than usual can lead to a sudden drop in blood sugar level (hypoglycemia). In such cases of diabetic emergencies consult your doctor immediately.

Here's more on what to eat when the blood sugar dips.

Click To Read

4. Diabetes care plan

When it comes to diabetes care plan, it can be divided into four key measures which include:

1. Lifestyle tips such as eating a healthy diet and exercising regularly without fail. A diet rich in proteins, complex carbohydrates, healthy fats and fibre is the key to keep your blood glucose levels in control. Ensure to get a minimum of 150 minutes of moderate intensity exercises such as brisk walking per week.

2. Recording and maintaining charts of your blood glucose levels on a daily basis helps you to know how well your treatment is working. Do not skip your medicines or stop taking your medicines even if your diabetes is in control.

3. Self-monitoring of blood glucose (SMBG) is important as it allows you to know your blood glucose level at any time and helps prevent the consequences of very high or very low blood sugar. It also enables tighter blood sugar control, which decreases the long-term risks of diabetic complications. Read more on how to use blood glucose monitors and tips to buy a glucometer.

4. Regular checkups are a must as these help you to understand if you are having trouble meeting your treatment or blood glucose targets. Get HbA1c level every three months along with a doctor visit every six months. Every year do a complete checkup to examine your eye health, lipid profile and kidney health.

Getting a regular health check-up is a good idea to prevent complications due to diabetes.

Book a Test

Myth: You must avoid sugar at all costs.

Fact: You can enjoy your favorite treats as long as you plan properly and limit hidden sugars. Dessert doesn’t have to be off limits, as long as it’s a part of a healthy meal plan. Check out our range of diabetic-friendly health drinks and superfoods.

Click Here

Frequently Asked Questions

Can eating sweets cause diabetes?

Is diabetes insipidus same as diabetes mellitus?

Do diabetes medicines help lose weight?

Can people with diabetes have proteins?

How is bitter gourd (karela) juice helpful in diabetes?

Are artificial sweeteners good for people with diabetes?

What is the best dinner time for people with diabetes?

Wheat or jowar roti: what is better for people with diabetes?

Can diabetes cause kidney failure?

Does eating potatoes cause diabetes?

Can diabetes be cured?

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Diphtheria

Also known as Strangling angel of children

Overview

Diphtheria is an infectious disease caused by the bacteria Corynebacterium diphtheriae. It is highly contagious and can spread through droplet transmission such as during breathing, coughing, speaking, and even laughing.

The disease is most often associated with a sore throat, fever, and the development of an adherent membrane known as pseudomembrane on the throat. The bacteria also produces exotoxins that can damage the heart, lungs, kidney, and nerves.

Diphtheria was a very common cause of death in children and adolescents in the 1920s. Proper vaccination that starts from infancy has reduced the number of cases to a larger extent.

The main risk factors for developing diphtheria are not being immunized against the disease and other factors like crowding, weak immunity, and direct or indirect contact with an infected individual.

Diagnosis is made by the patient's history and physical examination. Culture of Corynebacterium from the patient yields a definitive diagnosis although the patient should be treated if diphtheria is even suspected. The treatment of diphtheria includes early administration of antibiotics and diphtheria antitoxin.

Key Facts

Usually seen in

All age groups but more common in children below 12 years of age

Gender affected

Both men and women

Body part(s) involved

Mouth

Nose

Tonsils

Larynx

Pharynx

Throat

Skin

Heart

Nervous system

Prevalence

Worldwide: 8819 (2017)

India: 3485 (2020)

Mimicking Conditions

Epiglottitis

Retropharyngeal Abscess

Angioedema

Infectious mononucleosis

Pharyngitis

Oral candidiasis

Necessary health tests/imaging

Physical examination & medical history

Culture test

Toxin testing: Elek test, PCR testing & Enzyme immunoassay (EIA) test

Blood tests: Complete blood count (CBC), Troponin & Diphtheria antitoxoid antibody

Imaging tests: Chest X-ray, neck X ray & Electrocardiography (ECG)

Treatment

Diphtheria antitoxin

Antibiotic: Erythromycin and Penicillin G, Linezolid & Vancomycin

See All

Symptoms Of Diphtheria

The symptoms of diphtheria depend upon the part of the body affected by the bacteria. It usually infects the respiratory tract and skin involving tonsils, throat, nose, and/or skin. The signs and symptoms can be mild or severe. The incubation period is generally 2 to 5 days. Even asymptomatic patients, if not treated with antibiotics, can pass the infection to another person for up to 4 weeks.

The bacteria attaches to the lining of the respiratory tract and cause symptoms such as:

Weakness

Sore throat

Runny nose

Hoarseness

Chills

Painful swallowing

Low grade fever (about 100.4 to 102° F)

Generally feeling unwell (malaise)

Swollen lymph nodes in the neck

Cervical lymphadenopathy (enlargement of lymph nodes in the head and neck)

Swelling of the palate (roof of the mouth)

Loss of appetite

Tiredness/fatigue

In children, symptoms may also include:

Rapid heart rate

Nausea

Vomiting

Headache

The bacteria can also affect skin (cutaneous/skin diphtheria) and cause symptoms such as open sores and ulcers. These sores appear on the arms and legs, sometimes resemble other skin conditions such as eczema, psoriasis, and impetigo. The bacteria can also cause painful, red and swollen lesions on the skin.

Formation of pseudomembrane

The diphtheria bacteria makes a thick and gray coating in the respiratory system near tonsils or other parts of the throat which is called pseudomembrane. The pseudomembrane may narrow and block the airway. It can also paralyze the roof of the mouth. All these manifestations can be experienced in the following symptoms:

Difficulty in breathing

Difficult in swallowing

Gasping sound while inhaling

In severe cases the toxin produced by the bacteria can damage nerves of the face, throat, arms, and legs and cause:

Sudden Movements of the eyes, arms and legs

Respiratory failure

Rapid heart rate

Irregular heart rhythm

Low blood pressure

Myocarditis

Heart failure

Causes Of Diphtheria

Diphtheria is caused by a bacteria known as Corynebacterium diphtheria which can enter the body through nose, mouth or broken skin. The bacteria produces a toxin that can travel via the bloodstream and lymph vessels. This toxin can damage the heart, kidney, and nervous system.

Transmission

It is a highly contagious disease and can spread through close contact with the discharge from an infected person's eyes, nose, throat or skin. It can transmit through:

Coughing, sneezing, or speaking via respiratory droplets

Touching infected sores or ulcers

Touching contaminated clothes or objects through a break in the skin

Did you know?

Respiratory infections can also spread through frequently touched surfaces. This mode of transmission of infection is called indirect contact transmission and the surfaces are known as fomites. Read in detail how respiratory infections spread through surfaces.

Tap To Read!

Types Of Diphtheria

There are several types of diphtheria according to the part of the body affected. It can be categorized as:

Respiratory diphtheria

In this, the bacteria affects the part of the respiratory tract that includes the nose, larynx, and tonsils. It is of following types:

Nasal diphtheria: In this, the pseudomembrane formed by the bacteria appears inside the nostrils. This form is not dangerous as almost no toxins are absorbed from this location. The chances of systemic complications are also rare in nasal diphtheria.

Faucial diphtheria: It is the most common form of diphtheria in which the effect of the toxin is generally limited to the tonsils. People generally recovered well from this form with early treatment.

Nasopharyngeal: As the name suggests, here infection spreads to nose and pharynx. It is the most fatal form of diphtheria as infection can spread to blood. This can lead to septicemia which refers to blood poisoning.

Laryngeal diphtheria: This form of diphtheria can block the airway as infection spreads downward from the nasopharynx to the larynx.

Cutaneous diphtheria

In this, the skin is affected by the bacteria which can cause symptoms like open sores, lesions and ulcers on the skin.

Risk Factors For Diphtheria

Diphtheria is a vaccine preventable disease. The complete vaccination provides a good way to prevent diphtheria and decreases the chances of developing it even in the presence of risk factors. The risk of getting diphtheria are high if you:

Are not vaccinated

Are inadequately vaccinated

Are living in temperate region

Are exposed to cold environments

Are a frequent traveler in the diphtheria contaminated zone

Are in close contact with an infected person

Have weak immune system

Live in unhygienic and crowded condition

Travel to particular areas that are known for diphtheria such as South-East Asia, Russia and surrounding countries, Baltic countries and Eastern European countries.

Diphtheria is common in children, however older people with some comorbidities are also at higher risk of developing diphtheria. People with low socioeconomic status also have higher chances of getting this infection.

Diagnosis Of Diphtheria

Physical examination and medical history

Doctors generally decide if the patient has diphtheria by analyzing the symptoms and discussing the medical history including vaccination status and travel history. The throat is specifically examined for gray or green membrane which is a characteristic of diphtheria. The doctor also asks if the patient has come in contact with someone who has had diphtheria.

Culture

The diagnosis is confirmed by taking a sample and sending it to a laboratory for testing the growth of bacteria. The samples are taken by swabbing the throat and wound in case of skin infection. This procedure takes time so the treatment is usually started after physical examination.

Toxin testing

The test detects the toxin produced by the bacteria. It helps in the differentiation of toxigenic strain from non-toxigenic variants. This is done through:

Elek test

PCR testing

Enzyme immunoassay (EIA) test

Blood tests

Complete blood count: It helps to find out the level of infection by assessing several blood parameters.

Understand in detail about complete blood count.

Read To Know!

Troponin I: It is a marker of cardiac (heart) injury. This helps in finding out the extent of the damage to the heart.

Diphtheria antitoxoid antibody: This test measures the level of antibodies in the blood. The antibodies can be produced either through vaccination or previous infection.

Imaging studies

Chest and neck x-ray: These imaging tests are used to detect swelling of the soft tissue structure around the pharynx, epiglottis, and chest.

Electrocardiography (ECG): ECG is done in case of suspected heart disorders.

Celebs affected

George Washington

George Washington, who served as the 1st president of the United States was diagnosed with diphtheria at the age of 15 years. He was successfully treated with early medical intervention.

Specialist To Visit

Diphtheria demands immediate medical attention because any delay in treatment can lead to systemic complications. So, it is very necessary to consult the doctor as early as possible to get the best effective treatment and to avoid complications.

You may consult doctors from these specialties such as:

General physician

ENT specialist

Infectious disease specialist

Pulmonoligist

In case of heart complications, consult a cardiologist. You may consult a pediatrician in case your child is facing any such issues.

Consult India’s best doctors online from a single click.

Consult Now!

Prevention Of Diphtheria

Vaccination

Diphtheria is a vaccine preventable disease. Before the introduction of the diphtheria vaccine, it was one of the leading causes of hospitalization and death especially in infants and children. Getting adequately vaccinated is the best way to prevent diphtheria. The vaccination also reduces the chances of community spread.

Types of diphtheria vaccines

DTaP vaccine is for young children & provides protection from diphtheria, tetanus, and whooping cough

DT vaccine protects young children from diphtheria and tetanus

Tdap vaccine is for preteens, teens, and adults & provides protection from tetanus, diphtheria, and whooping cough

Td vaccine protects preteens, teens, and adults from tetanus and diphtheria

Things to consider before vaccination

It is always advisable to tell your doctor if you:

are unwell on the day of vaccination

have had a serious reaction to any vaccine in the past

have had a severe allergy to anything

are pregnant

Who should get vaccinated?

Babies and children: Babies and younger children need 3 and 2 shots of DTaP vaccine respectively to get the high protection against diphtheria, tetanus, and whooping cough (pertussis). These shots are given at the following ages:

2 months

4 months

6 months

15 to 18 months

4 to 6 years

Pregnant women: TdaP vaccine is administered in the third trimester of every pregnancy, as part of the combination vaccine for diphtheria, tetanus and whooping cough. This provides protection to the baby for the initial few months.

Read in detail about the benefits of Tdap vaccination in pregnancy.

Read in detail!

Preteens and teens: One shot of TdaP is given to the children between the age of 11 to 12 years to boost their immunity.

Adults: Tdap can be given at any age to the adults, if the person has not received it in the past. The shot is followed by either a Td or Tdap every 10 years.

Most people think that vaccines are for adults. However, what many people are unaware of is the fact that an adult also needs to be vaccinated for several diseases.

Understand what are the other vaccines needed for adults.

Read Now!

The vaccine is also advised for:

People who are traveling overseas, who haven’t had a diphtheria vaccine in the past 10 years

Laboratory workers who might have contact with the bacteria that causes diphtheria.

Who should not get these vaccines?

Vaccines are generally safe and do not cause any severe reaction. Vaccines are not given in case a child had a:

Life-threatening allergic reaction after a dose vaccine

Severe allergy to any component of the vaccine

Side effects of vaccination

Most people who get any of the diphtheria vaccines will not face any serious side effects. But, in some cases vaccines can cause milder side effects which can be easily managed. Most of the effects usually go away on their own. The common side effects can include:

Redness and swelling at the injection site

Fever

Loss of appetite

Tiredness

Vomiting

Headache

Chills

Body aches

Managing the side effects

All the side effects are usually mild and occur for a short period of time. They generally occur in the first 1-2 days of vaccination and do not require any specific treatment. However, following measures can be taken to reduce that.

Consume fluids

Avoid overdressing the children

Take paracetamol after consulting with doctor if the fever is high or to manage the swelling and pain at the injection site

Did you know?

Some vaccines are delivered as early as on birth such as BCG, oral polio vaccine or DPT vaccine which can prevent a wide range of diseases such as tuberculosis, hepatitis B, polio, etc. But there are some vaccines that you may not know about that have gained importance over time and that you might want to consider for your kids. Learn in detail about various lesser known vaccines that can benefit your child.

Click To Read!

Treatment Of Diphtheria

If diphtheria is suspected, the treatment usually begins before the confirmation of laboratory tests to avoid any complications. The symptoms, overall health, and age of the patient is considered before initiating the treatment. The two main treatment options include:

Diphtheria antitoxin (DAT)

The prompt administration (intravenous or intramuscular) of DAT is the most effective treatment for diphtheria. It aids in the neutralization of the unbound toxin produced by the bacteria in the blood. Antitoxin has no role in neutralizing the already bound toxin. Therefore, it is necessary to administer it as early as possible to avoid complications.

Antibiotics

The treatment of antibiotics is usually effective before the bacteria starts releasing toxins in the blood. It offers benefits such as:

Reduces the amount of toxins released in the blood

Fastens the recovery

Prevents the spread of infection

The commonly used antibiotics in diphtheria infection are erythromycin and penicillin G. linezolid and vancomycin are also used in case of antibiotic resistance. A full course of antibiotics, as advised by the doctor should be followed by the patient to completely remove the bacteria from the system.

Read 11 valuable tips to be followed while taking antibiotics.

Click To Know!

Diphtheria is a severe and a highly infectious disease. Apart from the basic treatment given, the procedure may also include:

Hospitalization of the patient

Isolation to reduce the transmission

Other medicines such as corticosteroids, adrenaline or antihistamines to reduce any severe reaction to the antitoxin given

Tracheostomy (surgical insertion of a tube in the windpipe), in case of severe breathing difficulties

Surgery to remove the gray membrane in the throat, if necessary

Treatment of complications, for example medications to treat myocarditis (inflammation of the heart)

Bed rest for about one month or longer, for complete recovery

Cleaning sores with soap and water, in case of skin diphtheria

Home-care For Diphtheria

Eat soft food diet

Diphtheria causes sore throat and difficulty in swallowing. It is better to consume soft foods and liquids.

Self isolation

Since diphtheria is a highly contagious disease, it is necessary to isolate the patients to reduce the spread of infection.

Maintain hygiene

Strict hygiene should be maintained by the people who are caring for diphtheria patients. The precautionary measures such as washing hands, particularly before cooking food and handling the patient should be followed.

Get vaccinated

Vaccination is also necessary for the patient who has recovered from the diphtheria infection because it can occur again also. The care-takers and the people who are in close contact with the patient should also take a booster dose of vaccine.

Take sufficient rest

The recovery of the patient is generally very slow, especially if the infection was severe. Such people are advised to take proper rest for a couple of weeks. The normal physical exertion may be harmful if the disease has affected the heart.

Close contacts get tested

The people who are in close contact with the patient should go for the test of diphtheria. The treatment protocol is initiated in these people in case of any suspicion. This is required even in the people who have been vaccinated.

Did you know?

Diphtheria was a very common cause of death in children and adolescents in the 1920s. The diphtheria vaccine, first used in the United States in the early 1940s, has virtually eliminated the disease. Now very few cases are seen in the world, especially in the developed countries. But, outbreaks still occur around the world with a drop in immunization rates.

Alternative Therapies For Diphtheria

Home remedies

Diphtheria is a severe respiratory illness. Doctors should be immediately consulted to avoid any life threatening complications. The treatment of diphtheria consists of antibiotics and antitoxin. However, some home remedies can be used as an adjunct to medical treatment. It is also advisable to consult the doctor before starting any home remedies:

Garlic (Lehsun): Chewing a clove of garlic every three to four hours for a week helps to reduce fever associated with diphtheria. It also helps to soothe the throat.

Pineapple: Pineapple juice helps in removing the throat deposits. It contains bromelain that is effective in managing coughing.

Basil leaves (tulsi): The antibacterial property of tulsi helps in reducing respiratory infections. It can be consumed as water infused with basil leaves.

Passion flower: This herb can help to alleviate symptoms of diphtheria. Add a tablespoon of the passion flower powder to a cup of boiling water. Strain and drink it at least twice a day.

Castor leaves: It possesses anti-inflammatory and antimicrobial properties that help to manage the condition. Ground castor leaves can be taken orally. A paste of castor leaves, garlic juice and drumstick leaves can also be inhaled to clear the nasal passage.

Complications Of Diphtheria

The pseudomembrane formed by the bacteria separates from the tissues in 7 to 10 days. The toxin produced by the bacteria can reach the heart, kidney, muscles, and liver which can cause various severe complications:

Cardiac complications

The heart is usually the first organ to be affected. Diphtheria usually affects the heart in the second or third week. The patient can develop:

Myocarditis (inflammation of the heart muscle i.e, myocardium)

Cardiac arrhythmia (irregular heartbeat)

Circulatory collapse

Neurological complications

The toxin can affect the nerves of the brain, extremities and muscles of the pharynx and soft palate causing:

Neuritis (may lead to respiratory failure and pneumonia)

Nerve weakness

Encephalitis (rare in children)

Oculomotor nerve palsy (Involuntary movement of eyeball)

Reflux of food through nose

Respiratory obstruction

In most of the cases, the pseudomembrane blocks the respiratory tract and can cause

suffocation. This requires immediate mechanical ventilation and intubation.

Kidney damage

The toxin released in the blood can also damage the kidney, thereby affecting their ability to filter wastes from the blood.

Living With Diphtheria

Here are a few simple tips which could help to deal better with diphtheria infection:

Choose food wisely

The patients of diphtheria usually find it hard to swallow food due to the development of an artificial membrane in the throat. Liquids and soft food items might help in this condition. The incorporation of healthy foods such as fresh fruits and vegetables in the form of juices and smoothies may also speed up the recovery process.

Foods to be taken

Fluids (juices)

Milk

Garlic

Food in semi-solid form (ice creams)

Fruits and vegetables

Foods to be avoided

Spicy food

Saturated oils and trans fats

Keep hydrated

Drinking enough water especially before bedtime helps in clearing the throat and loosening the mucus.

Take plenty of rest

Rest plays a very crucial role in complete recovery of the diphtheria patient. Avoid vigorous exercise and take sufficient rest as advised by the doctor. Avoid resuming physical activities early and give the body some time to heal completely from the effects of the bacteria.

Sleep the right way

The patient should avoid sleeping on the back as it can trigger the accumulation of mucus in the throat. It is advised to use a thick pillow or use two pillows. This helps in elevating the trunk region, thus opening up the airways.

Practice Yoga

Do some breathing exercises such as pranayama. This will ease the breathing process. Some yoga such as sarvangasana and uttanasana relaxes the body and helps in sound sleep.

Frequently Asked Questions

How serious is diphtheria?

How does diphtheria spread?

Can you get diphtheria more than once?

Who should get diphtheria vaccines?

How many doses of vaccine are needed?

How effective are diphtheria vaccines?

Which diphtheria vaccine should be given to pregnant women?

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Dizziness

Also known as Giddiness, Vertigo, Faintness, Lightheadedness, Unsteadiness, Dysequilibrium and Wooziness

Overview

Dizziness is a sensation of feeling off-balance, lightheaded, or giddy. Dizziness is not a disease but rather a symptom of various disorders. Most cases of dizziness are mild and occur as a one-and-off episode. Occasional dizziness is not something to worry about.

However, dizziness can be accompanied by nausea, vomiting, headaches, weakness in the hands or legs, shortness of breath, and difficulty in speech. If dizziness is persistent for a prolonged period and interferes with the quality of life, it is essential to seek medical care.

The cause for dizziness must be investigated in such cases as it can sometimes be an underlying symptom of some other medical condition. The aim of the treatment is to treat the underlying cause.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Brain

Ear

Necessary health tests/imaging

Blood tests: Complete blood count (CBC), Blood sugar tests, Electrolyte levels, Thyroid tests & Kidney function tests

Cardiac tests: Electrocardiography (ECG) & Echocardiography (Echo)

Imaging studies: CT Scan (head), CT neck plain & MRI brain

Balance tests: Rotary chair test, Vestibular evoked myogenic potentials (VEMP) test & Electronystagmography (ENG)

Treatment

Betahistine

Antiemetics: Promethazine & Ondansteron

Antibiotics

Vestibular suppressants: Antihistamines, Benzodiazepines & Anticholinergic drugs

Electrolytes/glucose drinks

Iron supplements

Specialists to consult

ENT surgeon

Neurologist

Endocrinologist

Cardiologist

Symptoms of Dizziness

A person may be suspected to have dizziness if they suffer from the following:

Giddiness, lightheadedness, or feeling faint.

A sensation of abnormal swaying such as feeling of moving from side to side.

A sensation where the person feels he/she is spinning or the world around him/her is spinning.

A feeling of imbalance or loss of balance.

A sensation of nausea (may or may not be accompanied by vomiting).

Types of Dizziness

Dizziness can be classified into four subtypes:

Vertigo: The patient may feel as if he/she is spinning or the surroundings are spinning.

Lightheadedness: This is a vague sensation in the head where the patient may feel that his head is floating or feels giddy.

Disequilibrium: This is a disturbance in the balance or coordination. It may affect the patient’s normal way of walking.

Pre-syncope: This occurs when the patient feels like he/she will lose consciousness.

Causes Of Dizziness

Dizziness is a symptom that occurs in many diseases and may be caused due to many underlying disorders. It is important to correctly differentiate and determine the cause for dizziness as treatment varies with each cause.

A. Problems with the ear and vestibular system

The ear is the organ responsible for maintaining normal balance and equilibrium of the body. Problems in the ear and vestibular system can lead to vertigo, a type of dizziness. Multiple conditions can be associated with vertigo such as:

1. Benign paroxysmal positional vertigo (BPPV)

Benign: not dangerous to health

Paroxysmal: presents as a sudden, brief episode

Positional: set off by particular head or bodily movements

Vertigo: an internal sense of irregular or spinning movement either of oneself or of the surroundings

BPPV is the most common cause of vertigo. It is a harmless condition that presents as mild to intense dizziness lasting for a few seconds or minutes. It is often associated with a sudden change in the position of the head or body, like bending over, turning in bed, or sitting up. BPPV usually resolves on its own and is not serious.

The inner ear is a system of canals filled with fluid that lets the brain know about movements of the head. In BPPV, small calcium crystals in the inner ear move out of place. Hence, the system is not able to send the correct signals to the brain.

BPPV can happen because of a head injury or aging as well. The natural breakdown of cells that happens with age or during injury is thought to be responsible for this.

2. Meniere’s disease

This is a rare condition that causes severe vertigo, nausea, ringing in the ears, muffled or distorted hearing, hearing loss, and feeling of a plugged ear. This condition is characterized by excess fluid buildup in the inner ear. Meniere’s attacks usually happen suddenly and can last from 20 minutes to 24 hours. Patients also feel worn out after the attack passes.

3. Ear infections

Viral and less commonly bacterial infections can cause inflammation of the nerves in the ears. The vestibulocochlear nerve, a nerve in the inner ear, has two branches:

The vestibular nerve sends signals to the brain about balance. Its inflammation leads to vestibular neuritis.

The cochlear nerve sends signals about hearing. Its inflammation causes labyrinthitis.

This inflammation hinders the messages the nerves of the ear take to the brain. Hence, the symptoms of vertigo are experienced.

4. Acoustic neuroma (vestibular schwannoma)

It is a benign tumor that develops on the vestibular or cochlear nerves leading from the inner ear to the brain. The pressure on the nerve from the tumor may cause vertigo.

5. Vestibular migraine

Migraines are often characterized by painful headaches, however vestibular migraine may or may not involve headaches along with vestibular symptoms such as vertigo and imbalance. People with vestibular migraine do report common migraine symptoms such as sensitivity to light & sound.

B. Problems with blood circulation

1. Hypotension or low blood pressure

Dizziness is commonly seen in people who have low blood pressure. Due to low blood pressure, enough oxygen-rich blood is not delivered to the brain, thereby affecting its function. This can lead to dizziness. Some of the common causes for low blood pressure are:

Dehydration or loss of water during extreme summers, heat cramps, heat exhaustion, or heat stroke. Dehydration often occurs along with vomiting and diarrhea as well. Fever can also cause a remarkable loss of water due to elevated metabolic rate and profuse sweating when the body tries to cool itself.

Anemia due to decreased production or increased destruction of red blood cells

Bleeding that may cause loss of red blood cells and lead to anemia

Alcohol use

Pregnancy

2. Postural hypotension (orthostatic hypotension)

If someone is dehydrated or anemic, blood pressure readings may be normal when they are lying down. However, when they sit up or stand up too quickly they may experience a brief feeling of lightheadedness. This feeling may go away in a few seconds as the body adapts. If dehydration or medications like beta blockers prevent the body from reacting, the dizziness may continue to the point at which the patient faints.

3. Heart diseases

Conditions such as cardiomyopathy, heart attack, heart arrhythmia, and transient ischemic attack could cause dizziness.

C. Endocrine diseases

1. Diabetes

Uncontrolled diabetes is one of the main diseases that may cause dizziness.

Hypoglycemia or low blood sugar can occur because of reduced food intake, or from overmedicating with diabetes medication. In this situation, the person experiences dizziness because the brain doesn't get enough glucose to function properly.

Hyperglycemia or high blood sugar levels may also cause dizziness due to dehydration. This happens due to lack of sufficient insulin to allow cells to use glucose for energy metabolism.

2. Thyroid diseases

Abnormalities of the thyroid may also cause dizziness as a symptom.

Hyperthyroidism or high levels of thyroid hormone may cause palpitations and lightheadedness.

Hypothyroidism or low levels of thyroid hormone may lower blood pressure and heart rate leading to dizziness and weakness.

3. Addison's disease

Addison's disease is a condition in which the adrenal glands do not produce enough cortisol to meet the demands of the body. If cortisol levels are low, a patient may experience weakness, low blood sugar, low blood pressure, and dizziness.

D. Other causes

1. Neurological conditions

Rarely, the cause of vertigo may arise from the brain. Stroke, tumors, seizures, peripheral neuropathy, Parkinson’s disease, and multiple sclerosis may be associated with vertigo.

2. Trauma

Concussion and minor head trauma can also cause vertigo.

3. Certain medicines

Dizziness can be a side effect of certain medications such as antibiotics like gentamicin and streptomycin, anti-seizure drugs, antidepressants, sedatives, tranquilizers, antihypertensive drugs like beta blockers, diuretics, ACE inhibitors & medications for erectile dysfunction.

4. Psychological disorders

Stress, anxiety, panic attacks, and depression can also cause dizziness, when you hyperventilate or breathe too quickly.

5. Carbon monoxide poisoning

Symptoms of carbon monoxide poisoning may include nausea, vomiting, shortness of breath, dizziness, weakness, and confusion.

Is dizziness felt during COVID-19 infection?

Dizziness is one of the main neurological symptoms of COVID-19. It is also seen in long COVID-19 that persists weeks or months after the initial coronavirus infection. Dizziness can occasionally occur post COVID-19 vaccination as well. It is most common in the first 15 to 30 minutes of vaccination. However, more research is required to prove this relationship.

Read More About COVID-19

Risk Factors For Dizziness

Dizziness can happen to anyone at any point in time in their life. It may occur as a one-time, brief episode, or it may be long lasting with intermittent periods of symptoms. It is estimated that most people over the age of 40 might have experienced dizziness at least once in their lifetime.

Certain factors can increase the chance of dizziness such as:

Old age especially people over 65

Being a woman

A medical history of past episodes of dizziness

Having a family member who has vertigo

Hyperlipidemia

Vitamin D deficiency

Anemia is one of the causes of dizziness. Here are a few simple tips to increase hemoglobin levels in blood & prevent anemia.

Click To Read!

Diagnosis Of Dizziness

If a patient presents with symptoms of dizziness, a thorough history and detailed physical examination are key to diagnosis. Aggravating and relieving factors of dizziness along with other associated symptoms are assessed. Review of the past medical history and current medications the patient is taking is also done.

1. Blood tests

The requirement for blood tests depends on the cause of the dizziness. Common tests that are done are:

Complete blood count (CBC)

Blood sugar tests

Electrolyte levels

Thyroid tests

Kidney function tests

2. Cardiac tests

Sometimes cardiac health needs to be assessed using the following tests to rule out any heart diseases that can cause dizziness:

Electrocardiography (ECG)

Echocardiography (Echo)

3. Imaging studies

Radio imaging tests may be performed to determine the cause of dizziness. The cause of such dizziness could be inner ear disturbances or other head and neck conditions, like cervical spondylosis, brain tumor, an insufficient blood supply to the brain. Some of the common tests that are recommended include:

CT scan (head)

CT neck plain

MRI brain

MRI brain with contrast

MRI cervical spine

4. Balance tests

These tests check for balance disorders by evaluating how the body responds to changes in posture. Vestibular system which is located in the inner ear along with the central nervous system is responsible for maintaining body balance. The following tests can be done to evaluate the functioning of these systems:

Rotary chair test

This test records eye movements while the patient is sitting on a rotational computerized chair. The test evaluates the vestibular system which regulates balance, posture, and the body's orientation in space.

Computerized dynamic posturography (CDP)

This test is also called test of balance (TOB). It evaluates the ability to remain standing in either stationary or moving conditions.

Vestibular evoked myogenic potentials (VEMP) test

This test assesses vestibular function by measuring the reaction of muscles to a repetitive sound stimulus.

Video head impulse test (vHIT)

The doctor will gently move the patient’s head to each side. Eye movements are recorded while the patient focuses on a stationary object like a spot on the wall.

Vestibular test battery

A vestibular test battery includes several tests that will assess if vertigo is due to problems in the inner ear or due to some neurological cause. This helps in making an appropriate treatment plan.

Electronystagmography (ENG) and videonystagmography (VNG) tests

These tests record and measure the eye movements. In ENG, electrodes or small sensors are placed over the skin around the eyes. In VNG, special goggles are placed on the eyes. Patient is asked to look at and follow patterns of light on a screen. Patient is asked to move into different positions while watching the light pattern. Then warm and cool water or air will be put in each ear. This should cause the eyes to move in specific ways. If the eyes don't respond, it indicates damage to the nerves of the inner ear.

Prevention Of Dizziness

Dizziness may be caused due to a disturbance in the equilibrium mechanism regulated by the inner ear. It may also occur due to other head and neck conditions that affect balance or due to problems with nutrition and blood circulation. It is possible to prevent these spells of dizziness by avoiding certain activities like:

Avoid sudden movements of your head from one position to another, or stand up suddenly after lying down for a prolonged period.

Do not insert sharp objects or foreign matter deep into your ears for cleaning purposes, as it may damage the inner ear.

Always monitor your blood sugar levels closely if you are a diabetic on insulin therapy.

Drink plenty of water to avoid dehydration, especially in the summer season.

Closely monitor your blood pressure levels.

Certain medications may trigger spells of dizziness. In such cases, consult your doctor to make the necessary adjustments.

Specialist To Visit

Most cases of dizziness are mild and occur as a one-off episode. Such patients do not need to visit any doctor as the dizziness may often resolve on its own. However, if dizziness continues for a longer period of time and interferes with the ability to live a normal life, consult the doctor. Also, it is important to seek medical care if your dizziness is accompanied by nausea, vomiting, headaches, weakness in the hands or legs, difficulty in speech, or hearing loss.

The specialist doctors who can diagnose and treat dizziness depending on the cause are:

ENT surgeon

Neurologist

Endocrinologist

Cardiologist

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Treatment Of Dizziness

Often, episodes of dizziness are mild and do not require any treatment as they resolve on their own. The treatment for dizziness is necessary when the episodes do not go away or are so severe that they interfere with a patient’s day-to-day activities. The treatment for dizziness depends on the cause and severity of symptoms. Here are some medicines which are generally suggested:

A. Dizziness due to vertigo

1. Betahistine

Betahistine is used to treat vertigo caused due to Meniere’s disease (a disorder of the inner ear that can lead to dizzy spells and hearing loss). It works by improving the blood flow in the inner ear and reduces the pressure of the excess fluid that causes the symptoms of vertigo

2. Antiemetics

This is a class of medicine that helps ease the symptoms of nausea and vomiting, frequently associated with vertigo. Medicines that are effective against nausea and vomiting associated with vertigo are:

Promethazine

Ondansteron

3. Antibiotics

If the cause for vertigo is a middle or inner ear infection, then it must be treated with antibiotics to resolve the infection. Oral antibiotics and ear drops help fight bacterial infections of the ear, reducing the inflammation that causes vertigo.

4. Vestibular suppressants

These are medications that reduce the intensity of vertigo that occurs due to vestibular imbalance. There are three main categories of drugs:

Antihistamines are the most commonly prescribed medicines which help relief symptoms such as dizziness & prevent motion sickness

Benzodiazepines like clonazepam and lorazepam are anti-anxiety medications that can also act as vestibular suppressants in low doses and help reduce the symptoms of an acute vertigo episode. These medicines are not routinely prescribed and their use is restricted to acute severe episodes of vertigo or to manage anxiety associated with vertigo.

Anticholinergic drugs like scopolamine help with dizziness and motion sickness.

B. Dizziness due to problems with nutrition

1. Electrolytes/glucose drinks

When the person starts feeling dizzy, in addition to the symptoms of cold extremities and profuse sweating, it may be due to reduced blood glucose levels or dehydration. In such situations, it is important to immediately offer the patient a rapid source of glucose and electrolytes.

2. Iron supplements

Correcting iron deficiency with iron supplements helps improve dizziness caused by anemia.

3. Medications as per diseases

Dizziness due to various conditions can be corrected by getting appropriate treatment for them.

If your blood glucose levels are below the normal range, then, is eating a piece of chocolate sufficient to increase the blood glucose level?

Read Now!

Home-care For Dizziness

A one-off episode of dizziness does not require any special care. However, if these episodes are severe and frequent, the patient needs to take utmost care. Some tips to circumvent dizziness are:

Avoid sudden, jerky movements of the head and neck.

When you feel dizzy, stop what you are doing immediately and sit down until it passes.

Lie down flat immediately when symptoms occur. This will allow blood to reach your brain quickly.

Rest as much as possible.

Change positions slowly, especially when you are standing up after lying down. Try to sit for a couple of minutes before standing up.

Drink plenty of water. Make sure you drink enough fluid, at least 8 glasses of water every day, unless advised otherwise by your doctor.

Take a healthy balanced diet comprising all the essential nutrients.

Closely monitor blood sugar levels in case of diabetes and if on insulin therapy.

Monitor blood pressure levels regularly.

Do not engage in activities that involve speedy movements such as driving or joy rides.

Avoid standing at high places or climbing a ladder. Avoid wearing high-heeled shoes as well.

Use walking aids such as a cane or walking stick, in case of severe dizziness and increased risk of falling.

Hold onto the railing when going up and down stairs.

Avoid driving or operating equipment or machinery while you feel dizzy as this could be dangerous to yourself and others.

Install hand grips in bathrooms and showers.

Remove clutter from the floor like rugs, loose electrical wires, etc.

Complications Of Dizziness

If dizziness is left untreated, the underlying cause may worsen and lead to several complications such as:

Increased falls due to loss of balance

Accidents may occur, if the patient feels dizzy while driving or operating heavy machinery

Loss of consciousness or fainting

Hypotensive shock, if dizziness is due to extremely low blood pressure

Ischemic stroke, if dizziness is due to poor blood supply to the brain

Alternative Therapies For Dizziness

Some forms of dizziness such as vertigo, can benefit from alternative therapies such as:

1. Physiotherapy

Vestibular rehabilitation and balance training exercises, such as standing on a bosu ball or a tilt board, walking in S shape, standing with eyes closed, etc. are a specific set of exercises that can help improve balance. These can help decrease the chances of falls and dizziness.

2. Homeopathy

Homeopathic preparations such as byronia, cocculus indicus, etc., have shown that homeopathy is as effective as conventional medications in controlling the symptoms of vertigo.

3. Canalith repositioning maneuver

The canalith repositioning procedure can help relieve benign paroxysmal positional vertigo (BPPV). The doctor may guide you to perform simple head exercises called the Epley maneuver or canalith repositioning procedure (CRP). These help to get the dislodged calcium crystals back to their proper position. They are highly effective and most people feel better after one or three treatment sessions.

Living With Dizziness

Dizziness can affect the quality of life as it often imposes certain restrictions on an individual's lifestyle. As dizziness may be aggravated by sudden rapid movements of the head, a person with dizziness may not be able to enjoy adventure activities like joyrides. One may face aggravated motion sickness that may hinder traveling as well.

Patients with other underlying health conditions such as low blood sugar, low blood pressure, anemia & neurological disorders, often face a lack of productivity due to the symptoms of dizziness and fatigue.

Severe forms of dizziness that impair balance may lead to increased chances of falls and the complications arising out of falls. Patients with dizziness should not drive a car or operate heavy machinery to avoid any mishap.

Frequently Asked Questions

What is the difference between dizziness and vertigo?

How long does dizziness last?

What is a quick way to relieve dizziness?

Can improper posture cause dizziness?

Can a person have dizzy spells all of a sudden?

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Down syndrome

Also known as Down's Syndrome, Trisomy 21, Mongolism

Overview

Down syndrome is one of the most common genetic disorders seen in children. It occurs when the child is born with an extra chromosome. Chromosomes are thread-like structures found in every cell of the body. They carry hereditary information in the form of genetic codes. The presence of an extra chromosome in a child can affect the development of the baby’s body and brain, leading to birth defects, learning problems, and abnormal facial features.

The risk of a baby being born with Down syndrome is slightly high in women who conceive at or after 35 years. A 35-year-old woman has a 1 in 350 chance of conceiving a baby with Down syndrome. Routine antenatal (pregnancy-related) screening tests can help detect the condition early in the pregnancy (first trimester).

Down syndrome is a lifelong condition. Currently, there are no approved medicines available for its treatment. Medical treatment is driven symptomatically based on the comorbidities affecting the individual. This helps to improve the quality of life and also helps increase life expectancy of the person.

Key Facts

Usually seen in

Children below 6 months of age

Gender affected

Both men and women

Body part(s) involved

Heart

Large intestine

Small intestine

Bones

Joints

Eyes

Ears

Blood

Prevalence

Worldwide: 1 in 1000 babies (2015)

Mimicking Conditions

Congenital hypothyroidism

Trisomy 18

Partial Trisomy 21 (or 21q duplication)

Necessary health tests/imaging

USG Foetal Well Being (7-10 weeks)

Antenatal Profile Comprehensive

Chromosome Analysis, Chorionic villus

Echocardiography

Thyroid Profile Total

Vitamin D (25-OH)

USG Whole Abdomen

Complete Blood Count (CBC)

Amniocentesis

Specialists to consult

Child Specialist

Pediatric Cardiologist

Pediatric Neurologist

Bone & Joint Specialist

Gastroenterologist

Genetic Counsellor

Physiotherapist

Occupational Therapist

See All

Causes Of Down syndrome

It is caused due to a gene mutation in a chromosome. Both mother and father contribute one each to form a single pair of chromosomes in a child, which creates the unique genetic code of a child. However, due to certain maternal or environmental factors, chromosomes may mutate and the baby can be born with an extra copy of chromosome 21.

Chromosomes are a bundle of genes which are inherited by the child from its parents. Chromosomes come in pairs, and our body needs just the right number of pairs for the development of the body. There are 23 pairs of chromosomes in all healthy individuals. It is due to this extra copy of chromosome 21 that a child develops the characteristic physical and developmental problems associated with Down syndrome.

Types Of Down syndrome

There are three different types of Down syndrome:

1. Trisomy

In trisomy type, every cell in the body has three copies of chromosome no. 21 instead of two. This is the most common type of Down syndrome.

2. Translocation

In the translocation type, each cell has a part or entire extra chromosome 21 which is attached to other chromosomes.

3. Mosaic

In this type, only some of the cells have an extra chromosome 21. This is a rare type.

Symptoms Of Down syndrome

Usually, Down syndrome in a baby is identified prenatally (while the baby is in the womb) through pregnancy screening tests. It is also possible that the doctor may suspect a case of Down syndrome at birth or during follow-up visits due to the characteristic physical appearance that occurs with the condition.

1. Characteristic physical appearance

Individuals who have Down syndrome have distinct facial features, such as:

A flattened face with a protruding tongue (tongue sticking out of the mouth)

A small head and a short neck

Upward slanting eyelids and tiny white spots on the colored part (iris) of the eye

Unusually shaped small ears

Other characteristic physical appearances include -

Short stature

Broad, small hands and tiny fingers with a single crease in the palm

Excessive flexibility

Poor muscle tone

Along with the myriad of characteristic physical appearances, children with Down syndrome also suffer from intellectual and developmental disabilities and may develop other health-related comorbidities.

2. Intellectual disabilities

Most children with Down syndrome have impaired cognitive function, reduced intelligence, poor memory, and language difficulties.

3. Developmental disabilities

Children with Down syndrome often face difficulty in attaining physical and developmental milestones, such as crawling, learning to walk, holding objects, etc.

4. Cardiac abnormalities

Congenital heart defects, such as atrioventricular septal defect and Fallot's tetralogy, are highly prevalent in babies with Down syndrome. These defects can be a significant cause of morbidity and mortality.

5. Gastrointestinal tract abnormalities

Babies born with Down syndrome are more prone to structural abnormalities of the intestine, such as intestinal obstruction, and associated diseases such as GERD (gastroesophageal reflux disease).

6. Hematologic abnormalities

Newborn babies with Down syndrome have abnormal blood counts within the first few months of life. However, such conditions are not very severe and resolve within 3-4 weeks of life. Patients with Down syndrome have a 10-fold higher risk of developing leukemia.

7. Neurologic abnormalities

Reduced muscle tone is a characteristic neurologic abnormality of patients with Down syndrome. They are also more prone to seizures and early-onset Alzheimer's disease.

8. Hormonal imbalance

Hypothyroidism is common in patients with Down syndrome. It may cause delay in the onset of puberty. Sexual development with age may also get affected or delayed in children with this condition.

9. Vision abnormalities

Changes in the eye and vision, such as refractive errors, cataracts, retinal anomalies, are very common in children with Down syndrome.

Risk Factors For Down Syndrome

The risk of a baby being born with Down syndrome is comparatively high:

In women who conceive at or after 35 years of age. The chance of conceiving a baby with Down syndrome is 1 in 350 for a woman of age 35 years. The risk may increase with the increase in the age of the mother.

With increasing father’s age. There is also a rare possibility that a parent may be a carrier of the gene and pass it to their offspring. This condition is known as translocation Down syndrome.

In parents who already have one child with Down syndrome. They may be at a greater risk of having more children with the same condition.

If someone in the close family has Down syndrome.

Myth: People with Down syndrome do not live very long.

Fact: Although there is no cure for Down syndrome, treatment such as physical, occupational, and speech therapy may help his or her development. Today, people with Down syndrome can look forward to a long life given the right medical attention. Also, with help and support from friends and family, lots of adults with this syndrome are leading an active and fairly independent life.

Get Expert Help

Diagnosis Of Down Syndrome

Broadly, there are two types of tests to check for Down syndrome - Screening Tests and Diagnostic Tests.

1. Screening tests

These are often a combination of blood tests and ultrasound performed to determine the risk of a baby being born with Down syndrome.

USG Foetal Well Being (7-10 weeks) - This can help identify any uneven or abnormal structural changes in the fetus, which are characteristic features to identify Down syndrome. The ultrasound is usually performed during the first trimester.

Antenatal Profile Comprehensive - This includes a set of routine blood tests that measure various parameters and, when used along with ultrasound imaging, can help screen for fetal abnormalities.

2. Diagnostic tests

If any abnormalities are found in the pregnancy screening tests, diagnostic tests are performed to confirm the diagnosis of Down syndrome.

Chromosome Analysis, Chorionic villus - In this test, cells are taken from the placenta and used to analyze the fetal chromosomes. The presence of an extra chromosome 21 confirms the diagnosis of Down syndrome.

Amniocentesis - During the second trimester of pregnancy, the analysis of fluid obtained from the amniotic sac surrounding the baby can help identify the possibility of a child being born with Down syndrome.

3. Supportive tests

There are numerous comorbidities that can affect a person with Down syndrome. A few tests are essential to help evaluate these comorbidities.

Echocardiography - to detect congenital cardiac abnormalities, which are very common in babies with Down syndrome.

Thyroid Profile Total- quite often it is seen that individuals who have Down syndrome also suffer from hypothyroidism. It is essential to diagnose the possibility of hypothyroidism and treat it.

Vitamin D (25-OH) - the musculoskeletal system of patients with Down syndrome is weak and poorly developed. The patient may also suffer from Vitamin D deficiency.

USG Whole Abdomen - some patients with Down syndrome suffer from gastrointestinal issues like intestinal obstruction, perforation, or GERD. If the patient exhibits any such symptoms, it is essential to evaluate the cause using ultrasound of the whole abdomen.

Complete Blood Count (CBC) - in the early weeks of life, newborn babies with Down syndrome suffer from impaired blood counts. Individuals with Down syndrome are also more prone to develop leukemia. Hence, routine CBC tests can help identify any blood-related abnormalities in time.

BOOK TESTS HERE

Prevention Of Down Syndrome

As such, there is no way to prevent Down syndrome. However, early conception before the age of 35 reduces the risk of a baby being born with this condition. Genetic counseling may help the cases where the risk of a baby being born with this syndrome is high.

Routine antenatal proffile (pregnancy-related) screening tests help identify the condition as early as the first trimester of pregnancy. Awareness regarding antenatal tests can help parents make informed decisions about the pregnancy and its complications.

Specialist To Visit

Usually, Down syndrome is detected during pregnancy by an obstetrician or at birth by a neonatologist. Sometimes, the diagnosis may not be picked up early and the child may be diagnosed with Down syndrome during routine visits to the physician. Usually, a child with Down syndrome will be cared for by a team of expert doctors. These doctors include:

Child Specialist

Pediatric Cardiologist

Pediatric Neurologist

Bone & Joint Specialist

Gastroenterologist

Genetic Counsellor

Physiotherapist

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Treatment Of Down Syndrome

Currently, there are no approved medicine therapies for the treatment of Down syndrome. Medical treatment is driven symptomatically based on the comorbidities affecting the individual. For example thyroid medications to control Hypothyroidism, Vitamin D supplements for Vitamin D deficiency, analgesics to provide pain relief, corrective surgery for congenital heart defects and intestinal defects, etc.

1. Alternative therapies

These form the most important part of managing Down syndrome. As the disease is congenital and impairs the person's intellectual and developmental abilities, it is essential that supportive care for the child begins as soon as possible. This will help the child lead a fairly normal, productive life.

2. Physiotherapy and occupational therapy

Physiotherapy and occupational therapy help the child achieve developmental milestones, like walking, hand gripping, balancing, etc., through customized exercise programs. These exercise programs can also help care for the bones & joints and prevent worsening of the musculoskeletal system.

3. Speech therapy

Speech therapy and voice modulation exercises are essential as they help the child communicate effectively. Learning to communicate well is a very important aspect of the social development of a child suffering from Down syndrome.

4. Life skills training

A child with Down syndrome often needs specialized life skills training in sync with his or her level of functioning. There are support groups and special schools available to help the child learn essential life skills, such as self-care and grooming, primary education, decision-making, etc. This helps the child grow into a somewhat normal-functioning adult who can lead a productive life.

Home-care For Down Syndrome

Educating oneself regarding the symptoms and disease progression of Down syndrome is essential for the parent or caregivers. A child with Down syndrome will require treatment with a multidisciplinary approach that improves their physical and intellectual capabilities.

Children with Down syndrome often need special attention at school. There are special classes and programs available for children and adults with Down syndrome. Also, close monitoring for comorbidities, such as cardiac complications, vision abnormalities, gastrointestinal problems, bone and joint pains, etc., need to be addressed as and when they start affecting the individual.

With good treatment opportunities, patients with Down syndrome can lead fairly normal lives with improved life expectancy.

Complications Of Down Syndrome

Down syndrome often presents with a host of other health conditions and, if left untreated, may pose a serious health risk. Certain complications may arise when Down syndrome is left untreated such as:

The inability of the child to function normally in the community

Cardiac complications, a consequence of congenital heart defects, often present in a child with Down syndrome

Weakened immune system, leading to a higher risk of serious infections

Obesity due to lack of physical activity

Sleep apnea, a breathing disorder that occurs while sleeping

Skeletal malformations

Poor vision and hearing

Seizures

Living With Down Syndrome

Infants born with Down syndrome are often subjected to social stigmas at a very early age. They may not be able to attend normal schooling or grow up like a regular child. Parents or caregivers need to provide special care and attention as the child grows. Most kids with Down syndrome could grow like normal kids due to the advent of numerous advances in physiotherapy, occupational therapy, and other supportive treatments.

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GET EXPERT HELP

Frequently Asked Questions

I am 36 years old and thinking of starting a family. Will my child be born with Down syndrome?

My child has Down syndrome. Will he be able to lead a normal life in the future?

Can a child with Down syndrome participate in extracurricular activities?

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Ear pain

Also known as Otalgia and Earache

Overview

Ear pain or earache can occur due to infections and inflammation of the external, middle, or inner ear. Earaches usually occur in children, but they can occur in adults as well. An ear pain may affect one or both ears, but the majority of the time it’s in one ear.

The ear pain can be constant or it can come and go, the pain can be dull, sharp, or burning. The symptoms of ear pain include pain in the ear, impaired hearing, and fluid discharge from the ear. Children can show additional symptoms like muffled hearing, fever, difficulty sleeping, headache, getting irritated more than usual, and loss of balance.

Some of the common causes of ear pain include injury, infection, irritation in the ear, or pain that originates in the jaw or teeth, earwax buildup, water trapped in the ear, and sinus infection.

The treatment of ear pain includes taking over-the-counter pain relievers to treat the ear pain and antibiotics, in case of an infection. Also, not getting the ear wet and sitting upright can help relieve ear pressure and pain.

Key Facts

Usually seen in

Children below 3 years of age

Gender affected

Both men and women

Body part(s) involved

Ear

Prevalence

Worldwide: 709 million (2012)

Mimicking Conditions

Sinusitis

Tooth infection

Ear barotrauma

TMJ syndrome

Arthritis of jaw

Trigeminal neuralgia

Necessary health tests/imaging

Blood tests: White blood cell count (WBC), Erythrocyte sedimentation rate (ESR) & C- reactive protein (CRP)

Imaging: X-ray, Computed tomography (CT) scan & Magnetic resonance imaging (MRI)

Treatment

Medications: Amoxicillin, Ibuprofen, Acetic acid & Benzocaine

Surgical procedures: Myringotomy & Ear tubes

See All

Symptoms Of Ear Pain

Ear pain is most commonly described as a feeling of pressure in the ear. This feeling may begin gradually or suddenly, and it can be very severe.

The symptoms of ear pain in adults include:

Hearing loss

Fever

Fluid drainage from the ear

Ringing of the ear

Vertigo

In young children, the signs of an ear infection may be the following:

Fever

Irritability

Pulling of the ear

Loss of appetite

Difficulty in sleeping

Difficulty in responding to sounds

Fussiness and crying

Loss of balance

Causes Of Ear Pain

Injury, infection, and irritation in the ear are the common causes of ear pain.

1. Ear infection

It is usually caused by bacteria and often begins after a child has a sore throat, cold, or other upper respiratory infection. The ear has three major parts -- the outer ear, the middle ear, and the inner ear. If the upper respiratory infection is bacterial, the same bacteria may spread to the middle ear and if the upper respiratory infection is caused by a virus, such as a cold, bacteria may move into the middle ear as a secondary infection.

Outer ear infection: The outer ear, also called the pinna, includes everything we see on the outside; it is the curved flap of the ear leading down to the earlobe. The outer ear infection is caused by swimming, wearing headphones that damage the skin inside the ear canal, or putting cotton swabs in the ear canal.

Middle ear infection: The middle ear is located between the eardrum and the inner ear. The infection can start from a respiratory tract infection and leads to a buildup of fluid behind the eardrums caused by the infections.

Inner ear infection: This part contains the labyrinth, which helps in maintaining balance. The other part is the cochlea, a part of the labyrinth, which is a snail-shaped organ that converts sound vibrations from the middle ear into electrical signals. The infection of the inner ear is labyrinthitis which is sometimes caused by viral or bacterial infections from respiratory illnesses.

2. Symptoms of other conditions

Ear pain with a toothache in children who are teething. Individuals with an infected tooth having an abscess or impacted wisdom teeth are more likely to have an ear pain.

Ear pain with a change in hearing, earwax build-up, an object stuck in the ear (do not try to remove it yourself – see a GP), and perforated eardrum (particularly after a loud noise or accident).

Ear pain with pain when swallowing in case of sore throat, tonsillitis, and quinsy (a complication of tonsillitis).

Ear pain with a fever, flu, cold or sinusitis.

3. Ear wax

It is part of the body's protective mechanism to lubricate the ear canal and prevent infection. If the wax hardens and builds excessively, it may cause significant ear pain, if the wax presses against the eardrum.

4. Insertion of a foreign object

When a foreign body is inserted into the ear, it causes pain and inflammation. These may include hairpins and pointed objects that are often used to scratch or remove ear wax.

Other causes of ear pain

1. Meniere's disease

Meniere's disease is caused by excess fluid buildup in the inner ear, although the exact reason behind this fluid retention is not known. Along with the classic triad of symptoms—vertigo, ringing in the ears, and hearing loss -- some people with Meniere's disease report ear pain or pressure.

2. Tumors

Although not common, a tumor may be the reason behind a person's ear pain. For example, nasopharyngeal cancer (a type of head and neck cancer) may cause ear fullness, along with hearing loss, ringing in the ears, and recurrent ear infections.

Two examples of benign (noncancerous) tumors or growths that may develop in the ear and cause pain include:

Cholesteatoma: A benign skin growth that forms in the middle ear.

Acoustic neuroma: A benign inner ear tumor that develops on the vestibular nerve (eighth cranial nerve).

3. Other causes: Some of the other causes of ear pain include:

Change in pressure, such as when flying on a plane

Temporomandibular joint (the joint that connects the lower jaw to the skull) syndrome

Arthritis affecting the jaw

Eczema in the ear canal

Trigeminal neuralgia (chronic facial nerve pain)

Thyroid inflammation

Carotid artery pain (carotidynia)

Learn more about the five most common causes of ear pain and how to deal with them.

Click Here!

Risk Factors For Ear Pain

The following conditions are related to increased risk of ear pain:

Inflammation in the ear

Fluid buildup in the ear

Medical conditions like respiratory tract infection, sinusitis, common cold, allergies or asthma

Illnesses that weaken the immune system such as AIDS (HIV infection)

Smoking also increases the chances of developing an ear infection

Children having viral infection

People who swim regularly are at a higher risk due to the water getting into the ears while swimming

Diagnosis Of Ear Pain

If you experience any symptoms of ear pain such as burning pain or discomfort, hearing loss, or drainage from the ear, then it is wise to consult a doctor. Your doctor might do some physical examination followed by a few questions related to your daily routine to know the cause of it.

Diagnosing ear pain often only requires a medical history and physical examination by an ear, nose, and throat (ENT) specialist.

1. Medical history

An ENT specialist can ask several questions related to the details of your pain like what the pain feels like, does the pain come and go, and whether a person is experiencing symptoms such as fever, hearing loss, and balance problems, ear drainage or tinnitus (ringing in the ears).

2. Physical examination

During your physical exam, the general physician will inspect the ear and parts of the ear including the outer, middle, and inner ear, ear canal, and tympanic membrane (eardrum) with an otoscope (an instrument designed for visual examination of the eardrum and the passage of the outer ear, typically having a light and a set of lenses). The most common causes are temporomandibular joint syndrome, pharyngitis (sore throat), dental disease, and cervical spine arthritis. The doctor will also look for the medical history of asthma, respiratory illness, and sinusitis in both children and adults.

In some cases, nasal endoscopy is recommended. It is a non-surgical procedure that allows for the examination of the middle ear, nasal passages, and openings to the sinuses and/or the upper section of the gastrointestinal tract.

3. Blood tests

These may be used to help diagnose various ear pain conditions in case of an ear infection.

White blood cell (WBC) count: This test can help to determine an infection or inflammation as WBCs play a vital role in your immune system. They assist in fighting infection and help in defense against other foreign materials.

Erythrocyte sedimentation rate (ESR): This test can be commonly used to detect non-specific signs of inflammation resulting from infection, cancers, or certain autoimmune disorders.

C- reactive protein (CRP): It is a marker for inflammation, and its level increase during bacterial infection and tissue damage.

These blood tests are not precisely done for detecting ear pain, but the evaluation can help rule out other related diseases like thyroid disorders and syphilis, all of which may have symptoms similar to those of Meniere's disease.

4. Imaging

If the diagnosis is not clear from the history and physical examination, imaging studies are done for a precise outcome. Imaging is sometimes needed to sort out an ear pain diagnosis.

X-ray: It is done to evaluate the jaws and adjacent areas of the ear.

Computed tomography (CT) scan or magnetic resonance imaging (MRI): It can be done for visualizing the middle and inner ear. The MRI scan is generally advised by the doctor when he finds that your hearing loss is sensorineural which means there is a problem with the nerves, to suspect a possible tumor such as nasopharyngeal cancer as the source of your ear pain.

5. Hearing tests

These may be recommended if there have been recurrent infections or if there has been a delay in speech development in children.

6. Tympanometry

It refers to a test that helps in the evaluation of the proper functioning of the middle ear. The middle ear is positioned behind the eardrum, also known as the tympanic membrane.‌

The test seeks to establish the condition and movement of the tympanic membrane as it responds to changes in pressure. The test helps doctors to identify and monitor any problems with the middle ear. After the test, the doctor records the results in a graph called a tympanogram.

Tympanometry is helpful in the diagnosis of ear problems that can lead to hearing loss, mostly in children. Through the test, your doctor can check if you have:‌

A middle ear infection

Fluid in the middle ear

A perforated tympanic membrane

Issues with the eustachian tube that connects the upper throat and nose to the middle ear‌

Prevention Of Ear Pain

Some ear pains may be preventable by avoiding some preventative measures like:

Avoid smoking

Avoid chronic use of cotton swabs

Avoid putting sharp and foreign objects into the ear as this can scratch up the ear canal or the wax layer, which can increase the risk of infection

After swimming, blow-dry your ears to avoid buildup of water in the ear

Keeping swimming pools and hot tubs clean with disinfectants and regular pH testing will also reduce the risk of infection and ear pain

Breastfeed exclusively until your baby is 6 months old and continue to breastfeed for at least 12 months

Specialist To Visit

The symptoms of ear pain are often easy to deal with the use of over-the-counter pain medications. However, consult a doctor in case:

You experience severe ear pain or discomfort that seems different or worse than usual

You notice fluid (such as pus or blood) oozing out of ear

You have a high fever

You have a headache or feel dizzy

You feel an object is stuck in your ear

You see swelling behind your ear, especially if that side of your face feels weak or you can’t move the muscles

You’ve had severe ear pain and it suddenly stops (which could mean a ruptured eardrum)

Your symptoms don’t get better (or get worse) in 24 to 48 hours

Specialists that can help to manage ear pain include:

General physician

ENT specialists

Pediatrician (in case of children)

If you, your children or any family members are facing such issues, contact and seek medical help immediately.

Consult Now!

Treatment Of Ear Pain

As there are many different causes of ear pain, there are similarly many possible treatments. The treatment of choice will specifically depend on the root cause of your ear pain.

Self-care plan

Home therapies can sometimes go a long way in easing ear pain, especially if the pain is related to fluid build-up from a virus or allergies.

Hold a warm compress against your ear or sinuses.

Performing simple jaw exercises in case of temporomandibular disorder (TMD).

For a blocked eustachian tube, drugs commonly used include decongestants and antihistamines can be used.

If a buildup of wax is causing your ear pain, you may be given wax-softening ear drops. They may cause the wax to fall out on its own.

In case of children, antibiotics cannot be prescribed immediately, watchful waiting and delayed prescribing steps are what doctors recommend. Watchful waiting for the child and waiting to check if the child needs antibiotics. This gives the immune system time to fight off the infection.

Ear flushing

This procedure is done to remove impacted wax, debris, infected material, and dead skin cells in the treatment of otitis externa (external ear).

If a buildup of wax is causing your ear pain, you may be given wax-softening ear drops, this causes the wax to soften.

Ear lavage also known as ear irrigation or ear flush, is a safe method of earwax removal.

Medication

Antibiotics are often not needed for middle ear infections because the body’s immune system can fight off the infection on its own. However, sometimes antibiotics, such as amoxicillin, are needed to treat severe cases right away or cases that last longer than 2–3 days. A standard 10-day course is recommended for younger children and children with severe illness; whereas a 5 to 7 day course is appropriate for children 6 and older with mild to moderate illness.

To soothe ear pain, sometimes the doctor may recommend over-the-counter acetaminophen or nonsteroidal anti-inflammatory drugs (NSAIDs) such ibuprofen. This medication can help in getting relief in pain and fever.

For the pain of TMJ syndrome, your general practitioner may also prescribe a muscle relaxant or a tricyclic antidepressant.

Ear drops work in combination to reduce inflammation, treat the infection, and ease the pain. The drops contain active ingredients like acetic acid, benzocaine, benzocaine + chlorbutol + paradichlorobenzene + turpentine oil, and paradichlorobenzene + benzocaine + chlorbutol.

Surgery

In a few cases, a surgical procedure called a myringotomy is sometimes needed to treat chronic middle ear infections which causes persistent ear pain in children and adults. The term myringotomy is a surgery where a tiny incision is made on the eardrum to drain out any fluid or pus that may have accumulated in the middle ear.

Sometimes, an ear tube insertion is also placed, known as tympanostomy tubes or grommets, into the eardrum to reduce the occurrence of ear infections and allow drainage of excess fluids. The procedure is very common and poses minimal risks. An ear tube insertion is more common for children, who tend to suffer ear infections more often than adults.

Surgery may also be indicated for other ear pain diagnoses like a tumor, severe mastoiditis, or abscess formation in perichondritis.

Alternative Therapies For Ear Pain

1. Cold or warm compresses

Putting moist heat around an infected ear can work as a great pain reliever. You can use this for both adults and children as this is a very safe remedy. Place the ice pack or warm compress over the ear and alternate between warm and cold after 10 minutes.

2. Neck movements and exercises

Some ear aches are caused by pressure in the ear canal. Certain neck movements and exercises can alleviate discomfort. Neck rotation can be one of the most beneficial exercises for relieving pressure in the ear canal.

3. Steam inhalation

Taking steam via a steam inhaler or vaporizer can be a great way to reduce ear pain. A warm shower can also be taken. The moist air opens and relaxes the airways, thus relieving the pressure and ear pain.

4. Home remedies

Garlic (Lehsun): It has both analgesic and antibiotic properties. Its extracts help ease ear pain caused by an ear infection. Warm equal amounts of garlic and eucalyptus oil. Cool, filter the oil, and put 2 or 3 drops of this garlic oil in the aching ear.

Chewing gum: If the ear pain is caused due to air pressure difference when traveling on an airplane. Chewing gum is very helpful in relieving the pressure in the middle ear.

Ginger (Adrak): It has natural anti-inflammatory properties that can help soothe pain from ear pains. Apply warmed ginger juice around the outer ear canal. Do not put it directly into the ear.

Onion: It is one of the most easily available home remedies for ear pain. Onions have antibiotic, antioxidant and anti-inflammatory properties.

Olive oil: A few drops of olive oil into the ear can act as a lubricant and helps in getting rid of the infection.

Frequently Asked Questions

What is the difference between ear pain and ear infection?

Ear pain is mostly seen in?

Can ear infections cause ear pains in adults?

Can an ear pain come and go?

What is otalgia?

What is a swimmer's ear?

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Earwax

Also known as earwax impaction, earwax blockage, earwax buildup, cerumen impaction

Overview

The outer ear canal has glands that produce a wax-like substance called cerumen. This is a normal and protective process that repels water and traps dust particles, microbes, and dead skin cells. Eventually, this accumulated ear wax dries up and falls out of the ear canal. In fact, the absence of ear wax is linked to dry, itchy ears, and sometimes infections. Hence, the removal of ear wax is not required under ideal circumstances.

However, excessive buildup of ear wax can cause pain, itching, irritation, and a feeling of fullness in the ear. Hearing loss and ringing in the ears (tinnitus) might also be experienced.

In such cases, it may be necessary to remove excessive ear wax. A variety of over-the-counter (OTC) products and aids are available for the same. If multiple attempts to remove the buildup are ineffective, see an ear, nose, and throat (ENT) specialist.

To prevent excessive wax buildup avoid putting small things like hairpins, headphones, cotton buds, etc. in your ears. These objects can push the wax further down the ear canal.

Causes Of Earwax Buildup

Earwax is a sticky substance that is made up of dead skin cells, and sweat mixed with dirt, and contains oil. The sweat glands in the skin of the human external auditory canal, together with sebaceous glands, produce ear wax. It has lubricating and self-cleaning agents with protective, emollient, and bactericidal properties.

Ear wax build-up can be due to:

Failure to self-clear because of slow skin migration

Putting small things like cotton buds, hairpins, headphones etc. in your ears. These objects can push the wax further down the ear canal.

Types Of Earwax Buildup

Mostly everyone’s ears produce earwax. However, its composition varies from person to person.

The 2 primary types of ear wax are wet and dry. Apart from these, here is a guide to different types of earwax:

Yellow and soft earwax: This type of ear wax is a sign of healthy ear wax production. It is soft in consistency. It is new wax and doesn’t harden too much before it falls out from the ear.

Pale and flaky earwax: It is also a sign of a self-cleaning mechanism of your ear. This type of wax easily falls out of the ear.

Brown and firm earwax: Brownish or darker color earwax is a sign of older and sometimes harder ear wax. This could be a sign of ear impaction.

Smelly ear wax: Smelly ear wax could be an early sign of any ear infection that might need a doctor’s intervention.

Liquid or runny earwax: It is a form of wet earwax that usually occurs after swimming or diving. However, sometimes it can occur due to other middle ear infections or ruptured eardrums.

Blood-tinged earwax: If you find blood in your earwax, it's a sign of some injury to the ear canal.

Is the color of your ear wax telling you something?

The color and consistency of your earwax can also vary depending on your environment and diet. Take care of your ears like any other part of your body.

Check out our ear care range

Symptoms Of Earwax Buildup

Earwax acts as a natural barrier that prevents bacteria and dirt from entering the innermost parts of the ears. But, if it builds up, it can cause severe ear pain and infections by irritating your ears wall and preventing you from hearing well. Earwax build-up and blockage may cause the following symptoms:

Itchiness in the ear

A feeling of fullness in the ear

Foul odor or discharge from the ear

Earpain

Otalgia (ear infection with pain)

A sensation of air trapped in the ear or plugged

Tinnitus (ringing or noises in the ear)

Partial hearing loss or decreased hearing

Dizziness

Cough

Vertigo

Want to learn more about ear pain? Read to know about the 5 common causes of ear pain and how to deal with them.

Tap here

Risk factors Of Earwax Buildup

Anatomical deformities like narrow ear canals or ear canals that are not fully formed.

Very hairy ear canals.

Benign (non-cancerous) bony growths or osteomas, in the outer part of the ear canal

Certain skin conditions like eczema

Older age

Recurring ear infections

Auto-immune conditions like Sjogren’s syndrome and Lupus.

Individuals with a gene variant -ABCC11 in their DNA

Use cotton buds to clear the earwax.

Diagnosis Of Earwax Buildup

Diagnosing earwax blockages or impaction often only requires a medical history and physical examination by an ear, nose, and throat (ENT) specialist.

Medical history

An ENT specialist will ask several questions related to the symptoms you may be experiencing. Your doctor may also enquire about any history of major or minor ailments or ear surgery.

Physical examination

During your physical exam, your ENT specialist will inspect parts of the ear including the outer, middle, and inner ear, ear canal, and tympanic membrane (eardrum) with an otoscope (a medical equipment that shines a beam of light for visual examination of the eardrum and the passage of the outer ear).

Some people cannot accurately convey symptoms, such as those suffering from dementia or developmental delay, nonverbal individuals with behavioral changes, and young children with fever, speech delay, or parental concerns. In these people, earwax is removed when it limits examination.

Note: Earwax can also compromise vestibular testing (a series of tests that can evaluate hearing function) and should therefore be removed before these tests are performed.

Specialist To Treat

Specialists that can help to treat earwax impaction include:

General physicians

ENT specialists

Pediatricians (in the case of children)

Otolaryngologists also known as ENT specialists diagnose and treat conditions of the interconnected head, nose, and throat systems.

When to see a doctor?

Consult an ENT specialist immediately, if you notice the following symptoms:

Fever

Prolonged earache for more than a week

A foul odor from your ear

Fluid coming out of your ear

If you or your loved ones are experiencing such symptoms, don’t wait to consult an expert.

Book your appointment now

Prevention of Earwax Buildup

Mostly, the ears clean themselves by slowly moving earwax out of the ear canal opening. However, excessive blockages of earwax can be prevented with the following tips:

Don’t use long objects for earwax cleaning as it can damage the ear canal or eardrum, or push earwax farther into the canal.

Never insert earbuds or other devices deeper into the ear canal for ear wax cleaning, as it may push the wax more inside and irritate the ear wall, leading to serious infections.

Use earplugs while taking showers, or while swimming. It will help you to prevent infection by blocking the entry of moisture or water droplets.

Always dry your outer ear by gently cleaning it with a cotton swab. It will help you to avoid any trapping of water or moisture inside the ear canal.

Use OTC ear drops to soften and remove ear wax if you have a history of producing excessive earwax.

Do not irrigate your ears frequently as this can inflame the ear canal and causes pain, or ear infection.

Avoid ear candling hasn't been proven to be safe or effective, and can be dangerous.

Listen to our experts talk about the correct way to clean your ears. Watch this video now.

Treatment Of Earwax Buildup

Earwax blockage can be treated or removed in several ways. Most common methods include:

1. Irrigating or syringing with warm water

It is one of the most common processes used to clean earwax. Your doctor will fill a syringe with lukewarm water to rinse out the ear canal with water. In some cases, your doctor may use saline solution in place of warm water. Finally, your doctor can check and remove the remaining wax manually using special instruments such as spoons, forceps, or suction devices.

Note: Irrigation should not be performed if you have a history of ear surgery or anatomic abnormalities of the ear canal(birth defect).

2. Microsuction technique

Removal of impacted earwax requires an instrument for visualization such as an otoscope, headlamp, or binocular microscope, and for removal, a micro-suction device along with a thin long tube. During this procedure, your doctor fits a thin nozzle in your ear to vacuum out the wax by applying gentle pressure with the help of a suction pump.

3. Medicines

Over-the-counter (OTC) drugs or topical solutions are present to clear earwax blockages. These preparations are also known as cerumenolytics (solutions to dissolve wax) and are commonly used are:

Hydrogen peroxide

Sodium bicarbonate

Carbamide peroxide

You can use some natural cerumenolytic solutions in the ear canal. These solutions include:

Mineral oil

Baby oil

Glycerin

Saline solution

How to use the drops?

Put a few drops of solution into the ear with a dropper and lie down for at least 5 minutes. You may hear a bubbling sound inside your ear and it's normal. This is due to the foaming action of earwax removal. After a few minutes, lie on the opposite side so that the solution can rinse out of the ear canal containing wax in dissolved form. Clean the outer part of the ear with a small piece of cotton.

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Home care For Earwax Buildup

By using topical solutions or cerumenolytics removal of earwax can be done at home. But sometimes, earwax build-up creates pain, foul discharge, and a feeling of fullness in the ear. These symptoms can be relieved at home with simple home remedies. However, make sure to take consent from your healthcare provider before trying these home remedies:

Chewing gum: If your ears are plugged or you have a feeling of fullness even after the removal of earwax. Chewing gum can relieve the pressure in the middle ear. If this doesn’t work, try to take deep breaths and blow out of your nose gently while pinching your nostrils closed.

Honey (Shahad): Sometimes earwax blockages cause cough. To treat a cough at home, the best remedy is honey due to its mucolytic property. You can eat a spoonful of honey or mix it with warm water.

Buy honey products online

Ginger (Adrak): It has natural anti-inflammatory properties that can help soothe a sore throat or cough. Applying ginger juice around the outer ear canal can relieve ear pains.

Read about other health benefits of ginger.

Tap here

Olive oil: A few drops of olive oil into the affected ear can act as a lubricant and helps in getting rid of the infection as well as the blockages due to earwax.

Garlic (Lehsun): It has both antibiotic and analgesic properties. Warm a few cloves of garlic in eucalyptus oil. Cool, filter the oil, and apply a few drops of this garlic oil around the outer parts of the affected ear.

Want to know how to use garlic to improve your health?

Read this now

Complications Of Earwax Buildup

If excessive earwax is not removed, it may turn the symptoms of earwax blockage worse. Other complications include:

Perforated eardrum: A ruptured eardrum is a tear or hole in the thin tissue (tympanic membrane) that separates the outer ear from the middle ear. An untreated ruptured eardrum can cause severe pain due to infection.

Note: A perforated eardrum can also be caused due to loud music, head injury, or any foreign entity in the ear.

Middle-ear infection: Some people develop an inflammation in the ear canal and later ear infection after irrigation. As earwax works as a physical barrier and prevents the entry of bugs, dirt, etc into the ear. Therefore, removing it completely can cause middle ear infections. Mostly mild ones are cleared up on their own but in some cases, ear drops(antibiotics) are needed to treat the infection.

External-ear infection (swimmer’s ear): This doesn’t mean that you are a regular swimmer. It occurs when moisture or water is trapped in the ear canal causing pain and a feeling of something being stuck inside the ear. This can be caused by taking showers, washing hair, or being in a moist or humid environment.

Did you know?

Covid-19 and ear infections are interlinked. Researchers have found that SARS-CoV-2 can infect inner ear cells and cause hearing loss in some individuals. Covid-19 is still infecting many people. Read about the latest updates on the effectiveness of COVID treatments, antiviral therapy, and vaccines against COVID variants.

Click now

Frequently Asked Questions

Is ear wax serious?

Can earwax cause memory loss?

Does earwax smell?

Is earwax blockage permanent?

What does dark earwax mean?

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Ear

Mimicking Conditions

Foreign body in the external ear canal

Perforation of the eardrum

Otitis

Middle ear disease

Dysfunction of the eustachian tube

Necessary health tests/imaging

Physical examination with the help of otoscope

Treatment

Irrigating or syringing with warm water

Microsuction technique

Medicines: Hydrogen peroxide, Sodium bicarbonate, and Carbamide peroxide.

Specialists to consult

General Physician

ENT specialists (Otolaryngologists )

Pediatrician

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Ectopic pregnancy

Also known as Extrauterine pregnancy or Tubal pregnancy

Overview

Ectopic pregnancy(EP) refers to the pregnancy occurring outside the uterus, typically in the fallopian tube. In a normal pregnancy, the fertilized egg travels through the fallopian tube and attaches to the uterine lining.

The various risk factors associated with EP include advanced maternal age, history of previous EP, pelvic inflammatory disease, Chlamydia trachomatis infection, smoking, endometriosis, etc.

Symptoms of ectopic pregnancy may manifest as abdominal pain, vaginal bleeding, shoulder pain, dizziness, or fainting. However, in some cases, initial symptoms may be absent.

If left untreated, an ectopic pregnancy can lead to the rupture of the fallopian tube, causing severe bleeding and potentially life-threatening complications. Treatment options for ectopic pregnancy include medication to halt the progression of the pregnancy or surgical removal of the ectopic pregnancy.

Early diagnosis and prompt treatment are crucial to prevent significant complications and improve outcomes for women with ectopic pregnancy.

Key Facts

Usually seen in

Women older than 35 years

Gender affected

Women

Body part(s) involved

Uterus

Fallopian tube

Cervix

Abdominal cavity

Ovary

Prevalence

Worldwide: 1-2% (2022)

Mimicking Conditions

Ovarian torsion

Tubo-ovarian abscess

Appendicitis

Hemorrhagic corpus luteum

Ovarian cyst rupture

Threatened miscarriage

Incomplete miscarriage

Pelvic inflammatory disease

Ureteral calculi

Necessary health tests/imaging

Physical examination

Vaginal ultrasound

Blood test: HCG and progesterone levels

Laparoscopy

Dilation and Curettage (D&C)

Treatment

Medication: Methotrexate

Surgery: Salpingectomy, salpingostomy

Expectant management

See All

Symptoms Of Ectopic pregnancy

An ectopic pregnancy can first appear as a normal pregnancy. The symptoms of ectopic pregnancy can mimic miscarriage or the symptoms of other female reproductive disorders.

The symptoms of ectopic pregnancy can include:

Missed period, morning sickness, and breast tenderness

Pain in the lower abdomen

Pain in the lower back

Cramps on one side of the pelvis

Vaginal bleeding or spotting

Sudden and severe pain in the lower abdomen (if the fallopian tube ruptures).

The symptoms of normal pregnancy and ectopic pregnancy can be the same, especially in the early stages. To know more about the basics of pregnancy

Read here

Causes Of Ectopic pregnancy

The fallopian tube has a carefully controlled environment that facilitates oocyte (egg cell) transport, fertilization, and migration of the early embryo to the uterus for implantation.

Any damage to the fallopian tubes can induce its dysfunction and thereby retention of an oocyte or embryo.

Ectopic pregnancy can also occur in the cervix, ovaries, the muscle of the uterus, abdominal cavity, etc. discussed in detail in the next section.

Types of Ectopic pregnancy

The different types of ectopic pregnancy include:

Tubal ectopic pregnancy (in the fallopian tube)

- Either ampullary (in the middle part of the Fallopian tube),

- Isthmic (in the upper part of the Fallopian tube close to the uterus)

- Fimbrial (at the end of the tube)

Cesarean scar pregnancy (within a cesarean section scar on the uterus)

Cervical pregnancy (on the cervix)

Cornual pregnancy (within an abnormally shaped uterus)

Ovarian pregnancy (in or on the ovary)

Intramural pregnancy (in the muscle of the uterus)

Abdominal pregnancy (in the abdomen)

Heterotopic pregnancy (co-existence of an intrauterine pregnancy with an ectopic pregnancy)

Did you know?

Over 90% of ectopic pregnancies occur in fallopian tubes. Research has shown that about 70% of EPs occur in the ampullary portion, 12% in the isthmic portion, and about 11% in the fimbrial end of the Fallopian tube.

Risk Factors For Ectopic pregnancy

Up to 50 % of women diagnosed with EPs have no identifiable risk factors. However, the following risk factors have been associated with EP:

Age above 35 or older

A history of ectopic pregnancy

Pelvic inflammatory disease (PID) especially caused by Chlamydia Trachomatis infection

A history of miscarriage

A history of repeated induced abortions

A history of infertility issues or medications to stimulate ovulation

Taking a progesterone-only oral contraceptive pill

History of assisted reproductive technology (ART) such as in vitro fertilization(IVF).

Any abnormality in the shape of the Fallopian tube, such as a birth defect.

Any causes of pelvic adhesions, including endometriosis, and appendicitis, that may distort the shape of the fallopian tube

Prior abdominal surgeries such as a cesarean section

Past pelvic surgeries like tubal ligation (having your fallopian tubes’ tied or clamped to prevent pregnancy).

An intrauterine device (IUD) in place at the time of conception

Other health conditions like genital tuberculosis

Did you know?

The transport of an oocyte and embryo through the fallopian tube relies on both muscle contraction and ciliary beating (Cilia are small hair-like protuberances lining the fallopian tube). The ciliary beat frequency is negatively affected by tobacco smoking, making smoking an important risk factor for ectopic pregnancy. Find Out! How Smoking Affects Women’s Health.

Read here

Diagnosis Of Ectopic pregnancy

It can be difficult to diagnose an ectopic pregnancy from the symptoms alone, as they can be similar to other conditions. The steps that are often followed to diagnose an early ectopic pregnancy include:

1. Medical history and physical examination: Your doctor will ask about your medical history and symptoms, and will examine your abdomen. The doctor will first confirm the pregnancy test.

With your consent, your doctor may also do a vaginal (internal) examination.

2. Blood tests: A test for the level of the pregnancy hormone βhCG (beta human chorionic

gonadotrophin) and progesterone level or a test every few days to examine for variations in the levels of these hormones, may help to make a diagnosis.

These levels usually rise throughout normal pregnancy, but if they don't, it could be a symptom of an irregular pregnancy, such as an ectopic pregnancy or an approaching miscarriage.

If you are looking to book a test just sitting back at home, you are just a click away.

Book Now!

3. Vaginal ultrasound: An ectopic pregnancy is usually diagnosed by doing a transvaginal ultrasound scan (in which a probe is softly put into your vagina). A transvaginal scan helps to identify the exact location of your pregnancy.

4. Laparoscopy: This is also called keyhole surgery. In some cases, laparoscopy is needed to confirm the diagnosis of an ectopic pregnancy. This procedure is also used in the treatment of ectopic pregnancy.

It is done by using a small telescope to look at your pelvis by making a tiny cut, usually into the umbilicus (tummy button).

Note: The combination of a urinary pregnancy test, transvaginal ultrasound, and serum hCG estimations is commonly used to enable the early diagnosis of ectopic pregnancy. Early diagnosis and treatment can help prevent serious complications.

Celebs affected

Tamar Braxton

Singer and reality TV star Tamar Braxton shared her experience with ectopic pregnancy in a 2018 episode of her show "Braxton Family Values." She underwent emergency surgery to have one of her fallopian tubes removed.

Kajol

Famous Bollywood actress Kajol was operated on for ectopic pregnancy in 2001. In one of her interviews, she mentioned that “family support is one major thing which helps to go through this difficult phase.”

Prevention Of Ectopic pregnancy

In general, women cannot prevent Ectopic pregnancy (EP), however, the following points can help reduce the risk of EP:

Here are certain steps that can help reduce the risk of ectopic pregnancy:

1. Use contraception: When having sex, use a condom. This can reduce your chances of developing pelvic inflammatory disease and sexually transmitted infections.

Explore our wide range of contraceptive measures.

Explore here

2. Get tested for sexually transmitted infections (STIs): Certain STIs, such as chlamydia and gonorrhea, can cause pelvic inflammatory disease (PID), which raises the chance of ectopic pregnancy. Getting tested for STIs and treating any infections as soon as possible can help lower this risk.

3. Quit smoking: Smoking may raise your chances of developing EP. To lessen the risk, women should quit smoking or avoid being exposed to cigarette smoke before attempting to conceive.

Here we have an anti-smoking cessation range that will help you to stop your craving for smoking.

Explore here

4. Get early prenatal care: If you do become pregnant, seeking early prenatal care can help ensure that any potential problems are detected and addressed as soon as possible. This can help lower the risk of complications, such as ectopic pregnancy.

5. Awareness about sex education: Women should receive their first "sex education" as young teenagers, which should cover the danger of infertility as a result of smoking, drug use, vaginal douching, and unsafe sex. During preconception counseling, the woman can be checked for ectopic pregnancy risk factors and told about the signs and symptoms of an ectopic pregnancy, as well as the need for early detection.

Specialist To Visit

If you experience any symptoms of ectopic pregnancy, such as abdominal pain, vaginal bleeding, or dizziness, etc,it is important to visit a:

General physician

Gynecologist

Obstetrician

Consulting the right expert can help you get the right medical advice. Talk to our experts.

Book Consultation Now

Treatment Of Ectopic pregnancy

Ectopic pregnancy may be treated in several ways. This depends on whether the fallopian tube has broken open (ruptured), how far along the pregnancy is, and your hormone levels. Treatments may include:

1. Medications

Your doctor may suggest a drug called methotrexate to halt the pregnancy if you are early in your pregnancy and there are no symptoms of internal bleeding. By preventing cell growth, this medication puts an end to the pregnancy and does not require the removal of the fallopian tube.

It may sometimes require a follow-up injection or surgery. After the medicine is administered, doctors perform blood tests to detect hCG levels every week to determine whether methotrexate treatment was successful.

If hCG cannot be detected, the treatment is considered effective. If methotrexate fails, a second dose or surgery is required.

General precautions to be taken:

Women should limit their exposure to sunlight during treatment since methotrexate can promote sensitivity to sunlight and sunburn.

Women who are taking methotrexate should avoid alcohol and folic acid (folate)-containing supplements.

2. Surgery

An ectopic pregnancy can be removed from the fallopian tube by using two types of surgical procedures called salpingostomy and salpingectomy. These procedures can be performed by either Laparoscopy or Laparotomy.

Laparoscopic (keyhole) surgery: It is done to remove the fertilized egg from the fallopian tubes. The surgery may involve removing your damaged fallopian tube (salpingectomy) or opening your fallopian tube (salpingostomy) through a small lengthwise incision in the fallopian tube to remove the ectopic pregnancy tissue.

Laparotomy (open surgery): It is done to remove the ectopic pregnancy. If the pregnancy is advanced or there has been significant associated bleeding, then your doctor may perform a laparotomy, a type of surgery involving a much larger incision.

3. Expectant management

It is a conservative strategy that comprises persistent observation and monitoring of the situation to determine whether any treatment is required or whether the ectopic pregnancy resolves spontaneously and successfully without intervention. Patients are closely monitored with weekly transvaginal ultrasonography and b-hCG levels are measured in the blood.

4. Recovery after treatment

Following treatment, the doctor may advise the woman to undergo regular blood tests to ensure that her pregnancy hormone (hCG levels) return to zero. Otherwise, if your hormone level does not decrease or increase, you may require more treatment.

Most women heal quickly after laparoscopic surgery or a methotrexate injection and are able to leave the hospital within 24 hours.

However, you must notify your doctor immediately if you have any of the following symptoms following treatment-

Feverish feeling or rise in body temperature

Swelling, redness, or pus accumulation on surgical cuts

Strong and foul-smelling vaginal discharge

Bright red vaginal blood loss or blood clots

Home Care For Ectopic pregnancy

After treatment, it is important to follow your doctor's instructions for recovery and follow-up care. This may include-

Even if you feel better sooner, you should rest for a week after your surgery. Your body requires rest to heal.

Ask your family or friends to assist you with chores and errands while you recover.

Walk as often, if your body allows.

Perform deep breathing exercises.

Avoid strenuous activities.

Prevent constipation. To alleviate symptoms, it is recommended that you hydrate yourself, eat fruits and vegetables, drink plenty of water, and consume fiber-rich foods.

If the pain gets severe, you can take painkillers after your doctor’s consultation.

Follow-up care:

You may need follow-up blood tests to make sure that the ectopic pregnancy has been completely removed.

Keep a follow-up appointment with your doctor.

Immediately contact your doctor if you experience any unusual symptoms such as feverish, stomach ache, swelling on surgical wounds, vaginal discharge, nausea, etc.

Complications Of Ectopic pregnancy

The complication of ectopic pregnancy may include-

Rupture of the fallopian tube: As the fertilized egg matures, it can burst the fallopian tube, resulting in serious bleeding and potentially life-threatening consequences.

Infertility: Damage to a fallopian tube following an ectopic pregnancy can result in scarring and obstructions, making it harder to conceive in the future.

In this case, talk to your doctor about other options to get pregnant, like IVF (in vitro fertilization).

Hypovolemic shock: Severe internal bleeding can result in shock, a potentially fatal condition that requires prompt medical intervention.

Alternative Therapies For Ectopic pregnancy

The only successful treatment for ectopic pregnancy is the removal of the embryo, which is usually accomplished through surgery or medicines. Delaying therapy can result in fallopian tube rupture and severe bleeding, both of which can be fatal.

Alternative treatments for ectopic pregnancy, such as herbal medicines, acupuncture, or homeopathy, are ineffective. These remedies may even postpone medical intervention, which can be fatal.

It is critical to seek medical help as soon as possible in order to receive proper examination and treatment.

Living after Ectopic pregnancy

An episode of ectopic pregnancy can be challenging both physically and emotionally.

Here are some tips that may help:

1. Emotional support: Ectopic pregnancy can be distressing for women. It might mean coming to terms with the loss of your baby, with the potential impact on future fertility, or with the realization that you could have lost your life.

Taking support from other people, whether friends and family, support groups, or counselling may be helpful.

2. Getting follow-up care: After the therapy is completed, the doctors will want to regularly monitor the patient. It is critical that you attend all of your follow-up appointments.

3. Seek support: It is natural to experience a variety of emotions when dealing with an ectopic pregnancy. You could be unhappy, furious, or anxious. To cope, consider seeing a therapist or joining a support group.

4. Take time to heal: It's important to allow yourself time to heal both physically and emotionally after an ectopic pregnancy. Do not rush back into your regular schedule.

5. Consider future pregnancy: If you want to have a baby in the future, discuss your options with your doctor. It is critical to wait until you are emotionally and physically ready before attempting another kid. It is advised that you wait at least three months for your body to recuperate.

Frequently Asked Questions

Can I conceive again after an ectopic pregnancy?

How likely is it that I will have another ectopic pregnancy?

How much time gap is required after ectopic pregnancy?

Is surgery required for an ectopic pregnancy?

What is the best option after ectopic pregnancy?

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Eczema

Overview

Eczema is a common chronic skin condition characterized by dry, intensely itchy, and inflamed patches of skin. It originates from the Greek word ‘ekzein’ which means to ‘boil over’ or ‘break out’. Although there are several types of eczema, the term usually refers to the most prevalent form, called ‘atopic dermatitis’.

Atopic dermatitis results from a complex interplay between environmental and genetic factors. The word "atopic" in atopic dermatitis indicates an association with allergies. Though the condition is not always directly caused by an allergic reaction, it is commonly associated with other allergic conditions like asthma and hay fever.

The condition begins as lesions that are intensely red, bumpy patches or plaques that may ooze fluid when scratched. In chronic eczema, scratching and rubbing create skin lesions that appear scaly, dry, thicker, darker and scarred. While eczema is not contagious, the secondary skin infections associated with the condition may be.

Eczema can be lifelong and patients often cycle through long periods of symptom-free remission, followed by brief flare-ups that can be severe. However, symptoms can be prevented and managed with home care and remedies by keeping the skin healthy and moisturized. Exacerbation of eczema requires treatment in the form of corticosteroid creams. In addition to topical treatment, severe acute or chronic eczema often requires systemic immunosuppressant drugs or phototherapy.

Key Facts

Usually seen in

All age groups but more common in children

Gender affected

Both men and women

Body part(s) involved

Skin

Hands

Inner elbows

Neck

Ankles

Feet

Eyes

Prevalence

Worldwide: 15-20% in children and 1-3% in adults (2015)

India: 0.9% (2015)

Mimicking Conditions

Contact dermatitis

Cutaneous fungal infections

Seborrheic dermatitis

Drug eruptions

Scabies

Psoriasis

Ectodermal dysplasia

Hyper IgE syndrome

Netherton's syndrome

Wiskott-Aldrich syndrome

Necessary health tests/imaging

Patch test

Blood tests

Skin biopsy

Treatment

Medications: Corticosteroid creams, Antibiotics & Antihistamines

Injected biologic drugs

Phototherapy

See All

Causes Of Eczema

The exact cause of eczema is not fully known. However, there are a few theories or hypotheses regarding the underlying causes of eczema. These are not thought to be mutually exclusive and may complement each other to cause eczema.

1. Defects in skin barrier

The cells that make up our skin are vital for optimal skin hydration. People with eczema tend to have dry skin due to a defect in their skin barrier.

A strong association has been found between eczema and genetic change or mutation in the filaggrin gene (FLG). It is a vital gene which is responsible for creating the tough cells that make the outermost protective layer of the skin. In a patient with normal skin cells, these cells are tightly packed in an organized manner. With gene defects, less filaggrin is produced, leading to a haphazard organization of these skin cells.

This dysfunction causes a 'leaky' skin barrier. Water can easily escape from this leaky skin leading to dryness and dehydration. Harmful substances or allergens can more readily penetrate the skin leading to infections.

2. Impaired defense mechanisms

People with eczema have also been found to have decreased numbers of beta-defensins in the skin. Beta-defensins are proteins that are important for fighting off certain bacteria, viruses, and fungi. A decrease in Beta-defensins leads to increased susceptibility to skin infections.

3. Immunological causes

The immune system develops in the first six months of life. There is usually an equilibrium between the two main types of T helper lymphocytes (a type of white blood cells) namely Th-1 and Th-2. In eczema, this balance is disrupted with excess Th-2 cells and their associated chemical messengers (cytokines).

In some kids, high levels of the immunoglobulin E (IgE) antibodies and eosinophils (the white blood cells associated with allergy) are also found.

In rare cases, a single mutation in CARD11, a gene involved in the development and function of certain immune system cells, can cause eczema.

Symptoms Of Eczema

The skin of people with eczema does not retain moisture well and loses its protective properties. When this occurs, various symptoms can develop according to the phase of the disease.

In the acute phase, lesions are intensely red, bumpy patches or plaques that may ooze fluid when scratched.

In the chronic phase, scratching and rubbing create skin lesions that appear scaly, dry, thicker, darker, scarred or lichenified. Cracking of the skin or fissures can also occur.

Other common symptoms associated with eczema are:

Intense itching

Swollen skin

Dry skin (xerosis)

Skin color changes

Pus discharge due to secondary infection

Rash

Hives

Increased lines on the palms of the hands and feet

Dry, pale patches on the face and upper arms

Small bumps on the upper arms and thighs

Double skinfold underneath the inferior eyelid (Dennie-Morgan fold)

Note: Distribution of lesions is age specific.

Infants younger than 1 year old usually have the eczema rash on their cheeks, forehead, eyelids or scalp. It may spread to the knees, elbows, and trunk (but not usually the diaper area).

Older children and adults usually get the rash in the flexural surfaces or bends of the elbows, behind the knees, on the neck, or on the inner wrists and ankles.

Risk Factors For Eczema

Eczema results from a complex interplay between environmental and genetic factors.

Genetics

If a parent has atopic eczema, then the child could develop it, too. And, if both the parents have it, then there is a greater risk. Apart from this, if there is a family history of allergies, asthma or hay fever, then, too, there is a greater risk of the child developing eczema.

Personal history

Individuals with a personal history of allergies, hay fever or asthma have more chances of suffering from eczema.

Eczema, asthma, and hay fever are known as "atopic" conditions. These affect people who are overly sensitive to allergens in the environment.

Environmental factors

The irritants in our environment that can trigger eczema include:

Harsh soaps

Shampoos

Detergents and household cleaners

Dishwashing soaps and liquids

Perfumes

Disinfectants

Glues and adhesives

Chemicals used in dyes and tattoos

Antibacterial ointments

Fabrics like wool and polyester

Pollens

Molds

Mites

Animal dander

Tobacco smoke

Stress

Surprisingly, stress could also be one of the causes of eczema. Likewise, eczema causes excess stress. Mental, emotional, and physical stress that may trigger eczema are:

Depression

Anxiety

Inability to sleep

Irritability

Here's everything you need to understand about stress and its effects on your body.

Click To Read!

Studies suggest some more risk factors for developing eczema. These are:

Food allergies such as allergy to cow’s milk, hen’s eggs, and peanuts

Being sensitized to food in infancy

Cold climate

Exposure to secondhand smoke

Excess weight at birth

Treatment with antibiotics in infancy

Exposure to hard water in infancy

Birth through cesarean section

Avoid hot water during winters, if you have eczema

The changing weather and dry air of winters can cause eczema flare-ups. Hot water can be tempting during the cold season. However, a sudden change in temperature can lead to skin irritation. Read about 5 simple skin care tips for dry skin In winter.

Click Now!

Diagnosis Of Eczema

An accurate diagnosis requires a physical examination of the entire skin surface along with a detailed medical and family history. If any family members have atopic conditions, it is an important clue. No specific investigations are required to diagnose eczema. However, when there is a doubt or to confirm diagnosis, the following tests can be performed.

1. Patch test

A patch test is carried out to detect allergens. This helps your doctor to plan the right treatment for the allergies. They will also create a plan of action to tackle the dryness and itchiness of the skin and bring your symptoms under control. Patch test is essential particularly if the dermatitis becomes resistant to treatment.

2. Blood tests

Blood tests might be performed to check for causes of rashes that may be unrelated to dermatitis.

3. Skin biopsy

Skin biopsy can be done to distinguish one type of dermatitis from the other.

Read more about allergies and ways to tackle them.

Click Here!

Celebs affected

Kate Middleton

Kate Middleton, the Duchess of Cambridge, confessed that she developed eczema during her teenage years. However, she is currently known for her flawless skin.

Brad Pitt

Brad Pitt developed eczema during the shooting of the film, ‘The curious case of Benjamin Buttons’, due to the use of prosthetic makeup.

Catherine Zeta-Jones

Catherine Zeta-Jones is a famous actress and star. In 2010, she revealved that she dealt with eczema in her childhood for a long time. However, intense moisturisation of skin helped her tackle the condition.

Prevention Of Eczema

Eczema is a skin condition that develops as a result of an overactive immune system, a family history, or allergens and irritants in our environment. It has no permanent cure nor it can be prevented. However, we can definitely prevent the flares if we are aware of the triggers. Some of the triggers and tips to prevent it includes:

1. Dry skin

Dry skin is the most common symptom of eczema. Weather changes, harsh soaps and hot water can all cause our skin to dry. So, the best way to ensure soft skin is to look after our skin health. Here are a few tips to prevent dry skin.

Apply body lotion, moisturizer or emollient, or cold-pressed coconut oil after a shower to lock in the moisture. Moisturize at bedtime, too. Ceramide containing creams are particularly useful.

Place a humidifier in your bedroom during winters to moisten the air and ensure a good night’s sleep.

Avoid long, hot water showers during winters as the skin is sensitive to temperature changes. Allow the body to warm up before a shower. Add a few drops of body oils to your bath.

Avoid using harsh soaps, body washes, and shampoos. Avoid using cosmetics, perfumes, or toiletries that are loaded with chemicals and can trigger a skin infection.

Read about how to choose a good moisturizer for your skin.

Click Here!

2. Irritants and allergens

The everyday products we use contain irritants that trigger rashes on our skin. The foods that we eat cause flare-ups, too. Here are some of the common products and food items that trigger a flare-up. You can find ways to replace them with products that are gentle on the skin and foods that provide the necessary nutrients without disturbing the immune system.

Some of the common products that contain irritants include:

Detergents

Handwashes

Baby wipes

Fragrances

Glues and adhesives

Skincare products

Wools and polyester fabrics

Foods that may cause allergies are:

Milk

Eggs

Nuts

Gluten (wheat)

Spices

Citrus fruits

Tomatoes

Allergens are also hidden in unexpected places such as pet dander, dust mites, cockroaches, pollen, and mold. Avoiding these may prevent skin allergies leading to eczema.

3. Stress and anxiety

Our mental health and well-being affect our physical health and lifestyle. Stress and worry cause a flare-up and skin infections can cause stress and anxiety. Finding ways to get out of this vicious circle will help you manage the triggers and prevent eczema flare-ups.

Sufficient sleep, a gentle workout that does not cause sweating, and meditation will help you stay calm and deal with the triggers. You could ask your doctor for therapists who will help ease your tension.

Specialist To Visit

Paying close attention to allergies and staying alert to avoid the triggers is essential. Finding the right doctors and health care practitioners who will guide you and plan an appropriate treatment will give you comfort. The specialists who will help you in your fight against eczema are:

Dermatologists

Allergists

Family doctors or general physicians

Pediatricians

Eczema symptoms are sometimes mild and at other times, severe. So, please contact your doctor when:

You experience excessive itching and dryness

Your symptoms affect your productivity and sleep

Over-the-counter medications do not bring any relief and the skin infection worsens

Fever follows the symptoms

If you are having any such symptoms, seek advice from our professionals.

Consult Now!

Treatment Of Eczema

Eczema is a skin condition where patches on the skin become dry, itchy, and inflamed. It does not have a diagnostic test. However, its symptoms can be treated if you are well aware of the triggers that cause flares.

Here are some of the medications that are prescribed by doctors for the treatment of the symptoms of eczema.

A. Medical management

1. Corticosteroid creams and lotions: Corticosteroids are anti-inflammatory medicines that give relief from inflammation and itchiness. Some may require prescriptions. Most commonly used corticosteroids are:

Prednisolone

Hydrocortisone

2. Topical calcineurin inhibitors: Calcineurin inhibitors help reduce inflammation and prevent flares. Examples include:

Tacrolimus

Pimecrolimus

3. Barrier repair moisturizers: Barrier repair moisturizers repair the skin by reducing water loss. These are moisturizers that repair the natural moisture barriers of the skin and enable faster healing and hydration of the skin.

4. Antihistamines: They are medicines used to treat allergic skin reactions, hay fever, and allergic conditions. These cause drowsiness and hence reduce nighttime scratching to ensure a goodnight’s sleep.

5. Antibiotics: These are prescribed for bacterial infections that might develop along with eczema. These include:

Flucloxacilli

Erythromycin

Penicillin

6. Other medications: Ciclosporin is prescribed if topical treatments aren’t reducing the symptoms. These medications should be taken as per doctor’s prescriptions and for a short period.

B. Injected biologic drugs

These drugs work by blocking the proteins in the immune system. This calms the immune system and results in less severe inflammation and fewer symptoms. These include:

Rituximab

Omalizumab

Dupliximab

Infliximab

Mepolizumab

Tocilizumab

C. Phototherapy

This therapy is used for eczema that is spread all over the body. In this therapy, the skin is exposed to UVA and UVB waves to treat moderate dermatitis. It needs a month or two of steady treatment to notice any improvement in the symptoms.

Home-care For Eczema

Changing your lifestyle and eliminating products and food items that trigger flare-ups are the two most important things you can do to take care of your health. It is easier to prevent flare-ups but difficult to cure them permanently. So, making a gradual change instead of a quick transition will help you eventually. Here are some changes you can make at home to help prevent skin rashes or skin infections.

Moisturize every day: Choose gentle body lotions and moisturizers or emollients to moisturize the skin. Ceramide containing creams are more effective in management of eczema.

Add household bleach to your bath water: This helps kill the bacteria that cause the infections in eczema. It will also ease the inflammation and the itching. Add half a cup of bleach to a tub of water and soak in it for 10 minutes. Rinse well.

Be gentle while drying the skin: Dab dry with the towel to wipe away the moisture. Do not scrub.

Use mild soaps and body wash: Eliminate all the harsh soaps, shampoos, and body wash and replace them with products that are gentle on the skin and prevent it from drying.

Try cool compress: Apply a cool compress to ease the itching. A clean, damp cloth will give you relief from the itching. Avoid scratching.

Say no to hot water showers: Switch to lukewarm showers during winters. Have shorter baths and pat dry the skin. Moisturize after the shower.

Use cold-pressed coconut oil: Coconut oil is antibacterial and anti-inflammatory. It helps soften dry skin and heals bacterial infections of the skin.

Try vitamin supplements: Enquire about vitamin supplements such as fish oil capsules, Vitamin D, Vitamin E, zinc, selenium, probiotics, and turmeric supplements. These might be beneficial in dealing with skin infections.

Avoid fabrics that irritate the skin: Switch to cotton, silk, and linen clothes. These are skin-friendly fabrics and will not cause any skin allergies.

Avoid high-intensity workouts: Try a gentle exercise regimen that will prevent sweating and skin rashes.

Massage your body: A body massage with the right oils or lotions will make you feel better. Look for a masseur who is experienced in giving body massages to patients with eczema.

Manage mental stress: Try gentle yoga exercises and meditation for relief from stress and anxiety. Flare-ups can trigger anxiety which is not good for health.

Eczema can be caused by a variety of reasons and severe cases need help from a dermatologist. Read about home remedies to manage eczema in mild cases.

Click Here!

1 mg Pro-tip: Never scratch an itch.

Scratching an itch worsens the condition and makes way for bacterial infections. Instead, apply a cold moisturizer, or a gel to soothe the itch and get relief. If you fear scratching while you sleep, try wearing cotton gloves and socks to bed. Or, request your doctor to prescribe antihistamine pills to control the itching. Read everything about itching from causes to management.

Click To Read!

Complications Of Eczema

The main reason behind the several complications of eczema is itching. The skin gets damaged by the incessant scratching due to itchiness. This results in various infections that can worsen the condition.

Cellulitis

It is a bacterial infection where the bacteria infects the deeper layers of the skin. The skin is red, swollen, and very painful. It spreads rapidly and affects the lower legs, face, arms, and other areas. The bacteria enter the skin through a crack and spread infection. The swelling is followed by pain, blisters, and fever. If left untreated, it can be life-threatening.

Eczema herpeticum

This viral infection is caused by the virus that causes herpes. The symptoms are painful blisters, fever, and swollen lymph nodes.

Molluscum contagiosum

This infection is caused by a poxvirus. It causes white wounds on the skin that itch and swell. Curettage (cutting it) or cryotherapy (freezing it) are some of the ways of treating this viral infection.

Neurodermatitis

Itching and scratching of the skin because of eczema causes this infection. Continuous scratching causes the skin to become thick and dry. It can happen on the ankles, neck, hands, elbows, feet, shoulders, wrists, and scalp. Steroids are prescribed for its treatment along with medicines to help you sleep better and prevent scratching.

Scars

The constant itching and scratching because of the infection leads to scarring of the skin. Once dry, the scars fade away with time.

Seborrheic dermatitis

It is a type of eczema that affects the scalp. It is caused by a fungus called Malassezia yeast that is found on the surface of the skin. It causes severe dandruff, itching, and hair loss due to damaged hair follicles. It affects the forehead, nose, armpits, chest, and groin.

Sleeplessness

Eczema severely affects a person’s sleep. The itchiness seems worse at night and leads to scratching and discomfort. Staying away from the triggers and getting treated for the itching can help in better sleep.

Depression and anxiety

Eczema increases stress and anxiety because of skin rashes and itching. Likewise, stress and depression can trigger flare-ups. A support group and therapy will help you relax and find ways to tackle the flare-ups.

Alternative Therpaies For Eczema

The most important part of managing eczema is understanding the triggers and making necessary changes that will help you manage your condition better. It is advised to consult your doctor before starting any alternative treatments for eczema. Some of them include:

Supplements

Supplements fulfill the body’s requirements of essential nutrients, strengthen the immune system, and reduce inflammation in patients. However, please inquire with your doctor before starting any of the supplements.

Fish oil

Vitamin D

Zinc

Selenium

Turmeric

Melatonin

Read more about the right way to take Vitamin D.

Click To Read!

Ayurveda

This ancient medical science uses various methods to achieve a balance between the mind and the body to heal an illness. It uses herbs, dietary changes, oils, body massages, meditation, and yoga to help purify the body from within.

But please consult with your doctor before starting an ayurvedic treatment. Even various herbs such as tannins, pansy flowers, fenugreek seeds, and alsi (flaxseeds) may also help treat dermatitis.

Mindfulness and meditation

Stress increases inflammation in the body and is known to trigger eczema flare-ups. Learning meditation will help you focus on the present and attain a state of calmness to bring down stress levels.

Yoga

Yoga is a wonderful way to practice mindfulness, and improve your breathing and flexibility. Yoga improves not just physical wellbeing but emotional and mental well-being too. The gentle exercises in yoga do not exert and cause excess sweating that could trigger skin irritation. It helps reduce stress and, therefore, inflammation that causes physical discomfort.

Some of the yoga asanas for a healthy skin are:

Uttanasana

Trikonasana

Bhujangasana

Janu sirsasana

Viparita karani

Acupressure

Acupressure uses physical pressure on certain points on the body to unlock life energy. There are limited studies that prove if acupressure can bring relief from the symptoms of eczema, but just like body massage, it might help calm the mind and relieve mental stress.

Traditional chinese medicine

It incorporates acupuncture, body massage, mind-body practices, and traditional Chinese herbs to help the vital force called Qi regain balance to heal an illness.

Gamma-linoleic acid

Gamma linolenic acid is a fatty substance used for managing symptoms of eczema. It is found in various plant seed oils such as borage oil and evening primrose oil.

Omega-3 fatty acids

A study demonstrated that dietary intake of omega-3 fatty acids may have a therapeutic effect on the symptoms of eczema as they help reduce the inflammation associated with eczema.

Probiotics and prebiotics

Probiotics are live microbial food supplements. Prebiotics are indigestible carbohydrates that stimulate the growth of probiotic bacteria in the intestine. They are thought to be effective in reducing the incidence of eczema. However, further studies are required to prove their effectiveness in doing so.

Use coconut oil to moisturize your skin.

Coconut oil is a natural remedy for eczema. It moisturizes the skin and soothes dry, itchy skin. Loaded with healthy fats, coconut oil contains anti-inflammatory and antibacterial properties and antioxidants that protect the skin. Learn more about the benefits of coconut oil.

Tap To Read!

Living With Eczema

Living with an illness is never easy. However, a positive mindset, mindfulness, and strategies to deal with its symptoms will help you immensely. Itchy skin is the worst part of eczema and scratching an itch is prohibited. So, how do we deal with such a problem? Here are a few tips for easy living with eczema.

1. Know your triggers

Be aware of the triggers and foods that your are allergic and the products that irritate your skin. Being aware of the allergens and the irritants will help you make changes in your lifestyle and your everyday habits that will help in keeping the discomfort under control. Avoid direct sunlight and any exercise that causes sweating. Protect yourself from sun, heat, sweat, and sudden changes in temperature that can dry the skin.

2. Start an exercise routine

Pick an exercise routine that suits you. Make sure it doesn’t exert you and makes you break into a sweat. Try something gentle like yoga or Tai chi. The benefits of exercising are multiple. Not only does it improve your physical health, but also your mental and emotional wellbeing. It helps you stay mindful, focus on breathing, and calm your mind. Exercising also helps you develop a positive attitude that is so necessary for everyday life.

3. Moisturize

It is essential to keep the skin well moisturized to prevent it from itching and developing cracks that can lead to bacterial infection. Pick lotions and creams that are gentle on the skin and contain fewer chemicals. Opt for cold-pressed coconut oil. It is antibacterial, antiviral, and loaded with antioxidants that keep the skin soft and healthy.

4. Develop a hobby

Any creative activity, be it drawing, singing, cooking, reading, writing, or gardening, can help keep your mind occupied. Indulging in such activities keeps us busy and happy. It also keeps the hands busy and distracts the mind from the itching and the other discomforts related to eczema. It gives you a chance to spend time with yourself, doing an activity that you enjoy.

5. Communicate

Being open about your condition with family and friends is very important. It helps them be aware of your struggles and extend the help you may need sometimes. Also, communicate with your doctor regularly. Keep your doctor’s appointments so that they, too, are aware of your symptoms, flare-ups, and discomfort and will help make changes in the treatment.

6. Self-care

Self-care is critical when dealing with eczema. Find time for yourself, spend time with yourself, doing things you love. Make your health and wellbeing your priority. Look after yourself like you would look after your loved ones.

Frequently Asked Questions

Can eczema go away on its own?

What are the foods to avoid in eczema?

What soothes eczema itch?

Is vaseline good for eczema?

Can drinking lots of water cure eczema?

Is baking soda good for eczema?

Can swimming pools make eczema worse?

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Edema

Also known as Oedema, Swelling, Hydrops, Puffiness, and Dropsy

Overview

Edema is an observable swelling that occurs due to the accumulation of fluid in body tissues. Edema most commonly occurs in extremities like feet, ankles, legs, or hands where it is referred to as peripheral edema. There are a number of other different types of edema, usually named after the part of the body affected.

Mild edema is common and does little harm. It can develop due to spending too much time sitting or staying in bed (immobility), due to varicose veins, and pregnancy. Certain medications, allergies, or more serious underlying ailments including heart failure, liver disease, and kidney disease can also cause edema.

Dietary modifications like decreasing dietary sodium intake can help reduce fluid overload. Treatment includes use of diuretics like furosemide, and bumetanide, which can reduce edema fluid. Patients on these diuretics are commonly advised to take potassium supplements or consume foods rich in potassium such as bananas, orange juice, tomatoes, potatoes etc.

Key Facts

Usually seen in

Adults above 40 years of age

Gender affected

Both men and women

Body part(s) involved

Face

Abdomen

Limbs

Kidney

Lungs

Heart

Prevalence

Worldwide: 0.62 to 11.8 per thousand (2016)

India: 18% (2021)

Mimicking Conditions

Hypothyroidism

Capillary leak syndrome

Angioedema

Autoinflammatory disease

Localized swelling

Obesity

Nephrotic syndrome

Deep vein thrombosis

Lipedema

Angioedema

Urticaria

Cellulitis

Necessary health tests/imaging

Blood test: complete blood count (CBC) along with kidney function test, lipid profile and liver function test

Imaging: X-ray of the chest, Echocardiography, and Magnetic Resonance Imaging (MRI).

Treatment

Diuretics: Acetazolamide, Theophylline, Furosemide, and Amiloride

Corticosteroids: Dexamethasone

See All

Types Of Edema

The various types of edema include:

1. Peripheral edema: Edema of peripheral parts like legs, feet, and ankles.

2. Pedal edema: Edema of the foot.

3. Pulmonary edema: This is characterized by the accumulation of fluids in air spaces of the lungs that may lead to respiratory failure.

4. Cerebral edema: The accumulation of increased water content in the brain that may be caused due to ischemic stroke, cancer, or brain inflammation due to meningitis or encephalitis.

5. Angioedema: It generally occurs on the face and is different from hives where swelling is caused underneath the skin rather than on the surface of the skin.

6. Hereditary angioedema: It is a rare genetic condition that affects the immune system. This type of swelling generally affects the face, genitals, and abdomen.

7. Papilledema: Swelling of the optic nerve of the eye which is a result of increased intracranial pressure inside the skull and around the brain.

8. Macular edema: This condition occurs when blood vessels leak into a part of the retina called the macula, making it swell.

9. Dependent edema: It is the swelling that occurs in the legs and lower body which is affected by gravity and position.

10. Scrotal lymphedema: It is caused due to enlargement of the scrotum due to fluid accumulation around the testes.

11. Lipedema: It is a disorder of the fatty (adipose) tissue that causes swelling of the legs and hips.

12. Ascites: It is a condition in which fluid collects in spaces within the abdomen.

13. Pleural effusion: It is an abnormal, excessive collection of this fluid in the chest (lung or pleural cavity). The most common cause of the pleural effusion is heart failure.

14. Anasarca: This is a medical condition that leads to general swelling of the entire body.

The condition is also known as extreme generalized edema or massive edema.

15. Idiopathic edema: Accumulation of fluid in tissues with no particular cause.

Edema can also be broadly classified as:

1. Pitting edema: In this condition, depression is seen when pressure is applied to the skin and removed.

2. Non-pitting edema: This is a type of edema in which there is no presence of depression when pressure is applied.

Symptoms Of Edema

Some of the common signs and symptoms of edema include:

1. Swelling

Swelling in edema is due to fluid retention in the tissues. Swelling affects the feet, ankles, and legs the most, but it can also affect other parts such as the face, hands, and abdomen.

2. Stretched and shiny skin

In edema, the skin above the swelling area may appear stretched and glossy. The stretching of the skin is due to excess fluid that pulls the skin.

3. Pitting

Poor circulation or the retention of extra fluids are the most common causes of pitting edema. A dimple in the skin can be created by gently pressing in on the swelling area with the finger for at least 5 seconds and then removing your finger.

4. Aching body parts

The aching pain can be local or general. It depends upon the underlying cause of edema. Excess fluid and disturbed cellular activities are the cause of pain in edema.

5. Weight gain

Unexplained weight gain could be due to fluid retention. Weight gain can make limbs, hands, feet, face, or abdomen appear puffy.

6. Decreased urine output

If kidney disease is the underlying cause of edema, urine output could get affected. The kidneys are vital organs that help in blood purification. During this process, the excess fluid along with toxins and waste is eliminated in the form of urine. In kidney disorders, the kidney fails to produce urine in adequate quantities and, as a result, edema develops.

7. Shortness of breath

Is because of the lung's inability to provide enough oxygen to the body. Shortness of breath also known as dyspnea develops gradually.

8. Chest pain

Another symptom of pulmonary edema. If the underlying cause of pulmonary edema is a cardiac disease or chest injury it may present with severe chest pain.

Chest pain is not something to ignore! It can be life-threatening and may need immediate attention. Read about first-aid tips to follow in case of chest pain.

Tap Now!

Causes Of Edema

When the small blood arteries (capillaries) leak fluid and fluid collects in the surrounding tissues, it leads to edema.

It could be due to a twisted ankle, a bee sting, or a skin infection. This may be beneficial in some instances, such as an infection. More fluid from your blood vessels fills the enlarged area with infection-fighting white blood cells.

However, edema could also indicate serious underlying medical conditions including:

1. Congestive heart failure

One or both the lower chambers of the heart lose their capacity to pump blood effectively in congestive heart failure. Blood can back up in the legs, ankles, and feet as a result, creating edema.

This disorder can sometimes cause fluid to build up in the lungs (pulmonary edema), resulting in shortness of breath.

Worried about your heart health? Read 5 tips by cardiologists to keep your heart healthy.

Click Here!

2. Liver cirrhosis

Ascites (fluid accumulation in the abdominal cavity) and fluid accumulation in the legs can occur as a result of liver injury (cirrhosis).

3. Kidney disease

Edema can also be caused due to kidney or renal disease. Kidney disease may lead to fluid and sodium retention in the body, causing the legs to swell.

4. Damage to veins in the legs

The one-way valves in the leg veins are weakened or destroyed allowing blood to pool and produce swelling.

A blood clot (deep vein thrombosis, or DVT) in one of the leg veins can cause sudden swelling in one leg, as well as pain in the calf muscle. In this condition, one must get medical attention immediately.

5. Inadequate lymphatic system

The lymphatic system aids in the removal of excess fluid from tissues. If this system gets affected, like in cancer surgery, the lymph nodes and lymph arteries that drain an area may not function properly, resulting in edema.

6. Protein deficiency

Albumin and other proteins in the blood behave like sponges, allowing fluid to flow freely through your blood vessels. Over time, a deficiency of protein in the diet might result in fluid accumulation and edema. However, it is rarely the cause.

7. Allergic reactions

Edema is a common side effect of allergic responses. Nearby blood vessels leak fluid into the affected area in response to the allergen.

8. Head trauma

Cerebral edema can be due to low blood sodium, high altitudes, brain tumors, and a block in fluid outflow in the brain (hydrocephalus). Headache, disorientation, and unconsciousness are all possible symptoms.

9. Critical illness

Burns, life-threatening infections, and other conditions can trigger a response that permits fluid to leak into practically all tissues. This can result in edema all over the body.

10. Emphysema

It is a lung condition that can also cause edema in the legs and feet if the pressure in the lungs and heart gets elevated.

Did you know?

You can measure the efficiency of your lungs by a simple test called the pulmonary function test. Know more about it.

Read Now!

Risk Factors For Edema

Numerous factors can up your risk of edema. They include:

1. Pregnancy: The fetus and placenta require more fluid, hence the body retains more sodium and water, making one more susceptible to edema.

2. Taking certain medicines: The following medicines increase the risk of edema:

Blood-pressure lowering medications

Nonsteroidal anti-inflammatory medicines (NSAIDs)

Estrogens

Thiazolidinediones (oral antidiabetic medicine)

Corticosteroids (like prednisone and methylprednisolone)

3. Prolonged sitting or standing: This can cause edema, especially in hot weather, leading to excess fluid accumulating in the feet, ankles, and lower legs.

4. Excessive sodium consumption: Consuming too much salt (sodium) can cause swelling on the fingers and around the ankles due to excessive fluid build-up in the body's tissues.

5. Obesity: Several studies have demonstrated an increased body mass index is widely acknowledged as a risk factor involved in the development of edema.

6. Uncontrolled diabetes: Diabetes can affect your blood circulation and cause fluid to build up in the lower extremities. Persons with diabetes frequently present with lower extremity (LE) edema.

7. Premenstrual hormonal changes: Edema is seen in 92% of women, predominantly in the second phase of the menstrual cycle due to the hormone progesterone that causes water retention.

Pe-Menstrual Syndrome (PMS) is Real!

Have you ever experienced mood swings, tender breasts, food cravings, fatigue, irritability, and depression before your periods? Well, the cause isn't fully understood but it likely involves changes in hormones during the menstrual cycle. Read more on PMS.

Click To Read!

Diagnosis Of Edema

If you experience any symptoms of edema such as swelling or puffiness, stretched skin, weight gain, or a change in urine output, then it is wise to consult a doctor.

Your doctor might do a physical examination and ask you a few questions related to your medical history. Physical examination generally includes inspecting the skin over the swollen area. The doctor may also press gently over the swollen part for about 15 - 20 seconds to see if it leaves a dimple. The doctor might ask for some more tests to diagnose the cause:

1. X-ray of the chest: A chest X-ray can help confirm the diagnosis of pulmonary edema and rule out other causes of shortness of breath.

2. Urine routine microscopy: Urine sample is analyzed to check for the presence of protein in urine. Proteins are reabsorbed and not eliminated in the urine. In kidney diseases, the kidneys fail to function properly, and as a result, protein and albumin are excreted in the urine. At the same time, the fluid having toxins is retained, which gets accumulated and gives rise to edema.

3. Ultrasound: It is a test that helps to check the distribution of edema. The intensity and spread of edema can be determined by ultrasound.

4. Echocardiography (ECG): This test can be used to determine any cardiac causes of edema.

5. Magnetic resonance imaging (MRI): The test can help identify any damage in the bone marrow that may result in the development of edema.

6. Blood test: A complete blood count (CBC) along with kidney function test, lipid profile, and liver function test is useful in diagnosing causes of edema.

In some cases, allergic tests, tests for viral or bacterial infection, or toxicity tests are recommended. Additional serological tests could be done based on the condition.

Get your lab tests done with us, where patient comfort and safety are the utmost priority.

Book Now!

Celebs affected

Rana Daggubatti

A popular Indian actor, Rana Dagubatti, has talked about how he dealt with heart and kidney issues. He also mentioned how the edema associated with his illness affected his workout routine initially, but he was able to cope with it and recover.

Selena Gomez

The famous singer and actress Selena Gomez was suffering from lupus. This led to kidney failure and renal edema. She received a kidney transplant from her friend Francia Racia and is now doing well.

Prevention Of Edema

Here are a few simple tips that can help you to manage and prevent edema:

1. Physical activity

Try to be physically active. Sitting or standing for long periods without moving is not recommended.

Moving helps in activating the muscles in the affected body area, particularly the legs. This may assist in pumping the excess fluid back to the heart. While traveling, get up and stroll about, especially if you are flying.

Read about 5 marvelous ways in which walking can benefit your health.

Read Now!

2. Eat a low sodium diet

Avoid consuming too much sodium in your diet. A low-salt diet helps to regulate high blood pressure and edema.

3. Elevate your legs

Raising the legs above heart level for 30 minutes three or four times a day can help with leg, ankle, and foot edema. For those with minor venous illnesses, elevating the legs may be enough to eliminate edema.

4. Drinking water

Although fluid retention causes swelling, drinking water can help to lessen edema. To minimize swelling, drink 8-10 glasses of water every day. When the body is dehydrated, it maintains the fluids it already has. This results in edema.

5. Avoid alcohol

Avoid consuming alcoholic beverages. If drinking alcohol produces recurring swelling, it could indicate a problem with the kidneys, liver, or heart.

6. Magnesium-rich foods

Magnesium deficiency leads to retention of water in the body. Eating magnesium-rich foods like Tofu, spinach, cashews, almonds, dark chocolate, broccoli, and avocados are helpful in preventing edema.

Do you want to buy magnesium supplements? Just click here to choose from the best potassium supplements.

Browse Now!

7. Foot massage

Massage is an effective approach to relieve swollen feet. It helps to drain fluids and minimize edema. It is advisable to massage your feet after exercise, long hours of standing, and long journeys.

8. Increase potassium-rich foods

High blood pressure and water retention are symptoms of potassium insufficiency. Potassium-rich foods including sweet potatoes, bananas, salmon, chicken, and white beans, should be consumed. In case of kidney problems, talk to your doctor before increasing your potassium consumption.

Potassium is important for normal functioning of the heart and bones! Know about top 50 indian foods that are rich in potassium.

Read This!

9. Sleep on the lateral sides

Sleep on your side if possible. Sleep on your left side if possible to relieve strain on the vein that transports blood from the bottom of your body to your heart. This may aid in the reduction of edema.

10. Swimming

Take a dip in the pool. In the pool, try standing or walking. Water pressure can help decrease swelling in your feet and ankles by compressing tissue in your legs.

Swim your way to good health! Read more about the benefits of swimming.

Click Now!

Specialist To Visit

The symptoms of edema may not always be resolved due to lifestyle changes.

It could be due to some serious underlying disease involving the heart, lungs, or kidneys.

If you experience severe chest pain or breathlessness or a change in urine output, then consult a doctor.

Specialists that can help to manage edema depending on the body parts involved include:

General physician

Urologist

Nephrologist

Pulmonologist

Cardiologist

Oncologist

Gastroenterologist

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Treatment Of Edema

Mild edema normally clears up on its own, especially if you speed things up by elevating the affected limb above your heart.

The drugs that are used to treat edema either stop the accumulation of fluid in cellular space or help to eliminate them. Based on their action mechanism, these drugs are:

1. Diuretics

Diuretics, often known as water pills, aid in the removal of excess salt (sodium) and water from the body. This helps to clear up edema. They include:

Acetazolamide

Theophylline

Furosemide (Lasix)

Chlorthalidone (Hygroton)

Hydrochlorothiazide (Esidrix)

Amiloride (Midamor)

2. Corticosteroids

Although it may seem contradictory, corticosteroids have a role in the treatment of edema in some advanced cancer patients. Treatment with corticosteroids is thought to minimize peritumoral edema and relieve constriction of the venous and lymphatic systems, resulting in less edema. The corticosteroids used in treating edema are:

Dexamethasone

Betamethasone

Methylprednisolone

Corticosteroids are used to manage potentially life-threatening illnesses such as autoimmune disorders and cancer. But, here are a few dos and don’ts you need to follow while taking these medications.

Know More!

3. Benzopyrones

The use of benzopyrones, such as coumarin and oxerutins, in the treatment of chronic edema caused by lymphatic and venous illness, has piqued interest.

Read how to effectively manage venous disease.

Tap To Read!

Home-Care for Edema

Diet and lifestyle changes play a key role in the management and treatment of edema. Here are some tips you need to follow to keep edema under control:

Be active: Moving and activating the muscles, particularly your legs, can help in pumping the excess fluid back toward your heart.

Do not stay in a certain position for long: As it could interfere with venous drainage leading to edema.

Avoid prolonged standing or sitting without support! Gravity can drag fluid down into your legs and feet at times. This can lead to swelling and pain. It is necessary to get up and move about at regular intervals.

Read about 5 natural remedies to relieve pain.

Click Here!

Wear compression stockings: If you have edema in one of your limbs, you can wear compression stockings, sleeves, or gloves to prevent further swelling. Do consult your doctor before using them.

Soak your legs: Soaking legs for 15 to 20 minutes in a cool epsom salt bath can be very beneficials as epsom salt (magnesium sulfate) has the potential to relieve edema and inflammation.

Try massage: Massaging the affected area with firm, but not painful pressure toward your heart may assist in shifting the excess fluid out of that area.

Eat right: Consuming asparagus, parsley, beets, grapes, green beans, leafy greens, pineapple, pumpkin, onion, leeks, and garlic could be beneficial as these are all-natural diuretic foods.

Consume foods rich in antioxidants: Blueberries, cherries, tomatoes, squash, and bell peppers are high in antioxidants.

Stay hydrated: Water is the best natural remedy for edema. You must aim to consume close to 7-8 glasses (2-3 liters) of water every day.

Increase potassium intake: Water retention can be caused by a potassium deficit. Consider eating potassium-rich foods if you don't have any dietary limitations. Sweet potatoes, white beans, bananas, salmon, pistachios, and chicken are all rich in potassium.

Reduce consumption of salt and refined foods: Salt can aggravate edema by increasing fluid retention and refined foods such as white bread, pasta, and sugar should also be avoided.

Complications Of Edema

Edema, if left untreated, can lead to the following:

Painful edema: If the cause of the swelling is not treated timely, the pain becomes increasingly unpleasant and could turn unbearable.

Difficult walking: Edema can cause pain while walking.

Infection: The risk of infection is higher in the swollen area. The slightest injury or abrasion of the swollen part can become infectious. The infection can also lead to skin ulcers.

Angiosarcoma: It is a rare cancer that develops in the inner lining of blood vessels and lymph vessels. There is 10% risk of developing angiosarcoma in patients with chronic edema lasting >10 years.

Some other complications include:

Scarring between tissue layers

Reduced blood circulation

Reduced artery, vein, joint, and muscle flexibility.

Alternative Therapies For Edema

Here are a few quick fixes on how to control and get relief from edema.

1. Ayurveda

Rock salt (Sendha namak): To relieve inflammation and swelling, soak your feet in a bucket of lukewarm water with rock salt. Make sure you only use rock salt, which is thought to be a pure kind of salt.

Grapefruit essential oil (Angur ka tel): Grapefruit oil is known for its antioxidant and diuretic properties. Adding a few drops of grapefruit oil to a bucket with warm water can relieve swelling.

Cucumber and lemon water (Kheera and Nimbu pani): Cucumber and lemon both contain antioxidants. The nutrients present in lemons and cucumbers help as a natural diuretic. It helps to get rid of excess water while retaining essential nutrients and hydration.

Watermelon (Tarbuj): Watermelon is a natural diuretic with 92% water. It stimulates urination and hence, reduces water retention and swelling.

Coriander seeds (Dhaniya ke beej): Coriander seeds have anti-inflammatory properties and are widely used for reducing edema. Add 2-3 spoons of coriander seeds to a cup of water. Boil it till the quantity reduces to half. Strain and let it cool. Repeat twice a day for better results.

Dandelion: As the dandelion leaf is a diuretic, it can be helpful in relieving edema, but it should not be taken along with diuretic drugs.

Read about 5 natural ayurvedic remedies for a healthy life.

Click Now!

2. Yoga

Yoga may help to reduce edema by increasing the flow of blood. Some of the simple yoga asanas that can help reduce edema include:

Tadasana

Urdhahastottasana

Parsvakonasana

Viparita Karani

Sarvangasana

Halasana

Setu bandha asana

Ashwa Sanchalan

Katichakrasana

Surya Namaskar

Note: Practicing yoga, especially mountain pose, combats edema in the limbs. By stretching the muscles and nerves in the legs, Tadasana helps to enhance blood circulation and reduce water retention. It's one of the few yoga poses that stretch all of your muscles, even the tiniest ones, from your toes to your head.

Read about 12 health benefits of yoga.

Click Here!

3. Acupressure

Acupressure consists of pressing the acupuncture points in an attempt to help the free flow of energy. It is an alternate technique to manage edema which helps to enhance blood flow and reduce swelling in the feet and legs.

Living With Edema

If you experience edema once in a while, it can be managed with a few lifestyle changes and posture changes. Remember, edema can also indicate underlying kidney or heart or pulmonary problems such as renal failure, congestive heart disease, or COPD. Hence, if edema appears as a result of these chronic conditions, then in addition to diet and lifestyle changes, you may also need medications and proper medical supervision.

Here are a few diet and lifestyle changes that can help in management of edema.

Avoid standing or sitting in one place for long hours

Keep moving your limbs to ensure smooth circulation.

Wear compression stockings, sleeves, or gloves to prevent further swelling.

Avoid foods that can trigger and worsen symptoms of edema like carbonated drinks, deep-fried food, fat-rich dairy, alcohol, and meat.

Avoid eating trans fatty acids, which are found in baked items.

Increase food rich in antioxidants. Blueberries, cherries, tomatoes, squash, and bell peppers are high in antioxidants.

Consume potassium-rich foods if you don't have any dietary limitations.

Reduce your salt consumption.

Avoid refined foods, such as white bread, pasta, and sugar.

Edema in pregnancy

Swelling in the ankles and feet can occur during pregnancy due to additional fluid in the body and pressure from the expanding uterus. As a woman's due date approaches, the swelling tends to worsen, especially near the end of the term.

While sudden swelling of the face or hands can indicate preeclampsia (sudden high blood pressure during pregnancy), modest swelling of the ankles and feet is usually not a cause for concern.

Try these simple techniques to help lessen and/or prevent those pesky swollen ankles:

Long periods of standing should be avoided.

When sitting for long periods, stretch frequently.

When sleeping, sleep on your left side.

Before getting out of bed in the morning, put on maternity support stockings that reach your waist.

Make sure you drink plenty of water.

In humid or hot weather, try to stay cool and hydrated.

Want to make your pregnancy comfortable?

While preparing for the pregnancy, there are a lot of questions in your mind. Read about top 5 tips on pregnancy and get all your queries answered.

Click To Read!

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Encephalitis

Also known as Acute encephalitis syndrome (AES), Chamki bukhar and Chamki fever

Overview

Encephalitis, known as “chamki bukhar” in Hindi, is a disease that causes inflammation of the brain. According to the World Health Organization (WHO), acute encephalitis is defined as the acute onset of fever and a change in the mental status of a person of any age and at any time of the year. The changes in mental status include the signs and symptoms of confusion, disorientation, delirium, or coma. It may also cause an onset of seizures for the first time, especially in children, after they are infected.

Also known as acute encephalitis syndrome (AES), it mostly affects children below 15 years of age. The most common cause of encephalitis are viruses, however, in rare cases, bacteria, as well as fungi or autoimmunity can cause the illness. Japanese encephalitis (JE), a viral infection spread by mosquitoes, has been considered to be the leading cause of AES in Asia.

Encephalitis is a medical emergency and requires attention right away. The treatment of encephalitis depends on its cause. Antivirals, antibiotics, immunotherapy and supportive treatment are the main stays in management of encephalitis.

Recovery depends on the severity of symptoms experienced during the illness. Both the acute stage of the disease and its after effects can be overwhelming for patients and their families. However, various rehabilitation therapies can go a long way in helping the patients to make the best possible recovery.

Key Facts

Usually seen in

Children below 15 years of age

Gender affected

Both men and women

Body part(s) involved

Brain

Prevalence

Worldwide: 68,000 (2019)

India: 10,485 (2018)

Mimicking Conditions

Brain abscess

Bacterial meningitis

Sepsis

Tuberculosis

Fungal infection

Parasitic infection

Syphilis

Leptospirosis

Malignancy

Autoimmune or paraneoplastic diseases

Drug-induced delirium

Necessary health tests/imaging

Neuroimaging

Lumbar puncture

Electroencephalogram (EEG)

Intracranial pressure monitoring (ICP)

Brain biopsy

Treatment

Immunotherapy: Steroids, IV antibodies & plasma exchange

Antiviral medications: Acyclovir, Ganciclovir, Foscarnet & Ribavirin

Antibiotics: Ceftriaxone, Penicillin G & Vancomycin

Supportive care

See All

Symptoms Of Encephalitis

Acute encephalitis causes fever and a change in the mental status of a person. It may also cause an onset of seizures for the first time, especially in children, once infected. Most people suffering from the condition don’t have any symptoms. However, some might experience symptoms such as:

Headache

Vomiting

Neck stiffness

Weakness

Increase in irritability

Confusion

Disorientation

Coma

Hallucinations

Inability to talk or speak (Aphasia)

Loss of balance (Ataxia)

Involuntary movements

Personality change

The infection turns into illness in less than 1% of those infected. In people who develop symptoms, it usually takes around 5-15 days for the symptoms to appear after the infection.

In severe cases, AES can show symptoms such as:

Hearing loss

Vision impairment

Seizures

Unconsciousness

Paralysis

Coma

Causes Of Encephalitis

The main cause of encephalitis in India is known to be viruses however, even bacteria, parasites, fungi, chemicals, toxins and cancer (paraneoplastic encephalitis) can also cause the disease. Various causes are discussed below:

1. Viruses

Arboviruses, viruses transmitted through insect bites, are one of the most common causes of viral encephalitis. These include Japanese encephalitis and tick-borne encephalitis viruses. It is reported that people suffering from dengue, mumps, measles, scrub typhus, nipah, and zika virus are at high risk of encephalitis. Also, other viruses that can cause encephalitis include herpes simplex virus (HSV), enteroviruses, Epstein Barr virus, mosquito borne viruses, tick borne viruses, and rabies virus.

2. Autoimmunity

Autoimmune encephalitis occurs when a person’s own antibodies or immune cells start to attack the brain. It can be caused by autoimmune disorders like systemic lupus erythematosus and Behcet's disease.

3. Cancer

Encephalitis associated with cancer is known as paraneoplastic encephalitis. It is caused by metastasis of cancer cells to the nervous system or by any complication of cancer such as coagulopathy, stroke, metabolic and nutritional conditions, and side effects of cancer therapy.

4. Other causes

Rarely, bacteria and parasites can cause encephalitis. A severe form of leptospirosis and toxoplasmosis are associated with encephalitis. The causative agent might vary with season and geographical status. Surprisingly, in some cases, the causative agent may also remain unidentified.

Risk Factors For Encephalitis

Various risk factors associated with encephalitis are:

Age

Mostly, infants, young children and elderly are at a higher risk of most types of viral encephalitis.

Compromised immunity

People with weakened immune system like those suffering from HIV or cancer, undergoing chemotherapy or taking immune-suppressing drugs are at increased risk of encephalitis.

Geographical areas

Certain geographical areas which have high prevalence of mosquito or tick borne viruses see more cases of encephalitis.

Season of the year

Mosquito and tick borne diseases tend to be more common in summer or rainy seasons when these insects are most active.

Litchi And Encephalitis: What’s The Link?

Every year, many children in India, especially in Bihar, fall prey to this disease. Encephalitis seems to affect mostly children from impoverished rural families, and has often been attributed to natural toxins found in litchis which grow in abundance all around the district. Several studies have also revealed that eating litchi on an empty stomach or at night can cause encephalitis. Read the article to know more about it.

Click To Read!

Diagnosis Of Encephalitis

Acute encephalitis constitutes a medical emergency. The diagnosis of acute encephalitis is suspected in a febrile patient presenting altered consciousness. To diagnose encephalitis, your healthcare provider might order tests, perform a medical exam and discuss medical history.

A. Clinical history

Before confirming the patient is having encephalitis, it is essential to rule out the conditions that may mimic the symptoms of encephalitis. A physician performs a detailed overview checkup, reviewing the patient’s history, and the onset of symptoms to rule out other potential causes.

B. Lab tests and imaging studies

1. Imaging tests: Tests like magnetic resonance imaging (MRI) or computed tomography (CT) can be used to view the cross-sectional area of the brain. Single photon emission computed tomography (SPECT) can also be performed depending on availability. Imaging tests can reveal the abnormalities in the brain and the cause of the seizure-like tumor, lesions, and causes of cerebral dysfunction. These tests can also check for any problems that can make performing a lumbar puncture or a spinal tap risky.

2. Lumbar puncture: Also known as a spinal tap, this test is done to obtain a sample of CSF (cerebrospinal fluid), a protective fluid that flows through the meninges that cover the brain and spinal cord. When the brain and meninges are inflamed, the number of white cells in cerebrospinal fluid increases. Sometimes, samples of CSF can be tested to identify the virus or other infectious agent that is causing encephalitis.

3. Cerebrospinal fluid (CSF) polymerase chain reaction (PCR): PCR produces many copies of a gene which helps in detecting the genetic material of viruses in a sample of cerebrospinal fluid. It has become the primary diagnostic test for central nervous system (CNS infections) caused by viruses such as cytomegalovirus (CMV), Epstein Barr virus (EBV), human herpesvirus 6 (HHV-6) and enteroviruses.

4. Electroencephalogram (EEG): EEG helps to record the brain's electrical activity. It does not detect the virus that causes encephalitis, but certain abnormal patterns on the EEG may indicate a diagnosis of encephalitis.

5. Other lab tests: Blood tests including complete blood count (CBC) along with urine or serum toxicology screening tests may be done to test for viruses or other infectious agents.

6. Intracranial pressure monitoring (ICP): Any brain swelling can be diagnosed by increase in pressure inside the skull.

7. Brain biopsy: In very rare cases, a small sample of brain tissue might be removed for testing. This procedure is not preferred because of its high risk of complications. A brain biopsy is usually done only if the other tests do not give an answer or symptoms are worsening and treatments are having no effect.

8. Detection of intrathecal synthesis of antibodies: This test may be useful in detection of HSV, west nile virus and varicella zoster virus encephalitis.

Prevention Of Encephalitis

As encephalitis can be spread from one person to another, here are few tips to prevent the infection.

Avoid sharing items with a sick person: Be it food, utensils, glasses, or any other objects, it is advised to not share anything, especially personal items, with someone who may be exposed to or have the infection.

Hand hygiene: Wash hands frequently and properly with soap and water, particularly after using the washroom and before and after meals.

Prevent mosquito bites: Eliminate the risk of being bitten by an infected mosquito or another arthropod by the following steps:

Wear clothes that cover arms, legs, and feet

Avoid sleeping or staying long in open areas

Use mosquito repellents in your home and clothes

Use mosquito screens on doors windows to prevent entry of mosquitoes in the homes

Use bed nets for all members of the family during night time

Use mosquito zapping devices like electric bats

Invest in mosquito-repelling plants like tulsi and lemongrass

Get vaccinated: Vaccines are the most effective way of reducing the risk of developing encephalitis. These include vaccines for measles, mumps, and rubella. If the specific virus is prevalent in your region, vaccines for Japanese encephalitis and tick-borne encephalitis are recommended. Vaccines have been developed for people who travel to high-risk areas as well.

Do not self medicate: Take antibiotics (only after consulting with a doctor) if you live, work, or go to school with someone who has been diagnosed with bacterial encephalitis.

Should a person with encephalitis be quarantined?

Some of the causes of encephalitis such as enterovirus, COVID-19, or herpes are contagious while other forms are not. This is one reason, it is important to find out the underlying cause when a patient has encephalitis. The vast number of patients with encephalitis would not require quarantine. Consult your doctor to get clarity.

Consult Now!

Specialist To Visit

Patients exhibiting the symptoms of encephalitis are not capable enough to take their decisions on their own. Thus, the family or caregivers must approach the emergency care team if they suspect any abnormal activities of the brain in the patient. The following doctors can be consulted:

Neurologist

Internal medicine specialist

Infectious disease specialist

Pediatrician

Treatment Of Encephalitis

The key to surviving encephalitis is early detection and effective treatment of the underlying cause. Encephalitis treatment depends on the underlying cause and symptoms and may include:

1. Antiviral medications

The following antiviral medications are prescribed in case of viral encephalitis:

Acyclovir: It is commonly used in patients suspected with viral encephalitis, especially in case of HSV encephalitis.

Ganciclovir and foscarnet: Both these drugs can be used either individually or in combination for the treatment of CMV encephalitis.

Ribavirin: It might be of benefit in children with severe adenovirus or rotavirus encephalitis.

2. Antibiotics

This class of medicines are used to address underlying bacterial infections causing encephalitis. Some of the common examples include:

Ceftriaxone

Penicillin G

Vancomycin

3. Immunotherapy

Immunotherapy is mostly recommended to address certain types of autoimmune encephalitis.

Steroids: It is usually used as an adjunctive therapy in the treatment of tuberculosis (TB) encephalitis, bacterial encephalitis (before an antibiotic shot is given), and autoimmune encephalitis. It helps in reducing the inflammation of the brain tissue and intracranial pressure (ICP).

IV antibodies (IVIG): Viral encephalitis and autoimmune encephalitis have shown benefit after the use of IV antibodies. Due to the lack of sufficient evidence in the favor of IVIG, this treatment cannot be used as a part of the standard treatment of encephalitis

Plasma exchange: Therapeutic plasma exchange has shown promise especially in severe refractory cases of autoimmune encephalitis, not responding to steroids or IVIG.

3. Supportive care

Supportive care includes careful monitoring of intracranial pressure, fluid restriction, suppression of fever, and monitoring of blood pressure. Also, use of a feeding tube, catheter, and breathing tube are required in some cases.

Note: Seizures should be treated with standard anticonvulsant treatment and prophylactic therapy should be considered in view of the high frequency of seizures in severe cases of encephalitis.

Did you know?

Patients with encephalitis who suffer from seizures and do not respond well to anti-seizure medications can benefit from a ketogenic diet. Keto diet is high in fat and low in carbohydrates. It has been found to be effective in reducing seizures in drug-resistant epilepsy in children and adults, as well as in patients with autoimmune encephalitis.

Read To Know More!

Home-care For Encephalitis

Self-management can help in taking care of yourself.

Know about your condition

Taking your medicine

Talk with a doctor if you have questions

Good nutrition

Lower stress levels

Get enough sleep

Complications Of Encephalitis

Timely treatment after proper diagnosis of encephalitis can lead to better prognosis. However, if the encephalitis is left untreated, or even if the treatment is delayed, the damage to the brain can be fatal. Some of the common complications of encephalitis include:

Persistent fatigue

Persistent headache

Weakness or lack of muscle coordination

Movement disorders like tremors & involuntary muscle jerks

Post encephalitis (residual) seizure disorder

Paralysis

Hearing or vision defects

Speech impairments

Decreased concentration

Personality changes

Memory problems

Depression

Living With Encephalitis

Encephalitis is a serious condition. Both the acute stage of the disease and the after effects can be overwhelming for patients and their families. Recovery can take a long time. However, the following therapies can go a long way in helping the patients to make the best possible recovery:

Occupational therapy: Sometimes, encephalitis can dull the senses. An occupational therapist can help to adjust to this lack of sensation. They can also help a person improve their ability to carry out daily activities such as bathing, dressing, eating or reading.

Physical therapy: The goal of physical therapy (PT) or physiotherapy is to improve mobility, restore function, reduce pain, and prevent further injury by using a variety of methods, including exercises or yoga. A physical therapist can help to regain strength and relearn movement and coordination.

Speech therapy: Speech therapy is a treatment that can help improve communication skills. A speech and language therapist can help with problems producing speech. In case verbal communication is difficult, they can help in finding new and innovative ways of communication. Regular practice along with change in communication style can make communicating simpler.

Cognitive therapy: Post encephalitis, many patients may experience changes in their thinking or reasoning skills. This can also lead to behavioral and mood swings. Cognitive therapy can help to regain former patterns of behavior, along with management of emotional responses.

Frequently Asked Questions

Is encephalitis a zoonotic disease?

What is the main cause of encephalitis?

Can the brain recover from encephalitis?

Can encephalitis be cured?

Is encephalitis a STD?

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Endometriosis

Overview

Endometriosis is a condition in which the tissue that lines the inside of the uterus or womb called the endometrium starts growing outside the uterine cavity. This endometrial tissue can grow in the ovaries, fallopian tubes and even the pelvic area.

The typical symptoms of endometriosis include heavy menstrual flow, pelvic pain, and pain during urinary or bowel movements. Having an immediate family member suffering from the disease, early onset of menstruation and not having a child increase the risk of endometriosis. It usually affects women between the ages of 25 and 40. Women with endometriosis are more likely to have infertility or difficulty getting pregnant.

Endometriosis can be diagnosed with abdominal ultrasound or laparoscopy, which is the gold standard of diagnosis and treatment. Treatment often begins with medications such as oral contraceptives, GnRH analogues and injections to suppress the ovarian function. Surgery is often the last resort to treat the later stages of this condition.

You can take care of yourself at home by trying some simple remedies such as using a heating pad for pain relief and including remedies such as curcumin and green tea. Remember, ignoring the symptoms of endometriosis and not seeking treatment on time can result in severe complications.

Key Facts

Usually seen in

Adults between 25 - 40 years of age

Gender affected

Women

Body part(s) involved

Pelvic cavity

Uterus

Ovaries

Fallopian tubes

Prevalence

India: 25 million (2020)

Mimicking Conditions

Dysmenorrhea

Pelvic adhesions

Serositis

Functional or neoplastic ovarian cyst

Uterine malformation

Adenomyosis

Colon cancer

Ovarian cancer

Necessary health tests/imaging

USG whole abdomen

CT/MRI of Pelvis

Laparoscopy

Histological examination

Treatment

NSAIDs: Ibuprofen

Oral contraceptives: Desogestrel, Etonogestrel

Danazol

Progestin: Medroxyprogesterone

GnRH analogues: Leuprolide

Intrauterine devices

Surgery

See All

Symptoms Of Endometriosis

Many women with endometriosis may not have any symptoms. Such women come to know of endometriosis if they face difficulty in conceiving or during a routine ultrasound. The following are the most common symptoms for endometriosis, but each woman may experience symptoms differently:

Chronic pain in lower back and pelvis

Abnormal or heavy menstrual flow or bleeding between periods

Painful menstrual cramps

Pain during sexual intercourse

Painful bowel movements during menstrual periods

Painful urination during menstrual periods

Other gastrointestinal symptoms like bloating, diarrhea, constipation or nausea especially during menstrual periods

Infertility or difficulty in conceiving

Fatigue

Pelvic pain is the pain experienced internally in the reproductive region in both men and women. Read more about the common causes of pelvic pain in women.

Click To Know!

Causes Of Endometriosis

Endometriosis is an idiopathic disease, which means the cause of the disease is largely unknown. However, there are a few theories that explain the mechanism of endometriosis:

1. Retrograde or Reverse menstruation: This popular theory suggests that during menstruation, some of the blood and tissue containing endometrial cells from the uterus travels through the fallopian tubes into the pelvic cavity. These endometrial cells stick to the walls of the pelvic cavity and continue to proliferate and bleed over the course of each menstrual cycle. Mostly all women have some degree of reverse menstruation, but only a few develop endometriosis. This is thought to be because of differences in a woman’s immune system.

2. Coelomic metaplasia or Cellular metaplasia: According to this theory, cells in the body outside of the uterus transform into endometrial cells that line the uterus.

3. Endometrial cell transport: This theory suggests that endometrial tissue may travel through the blood or lymphatic system to other distant areas or organs.

4. Direct implantation: Endometriosis can also occur because of direct transplantation in the abdominal wall. Eg. During a cesarean section or some pelvic surgery like hysterectomy, some endometriosis tissue might accidently get implanted in the abdominal incision.

5. Genetic factors also play a role as the disease is much more common if your close relative like your mother, sister also has the disease.

The most common sites of endometriosis include:

The ovaries

The fallopian tubes

Tissues that hold the uterus in place

Outer surface of the uterus

The lining of the pelvic cavity

Other sites of growth could be the vagina, cervix, vulva, intestines, bladder, or rectum. Very rarely, endometriosis can appear in distant parts like the skin, lungs and brain.

Stages of endometriosis

Endometriosis occurs in 4 stages, depending on the depth and area it affects. These are described as follows:

Stage 1: This is the minimal type of endometriosis, where small lesions are present. These are present on the tissue lining the pelvis or abdomen. There is no scar tissue.

Stage 2: This is the mild type of endometriosis. More lesions are present in deeper tissue, along with some scar tissue.

Stage 3: This is the moderate stage of endometriosis. There are several deep lesions at this stage. Small cysts may also be present in ovaries, along with scar tissue or thick bands known as adhesions.

Stage 4: This is the most severe stage of endometriosis. This type of endometriosis is widespread and is associated with several deep lesions and thick adhesions. Large cysts may also be present in one or both ovaries.

Risk Factors For Endometriosis

Women are at higher risk for endometriosis if they:

Have an immediate family member such as a mother, sister or aunt suffering from endometriosis

Started their period at an early age (before the age of 11), also known as early menarche

Have short monthly cycles, which are less than 27 days

Have heavy menstruation or periods that last more than 7 days

Never had a child

Are giving birth for the first time after the age of 30 years

Have an abnormal uterus

Have a medical problem that prevents the normal flow of blood from the body during menstrual periods

Disorders of the reproductive tract

Consume alcohol in excess

Have intercourse during menstruation

Have low body mass index

Did you know?

When the ovary is involved because of endometriosis, blood can become embedded in the normal ovarian tissue, forming a "blood blister" surrounded by a fibrous cyst, called an endometrioma. So do not ignore any symptoms and consult an expert right away.

Consult Now!

Diagnosis Of Endometriosis

Various ways by which endometriosis can be diagnosed are:

A pelvic examination: Your gynecologist will carry out a routine pelvic examination after recording your medical history.

USG whole abdomen: A diagnostic imaging technique that uses high-frequency sound waves to produce pictures of the internal structures of the abdomen.

CT scan: A noninvasive diagnostic imaging tool that uses a combination of X-rays and computer technology to create images of the pelvis to detect any abnormalities.

MRI scan: To gain visuals of the organs of the pelvis and lower abdomen.

Laparoscopy: Laparoscopy is considered to be the gold standard of diagnosing endometriosis. In this procedure, laparoscope, which is a thin instrument with a light and a camera, is used to view the pelvic region and its organs.

Histological examination: In certain cases of endometriosis, your doctor can take a biopsy or sample of tissue during laparoscopy and send it to a lab for evaluation.

Celebs affected

Padma Lakshmi

The Indian American Author and model Padma Lakshmi was diagnosed with endometriosis in 2006. According to reports online, she suffered from endometriosis for more than 20 years.

Cyndi Lauper

The American singer Cyndi Lauper said she was diagnosed with endometriosis in her 30s, after years of struggling to conceive.

Specialist To Visit

If you experience any symptoms of endometriosis it is important to visit a gynecologist and obstetrician at the earliest.

Most Indian women don’t have a regular gynaecologist like they do for a family doctor or General Physician(GP). Here is a list of the types of gynecologists you can consult for gynecological related problems.

Click To Know!

Treatment Of Endometriosis

Endometriosis can be treated by medicines and surgery. Here’s some of the common treatment options for endometriosis:

Pain medication

Nonsteroidal anti-inflammatory drugs, such as Ibuprofen or other over-the-counter analgesics can give temporary relief from pain. If these do not help, a doctor may prescribe stronger drugs.

Hormonal therapy

Hormonal therapy can lower the amount of estrogen which is directly linked to endometriosis. This helps in reducing bleeding, inflammation, scarring, and cyst formation. Common hormones used are:

Oral contraceptives: Function by suppression of ovarian function. Eg, Desogestrel, Etonogestrel.

Danazol: A synthetic derivative of testosterone (a male hormone).

Progestin: These medicines suppress the activity of ovaries by modulating female hormones in the body. Eg, Medroxyprogesterone.

GnRH analogues- GnRH analogues are given in injection form to suppress the ovarian activity, so the level of the hormones in the body is decreased. One of the most common GnRH analogue is Leuprolide.

Devices

Intrauterine devices such as the levonorgestrel system are placed in the uterine cavity, where it suppresses endometrial activity and also helps in regulating menstrual blood flow.

Surgery

Surgical procedures are often the last resort for the treatment of endometriosis. Surgery is often performed laparoscopically or even with an open procedure. This process involves removal (excision) or burning (fulguration) or both, of the endometriotic tissue. Removal of scar tissue can provide great relief in pain. Along with the relocation of the ovaries and fallopian tubes to their normal position in the pelvis during surgery, it can greatly increase the chances of a woman to get pregnant.

Home Care For Endometriosis

If you are suffering from endometriosis, you can follow these simple tips to ease the symptoms of this condition:

Take adequate rest. You can also use a hot pack, heating pad or hot bottle of water to ease the pain.

You can also take long warm baths to ease the pain and associated symptoms of endometriosis.

Prevent constipation. Constipation is common in women suffering from endometriosis, therefore it is advised to hydrate yourself and include fibre-rich food to relieve the symptoms.

Get regular exercise. Exercise improves blood circulation and helps nutrients and oxygen flow to all the systems of the body. Regular exercise can help in reducing pelvic pain associated with endometriosis.

If the pain gets severe, you can take painkillers after your doctor’s consultation.

Complications Of Endometriosis

Endometriosis may have certain complications if it is severe in nature or is diagnosed or treated at a later stage. Some of the common complications of endometriosis are:

Fertility issues

Endometriosis can lead to fertility problems. The following ways are thought to cause infertility:

Endometriosis can change the shape of the pelvis and reproductive organs which makes it difficult for the sperm to find the egg or it can deform the fallopian tubes in such a way that they are not able to pick up the egg after ovulation.

It can cause inflammation that affects the normal function of the ovary, egg, fallopian tubes or uterus.

The immune system, which normally protects the body against any infection, begins to attack the embryo.

The endometrium or the uterine lining where implantation occurs, does not develop normally.

Some women suffering from endometriosis do not have any fertility issues and eventually get pregnant without any treatment. But, for many it can be harder to get pregnant. Sometimes, medication alone fails to improve fertility. Surgery can help you in improving your fertility by removing the patches of endometriosis tissue.

Ovarian cysts and adhesions

Endometriosis leads to adhesions, which are the areas of endometriosis tissue that are sticky and glue the organs together. Endometriosis can also result in ovarian cysts, which are the fluid-filled cysts that can become large and painful. These can be treated with surgery.

Bladder and bowel problems

Endometriosis can also affect your bladder or bowel movements. This condition may require major surgery, which may involve removing a small part of the bladder or intestine.

Cancer

Women suffering with endometriosis might be at a risk of developing ovarian cancer, but the risk is still relatively low. Another rare type of cancer, endometriosis-associated adenocarcinoma can develop later in life in those who have had endometriosis for a long time.

Most of the couples do not have any significant symptoms of infertility. In fact, it is not until the time they try to conceive that they know about infertility. The signs of infertility in women could be related to the underlying cause of the condition.

Click To Read!

Alternative Therapies Of Endometriosis

Here are few of the most common herbal and home remedies for the treatment of endometriosis:

Curcumin: Curcumin or turmeric has anti-inflammatory, antioxidant, and antiproliferative properties that are useful in treating the symptoms of endometriosis. You can take turmeric in the form of tablets or with your tea or milk by mixing a teaspoon of turmeric to your drink.

Puerarin: Puerarin is a compound that is found in kudzu plants. It contains isoflavonoid compounds that possess estrogenic effects. This component binds to the estrogen receptors (ERs) and relieves some of the symptoms of endometriosis.

Resveratrol: Resveratrol is a polyphenol compound that is mainly found in grapes, peanuts, mulberry, and some other plants. These foods have strong antioxidant properties and therefore could be of great help in endometriosis.

Green tea: Green tea is a great antioxidant, which helps in prevention of new blood vessel formation (antiangiogenesis) and inhibits the function of microvessels that are present in the endometrial lesions. This helps in reducing the size and the weight of these lesions thereby hindering the growth of endometriosis.

Living With Endometriosis

If you are suffering from endometriosis, you can follow these easy tips to reduce the pain and othe symptoms of endometriosis:

1. Use a hot pack: For the excruciating pain that comes with endometriosis, you can apply a hot water bottle or heating pad to your lower abdomen. This can help in proper blood circulation and muscle relaxation. Warm baths can also be of great help in treating endometriosis.

2. Take proper rest: If the pain of endometriosis becomes intense, you must take proper rest. You can place a pillow under your knees while you are on your back. While lying on your side, keep your knees close to your chest. These positions can reduce the pressure on your lower back.

3. Get regular exercise: Exercise is helpful in releasing natural painkillers in your body, known as endorphins. Exercise also helps in improving blood circulation and flow of nutrients and oxygen to all the systems of the body.

4. Include a healthy & balanced diet: When it comes to endometriosis, maintaining a healthy weight can be of great help. You must also include plenty of fiber in your diet, which will help in preventing the painful straining during bowel movements.

5. Make use of alternative treatment: You can go for other techniques that also offer ways to relax and may help relieve pain Muscle relaxation, deep breathing, biofeedback and Yoga. you can also go for acupuncture that helps in painful periods.

Frequently Asked Questions

Can endometriosis go away on its own?

Can I conceive if I have endometriosis?

Which foods should I eat for endometriosis?

Which foods can trigger endometriosis?

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Epilepsy

Seizures, Epileptic seizures and Epileptic syndrome

Overview

Epilepsy is a common neurological disease that affects around 50 million people worldwide. Every 4 to 10 in 1000 individuals are suffering from it. The cause of the disease is still unknown. It is characterized by recurrent seizures that vary and depend on where the disturbance first starts and how far it spreads in the brain. Seizures manifested are a result of uncontrolled electrical discharges which can vary from less than one a year to several per day.

Some of the common symptoms of epilepsy include loss of awareness or consciousness and disturbances of movement. Epilepsy can substantially impair the quality of life by seizures, psychiatric disorders, and adverse effects of medication. The rate of premature death is three times higher than in the general population.

The treatment for epilepsy primarily aims to control seizures with the appropriate use of the least anti-seizure medicine, particularly for young females and the elderly suffering from other medical conditions. The patients poorly responsive to drug treatment undergo alternative treatments like surgery, ketogenic diet, and implantable brain neurostimulators.

Key Facts

Usually seen in

All age groups

Individuals between 5 to 20 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Brain

Prevalence

Worldwide: 50 million (2019)

Mimicking Conditions

Syncope

Alcoholic blackouts

Hypoglycemia

Transient ischemic attack (TIA)

Brief psychotic disorder

Bipolar disorder

Major depressive disorder

Post-traumatic stress disorder

Autism spectrum disorders

Substance abuse

Schizophrenia

Necessary health tests/imaging

EEG

CT scan (Head)

MRI brain

Brain spect

PET CT brain with contrast

Serum electrolytes

Blood glucose level

Comprehensive health checkup

Treatment

Conventional anti-epileptics: Phenytoin, Phenobarbitone, Carbamazepine & Levetiracetam

Intravenous and intramuscular injectables: Diazepam, Lorazepam & Clonazepam

Anesthetic drugs: Isoflurane, Desflurane & Ketamine

Vagus nerve stimulators

Surgery: Temporal lobectomy, Corpus callosectomy & Lesionectomy

Transcranial magnetic stimulation (TMS)

See All

Symptoms Of Epilepsy

A seizure is a transient occurrence of signs or symptoms due to abnormal excessive or synchronous neuronal activity in the brain. Epilepsy describes a condition in which a person has a high risk of recurrent (2 or more) unprovoked seizures. It is a neurological disorder that affects the normal activities of the brain. The abnormal activity could be due to inherited conditions, trauma to the head, and developmental disorders.

The symptoms between individuals vary from mild to severe in form depending upon the type of seizure. Symptoms such as temporary confusion, episodes of staring blankly, uncontrollable jerks and twitching of arms and legs, loss of consciousness or awareness, and psychological symptoms like fear, anxiety, and depression. The common signs and symptoms of epilepsy include:

1. Daydreaming and confusion

Staring at everything and not responding to anything. It is often accompanied by attention blackouts, mumbling, or no response. It is one of the common presentations seen in cases of absence seizures

2. Uncontrollable jerking movements and twitching of arms and legs

Involuntary movement occurs at the time of seizure leading to nerve damage. It often produces small twitches in the affected muscles. Some involuntary movements include:

Tardive dyskinesia: A neurological condition that originates in the brain with the use of neuroleptic drugs. A disorder that results in repetitive, involuntary body movement that includes grimacing (the face twists in an ugly way), rapid jerking movements, blinking of the eyes, and protruding tongue. This disorder interferes with normal daily functioning.

Myoclonus: It is a quick involuntary muscle jerk. It occurs right before sleeping or waking up. The person might experience an electric shock and rhythmic movements.

Tremors: It can be a symptom of a seizure. It is an uncontrolled and involuntary movement. Typically a person may experience the following symptoms like uncontrollable nodding head, balance problems, numbness in any part of the body, and stooped posture.

3. Sudden fear or anger

The abnormal activity in the brain results in seizures. At the time of a seizure, the person experiences change in behavior and automatic responses such as hunger, emotional distress, and fight or flight response.

4. Sudden falls and frequent stumblings

People with epilepsy tend to have more physical problems such as fractures and bruises related to seizures. Elders are more prone to falls and injury and hurt themselves once and many times a year.

5. Jacksonian march

Abnormal movements may begin in avery restricted region of limb like fingers and progress gradually over seconds to minutes to involve a large portion of extremity and even involving whole body, eventually culminating into generalized seizures.

6. Todd’s palsy/paralysis

Some of the patients may experience a transient paralysis of the limb or part involved in the seizure, this may last upto minutes to many hours.

Non-motor symptoms: These are not as common as motor symptoms seen during the episodes of seizures, but can be present in few patients especially those who have atypical presentations.

Sensory symptoms: Patients may experience sensory symptoms such as numbness, burning sensation, and tingling sensation.

Autonomic symptoms: Loss of bowel/ bladder control, unregulated increase or decrease in heart rate may be seen.

Emotional lability: Excessive and unprovoked laughter, crying, anger or sadness may be seen.

Is epilepsy contagious?

Epilepsy is not contagious or communicable. It cannot spread by touching the person, sharing utensils, or coming into contact with saliva. Do not refrain from helping a person undergoing an epileptic attack. Here are more common myths about epilepsy.

Click To Know!

Causes Of Epilepsy

There are single established causes of epilepsy or unprovoked seizures. It is likely to be categorized into genetic, structural, infectious, metabolic, immune, and infectious. For example:

A severe head injury

Genetic conditions associated with brain malfunction

Brain tumor or cyst

Infections of the brain such as meningitis

Lack of oxygen to the brain

Dementia or Alzheimer’s disease

Maternal drug use, prenatal injury, brain malformation, or lack of oxygen at birth

Infectious diseases such as AIDS (HIV infection)

Scarring on the brain after a brain injury (post-traumatic epilepsy)

Intracranial hemorrhage

Drug or alcohol withdrawl

Febrile seizures

Illicit drug use/overdose

Stroke

Hepatic failure

Advanced chronic kidney disease

Hyponatremia (low levels of sodium)

Hypoglycemia

Types Of Epilepsy

The signs of the seizure depend on the type of the seizure. Seizures can be broadly classified into two types:

1. Generalized seizures

It affects the entire brain that is both hemispheres of the brain. The seizure begins suddenly, the person loses consciousness and experiences a rigid body, jerking movement of the arms and legs, crying out, and falling on the ground. They are further classified into four types:

Generalized clonic tonic seizure: During the tonic seizure, the muscle tone is increased greatly in the body. Causing sudden stiffening movements. These seizures last for 1 to 3 minutes. Breathing may decrease producing cyanosis of the lips and nails.

Myoclonic seizure: They are rapid, brief and shock like a jerk of muscles. They are sudden jerks or clumsiness.

Absence seizure: This causes short impairment of consciousness. It is often called blanking out. It usually lasts for no more than a second.

Atonic seizure: These seizures cause loss of muscle tone. The word means without tone and the muscles become weak. It leads to eyelids drooping, heads to drop and people dropping things.

2. Focal seizures

These are located in one part of the brain and are often called partial seizures. The brain consists of four lobes: frontal, temporal, parietal, and occipital lobes. In focal seizures, only one focused area is affected, depending on the area affected symptoms occur. Seizure in the temporal lobe leads to confusion and staring. Seizure in the occipital lobe tends to cause visual impairment. Location in the parietal lobe leads to numbness. They are further classified into:

Simple focal seizure: These seizures affect the small part of the brain. It causes a change in sensation such as strange taste or smell.

Complex focal seizure: It can make a person confused and the person will not be able to answer questions.

Secondary generalized seizure: It starts in one part of the brain and spreads in both parts of the brain.

Myth: During a seizure, you swallow your tongue.

Fact: This is not true, a tongue cannot be swallowed. But as a precautionary measure to avoid tongue injury during a seizure, you can put a cloth in the mouth of the patient and make them lie in a recovery position. And call for immediate medical attention or consult doctor right away. To know more myths about epilepsy, read the article.

Click Here!

Risk Factors For Epilepsy

The risk factors associated with developing epilepsy are any injury to the brain, being born with brain abnormalities, a family history of seizures, and many people developing disease don’t have the risk factor.

1. Medications

Missed dose of antiepileptic drug or underdosing of antiepileptic is a common cause seen in day to day clinical practice.

2. Medical history

Medical history is the foundation in the diagnosis of epilepsy. For a precise treatment to analyze the family history, any patient in the family background for the same disease. The doctor identifies the prenatal and perinatal causes brain damage, before birth and after birth like:

Born with abnormal areas of the brain

Seizure in the first month of life

Premature birth

3. Other health conditions

Many health conditions like autism and growth defects in the brain can lead to epileptic seizures. Any problem in the electrolyte conduction can cause many other diseases like:

Cerebral palsy

Stroke

Alzheimer’s disease

Intellectual disabilities

Diagnosis Of Epilepsy

Epilepsy is predicted by diagnosing the type of seizure. Many disorders lead to a change in behavior and can be confused with epilepsy. Diagnosis involves ruling out other psychiatric illnesses and disorders occurring due to chemical disturbances in the brain. Establishing a diagnosis for epilepsy involves the following:

1. Clinical history

Before confirming the patient is having epilepsy, it is essential to rule out the conditions that may mimic the symptoms of epilepsy. A physician performs a detailed overview checkup, reviewing the patient’s history as well as his/her family history and the onset of symptoms to rule out other potential causes.

2. Lab tests and imaging studies

The following test can be done to evaluate the overall health conditions and study brain functioning.

Computed tomography (CT) scan (head): A CT scan uses an X-ray to view the cross-sectional area of the brain. It can reveal the abnormalities in the brain and the cause of the seizure-like tumor, lesions, and bleeding.

Magnetic resonance imaging (MRI) brain: A MRI uses powerful magnetic and radio waves to create a detailed image of the brain. The doctor by viewing an MRI can detect the cause of the seizure.

PET CT brain with contrast: A PET scan takes a picture of the brain as it works. It can detect any metabolically active lesion, particularly tumor, which may be a cause of seizures.

Electroencephalogram (EEG): It measures the activity of the brain. It is useful in patients with epilepsy especially in the diagnosis of the type of epilepsy, in localizing the lesion in the brain, and helps the physician in choosing the appropriate drug for further treatment.

Note: It is most useful to document electrographic seizure activity but the seizures are infrequent and unpredictable so it is often not possible to obtain EEG during a clinical event. In such situations activating procedures may be undertaken by your doctor to provoke abnormalities. These procedures are done under strict medical supervision and may include hyperventilation (3 or 4 minutes).

Brain spect: It is an imaging procedure done by using a tracer dye to create an image of the blood flow in the brain. It helps in locating the origin of epileptic seizures.

Comprehensive health checkup: To evaluate the overall health status of a person. This includes tests to check serum electrolytes (sodium, calcium & potassium), blood glucose, liver function tests, renal function tests and urinary toxicology to rule out use of illicit drugs.

3. Neuropsychological test

A detailed neuropsychologists test is designed to measure the individual performance in terms of accuracy, memory, language, attention, thoughts, mental status and patient’s history is essential to diagnose the disease.

These tests can help to predict whether seizures are affecting your psychological functions including memory, attention, mood, language, emotions, and personality.

Prevention Of Epilepsy

An estimated 25% of epilepsy cases are preventable. The most common ways to reduce the risk of seizure are:

1. Have a healthy pregnancy. Some problems during pregnancy and childbirth may lead to epilepsy. Follow a prenatal care plan with your healthcare provider to keep you and your baby healthy.

2. Prevent brain injuries as it lowers the chances of stroke and heart disease.

3. Be up-to-date on your vaccinations.

4. Wash your hands and prepare food safely to prevent infections such as cysticercosis/neurocysticercosis.

5. Follow proper sleep hygiene & avoidance of loud music/flashy lights which can trigger an attack

In a known case of epilepsy/seizures, prevention can be done by taking antiepileptic drugs in a timely manner and appropriate dose as prescribed by your doctor. Also, prevention of triggers can help lower the risk of getting an epileptic attack.

Specialist To Visit

Patients exhibiting the symptoms of epilepsy are not capable enough to take their decisions on their own. Thus, the family or caregivers are the primary ones to decide and they must approach the healthcare physician if they suspect any abnormal activities of the brain through scans and tests which are lasting for a prolonged time.

In an acute episode of status epilepticus an emergency physician might be helpful. The healthcare physician can thus refer the patient to the specialist’s doctor for better evaluation and treatment. These patients can be referred to:

Neurologist

Psychiatrist

Psychologist

Treatment Of Epilepsy

Treatment with antiepileptics or anti-seizure medications can alleviate symptoms. They are a class of drugs primarily used to treat seizures associated with epilepsy. Usually the treatment is started with a single antiepileptic drug, but if your doctor feels it is not sufficient then a combination of drugs may also be used. The other treatment options include vagus nerve stimulator, ketogenic diet, and surgery. But, medication is the first line of treatment.

1. Conventional anti-epileptics or anti-seizure drugs

These drugs decrease the frequency or severity of seizures in people with epilepsy. These drugs treat the symptoms of epilepsy and not the underlying cause of epilepsy. They maximize the quality of life by minimizing seizures. They work by blocking the sodium channel or enhancing GABAergic action. They can potentially cause unsteady walking and poor coordination or balance. Antiepileptic drugs can be further divided into a narrow spectrum that works for specific types of seizures (partial or focus) and a broad spectrum that has effectiveness for a wide range of seizures (partial plus absence myoclonic seizure).

Some of the common examples include:

Phenytoin

Phenobarbitone

Carbamazepine

Valproic acid

Levetiracetam

Felbamate

Lamotrigine

2. Intravenous and intramuscular injectables

These are essential during an emergency condition (like status epilepticus) when oral administration of drugs is not possible. These formulations provide rapid delivery and complete bioavailability of the drug.

Common examples are:

Diazepam

Lorazepam

Clonazepam

Pentobarbital

These formulations are useful in the treatment of epilepsy and anxiety disorders. It decreases the abnormal and excessive activity of the nerve cells. Some common side effects are fatigue, depression, and impaired coordination.

3. Anesthetic drugs

These are used after the conventional therapy for seizures has failed to terminate seizures. They are commonly used to treat refractory cases of status epilepticus.

Some of the common examples include:

Isoflurane

Desflurane

Ketamine

4. Vagus nerve stimulators

This stimulation prevents seizure by sending regular, mild pulses of electrical energy to the vagus nerve. It is approved to treat focal or partial seizures. Vagus nerve stimulators work on drug-resistant epilepsy. Common side effects include coughing or shortness of breath.

5. Surgery

In the most severe cases, the affected area of the brain is surgically treated to improve the symptoms and the condition of the patient. Most commonly performed surgical procedures are:

Temporal lobectomy

Corpus callosectomy

Lesionectomy

6. Transcranial magnetic stimulation (TMS)

It is a form of focal, noninvasive cortical stimulation in which a focal electric current is induced in the cerebral cortex by a fluctuating extracranial magnetic field generated, most commonly, by a handheld electromagnet. It is useful for cases refractory to conventional medical therapy.

First-aid for epilespy

The major precautions one should take to help someone who is having an epileptic seizure are:

Ease the person and remain calm.

Turn the person onto one side, this will help them to breathe.

Remove all the harmful objects from close proximity.

Put something soft underneath the head of the person.

Lose all the clothes and anything around the neck to make the person breathe properly.

If the seizure lasts for more than 5 minutes, contact the doctor and stay with them until awake.

Home-care For Epilepsy

Living with someone who has epilepsy can be challenging for the family and the caregivers. The patient requires support and care at each stage. Epilepsy can vary from person to person so the care can vary greatly. Some people with epilepsy need a lot of care while others need only at the time of seizure. However, there are a few tips that can help to take care of someone with the condition.

Understanding the condition

Understanding the condition of the person is the first step in managing the disease. Caring can involve several skills such as emotional support, dealing with medical equipment, and recognizing the warning signs, if the disease worsens.

Stay focused on therapy

The therapy goal varies for a person and is adjusted to suit the requirement of the patient. Help your loved ones to adjust to the therapy and encourage them to practice self-management strategies. This will help them to take responsibility for their goals.

One of the most common causes for seizure recurrence is missed dose or under dosage of antiepileptic drugs, hence it is of paramount importance for the patient to maintain a regular dose schedule and preferably at the same time.

Keep patient away from tobacco, alcohol, and substance abuse

Alcohol and other drugs worsen the symptoms of epilepsy. Hence, the family should ensure that the patient does not indulge in such activities.

Professional help should be taken for patients already alcoholic or suffering from drug addiction as abrupt and sudden cessation may lead to withdrawal symptoms which may lead on to seizures.

Try stress management techniques

Being a caretaker for a patient can be exhausting and emotions such as anger, resentment, guilt, and helplessness can be common. Learning relaxation and stress management techniques will help in coping with the disease.

Join epilepsy support groups

Connecting with other people facing the same challenges may help the person and boost morale. Few societies in India help people with mental illness and encourage them to take advantage to engage with other patients in a safe and supportive environment.

Note: Epilepsy symptoms and conditions can change over time. The amount of care needed by the patient can also change with time and even the condition of the person caring can also change.

Complications Of Epilepsy

If left untreated, epilepsy may severely hamper a patient’s life and can cause various complications like:

Impaired mental function

Lack of motor coordination

Depression

Anxiety disorders

Physiological symptoms fear and anxiety

Aggressive behavior

If it worsens, then the patient might require long-term hospitalization.

Alternative Therapies For Epilepsy

1. Relaxation therapy

These days massage and aromatherapy are often used to reduce stress and tension. They can help get rid of poor sleeping patterns. Some people use yoga and meditation to relax and practice mindfulness. It has been found out that these techniques can ease tension and reduce stress related to seizures.

2. Cognitive behavioral therapy (CBT)

It is a psycho-social intervention that aims to improve mental health. This helps the patient to change what they think about a particular situation. It helps manage feelings and change the actions which further helps them to change the reaction.

3. Electroconvulsive therapy

For adults who do not respond to drug therapy, electroconvulsive therapy may be considered. It is a psychiatric treatment where seizures are induced to manage refractory mental disorders. A small amount of electric current is passed through the brain to regulate activity in the brain.

4. Deep brain stimulation (DBS)

This is a type of surgical procedure involving the implantation of a device to send electrical signals to the brain. Some electrodes are implanted in the patient’s brain area. These electrodes generate mild electrical impulses which regulate abnormal brain activity and improve the symptoms.

5. Ayurveda in epilepsy

Ayurveda treatment for epilepsy follows an integrated approach, combining natural medicine, ketogenic diet, and lifestyle regulation. In some cases, ayurvedic herbs were found to be beneficial when used in adjuvant with antipsychotic medication. However, there has been no such evidence to prove the effectiveness of ayurvedic treatment to treat or manage epilepsy.

A ketogenic diet can help in the treatment of epilepsy.

A 2019 study suggested that a ketogenic diet consisting of high fat and low protein can be used in drug-resistant epilepsy. This diet resembles the diet people take in a fasting state. A ketogenic diet also helps in maintaining weight and can be beneficial for sedentary patients. It is used to treat hard-to-control epilepsy in children. Thus, using fats as a primary fuel source rather than carbohydrates. The ketogenic diet reduces seizure frequency by more than 50%. Consult a nutritionist to know about it.

Click To Consult!

Living With Epilepsy

Self management can help in taking care of yourself.

Learn about your condition

Take medicines as recommended by your doctor

Talk to your doctor, if you have any questions

Manage your stress levels with yoga and meditation

Get enough sleep & maintain a sleep schedule

Maintain a seizure dairy by noting the time and day of an epileptic attcak, trigger or aura before it, chronic medicines, and liver function test reading

Frequently Asked Questions

How is epilepsy related to other medical conditions?

Which is the best way to prevent seizures?

Can a person with epilepsy always have seizures?

What is epilepsy? What is a seizure?

Can a person die from epilepsy?

If I have epilepsy, can I still drive a car?

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Erectile dysfunction

Also known as ED, Impotence

Overview

Erectile dysfunction (ED), as the name suggests, is a medical condition that causes an inability to achieve or maintain an erection for satisfactory sexual performance. The condition mainly affects men older than 40 years and the prevalence of ED increases with age. Some of the common causes of the condition include excessive medication, chronic illness, poor blood flow to the pelvic region, and unhealthy habits such as drinking too much alcohol or excessive smoking.

Most of the time, this condition is temporary and is triggered by stress, performance anxiety, or certain medications. Sometimes it can be due to underlying medical conditions like diabetes, heart problems, depression, and high cholesterol levels. In these cases, it requires intervention by a specialist. Since most men find it embarrassing to discuss the problem with their doctor, they resort to self-medication that can worsen the problem in the long run and harm their overall health.

Key Facts

Usually seen in

Individuals above 40 years of age

Gender affected

Men

Body part(s) involved

Penis

Prevalence

World: 22%–49% (2015)

India: 50-70% (2015)

Mimicking Conditions

Hypogonadism

Loss of libido

Depression

Anxiety

Necessary health tests/imaging

Physical examination.

Penile doppler

Serum testosterone level

Urine assessment (urinalysis)

Ultrasound

Overnight erection test

Treatment

Oral medications: Tadalafil & Vardenafil

Intracavernosal injections (ICIs)

Intraurethral suppositories

Vacuum-assisted erection devices (VED)

Penile implants (or prosthesis)

Counselling

See All

Symptoms Of Erectile Dysfunction

The inability to sustain an erection is one of the main presentations of erectile dysfunction.

However, based on the cause of the impotence (organic / non-organic or psychogenic) the other symptoms that a person can also experience include:

Symptoms of psychogenic ED

Sudden onset of errection issues

Intermittent dysfunction (variability and situational)

Loss of sustaining capability

Nocturnal erection

Excellent response to phosphodiesterase type 5 (PDE-5) inhibitors

Symptoms of organic ED

Gradual onset

Often progressive

Consistently poor response to phosphodiesterase type 5 (PDE-5)inhibitors

Poor nocturnal erection

Symptoms improve on standing than lying down (in cases of venous leak)

Causes Of Erectile Dysfunction

In order to understand the causes of ED, you need to first know the mechanism of an erection. Here is what happens during an erection.

The penis remains in its flaccid state when the blood vessels in penis are not fully dilated. This allows only a small amount of arterial blood flow in penis that is basically required for nutritional purposes. When you are sexually stimulated, there is a release of neurotransmitters namely nitric oxide (NO) from the nerve terminals in the penis. This causes relaxation of the smooth muscles of blood vessels and results in increased blood flow into the cavernosa of the penile region. This causes the penis to become erect and rigid.

Erection ends when the ejaculation occurs and sexual arousal ends, that allows the accumulated cavernosa blood to flow out through the penile veins back into the circulation.

Sometimes a combination of various physical and psychological factors can cause a disturbance in the mechanism of erection. These factors are explained in detail in the next section.

Types Of Erectile Dysfunction

Broadly, ED is categorized into two main types namely organic impotence and non-organic impotence.

Organic impotence: It refers to the inability to obtain an erection firm enough for vaginal penetration, or the inability to sustain the erection until completion of intercourse.the reason can be vascular, neurogenic, secondary to chronic disease & iatrogenic, or hormonal.

Non-organic or psychogenic impotence: In this, impotence or loss of erection is caused by anxiety, guilt, depression, or conflict around various sexual issues. In simple terms, caused due to an underlying psychological problem.

Here’s a quick sneak peak at the common types and causes of ED:

1. Psychogenic erectile dysfunction

Psychogenic erection is a result of audiovisual stimuli or fantasy. Impulses from the brain modulate the spinal erection centers to activate the erectile process. This type of ED is may be due to :

Physical and mental health problems

Psychological trauma

Relationship problems/partner dissatisfaction

Family/social pressures

Stress, anxiety, and depression

2. Neurogenic erectile dysfunction

It is caused due to a dysfunction in the nerve signaling to the corpora cavernosa, a structure present in the penile region to store blood and hence erection. Common causes of this type of ED include problems with the:

Central nervous system: Spinal cord injury, multiple sclerosis, stroke, Parkinson disease, etc.

Peripheral nervous system: Diabetic neuropathy, lumbar disc disease, radical pelvic surgery, etc.

3. Vasculogenic erectile dysfunction

The reduced blood inflow and arterial insufficiency caused due to vascular disease and endothelial dysfunction can lead to erectile dysfunction. Diseases that can lead to vasculogenic ED include:

Arterial insufficiency/peripheral arterial disease

Veno-occlusive disease

Hypertension

Trauma

4. Secondary erectile dysfunction

As the name suggests, an underlying medical disorder that can increase the risk of erectile dysfunction.

Hepatic insufficiency

Dyslipidemia (abnormal cholesterol levels)

Renal insufficiency

Chronic obstructive pulmonary disease

Sleep apnea

Benign prostatic hypertrophy

Lower urinary tract infection symptoms

5. Latrogenic erectile dysfunction

The most common iatrogenic cause of erectile dysfunction is radical pelvic surgery. Generally, the damage that occurs during these procedures is primarily neurogenic in nature. This is because of the close relationship between the cavernous nerves and the pelvic organs, surgery/radiation, etc. on these organs is a frequent cause of impotence. It includes conditions such as:

Cavernous fibrosis

Peyronie's disease

Penile fracture

Drug-induced (antihypertensives, antidepressants, antiandrogens, etc.)

After a surgery

After radiation therapy (cancer, etc)

6. Hormonal erectile dysfunction

Androgens are considered the major hormonal regulator of penile development and physiology. Androgens influence the growth and development of the male reproductive tract and secondary sex characteristics. Their effects on libido and sexual behavior are well established. This could happen due to:

Hypogonadism

Hyperprolactinemia

Diabetes mellitus

Thyroid disorder

As erectile dysfunction can be caused by one or several of these factors, it is important to talk to your doctor to know the exact cause and treat these underlying health problems.

Click Here For Consult

Risk Factors For Erectile Dysfunction

The factors that can cause or increase the risk of erectile dysfunction include:

Sedentary life

Unhealthy diet

Certain medications including some antihypertensives and antidepressants

Alcohol consumption

Smoking

Stress

Anxiety

Obesity

Hypertension

Diabetes

Heart disease

Atherosclerosis

Hypercholesterolemia

Depression

Pelvic surgery

Penile injuries

Cancer surgery

Diagnosis Of Erectile Dysfunction

The tests recommended for patients seeking medical care for erectile dysfunction include an evaluation of:

An accurate medical and sexual history

A careful general and focused genitourinary examination

Radiological test like penile doppler

Routine lab tests

1. Radiological tests

Radiological tests like penile doppler are important for the diagnosis of ED. It is an advanced imaging technique used to measure the blood flow through the blood vessels in the penis. Blood flow is very important for a man’s erections.

2. Routine lab tests

The routine lab tests include hormonal and biochemical tests such as:

Total and free testosterone

Sex hormone-binding globulin

Prolactin

Thyroid hormone

Total and high-density lipoprotein cholesterol

Triglycerides

Fasting glucose and glycosylated hemoglobin

Prostate/testis/penis abnormalities

Serum estrogen

Dehydroepiandrosterone sulfate (DHEAS)

Sex hormone binding globulin

Planning to get yourself tested? Book a lab test now!

Click Here!

Prevention Of Erectile Dysfunction

Some of the common ways that can help you to prevent ED include:

Keep a close tab on disorders, particularly diabetes or heart problems, as these can increase your risk of ED.

Limit tobacco consumption as it can impact your sex life as well as your ability to get an erection.

Overweight/obesity is a common risk factor for ED, so make sure you lose weight to improve your physical as well as sexual health.

If you are on drugs such as antidepressants and antihistamines, talk to your doctor to change the medications or ways you can minimize the effect of these drugs on your sexual activity.

Specialist To Visit

If you experience any signs associated with erectile dysfunction such as difficulty getting an erection, difficulty to maintain an erection enough for intercourse, or diminished sexual desire, you must consult an expert.

Although general physician is what most people tend to go to when it comes to problems with sex life, you can even consult specialists such as:

Urologist

Sexologist

Andrologist

Psychiatrist

Consult India's best doctors online from the comfort of your place.

Consult Now!

Treatment Of Erectile Dysfunction

There are multiple non-invasive treatments for ED that include lifestyle changes, oral medications (phosphodiesterase type 5 inhibitors), vacuum-assisted devices, and intraurethral suppositories. While lifestyle changes and oral medications are typically first-line treatments for ED, more-invasive treatments including intracavernosal injections and surgically implanted prosthetic devices may be required for the management of complex cases.

1. Oral medications

These medications inhibit the enzyme phosphodiesterase type 5 (PDE5), which keeps the level of cGMP (cyclic guanosine monophosphate) high and promotes erections. The most well-known of these PDE5 inhibitors is sildenafil, while other commonly used medications include:

Tadalafil

Vardenafil

Avanafil

2. Intracavernosal injections (ICIs)

These are an alternative to oral medications and are injected directly into the penile corpora (at the lateral base of the penis). The most commonly injected medication is prostaglandin E1 (PGE1), which stimulates cyclic adenosine monophosphate (cAMP) to induce smooth muscle relaxation and promote erections. It may be preferred in certain patients in whom oral medications may be contraindicated or nerves that stimulate erections are damaged.

3. Intraurethral suppositories

These medications are preferred by patients who wish to avoid oral or injectable medications. While intraurethral suppositories improve erectile function, they are known to be less effective than ICIs.

4. Vacuum-assisted erection devices (VED)

It is a device that is placed over the penis and pumped to create a vacuum, which pulls blood into the penis to cause engorgement and erection. The device may be challenging to use for patients with a large amount of lower abdominal fat and buried penis.

5. Penile implants (or prosthesis)

It is a surgically implanted device that comes in an inflatable form (with two- or three-piece devices) and malleable form (with two rigid cylinders that are implanted within the penile corpora). This device remains rigid and may be simply positioned to allow for intercourse. These are usually recommended for people who fail to respond to less-invasive ED treatments, but in some cases are also considered to be the first line therapy.

6. Counselling

It is also a recommended treatment approach for men with psychogenic ED. The reason being, most patients have symptoms of depression and anxiety related to sexual performance. This increases a man’s focus on the firmness of his erection, leading to self-consciousness and cognitive distractions that interfere with arousal and contribute to poor performance. In such a case, getting help from a psychiatrist or a sex counsellor can be of great help.

Do not think twice before getting professional help to treat ED. Get consultation from the best of the experts with a single click.

Book Your Appointment Here

Home-care For Erectile Dysfunction

Here are a few lifestyle changes that can help you deal with erectile dysfunction and improve your sexual life.

1. Exercise regularly

It is essential to stay physically active. It helps to maintain regulated blood flow to the pelvic regions. Erectile dysfunction has been found to be more commonly reported in men who are not physically active2. Try different forms of physical workout such as running, swimming, or brisk walking. Regular workout helps to keep lifestyle problems such as cardiovascular diseases, obesity, high cholesterol, and stress away which also decreases the risk for erectile dysfunction.

2. Foods to eat and avoid

A healthy, balanced diet plays a very integral role in maintaining the flow of blood to the sexual organs such as the pelvis and penis. Nutritious and healthy eating habits reduce an individual’s risk for lifestyle problems such as obesity, vascular diseases, and diabetes. Include fruits, vegetables, and whole grains in your daily diet. Reduce or avoid the intake of foods such as red meat and refined grains as it may increase the risk for erectile dysfunction.

3. Limit intake of medications

Intake of several forms of antidepressants, sedatives, and antihistamines have been found to affect the male’s sexual response. The vascular network that produces an erection is often controlled by the nervous system. These medications have been found to interfere with the critical nerve signals and therefore impair the sexual response.

4. Get enough sleep

Fatigue and stress have been found to severely affect sexual health. Psychological stress leads to increased adrenaline which further causes the contraction of the blood vessels. The contraction in the blood vessels inhibits the supply of blood to the pelvic region and helps adversely affect sexual health.

5. Get rid of your vices

Drink in moderation. Excess of alcohol has been found to be detrimental to the overall health. Chronic heavy drinking has been found to affect organ systems, causing fluctuations in the sex hormones. Irregular fluctuations in the sex hormones have been found to affect the sexual health and are considered to be major triggers for conditions such as erectile dysfunction.

If you smoke, quit smoking. Nicotine narrows the blood vessels and hampers the flow of blood to the pelvic region (including the penis).

Complications Of Erectile Dysfunction

If left untreated, ED can lead to various health complications that can impact your sexual as well as mental well being. Some of the common complications that can result from ED include:

An unsatisfactory sex life

Being stressed or depressed

Embarrassment or low self-esteem

Problems in the relationship with your partner

Inability to get your partner pregnant

ED And Comorbidities

1. Diabetes

ED is common in men with both type 1 and type 2 diabetes. Studies show that diabetics are three times more likely to develop ED. Moreover, the risk of ED in men with diabetes increases with age and there is a high chance of getting ED around 10-15 years earlier than non-diabetics.

This can be attributed to factors such as longer duration of diabetes, old age, poor glycemic control, and neuropathy. Moreover, the condition is more severe and less responsive to medicines in diabetics. ED can cause an increase in mental stress, lead to disordered interpersonal relationships and interfere in their sexual life, thus affecting the overall quality of life in diabetics.

Diabetics, especially those with poor glycemic control, obesity, and those who are aged, are at a high risk of developing ED. Hence, keeping your blood glucose levels under control can play a key role in lowering your risk of ED.

2. Depression

Sexual dysfunction is a common symptom associated with depression. The chemical imbalances that occur when depressed can reduce a person’s ability to experience pleasure, both physical and emotional, which affects the sex drive and erection. Also a person suffering from depression experiences symptoms such as low self-esteem, anxiety, and guilt, which can cause ED.

As every patient with depression has a different sexual problem, it is wise to not depend on random search results but consult a psychiatrist, who is trained to diagnose clinical depression and also treat ED. Remember, both depression and ED are treatable conditions, so do not wait until the symptoms worsen. Instead, seek help as soon as possible to lead a healthy and happy life.

3. Obesity

As obesity affects a person both physically and mentally, these issues can, in turn, affect sexual well being. It can lead to difficulties with orgasm, decline in sexual frequency, lower sexual desire, and lack of satisfaction in men. Obesity can lead to hormonal imbalance, endothelial dysfunction, insulin resistance, psychological factors, and physical inactivity, which can lead to erectile dysfunction. This risk of erectile dysfunction increases with increasing body mass index (BMI).

Obesity is one of the most rapidly increasing and most common public health concerns in the world. Yet, it is also one of the most neglected health issues. So keep a close eye on your weight by eating a healthy diet, exercising regularly, staying away from stress, and avoiding any vices which can make you gain weight.

How healthy are YOU? Is your BMI normal? Here’s a quick way to know if you have normal BMI or are overweight/obese.

Click Here To Know

4. Performance anxiety

Sexual performance anxiety, simply put as anxiety during/before sexual activity, is one of the most common sexual problems across the world that affects both men and women. It is responsible for premature ejaculation and erectile dysfunction in men. This is also commonly seen in men during the first night after marriage but is seen to improve with time.

Although there have been many cases of sexual performance anxiety, there is yet no diagnosis available for the condition. Also, there is no cause for concern, as it can be effectively treated with proper counseling or behavioral therapy. Consult a doctor who can help you improve your sexual performance and have a healthy sexual relationship.

Alternative Therapies For Erectile Dysfunction

Acupuncture for ED

Studies suggest that acupuncture has been found to successfully reverse erectile dysfunction. It helps in improving the ability to maintain an erection, sustainable hardness during erection, and improved sexual satisfaction.

Ayurvedic medicine for ED

1. Ginseng: Ginseng root has been used as an important constituent in Chinese medicine . It is used for many beneficial properties and has been known to act as an effective remedy for ED. However, certain precautions need to be exercised since it can cause side effects like insomnia and few medicine interactions. The recommended dosage is 600 mg-1000 mg a day. It is available in powdered and capsule form.

2. Tribulus herb: This plant (tribulus terestris), also known as puncture vine, has been used in traditional Chinese medicine and Ayurveda since ancient times. It is known to increase the sexual drive in men and women. It is also considered as a cure for ED in men. The extracts of the roots and flowers are used in the tablets available.

3. Maca root: This root is known to improve hormonal balance, especially of the thyroid gland. It helps in improving stamina, energy, and overall sexual performance.

4. Horny goat weed: Chinese medicine has traditionally used horny goat weed for treating ED. It has shown positive results on rats but has not been tested on humans yet. Experts recommend Horny Goat weed more for boosting overall energy and hence increasing performance. Extracts from the plant can be taken in the form of capsules or tablets.

5. Yohimbe: The bark of the African Yohimbe tree contains yohimbine which has shown positive results in treating ED in humans. However, it may indicate serious side effects like lowered blood pressure, anxiety, and irregular heartbeat. Never take Yohimbe without a doctor’s supervision. It is available in the form of capsules, containing the bark extract.

Home remedies for ED

Some of the common herbal remedies that are known to boost sexual function and health include:

1. Garlic: Garlic acts as an aphrodisiac and serves as a tonic for those suffering from loss of libido or those who are unable to maintain an erection. Crush two or three cloves of garlic and eat them every morning.

2. Onion: Onion, known to have several health benefits, has been known to strengthen reproductive organs and also benefits those suffering from erectile dysfunction. Usually, white onions are recommended for such conditions.

3. Dark chocolate: More often known as a herb, it contains close to 70% cocoa, which helps to increase dopamine levels in the brain. It helps to uplift the mood, relaxes the body, and improves the body’s response to stimulation. Have it more often, without giving yourself an occasion to.

4. Lady finger : As per the Ayurvedic literature, lady finger helps to regain sexual vigour. It helps to treat sexual disorders and overall improves health. Grind the ladyfinger and add it to a glass of milk. Add sugar according to taste. Drink this everyday for significant results.

5. Drumstick (Sahjan): According to Ayurveda, this spindly vegetable may help relieve symptoms of functional sterility in both males and females. The dried bark of the tree has been found to be beneficial for conditions such as impotence, premature ejaculation, and lack of motility of sperm. Grind the bark, add the powder to the milk. Now, boil the mix and your healthy mix is ready, drink it every day.

Frequently Asked Questions

What causes erectile dysfunction in males?

Is erectile dysfunction curable?

What is the best Ayurveda remedy for ED?

How can I get hard fast without pills?

What food is a natural Viagra?/ What foods cure erectile dysfunction?

Can you take sildenafil every day?

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Excessive sweating

Also known as Hyperhidrosis

Overview

Excessive sweating, known as hyperhidrosis, is a condition characterized by uncontrollable and profuse sweating beyond what is necessary for temperature regulation. It can occur in specific areas such as the armpits, palms, and soles of the feet, or affect the entire body. It affects both men and women equally, but women tend to seek more care.

While the exact cause is not always known, excessive sweating can be due to certain underlying medical conditions, medications, or hormonal imbalances. It can also be triggered by certain foods and emotional stress.

Treatment options range from conservative measures such as antiperspirants, clothing modifications, and lifestyle changes, to more advanced approaches like medications, iontophoresis, botox injections, and surgical interventions.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Face

Hands

Feet

Armpits

Groins

Mimicking Conditions

Thyrotoxicosis

Neuropathy

Hypoglycemia

Pheochromocytoma

Menopause

Lymphoma

Tuberculosis

Alcohol use disorder

Necessary health tests/imaging

Laboratory tests: Complete blood count (CBC), Thyroid-stimulating hormone, Erythrocyte sedimentation rate(ESR), Antinuclear antibody, Hemoglobin A1C (HbA1C), and Chest x-ray.

Starch-iodine test

Quantitative sudometry

Filter paper test

Treatment

Topical application

Antiperspirants

Astringents

Oral Medications

Anticholinergics: Glycopyrrolate, Bornaprine, and Methantheline bromide

Alpha-adrenergic agonists: Clonidine

Calcium channel blockers: Diltiazem

Beta-blockers: Propranolol

Benzodiazepines: Diazepam

Botox injections

Surgery

Specialists to consult

Dermatologist

Symptoms Of Excessive Sweating

Excessive sweating is usually seen in the palms, soles, face, head, or armpits. Other visible symptoms include:

Excessive body odor

Sweat-soaked clothing

Sweating even while sitting

Difficulty in holding objects

Extremely soft and white skin

Skin peels off easily

Skin infections

Psychological symptoms

Increased heart rate

Palpitations

Gastric disturbances.

Is your excessive sweating causing body odor? Read more about 7 effective ways to get rid of it.

Click now

Types of Excessive Sweating

There are two major types of excessive sweating:

Primary hyperhidrosis: It is usually seen if one of the family members may have had it. Studies suggest that primary hyperhidrosis begins in childhood and worsens with puberty, especially in women.

Secondary hyperhidrosis: It is caused by some other condition or behavior like neurologic syndromes, thyrotoxicosis, diabetes mellitus, gout, menopause, chronic alcoholism, etc.

Apart from these, there are other types of excessive sweating that include:

Night sweats: These are generally associated with menopause, infection, malignancy, or endocrine disease. Also, fluctuating sleep depth due to sleep apnoea, pains, restless legs, etc., can cause excessive sweating.

Food-triggered (Gustatory) sweating: Everyone knows that your face sweats when you consume highly spiced food. This gustatory hyperhidrosis is seen following salivary gland surgery and is then called Frey’s syndrome. It is also seen in uncontrolled diabetes.

Causes Of Excessive Sweating

Our body has a mechanism to regulate sweating. However, in excessive sweating (hyperhidrosis), this mechanism may not work properly. The negative feedback to the hypothalamus, a structure deep within your brain, which tells it to stop signaling the sweat glands, may be impaired. As a result, the body ends up sweating more than necessary to cool down.

Risk Factors For Excessive Sweating

Excessive sweating is a general feature seen during hot and humid conditions. However, if it is chronic then it can lead to discomfort. There are certain triggers that can lead to excessive sweating. They include:

1. Genetics

Several studies suggest that primary hyperhidrosis has a genetic component as demonstrated by the high frequency of positive family histories.

2. Fever

A fever or febrile illness is commonly associated with excessive sweating. Managing kids with fevers can be quite a task. Listen to our experts talk about natural remedies to get relief from fever.

Watch this video now

3. Certain Conditions

Secondary hyperhidrosis can occur in the following conditions:

Diabetes mellitus

Hyperthyroidism

Parkinson's disease

Neurologic disorders

4. Medications

Drugs that can induce hyperhidrosis, or sweating in excess include:

Antidepressants

Dopamine agonists

Selective serotonin reuptake inhibitors (SSRIs)

Antipsychotics

Insulin

5. Menopause

The excessive sweating associated with menopause is considered to be a form of secondary hyperhidrosis and is generally known as hot flashes.

Check out our exclusive range of menopause items to support your well-being and manage symptoms effectively.

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6. Anxiety

Studies have shown that excessive sweating is a potentially disabling symptom, which is often triggered in social anxiety disorder (SAD). It is an intense, persistent fear of being watched and judged by others.

7. Chronic excessive alcohol consumption

Excessive sweating in palms and soles is frequently observed in patients with a clinical history of chronic abnormal alcoholic intake.

8. Tumors

Excessive sweating can occur in cancer or cancer treatment. Tumors such as pheochromocytoma (a rare tumor that usually forms in the adrenal glands, which are located on top of the kidneys) and lymphoma (cancer of the lymphatic system) known to cause hyperhidrosis.

Diagnosis Of Excessive Sweating

To diagnose excessive sweating, it is important to first determine whether the source is primary or secondary and this can be done through a thorough history. The diagnosis consists of the following:

1. History and physical examination

Diagnosis of excessive sweating is usually made by a visual inspection. A family history and medical history can determine primary or secondary hyperhidrosis.

Primary hyperhidrosis is more commonly seen in the younger population. Symptoms that present later in life are mostly linked to a secondary cause.

2. Starch-iodine test

In this test iodine solution is applied to the skin and starch powder is applied on top of that. As soon as those substances are in contact with sweat, they turn violet in color.

The distribution pattern of the color (or absence of it) helps in the identification of excessive sweating.

3. Quantitative sudometry

The quantitative sudomotor axon reflex test (QSART) is a quantitative test assessing sweat glands innervated by small nerve fibers.

4. Filter paper test

This test is suitable to detect excessive sweating in the armpits. A pre-weighed filter paper is inserted into the armpit for a defined time period (60 sec or 5 min) and then weighed again. The difference corresponds to the amount of sweat released in mg/time can help diagnose hyperhidrosis.

5. Other tests

If a secondary cause is suspected, a complete work-up is done to rule out infection, kidney dysfunction, malignancy, diabetes mellitus, thyroid disease, an inflammatory disorder, or connective tissue disease. Some of these tests include:

Complete blood count (CBC)

Basic metabolic panel

Thyroid-stimulating hormone (TSH)

Erythrocyte sedimentation rate(ESR)

Antinuclear antibody

Hemoglobin A1C (HbA1C)

Chest x-ray

Worried about where you can find all these tests? Well look no further, we have got it covered for you.

Book your tests here

Prevention Of Excessive Sweating

Here are a few things that you can adopt and a few you can avoid to prevent generalized excessive sweating. They include:

Do’s

Wear loose-fitting, breathable clothes to minimize signs of sweating

Wear socks that absorb moisture

Change your socks at least twice a day if possible

Eat smaller frequent meals

Keep your moisturizers in the fridge to get the cooling effect during summers

Get a small handy fan to avoid sweating during hot weather.

Don’ts

Do not wear tight clothes or synthetic fabrics like nylon

Refrain from wearing enclosed boots or sports shoes that may cause your feet to sweat more

Avoid spicy food

Limit alcohol and caffeine consumption

Want to know some more practical ways of preventing and curbing body odor caused due to excessive sweating?

Enlighten yourself

Specialist To Visit

To address excessive sweating, it is crucial to identify its underlying cause. Consulting with a dermatologist(skin specialist) is essential as they can provide appropriate treatment for individuals experiencing this condition.

When to see a doctor?

Excessive sweating for 6 or more months

Sweating involves the armpits, palms, soles, and/or face

Sweating is on both sides of the body in symmetry

Decreased or no sweating at night

Sweating episodes last at least 7 days

Sweating impairs daily activities.

Consult India’s most trusted and well-qualified doctors if you are noticing these symptoms.

Book your appointment

Treatment Of Excessive Sweating

There are several treatment options available to manage or treat excessive sweating. These include:

1. Topical applications

Generally, topical applications are suitable only for cases of focal hyperhidrosis. The most commonly used ones include:

Antiperspirants: These are products designed to reduce sweat or perspiration on the skin. They are available in creams, powders, and sprays. Aluminum salts are added to many topical antiperspirants.

Astringents: These act by contraction or tightening of body tissues. In case of excessive sweating, they work by constricting the skin's pores, reducing sweat production, and providing a drying effect.

2. Oral Medications

Oral medication is reserved for treatment-resistant cases or generalized hyperhidrosis. Medications used include:

Anticholinergics: These are the most commonly used oral medications. Examples include:

Glycopyrrolate

Bornaprine

Methantheline bromide

Alpha-adrenergic agonists: These are used to treat localized types of excessive sweating. Clonidine is the most commonly used drug.

Calcium channel blockers: Calcium channel blockers like diltiazem inhibit the calcium-dependent release of acetylcholine and help to reduce sweating.

Other drugs: Beta-blockers (like propranolol) and benzodiazepines (like diazepam) are used to reduce anxiety-related excessive sweating.

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3. Iontophoresis

It is the process of passing a weak electrical current through the skin to block the sweat glands.

The current is applied usually for 10-20 minutes per session, initially with 2 to 3 sessions per week. It is followed by maintenance sessions at 1 to 3 week intervals, depending upon the patient's response.

Iontophoresis may sound painful but is not.

4. Botox injections

Injection of botox (botulinum toxin) is an effective therapy for excessive sweating of the armpits, hands, feet, armpit, and face.

It works by inhibiting the release of acetylcholine, the chemical that activates sweat glands.

The injections can be uncomfortable, but the use of a very small needle helps to minimize discomfort.

They usually give around six months of relief from sweating.

5. Surgery

It is the last resort when all other treatment modalities show no positive results. These include:

Endoscopic thoracic sympathectomy: This surgery is used to treat sweating of the palms or face. The sympathetic nerves control sweating. A sympathectomy is an irreversible procedure during which at least one sympathetic ganglion (relay station between the nerves) is removed.

Removal of axillary(armpit) sweat glands: Sweat glands in the armpit (axilla) is removed by means of axillary curettage (removal of tissue) or liposuction (removal of fat).

Home Care For Excessive Sweating

The following home remedies are traditionally known to manage excessive sweating and gain some control over perspiration. However, make sure to take consent from your healthcare provider before trying these.

1. Apple cider vinegar: This is a natural astringent that tightens skin pores and helps control sweat production. It can also help rid your body of odor caused by bacteria by balancing the pH level.

How to use it: Soak a cotton ball in apple cider vinegar and apply it to your problem areas at night just before you go to bed. Wash it off of your skin in the morning.

Buy apple cider vinegar products online.

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2. Sage tea: It contains a natural astringent called tannic acid that has the ability to constrict and shrink your skin and pores to reduce sweat. Sage also helps to tackle the body odor of the armpits and feet.

How to use it: Add two sage tea bags to two cups of boiling water and then let it cool. Dab a clean towel in it and wipe your underarms, arms, and feet. Repeat two or more times daily for best results. You can also soak your feet in warm water with sage tea bags in it.

3. Black tea: It is a great natural antiperspirant due to its high levels of tannic acid.

How to use it: Add two bags of black tea to four cups of boiling water. When the water is cool enough, soak your palms or feet for 20 minutes.

4. Potatoes: These can absorb excess sweat on the body and act as a natural antiperspirant.

How to use it: Take a small piece of potato, and rub it on your sweat-prone areas. Let the potato residue dry completely before getting dressed.

Know more benefits of potatoes.

Click here

5. Baking Soda: Baking soda can be used to get rid of body odor.

How to use it: Mix equal parts baking soda and cornstarch. Add lavender essential oil for its sweet fragrance and apply the mixture with a damp cloth to clean the underarms. Rinse it off after 20-30 minutes.

Here are 5 more effective home remedies to get that bad odor off your feet.

Know more

6. Chamomile tea: Chamomile is one of the best herbs for eliminating stress and promoting relaxation which can help reduce sweating.

How to use it: Drink two to three cups of chamomile tea each day to stay calm and refreshed.

Complications Of Excessive Sweating

Excessive sweating may not be a life-threatening condition, but it sure has an effect on the quality of life. Some of the general complications include:

Skin problems: Excessive sweating can lead to several skin complications due to prolonged moisture and the breakdown of the skin's natural protective barrier. These include:

Body odor

Skin infections

Dermatitis (redness, itching, and irritation of the skin)

Friction between moist skin surfaces

Eczema

Acne breakouts

Unusually soft or moist skin

Skin discoloration

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Social embarrassment: It can be due to visible sweat stains and an unpleasant odor, making individuals self-conscious and affecting their confidence in social interactions.

Emotional distress: This is caused by negative body image, and increased anxiety due to concerns about appearance and social interactions.

Psychological distress: It can trigger feelings of embarrassment, shame, and self-consciousness, leading to anxiety, low self-esteem, and a negative impact on overall mental well-being.

Work or school-related disability: Excessive sweating can interfere with productivity, concentration, and performance due to constant discomfort, distraction, and the need for frequent clothing changes at school or work.

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Did you know?

Night sweats are common in COVID-19 infections. Studies demonstrate that profuse sweating can happen at night due to COVID-19.

Know more about COVID-19

Alternative Therapies For Excessive Sweating

There are few alternative therapies that have shown good results in recent times to manage excessive sweating. They include:

1. Microwave thermolysis

This is a non-invasive method that causes local destruction of sweat glands through microwaves. It is used to treat excessive sweating in the armpits.

2. Cryotherapy

Topical cryotherapy uses a surface nitrous oxide cryoprobe applicator to freeze-damage the sweat glands.

3. Microneedle radiofrequency (MNRF)

The mechanism of action is the destruction of the sweat glands by heating. The radiofrequency generated by microneedles targets both the odor-producing and the water-producing glands. The results of this treatment last a long time.

4. Photodynamic therapy

This therapy involves using a photosensitizing agent. When the photosensitizer is exposed to specific light wavelengths, it generates reactive oxygen that targets and destroys sweat glands.

It is a safe and effective treatment for excessive sweating, particularly in areas like the armpits and palms.

6. Laser therapy

It is used for the treatment of underarm sweating, where lasers can precisely target, heat, and destroy the sweat glands. It is a safe, effective, and minimally invasive solution for excessive sweating.

7. Ultrasound

Micro-focused ultrasound is also an effective and well-tolerated treatment for excessive sweating in the armpits. It works by delivering focused ultrasound energy to the deeper layers of the skin, targeting and reducing sweat gland activity.

Living With Excessive Sweating

Living with excessive sweating can be challenging, as it can affect one's confidence and social interactions, but with proper management, support, and understanding, individuals can lead fulfilling lives and minimize the impact of excessive sweating on their daily activities. Tips that can help include:

1. Pay attention to personal hygiene

Individuals affected by hyperhidrosis should bathe daily and pay special attention to drying affected areas of skin (particularly the feet) to reduce any infections. Affected feet should be aired regularly. Also, changing the clothing once it is swat-soaked is a good option.

2. Use absorbent pads

Individuals with excessive sweating, especially in the armpits may benefit from using absorbent pads to prevent sweat from soaking through clothing.

3. Select proper footwear

For individuals with excessive sweating of feet, it is recommended to wear thick socks crafted from cotton or wool, regularly changing both socks and shoes. Optimal footwear options include leather, mesh, or canvas materials, while it is advisable to steer clear of synthetic materials.

Troubled with smelly feet? Know more about ways to manage it better.

Read this now

4. Maintain a sweat journal

Individuals who sweat a lot react to specific conditions. Heat, anxiety, and particular foods are a few common triggers that can cause excessive sweating. Finding out if you have triggers is crucial and they can be avoided to prevent sweating.

5. Focus on hydration

Excessive sweating can result in dehydration if fluids are not replenished. Therefore, maintaining adequate hydration is an important aspect of managing the condition and preventing its negative effects.

Listen to our experts talk about more benefits of drinking water.

Watch now

6. Stay calm and relaxed

Practicing relaxation techniques may assist individuals to cope with emotional stimuli that trigger sweating. Apart from this other psychological therapies that one can try include:

Psychotherapy: Hypnosis, psychotherapy, and biofeedback are only effective only in limited individuals. The treatment typically can lead to improvements in quality of life.

Behavioral therapy: These can help overcome anxiety benefitting individuals with anxiety-related sweating.

Tips for parents

Each child's experience with excessive sweating may vary, so it's essential to be patient, empathetic, and proactive in finding strategies that work best for your child's individual needs. Keep in mind the following things:

Talk openly with your child about excessive sweating to help them feel less self-conscious.

Explain that it's a common condition and reassure them that they are not alone

Opt for lightweight, breathable fabrics such as cotton to help keep your child cool

Encourage your child to maintain good hygiene by showering regularly and using an antiperspirant or deodorant suitable for their age.

Teach them proper skincare routines to prevent skin irritation

Ensure your child drinks enough water throughout the day

Pack an extra set of clothes, including socks, for your child to change into if needed in school.

Provide them with sweat-absorbing pads or talcum powder to help manage excessive sweating.

Frequently Asked Questions

What can cause excessive sweating in children?

Can one use baby powder to stop sweat?

Can hyperhidrosis be cured?

What is the outlook for people with hyperhidrosis?

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Fainting (Syncope)

Also known as Passing out and Blackout

Overview

Fainting (syncope) is the partial or complete loss of consciousness with disruption of awareness of oneself and one's surroundings. It is followed by spontaneous recovery to full wakefulness. Syncopal episodes may occur suddenly with or without preceding signs or symptoms like dizziness, lightheadedness, nausea, and visual disturbances.

The most common triggers for syncope include standing for long periods of time, exposure to heat, the sight of blood, fear, anxiety, or physical strain. Syncope can also occur due to any underlying condition affecting the heart or the nervous system. While syncope can occur to anyone, men above the age of 60 years are at a higher risk.

The best way to prevent syncope is to avoid the triggers, stay hydrated, eat meals on time, and not over-exert oneselves.

Fainting is relatively common and not life-threatening. However, some causes of fainting can be a warning sign of an underlying disease which needs proper diagnosis and treatment to prevent any episodes in the future.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men and women, but more common in men.

Body part(s) involved

Nervous system

Heart

Prevalence

World: ≥35% (2013)

India: 15-39% (2014)

Mimicking Conditions

Hypoglycemia

Seizures associated with aura

Tonic-clonic activity

Prolonged duration of unconsciousness

Urinary and/or bowel incontinence

Tongue biting and confusion after regaining consciousness

Panic attacks

Dehydration

Diabetic neuropathy

Diuresis

Drug-induced orthostasis

Dysautonomia

Ectopic pregnancy

Hemorrhage

Hypotension

Hypovolemia

Multisystem atrophy

Peripheral polyneuropathy

Postural hypotension

Subclavian steal

Vasomotor insufficiency

Necessary health tests/imaging

Imaging: Electrocardiogram (ECG), Echocardiogram & Treadmill test (TMT)

Blood tests: Complete blood count (CBC)

Treatment

Medications: Beta-blockers, Selective serotonin reuptake inhibitors & Fludrocortisone.

Therapy: Tilt training and device therapy

Surgery: Pacemaker

See All

Symptoms Of Fainting

Fainting (Syncope) can occur suddenly and with or without any preceding signs or symptoms. Some of the symptoms that start prior to syncope may include:

Dizziness

Lightheadedness

Nausea

Visual disturbances

Cold clammy skin

Sweating

Weakness

Decreased heart rate

Low blood pressure

Headache

Yawning

Blackouts

Did you know?

The frequency of syncope is 15-39% in the general population. Know more about first aid tips for the management of syncope.

Read this

Causes Of Fainting

The brain requires blood flow to provide oxygen and glucose to its cells to sustain life. Fainting is caused by a decrease in blood flow to the brain because of the following reasons or a combination of them:

The heart fails to pump the blood.

The blood vessels lack enough tone to maintain adequate blood pressure to deliver the blood to the brain.

There is not enough blood or fluid in the blood vessels.

Some of the most common types of syncope and their causes are discussed below:

1. Vasovagal syncope

It is the most common type of syncope caused by a sudden drop in blood pressure, which causes a drop in blood flow to the brain. The most common triggers for vasovagal syncope include:

Prolonged standing

Fear of injury

Physical or psychological stress

Dehydration

Bleeding

Pain

Strain

Heat exposure

Sight of blood

When an individual stands, gravity causes blood to settle in the lower part of the body, leading to syncope. In some cases of physical trauma, the body lowers blood pressure and heart rate to reduce the amount of bleeding, which causes syncope.

2. Situational syncope

Situational syncope occurs when a specific situation act as the trigger for a syncopal episode such as:

Urination

Defecation

Forceful coughing

Sneezing

Swallowing

Post-exercise

Dehydration

Intense emotional stress

Anxiety

Fear

Pain

Hunger

Use of alcohol or drugs

Breathing in too much oxygen and getting rid of too much carbon dioxide too quickly.

3. Cardiogenic syncope

Various heart conditions can cause fainting. These include:

Heart beating too fast or too slow

Abnormalities of the heart valves

Widespread disease of the heart muscle

Blockage of blood flow from the heart

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4. Orthostatic hypotension syncope

It is a transient loss of consciousness due to reduced blood flow to the brain due to the following reasons:

Volume depletion: Inadequate fluid intake (hot weather), diarrhea, vomiting, etc.

Drug-induced orthostatic hypotension: Alcohol, vasodilators, diuretics, and beta-adrenergic blockers

Diseases of the nervous system: These include Parkinson’s disease(a progressive disorder that affects the nervous system causing tremors in the body), Lewy body dementia (a disease associated with abnormal deposits of a protein leading to forgetfulness), diabetes, amyloidosis (build-up of proteins called amyloids in the organs), and spinal cord injuries.

April 11th is observed as World Parkinson’s Day every year. The aim is to raise awareness about the condition. To know more about parkinson’s disease.

Click Here!

5. Neurologic syncope

It is caused by neurological conditions like:

Seizure

Stroke

Migraine

Abnormal build-up of cerebrospinal fluid (CSF) in the brain.

6. Postural orthostatic tachycardia syndrome (POTS)

It is caused by a very fast heart rate (tachycardia) that happens when a person stands after sitting or lying down. Usually when a person stands, the nerves send signals to the blood vessels in the lower body to tighten. The tightening vessels work against gravity to keep blood from collecting in the legs. If there is not enough blood flow to the brain, a person may feel lightheaded or pass out every time they stand.

This condition is most common in women, but it can occur in men as well.

7. Other causes

The lesser common causes of syncope include:

Hypoglycemia (low blood sugar)

Hypoxia (decreased oxygen)

Symptomatic anemia

Tumor in the heart

Panic attacks

Did you know?

The cause of syncope is unknown In about one-third of patients. Understand better about anxiety and panic attacks.

Click Here!

Risk Factors For Fainting

Fainting (Syncope) is common in older adults, but younger people without cardiac disease may experience syncope while standing or have specific stress or situational triggers.

Risk factors include:

Age >65 years

Male gender

Structural heart disease

Heart failure

Family history of fainting or cardiac conditions

Syncope-related trauma

Hypertension

Palpitation

Abnormal ECG

High levels of troponin in the blood (an indicator of recent heart attack)

Know in detail about the symptoms, causes, risk factors and treatment for heart attacks.

Read This Now!

Diagnosis Of Fainting

Fainting (Syncope) may not be life-threatening, but repeated syncopal episodes can be a cause of worry. Diagnosing the actual cause of syncope is very important to prevent further episodes. The syncope diagnosis includes:

A. Medical history

A thorough history can provide valuable information in determining the etiology of a syncopal episode. Information about current medications and pre-existing medical conditions such as diabetes, heart disease, or psychiatric illness can help pinpoint the cause of syncope.

B. Physical examination

Physical exams should focus on examining the vital signs of the patient through neurologic and cardiac examinations. The doctor will measure your heart rate and blood pressure to help determine if a rhythm disturbance or low blood pressure caused the syncope. You may be asked to sit or stand while the blood pressure is measured to test for orthostatic hypotension.

C. Investigations

Tests to effectively diagnose syncope include:

Electrocardiogram (ECG): ECG is a widely available and inexpensive method that records the electrical signal from the heart and provides information about the potential and specific causes of syncopes like abnormal heart rhythms and other cardiac problems.

Echocardiogram: This test uses ultrasound imaging to view the heart and is used in patients with unexplained syncope and with a positive cardiac history or abnormal ECG.

Treadmill test (TMT): Also known as an exercise stress test that studies heart rhythms during exercise. It's usually conducted while you walk or jog on a treadmill.

Blood tests: These are routine blood tests like complete blood count (CBC) to check for anemia, which can cause or contribute to fainting spells.

Tilt table test: This test is done when there are no heart problems associated with syncope. During the test, the patient is asked to lie flat on their back on a table that changes positions, tilting upward at various angles and a technician monitors the heart rhythms and blood pressure to see if changing their posture affects them.

Blood volume determination: This test determines if the individual has the right amount of blood in the body, based on their gender, height, and weight. Studies show that measuring blood volume may explain the mechanisms of syncope in individuals with unknown causes of syncope.

Rhythm monitoring: Heart rhythm monitoring may be recommended to diagnose rhythm problems that come and go and have not been detected with a routine ECG. These include:

Holter monitor: This is a device that monitors your heart rhythm while performing normal daily activities at home for 24 or 48 hours.

Event recorder: An event recorder may be recommended to capture rhythm problems associated with a syncopal episode.

Implantable loop recorder: This provides a way to monitor rhythms over an extended period of time i.e 18 to 24 months.

Electrophysiology study: An electrophysiology study (EPS) may be performed if you have heart disease or if you have rhythm problems. Susceptibility to abnormal rhythms can then be assessed under controlled, safe conditions.

Electroencephalogram: It involves the measurement of electrical activity in the brain. It is used to diagnose seizures but may be part of the evaluation of unexplained "collapse" events.

Hemodynamic testing: This test checks the blood flow and pressure inside the blood vessels when the heart muscle contracts and pumps blood throughout the body.

Autonomic reflex testing: A series of tests that monitor blood pressure, blood flow, heart rate, skin temperature, and sweating in response to certain stimuli are done to check if there is nerve damage causing syncope.

Did you know?

Sometimes, fainting may be due to drops in a hormone called cortisol. Ask your doctor about testing for low cortisol.

Book your tests now

Specialist To Visit

Syncope can cause injuries from the loss of consciousness. Doctors that can diagnose any underlying cause of syncope and treat it include:

General physicians

Cardiologists

Neurologists

A cardiologist is a doctor who specializes in the study or treatment of heart diseases and heart abnormalities. A neurologist is a specialist who treats disorders of nerves and the nervous system.

Note: Syncope can be a sign of something more serious, such as a heart or brain disorder. Seek advice from our world-class doctor without any delay after a fainting spell, especially if you've never had one before.

Consult Now!

Prevention Of Fainting

Recurrent syncope has effects on quality of life and the degree of impairment is proportional to syncope frequency. Some things to keep in mind to prevent the next syncopal episode include:

1. Eat right

Eat regular meals and do not skip meals as low blood sugar levels can also cause syncope. Increase your salt intake as it expands your blood volume by retaining fluids preventing a drop in your blood pressure.

2. Know your triggers

Having an understanding of what causes syncope for you and then avoiding it can help prevent future episodes. Talk to your doctor to understand the cause of your episodes and take all your medications on time as prescribed by the doctor.

3. Manage presyncope symptoms

Lie down when you feel the symptoms of syncope starting and do not exert yourself too much. Do not exert yourself too much and if you stand in a place for a long time make sure to keep moving your legs. You can also try simple exercises to raise blood pressure like leg crossing, squatting, and tensing of legs and buttocks.

4. Use compression stockings

By exerting pressure against the legs, compression stockings reduce the diameter of the veins and increase blood flow in the legs.

5. Stay hydrated

Dehydration can be one of the most important yet neglected causes of syncope. Dink at least 2 liters of water a day to keep yourself wee-hydrated.

6. Avoid long and hot showers

Heat causes blood to shift to the superficial tissues and hot water dilates blood vessels, thus, dropping the blood pressure.

7. Cope up with your anxiety

If you have anxiety make sure to calm down to prevent syncope. Find ways of managing your anxiety with meditation, yoga, or exercise.

Yoga is more than just exercise. Read more about the 12 health benefits of yoga.

Tap Now!

8. Stop smoking

Tobacco can cause the blood vessels to constrict and if it is done while standing it can trigger orthostatic syncope.

Try our smoking cessation range if you are keen on quitting this deadly habit.

Browse Now!

Treatment Of Fainting

Treatment of the underlying cause is the focus of treatment in fainting. During an acute episode, patients should be made to sit or lay down quickly, and raising the legs help recovery. Treatment of any injuries sustained during a sudden fall from syncope should be given immediate attention. Treatment options depending on types of syncope include:

1. Vasovagal syncope

Conservative measures include avoiding situations or stimuli that have caused them, increasing the use of salt and fluid, and making lifestyle modifications. Other modalities include:

Drug therapy: Many agents have been prescribed for vasovagal syncope that might be useful if conservative measures fail, there include:

Beta-blockers

Selective serotonin reuptake inhibitors

Hydro fludrocortisone

Proamatine

Fludrocortisone

Alpha Agonists

Tilt Training: This consists of long periods of upright posture and has been recommended in patients who have high symptoms of syncope. Long-term benefit has yet to be demonstrated with attrition of compliance with the rule.

Device Therapy: On the basis of limited yet compelling randomized, controlled trial data, permanent pacing is indicated in carotid sinus syndrome, and this response clinically manifests as syncope.

2. Orthostatic hypotension

The treatment for this type of syncope is generally conservative consisting of:

Rising slowly from sleeping and sitting position

Avoiding medications like diuretics, and vasodilators

Use of compression stocking to improve blood circulation

Intravenous fluids in patients who are dehydrated

Using protamine in unmanageable cases.

3. Cardiac syncope

Treating underlying conditions is the goal of this kind of syncope. Patients with syncope and underlying heart disease need regular follow-ups with their physician and cardiologist.

The goals of treatment are to reduce mortality, injury, and recurrences. Treatment is obviously best directed at the correction of the underlying cause when this is possible. Surgery to incorporate a pacemaker may be required in conditions like slow or rapid heartbeats.

A healthy heart is the key to a healthy body. Learn tips and tricks to keep your heart healthy.

Home-care For Fainting

Fainting (Syncope) may be caused by a serious underlying health condition, so, always check with your doctor before taking any herbs or supplements. Some of the home remedies that can help you with recurrent episodes of syncope include:

A. Nutrition and supplements

Omega-3 fatty acids: Such as fish oil may help reduce inflammation and improve heart health. Cold-water fish, such as salmon or halibut, are also good sources.

Buy omega-3 and fish oil products online from the comfort of your home to amp up your health.

Shop Now!

Alpha-lipoic acid: It is an antioxidant that may be good for heart health. People who take thyroid hormone should ask their doctors before taking alpha-lipoic acid.

L-arginine: This is an antioxidant that may help promote good circulation. People who have a history of a heart attack, heart disease, low blood pressure, or circulatory issues should speak to their doctors before taking L-arginine.

Whole grains: Add high-fiber foods such as beans and whole grains. Lean protein meat like fish and chicken are also good choices. These take longer to digest and do not cause a sudden drop in blood pressure.

Read how whole grains can help you stay healthy and slim.

Click To Know!

B. Herbs

Herbs have been used to strengthen the body and treat diseases. However, herbs can trigger side effects and interact with other herbs, supplements, or medications. Always talk to your doctor before starting anything new. Some of hers that can prove to be very beneficial include:

Green tea: It is rich in antioxidant and anti-inflammatory substances that may be good for your heart health.

Blueberry: This is an antioxidant that helps promote good circulation. These may increase the risk of bleeding, especially if you also take blood thinners.

Apple cider vinegar: One common cause of dizziness is low blood sugar, but apple cider vinegar might help with that, according to a study in diabetes care.

Ginger (Adrak): Ginger delivers a lot of surprising benefits including reducing nausea, which can be a proponent of symptoms prior to the syncopal episode.

Complications Of Fainting

Fainting (Syncope) is not a sign of a fatal disease, particularly if it only happens once. Complications of syncope are injuries or fractures from falls or fainting. The elderly have a higher risk for injury than younger people who go into syncope.

Did you know?

Syncope is not a common manifestation of COVID-19, but certain studies suggest that it may occur in some cases.

Know more about COVID-19

Alternative Therapies For Fainting

Always remember to get approval from your doctor before starting any complementary or alternative therapy as some of the therapies may be contraindicated from the ongoing treatment. Alternative therapies, that can prove beneficial in managing or preventing syncope include:

1. Homeopathy

Syncope has been treated by homeopathy and requires detailed specific prescribing of the "right" homeopathic remedy. An experienced and certified homeopath will assess your individual constitution and symptoms, and then recommend remedies.

Explore Now!

2. Acupuncture

Acupuncture may help treat syncope. Studies have shown that acupuncture uses the technique to regulate yin and yang which promotes the reproduction of the body fluids and replenishes and restores circulation.

Acupuncture does not often cause side effects or complications, although some people may faint during acupuncture treatments, it is not considered a serious complication.

3. Massage therapy

You can actually activate your body’s acupressure points to relax and self-treat. But getting a massage is a more fun and relaxing activity that promotes a sense of calm and can help short-circuit dizziness. A soothing massage with lavender essential oil may help you if you’re prone to feeling anxious.

Check out our range of body massagers to get rid of those tense muscles and relax.

Fill Your Cart Now!

Frequently Asked Questions

1. Is there a difference between syncope and fainting?

2. Why is it important to see a specialist after syncope?

3. How will syncope affect my life?

4. Can vertigo cause syncope?

5. Can the sight of blood cause syncope?

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Fatty liver disease

Also known as NAFLD, Steatosis, Hepatic steatosis, and Fatty Liver Hepatitis

Overview

The liver is a critical organ in the human body that helps support metabolism, immunity, digestion, detoxification, and vitamin storage, among other functions. Fatty liver disease is the accumulation of abnormal amounts of fat within the liver cells that compromise the liver's ability to perform.

Fatty liver disease can be caused by excess alcohol consumption or other causes, which is known as nonalcoholic fatty liver disease(NAFLD). Most people do not know that they have NAFLD during the initial stages. It only presents symptoms or signs in case of a progression to liver failure.

NAFLD has become increasingly common with the increasing prevalence of its risk factors like obesity, diabetes, high blood pressure, and high cholesterol.

The treatment of NAFLD is based on the cause and how far the disease has progressed. Lifestyle modifications such as regular exercise, a healthy diet, managing weight, and keeping blood sugar and cholesterol under control are the cornerstone of managing this condition. A liver transplant may be required in severe cases.

Types Of Fatty Liver Disease

Fatty liver disease is broadly categorized into 2 types. These are:

1. Alcohol-related fatty liver disease (AFLD)

Alcoholic fatty liver disease occurs due to the consumption of alcohol in excessive amounts.

2. Nonalcoholic fatty liver disease (NAFLD)

Nonalcoholic fatty liver disease (NAFLD) is not related to alcohol consumption. We will be focusing on this type in detail.

NAFLD is further classified as:

Fatty liver (isolated fatty liver or IFL)

Nonalcoholic Steatohepatitis (NASH)

In both isolated fatty liver and NASH there is a high amount of fat in the liver cells, but, in addition, in NASH there is inflammation within the liver, and, as a result, the liver cells are damaged and are replaced by scar tissue.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women

Body part(s) involved

Liver

Kidneys

Pancreas

Prevalence

Worldwide: 25.24% (NAFLD)

India: 9-32% (NAFLD)

Mimicking Conditions

Alcoholic liver disease

Uncontrolled type 1 diabetes

Wilson disease

Hepatitis C (particularly genotype 3)

Medication induced steatosis (amiodarone, methotrexate, tamoxifen, glucocorticoids, valproate, anti-retroviral agents for HIV)

Reye syndrome

Mitochondrial hepatopathies

Kwashiorkor

Anorexia nervosa

Mitochondrial disorders

Cholesterol Ester Storage Disease (Lysosomal acid lipase deficiency)

Necessary health tests/imaging

Blood tests: Liver function test (LFT), Complete blood count (CBC), and Fasting serum glucose

Imaging tests: Abdominal ultrasound, Abdominal computed tomography (CT), and Magnetic resonance imaging (MRI)

Liver biopsy

Treatment

Dietary Modifications

Exercise Regime

Weight loss medications: Orlistat

Bariatric surgery

Dietary supplements: Vitamin E, Vitamin C, Vitamin D

Liver transplant

Medications for cholesterol and triglycerides: Atorvastatin and Lovastatin

Medications for Viral hepatitis: Lamivudine, Entecavir and Tenofovir disoproxil fumarate

Medications for Diabetes or insulin resistance: Rosiglitazone and Pioglitazone

See All

Symptoms Of Fatty Liver Disease

Fatty liver disease can progress through four stages, which include:

Simple fatty liver: It refers to the deposition and buildup of excess fat in the liver. It is usually harmless if it doesn’t progress.

Steatohepatitis: This refers to when there is inflammation in the liver along with fat deposition.

Fibrosis: This stage occurs when constant inflammation in the liver begins causing scarring. However, the liver can still function normally.

Cirrhosis: In this stage, scarring of the liver has become widespread, weakening the liver’s ability to function. This is a serious stage and is irreversible.

With NAFLD there are usually no symptoms in the early stages. However, in a few cases, the patient may feel tired and have discomfort in the upper right side of the abdomen. In cirrhosis (latter stages of NAFLD), the following symptoms can be observed:

Weakness or fatigue

Swollen belly

Abdominal pain

Loss of appetite

Weight loss

Confusion

Enlarged blood vessels underneath your skin

Larger than normal breasts in men

Edema (swelling), especially in the legs

Fluid accumulation in the abdomen (ascites)

Skin and eyes appear yellow due to jaundice

Dark-colored urine

Pale stools

Did you know?

The liver excretes bilirubin, a substance that helps the metabolism of proteins, carbohydrates, and fats. It also helps to remove wastes and toxic matter from the blood. A malfunctioning liver cannot excrete adequate amounts of bilirubin, and is one of the primary causes of jaundice.

Learn more about jaundice

Causes Of Fatty Liver Disease

In fatty liver disease, excess fat gets stored in liver cells.

Insulin resistance is the primary reason leading to NAFLD. Insulin resistance is when cells in your muscles, fat, and liver don't respond to insulin, leading to excessive glucose (sugar) in your blood. Also, elevated insulin levels and insulin resistance promote the continuous synthesis of fat in the liver.

Numerous risk factors for the development of NAFLD have been espoused, with most having some form of metabolic defect or insulin resistance at the core.

Don’t toy with your liver. Read about 6 habits that could be damaging it.

Click To Know More

Risk Factors For Fatty Liver Disease

NAFLD is primarily caused by the deposition of fats in the liver and the various risk factors include:

1. Diet and dietary habits

High frequency of eating fast foods, and larger food portions that contain high saturated fats and refined carbohydrates can increase the risk of NAFLD.

Dietary habits like inappropriate mealtimes, including the habit of eating too much at evening and night, missing breakfast, and eating too rapidly also predispose to insulin resistance and thereby NAFLD.

2. Overweight or obesity

Obesity is a strong risk factor for NAFLD. According to a study, up to 75% of people who are overweight and 90% of people who are obese are suffering from NAFLD.

3. High BMI

Another study suggests that adults with a high BMI (Body mass index is a measure of body fat based on the height and weight of an adult) rate may have a risk of NAFLD.

4. Age

The risk of developing NAFLD increases with age because older people begin experiencing organ dysfunction. A relatively high proportion of individuals with progressive forms of NAFLD develop cirrhosis by the time they are in their 70s or beyond.

5. Family history

Research shows that liver fat fraction and fatty liver condition are inherited traits and tend to run in families.

6. Type 2 diabetes

Diabetes significantly raises the risk of nonalcoholic fatty liver disease. In most cases, Type 2 diabetes mellitus and NAFLD exist together.

7. High cholesterol

Dyslipidemia, i.e. high levels of triglycerides and LDL (bad cholesterol) or low levels of HDL (good cholesterol) in the blood can predispose to NAFLD.

8. Metabolic syndrome

Metabolic syndrome is a combination of risk factors which predispose a person to developing type Ⅱ diabetes and cardiovascular disease.

The current diagnostic criteria require having 3 of 5 of the following factors:

Triglycerides (150 mg/dL or greater)

HDL cholesterol (less than 40 mg/dL in men and less than 50 mg/dL in women)

High fasting glucose (100 g/dL or greater)

Increased waist circumference (defined by population specific data)

High blood pressure (greater than 130/85 mmHg)

It is observed that the incidence of NAFLD has been increasing in concert with the rising rates of metabolic syndrome.

9. Polycystic ovary syndrome (PCOS)

The prevalence of NAFLD is higher in women suffering from PCOS. PCOS puts women at increased risk of insulin resistance, a critical factor in liver damage.

10. Obstructive sleep apnea

Evidence shows that obstructive sleep apnea can induce non-alcoholic fatty liver disease by increasing insulin resistance, inflammation, and dyslipidemia.

11. Hepatitis infections

HBV and HCV (hepatitis B and C viruses respectively) affect millions of people globally and are a major cause of chronic liver disease, including NAFLD (non-alcoholic fatty liver disease).

12. Genetic conditions

Defective LIPA gene which is clinically known as Wolman’s disease and cholesterol ester storage disease (CESD) can lead to chronic liver diseases. Fibrosis leading to cirrhosis is seen in two-thirds of patients with LIPA deficiency.

13. Certain medications

Side effects of certain medicines, such as corticosteroids, antidepressants, and antipsychotics can induce fatty liver disease.

14. Smoking

Smoking predisposes to the development of insulin resistance and metabolic syndrome, which are significant risk factors for fatty liver disease.

Tobacco kills more than 7 million people in the world. Try our widest range of smoking cessation products to keep this deadly habit at bay.

Buy NOW

Diagnosis Of Fatty Liver Disease

NAFLD can be hard to diagnose because many people do not have any signs and symptoms initially. A combination of laboratory and imaging tests is required to confirm a diagnosis. The diagnostic procedure include:

1. Medical history

Your doctor will evaluate the presence of risk factors and also the absence of excessive alcohol intake.

2. Physical examination

During a physical examination, your doctor will look for any physical signs of impaired liver function like pale yellow skin, jaundice, red palms, enlarged breasts tissue in men (gynecomastia), small or enlarged testicles, and swelling of the upper stomach. To check for liver inflammation, they may press on your abdomen as an enlarged liver can be felt along the lower edge of the right rib cage.

3. Blood tests

Liver function test (LFT): This test helps show the abnormal levels of enzymes and proteins produced by the liver, including bilirubin, albumin, lactate dehydrogenase, etc.

Complete blood count (CBC): This test may help detect any infection or anemia that may be caused due to internal bleeding.

Fasting serum glucose: Increased levels of fasting serum glucose correlate with the degree of steatosis in NAFLD patients and may be used as a marker of severe hepatic steatosis.

Hepatitis antibody test: This test may help to rule out hepatitis B and C (mainly) virus infections that may cause serious liver inflammation and damage.

Other blood tests: Antibodies are screened for autoimmune liver conditions, which include antinuclear antibody (ANA), anti-smooth muscle antibody (SMA), and anti-mitochondrial antibody (AMA) tests.

4. Imaging tests

The doctor may advise imaging tests to get a better understanding of the patient’s condition. The following imaging tests can show the size, shape, texture, and inflammation of the liver:

Abdominal ultrasound: It is a non-invasive, widely available, and accurate procedure for the detection of fatty liver disease. On ultrasound images, fatty liver looks brighter than normal liver, and cirrhotic livers (advanced stage) look lumpy and shrunken.

Abdominal computed tomography (CT): This procedure uses x-ray equipment with computers to produce multiple and detailed digital images of the liver. It can help detect mild to advanced steatosis as well as other liver diseases.

Magnetic resonance imaging (MRI): This technique requires a magnetic field, radio frequency pulses, and a computer to produce detailed pictures of the liver. A dye that is injected into the veins of the patient, helps the liver to be seen more clearly on the scan. It allows accuracy for the detection of damage caused by various liver diseases.

Magnetic resonance cholangiopancreatography (MRCP): MRCP is a special type of MRI that is used to evaluate a part of the liver and gallbladder.

Magnetic resonance elastography (MRE): This test assesses the stiffness, inflammation, and severity of scarring in the liver.

Transient elastography (fibroScan): This test helps quantify liver fibrosis (scarring).

5. Liver biopsy

In this procedure, fine tissue samples are collected from the liver with a needle or during surgery. The liver biopsy should be considered in all patients with unexplained elevations in serum aminotransferases (e.g., with findings negative for viral markers or with no history of alcohol use). It offers high accuracy in the detection of fatty liver disease.

Be it a basic wellness check or a specific test, you can now get them done in the comfort and safety of your house with just a click.

Book Now

Prevention Of Fatty Liver Disease

A healthy lifestyle prevents fatty liver disease and its potential complications. Following are a few tips to keep the liver, the only body organ with the superpower to grow back, healthy:

1. Eat right

A wholesome, well-balanced, healthy diet is the cornerstone for preventing fatty liver. This can be achieved by:

Consuming green vegetables, fresh seasonal fruits, whole grains, lean protein sources, nuts, seeds, low-fat dairy products, etc

Adding healthy fats (Polyunsaturated omega-3 fats) to the diet and staying away from saturated and trans fats

Increasing intake of dietary fiber

Avoiding fast food, canned and packaged food items

Limiting sugar intake

If you're trying to reduce the sugar and calories in your diet, you may be turning to artificial sweeteners or other sugar substitutes.

Watch this video to learn whether sugar alternatives are really as healthy as they claim to be and how you can include healthy alternatives to sugar in your life.

https://www.youtube.com/watch?v=v6D94qq4ynY

2. Keep your weight in check

Moderate amounts of weight loss is associated with improvement in insulin sensitivity.

Energy restriction of about 25–30 kcal/kg/day with a target weight loss of about 10% of body weight over six months can prevent and keep fatty liver in check.

Struggling to lose weight?

Here are a few weight loss tips and tricks that can work like magic!

Read Now

3. Always take out time to exercise

Regular exercise is a must to prevent fatty liver. Set realistic goals while working out, such as daily 15-min walks and 15-min exercises.

Small, achievable goals will also help you to be consistent and make working out a part of your daily routine.

3. Protect yourself from hepatitis

By avoiding hepatitis infection (particularly hepatitis B and C), the risk of developing liver cirrhosis can be limited.

Use the following methods to reduce the risk of infection:

Avoid unprotected sex

Try our range of condoms and protect yourself from STDs (sexually transmitted diseases)

Explore Now

Do not get body piercings or tattoos in an unsterilized environment

Get vaccinated for hepatitis B and hepatitis C

Do not share needles

Vaccination is not just for children. In fact, as you grow old, your immunity decreases which in turn makes you susceptible to various diseases. Read more about various adult vaccines.

Click Here

4. Manage diabetes and cholesterol

These two conditions can be the primary culprit causing NAFLD. It is essential to keep them in check by consuming a healthy, wholesome diet, adding exercise to your daily routine, monitoring levels, and seeing your doctor regularly for follow-ups.

NAFLD is a growing epidemic not just in India, but worldwide. Listen to our experts talk about liver detox tips that help you take care of your liver.

Click To Watch Video

Specialist To Visit

A general physician can evaluate the causes of liver abnormalities and refer to the following specialists for assessment. They include:

Gastroenterologist

Hepatologist

A gastroenterologist is a specialist with expertise in the treatment & management of disorders related to digestive tract organs, including the liver, while a hepatologist specializes in disorders and diseases that affect the liver biliary tract, gallbladder, & pancreas.

If you are facing any issues, seek help. Consult our healthcare professionals today.

Consult Now

Home Care For Fatty Liver Disease

The following home remedies can be used as an adjunct to lifestyle modifications and other treatment options for fatty liver :

1. Coffee: A study has found that coffee of all kinds lowers the risk of fatty liver disease, with a significant risk reduction of fibrosis.

Know more about the benefits of drinking coffee. Watch this video by our expert.

Tap Here

2. Turmeric: It has antiseptic, antibacterial, antifungal, and antioxidant properties and can do wonders in treating liver disease. Add a pinch of turmeric in hot milk with honey and drink it once a day.

Have all your questions answered regarding turmeric tea.

Click To Watch The Video

3. Apple cider vinegar (ACV): ACV helps improve fat metabolism and detoxify the liver.

Quick Tip! Always consume ACV with a straw. This helps prevent tooth erosion.

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4. Green tea: It has high antioxidant properties that reduce oxidative stress, which initiates fibrosis and cirrhosis of tissues. It also gives a protective effect against liver disease and has antiviral properties that help fight viral hepatitis.

Explore our wide range of green teas.

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5. Milk thistle: Studies show that it is a powerful liver cleanser and has the property of rebuilding the liver cells. It helps in reducing liver damage and removing toxins from the body that are processed through the liver.

The liver is the quality controller of the human body. Everything that goes in the body undergoes a quality check in the liver. So, detox your liver and boost its overall functioning.

Explore Our Liver Care Range

Treatment Of Fatty Liver Disease

The first-line treatment for fatty liver disease is lifestyle intervention with diet modifications and exercise regime.

Dietary Modifications

Healthy, mindful eating is key to induce weight loss without malnutrition. The following tips can be of great help. However, it is always advisable to work in conjunction with regular interactions with a dietician.

Avoid fast food, canned and packaged food items

Limit sugar intake

Count your calories. It is advisable to consume 1000‐1200 calories per day for women and 1200‐1600 calories per day for men.

Goal is to achieve a weight loss of 0.5 to 1.0 kg per week.

Aim for gradual but consistent weight loss over 6 to 12 months.

At the same time, macronutrients including carbohydrate, protein, fat and micronutrients including vitamins, minerals, and supplements must be well balanced.

Here is your guide to eating habits that lead to a healthy weight without compromising on all-round nutrition.

Watch This Vedio

Exercise Regime

120 minutes of aerobic exercise, such as running and swimming every week, increases glucose uptake by improving insulin sensitivity and reducing hepatic fat content.

NAFLD is also improved with resistance exercises, which may be more tolerable for patients who suffer from poor cardiorespiratory fitness and cannot tolerate intense aerobic workouts.

A study has also shown that modified high-intensity interval training (HIIT) of five cycles of high-intensity cycling followed by 3-min recovery periods, three times/week for 12 weeks, leads to a reduction in liver fat.

However it is important that an individualized exercise be developed based on

The severity of underlying liver dysfunction from NAFLD

Class of obesity

Exercise tolerance status

Presence of individual components of metabolic syndrome and other comorbid medical problems

Weight loss using medications

While weight can be mostly managed by caloric restriction from dietary modifications and physical exercise, medications like Orlistat can aid in moderate weight loss by reducing the absorption of fat.

Bariatric surgery

Sometimes, exercise and diet modifications fail to lose weight in excessively obese people. It increases insulin sensitivity in the liver, muscles, and fat along with improving overall metabolic health.

Dietary supplements

Certain vitamin supplements can give a helping hand in managing fatty liver disease. These include:

Vitamin E: It reduces triglycerides as well as oxidative stress, which contributes to decreasing the progression of fatty liver in patients. Natural sources include wheat germ oil, sunflower seeds, almonds, peanuts, spinach, pumpkin, and red bell pepper. Supplements can also be considered if your diet is not able to meet the demands.

Check out our extensive range of vitamin E supplements.

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Vitamin C: Vitamin C gives protective effects against liver oxidative damage. It also prevents fatty accumulation in the liver.

Include vitamin C-rich items like lemons, oranges, strawberries, blackcurrants, broccoli etc. in your diet.

You can also take vitamin C supplements to cover any gaps in your diet.

Shop Now

Vitamin D: Deficiency of Vitamin D can result in insulin resistance, metabolic syndrome, and NAFLD. A study found that 70% of patients with NAFLD have vitamin D deficiency. Therefore, appropriate levels of vitamin D can help in management of fatty liver disease.

Bask in the morning sunshine to boost your Vitamin D levels. You can also augment it by taking Vitamin D supplements.

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Medications

There are no specific medicines for fatty liver disease. However, the doctor may prescribe medicines for the management of underlying conditions like:

High Triglycerides and cholesterol: Medications include:

Atorvastatin

Lovastatin

Viral hepatitis: If fatty liver disease is long-term, the doctor may prescribe antiviral medicines like

Lamivudine

Entecavir

Tenofovir disoproxil fumarate

Diabetes or insulin resistance: Antidiabetic medicines include:

Metformin

Rosiglitazone

Pioglitazone

Liver transplantation

In advanced cases of fatty liver disease, when the liver completely loses its ability to function, a liver transplant is the last treatment option.

It is a procedure to replace a patient’s liver with a healthy liver from a deceased donor or with part of a liver from a living donor. Candidates for liver transplants undergo extensive testing to find whether they are healthy enough to have a good outcome following surgery.

Complications Of Fatty Liver Disease

Fatty liver disease can turn into a life-threatening condition if it progresses into inflammation, fibrosis, and cirrhosis of the liver. And, if left untreated, it can eventually lead to the following:

1. Bleeding

Inflammation, fibrosis, and cirrhosis can affect the liver's ability to make enough clotting factors. Hence, the chance of severe bleeding increases.

2. Jaundice

Fatty liver diseases may affect the liver’s ability to eliminate high levels of bilirubin, a waste product, from the blood leading to jaundice.

3. Infections

Fatty liver disease also reduces the body’s immunity to fight infections. Fatty liver is associated with recurrent bacterial infections.

4. Chronic viral hepatitis

Progression to fibrosis and cirrhosis is more rapid when there is any form of concomitant liver infection with fatty liver disease.

5. Osteoporosis

Some patients tend to lose their bone strength and are at a higher risk of bone fractures. Research shows that patients with NAFLD were 1.35 times more likely to develop osteoporosis when compared to individuals without NAFLD.

6. Diabetes

Diabetes may worsen if someone already has it and develops cirrhosis and complete liver damage.

7. Liver failure

Patients who are suffering from long-term fatty liver disease have the highest risk of liver failure.

8. Liver cancer

Scarring and cirrhosis increase the chances of liver cancer, most commonly a type called hepatocellular carcinoma (HCC).

9. Acute fatty liver of pregnancy (AFLP)

It is a rare but serious complication that occurs during the 3rd trimester of pregnancy. Proper delivery and supportive care can help the patient with better recovery.

Note: Liver health will likely return to normal within a few weeks of giving birth.

Alternative Therapies For Fatty Liver Disease

Complementary therapies that can help on managing the symptoms of NAFLD include:

1. Traditional Chinese Medicine (TCM)

TCM has been widely used to treat NAFLD for centuries in Asia, and its holistic concept shows advantages in the treatment of this condition. This treatment is mainly focused on preventing damage to the liver, increasing insulin sensitivity, and improving the immune system.

2. Acupuncture therapy

This is another traditional Chinese medicine-based approach, in which thin needles are inserted into the body that helps in healing. A study has demonstrated that acupuncture can effectively treat NAFLD by inhibiting inflammation and promoting fat metabolism in liver cells.

3. Yoga

Yoga positions can strengthen and stimulate the liver and aid in releasing stored fat in the form of energy. Certain yoga positions help improve liver functions and fatty liver diseases.

Garland Pose (Malasana)

Bhujangasana (Cobra Pose)

Adho Mukha Svanasana (Downward facing dog pose)

Naukasana (Boat Pose)

Plough Pose (Halasana)

Balasana (Child pose)

Mandukasana (Frog Pose)

Dhanurasana (Bow Pose)

Anulom Vilom Pranayama (Alternate Nostril breathing)

Kapalbhati Pranayama (Skull shining breath)

Yoga can not only benefit you with your liver condition but can have a very positive impact on your overall well-being.

Know more about other benefits of yoga.

Tap Here

Frequently Asked Questions

How does fatty liver disease progress?

What are some of the common symptoms that indicate a person is moving towards a liver disease?

What should I avoid eating and drinking if I have fatty liver disease?

Is NAFLD contagious?

Is chicken good for fatty liver?

Is coconut water good for the liver?

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Female infertility

Also known as Sterility and Barrenness

Overview

Female Infertility refers to the inability to conceive in spite of trying through unprotected intercorse for at least a year.

Infertility in women is linked to advancing age, especially over 35 years, underlying medical conditions, interference with ovulation, damage of anomalies in the female reproductive system,or any hormonal imbalance.

Also, unhealthy habits like overconsumption of alcohol and smoking along with stressful and sedentary lives have increased infertility rates in recent years.

The best way to conceive is to create a cohesive healthy environment that can help you get pregnant faster. Eating a healthy well balanced diet, exercising regularly, getting sufficient sound sleep, and managing your stress can help you in this journey.

If you think you need treatment, you may consider talking to a fertility specialist or gynecologist. They can recommend the best fertility treatment option for you.

Key Facts

Usually seen in

Women above 35 years of age

Gender affected

Female reproductive system

Mimicking Conditions

Endometriosis

Androgen-producing ovarian tumors

Adrenal tumors

Nonclassic congenital adrenal hyperplasia

Cushing syndrome

Prolactinemia disorders

Thyroid disorders

Polycystic ovarian syndrome (PCOS)

Necessary health tests/imaging

Laboratory tests: Follicle-stimulating hormone (FSH), Inhibin-B, Anti-mullerian hormone, and Hormone profile.

Imaging tests: Hysterosalpingography and Lower abdomen ultrasound.

Treatment

Medications: Clomiphene, Gonadotropins, Letrozole, Bromocriptine, and Metformin.

Surgery: Laparoscopy and Tubal surgery

Assisted reproduction: Intrauterine insemination, IVF (in-vitro fertilization), GIFT (gamete intrafallopian transfer), and ZIFT (zygote intrafallopian transfer).

Specialists to consult

Endocrinologist

Gynecologist

IVF specialist

Symptoms Of Female Infertility

The main symptom of infertility is not being able to get pregnant. Symptoms can also depend on many health conditions that can make it difficult to conceive a child. Some of the symptoms include:

Abnormal, irregular, or no periods

Bleeding during menstruation is heavier or lighter than usual

Painful periods with back pain, pelvic pain, and cramping

Pain during intercourse

Other symptoms indicating hormonal imbalance, such as:

Acne and skin problems

Changes in sex drive and desire

Dark hair growth on face

Thinning or loss of hair

Weight gain

Confused about irregular periods? What is a Normal Period?

Read this article to answer the questions

Tap here

Causes Of Female Infertility

To understand the cause of infertility we should understand the steps in conception first and how any problem in each step can hamper your chances of getting pregnant. These include:

1. Sperm transport

The sperms need to travel through the female vagina and cervix to the site of fertilization for the pregnancy to occur. Any changes in the female environment due to hormonal imbalance can destroy the sperm, inhibiting fertilization.

2. Egg transport

This process starts during ovulation (release of an egg from one of the ovaries) where the egg is then picked up by the fallopian tubule where it travels to the uterus. Conditions such as pelvic infections and endometriosis can permanently impair the function of the fallopian tubes, leading to infertility.

3. Fertilization and embryo development

This is the most important step that consists of a union between the sperm and egg for the pregnancy to occur. Any impairments in the fallopian tubule can result in fertilization taking place in the tubules itself leading to ectopic pregnancy (pregnancy outside the uterus).

4. Implantation

It is a process in which the embryo attaches to the surface of the uterus and starts developing into a baby. Abnormalities in the uterus, hormonal or metabolic imbalances, infections, or immunological factors can lead to defective implantation, causing miscarriages.

The various factors that can cause infertility in females include:

1. Ovarian causes

Polycystic ovary syndrome (PCOS): It is a hormonal disorder in which ovaries produce large amounts of male sex hormones or androgens which interfere with the development and release of eggs. Some of these eggs develop into cysts, which are little sacs filled with liquid, hence the name, polycystic ovary syndrome. PCOS has been linked to infertility in women.

Learn from our experts more about PCOS, its symptoms, and lifestyle changes to manage it better.

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Premature ovarian failure (POF): Refers to the loss of function of the ovaries before the age of 40. It is characterized by a decrease in the hormone estrogen, loss of female egg cells, and infertility.

Hyperprolactinemia: High levels of the hormone Prolactin, interferes with the normal production of other female hormones, like estrogen and progesterone. This can change or halt ovulation. It can also lead to irregular or missed periods.

2. Tubal and peritoneal causes

Inflammatory diseases: Infection of one or more of the upper reproductive organs, including the uterus, fallopian tubes, and ovaries can cause inflammation and predispose to infertility issues.

Endometriosis: It is a condition characterized by the growth of tissue resembling the lining of the uterus outside the uterus. This extra tissue and its surgical removal can cause scarring, blocking the fallopian tubes and making it difficult for the egg and sperm to meet.

3. Structural abnormalities

Uterine anomalies: The uterine malformations characterized by adhesions and/or fibrosis within the uterine cavity can lead to infertility.

Fallopian tube anomalies: Any obstruction in the tubules doesn’t let the ovum and the sperm converge, making fertilization unfeasible.

Cervical anomalies: Cervical stenosis (narrowing or closing of the passageway through the cervix- the lower part of the uterus) might affect natural fertility by impeding the passage of semen into the uterus.

Risk Factors For Female Infertility

1. Age

Fertility declines with advancing age. The 20s and early 30s are usually the best time to conceive. It becomes difficult to conceive after the age of 35.

2. Being underweight or overweight

BMI (body mass index) plays an important role in fertility. Being significantly overweight or underweight can cause hormonal changes that can affect fertility rates.

Trying to get rid of that stubborn fat?

These tips might help you

3. Stress

Stress alone cannot cause infertility, but it can interfere with your ability to get pregnant. Research has shown that anxiety also can prolong the time needed to achieve pregnancy.

Stressed? Try these relaxation techniques to help you battle chronic stress.

Read this

4. Genetic factors

Gene mutations can cause female infertility and pregnancy disorders.

5. Environmental factors

These include exposure to pesticides, radiation, air pollution, heavy metals, and other chemicals that can disrupt the hormones leading to infertility.

6. Hormonal disorders

Thyroid conditions: Thyroid diseases are associated with an increased risk of prematurity or stillbirth and can affect fertility.

Diabetes: Studies show that diabetic women are at increased risk of infertility, delayed puberty, absence of periods, menstrual irregularities and possibly earlier menopause.

Don’t let diabetes slow you down. Up your diabetes care game with our products to meet all your diabetes care needs.

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Others: Excess growth hormone and testosterone also increase the risk of female infertility.

7. Lifestyle

Diet: Food items with a high glycemic index (shows how your blood sugar (glucose) level changes after eating a specific food item) can cause infertility among women. Moreover, packaged, processed, and fried foods predispose to obesity and diabetes, both known risk factors for female infertility.

Smoking: In women, smoking can increase the risk of miscarriage and ectopic pregnancy (when fertilized egg implants and grows outside the uterus.)

Do you really know how much harm smoking can do? Read more about 5 ways how your body reacts to the smoke.

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Excessive alcohol: Excessive alcohol intake can lower the fertility rate in women. According to the American Cancer Society, it is best not to drink alcohol. Women who choose to drink alcohol should limit their intake to no more than 1 drink a day.

Did you know?

Can drink caffeine cause infertility? Studies have found that women who drink large amounts of caffeine may take longer to become pregnant. High concentration of caffeine is also found in energy drinks. Know if energy drinks are really good for you.

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9. Sexually transmitted disease (STD)

STDs are often associated with the risk of decreased fertility. Some of the identified STDs are syphilis, Chlamydia, gonorrhea, herpes simplex virus, human papillomavirus, HIV, etc.

Protect yourself from STDs with our wide range of contraceptives.

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10. Chemotherapy

Studies have shown that ovarian function decreases with chemotherapy increasing the risk of infertility in women.

Diagnosis Of Female Infertility

Infertility can be caused by multiple factors. Arriving at a correct diagnosis can help plan the treatment accurately focusing on treating the problem. The diagnosis mainly consists of the following:

1. History

A detailed history must consist of the duration of infertility, menstrual history, gynecological history to include a history of sexually transmitted infections, and sexual history to include frequency and timing of intercourse. Social and lifestyle history along with the family history is also taken into account.

2. Physical examination

The physical exam includes vital signs and BMI, thyroid evaluation, the appearance of an abnormal vagina, pelvic masses or tenderness, and uterine enlargement or irregularity.

3. Laboratory tests

Hormone testing: A hormonal imbalance may be one of the indicators of infertility. Various hormone levels are analyzed for the diagnosis and treatment of infertility. These include:

Progesterone

Luteinizing hormone (LH)

Follicle-stimulating hormone (FSH)

Inhibin-B

Anti-mullerian hormone

Prolactin

Thyroid Stimulating Hormone (TSH)

Dehydroepiandrosterone Sulphate (DHEAS)

Estradiol (E2)

Testosterone

Insulin-like growth factor-1 (IGF-1)

Post-coital test: This test analyzes cervical mucus within a few hours of sexual intercourse to inspect the interaction between sperm and cervical mucus.

Antisperm antibody tests: This test detects if a woman’s immune system may produce proteins that attack sperm (anti-sperm antibodies).

Clomiphene citrate challenge test (CCCT): It is a sensitive test that picks up a decreased ovarian reserve. It checks both FSH and estradiol levels between days 2 and 4 of the menstrual cycle.

4. Imaging tests

Hysteroscopy: This test is a gold standard for assessing the uterine cavity. It allows direct visualization of the intrauterine pathology and provides an opportunity for immediate surgical correction.

Hysterosalpingography: It is one of the common tests which is used to examine the fallopian tubes and help in the detection of any blockage or damage of the fallopian tubes and uterine cavity.

Laparoscopy: Just like the hysterosalpingogram, this test also helps to detect any abnormalities in the fallopian tubes. In this test, a small instrument known as a laparoscope is inserted into the body through a cut in the abdomen. The instrument helps to view and examine the female reproductive organs. In some cases, it can be used to remove the blockages, if any, found in the body.

Lower abdomen ultrasound: It is a procedure that uses high-frequency sound waves to scan the internal organs located in the lower abdomen of the body including the pelvic cavity and reproductive system.

Transvaginal ultrasound: It is an ultrasound test that helps the doctor look inside the uterus for abnormalities such as scarring, fibroids, or polyps. In this, a wand that is inserted into the vagina produces sound waves which give a clear picture of the reproductive organs including the ovaries and uterus.

Sonohysterograms: This is a special kind of ultrasound that uses sterile saline and air to observe the inner lining of the uterus. The pelvic organs are visualized through a transvaginal ultrasound.

Magnetic resonance imaging (MRI): MRIs can be helpful in detecting lesions or rare abnormalities inside the pelvis and uterus.

Book your tests now from the comfort of your home.

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5. Endometrial biopsy

A sample of the cells lining the uterus (endometrium) after ovulation is evaluated for signs of inflammation and changes in the endometrium (due to ovulation). It is generally performed about 7 to 12 days after ovulation.

Celebs affected

Farah Khan

The famous Indian choreographer and director, Farah Khan, opted for IVF in 2008. She has talked about the subject on several occasions. She gave birth to healthy triplets when she was 43.

Prevention Of Female Infertility

Harmful lifestyle choices have been found to have a lasting impact on health and are a major contributing factor to female infertility. Here are a few things you can do to prevent and manage infertility. These include:

1. Maintain a healthy weight

Maintaining a healthy weight lowers the chances of ovulation disorders. To do this, you can exercise regularly and eat a healthy well balanced wholesome diet.

Keep track of your weight with our widest range of weighing scales to choose from.

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2. Say No to smoking

Tobacco not only harms your overall health, it adversely affects fertility as well. If you are planning to get pregnant, you should consider quitting smoking.

Get rid of this deadly habit with our smoking cessation products.

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3. Avoid or limit the consumption of alcohol

Heavy drinking can increase the risk of ovulation disorders. While it is best not to drink alcohol, women who choose to drink alcohol should limit their intake to no more than 1 drink a day.

4. Manage stress

Everyone suffers from stress from time to time. But if there is continued stress, it can mess up your ovulation. Moreover, in a vicious cycle, infertility can inevitably cause stress and stress can hamper the results of infertility treatment. You can manage your stress effectively by working out, reading, and meditating amongst other stress-coping techniques.

5. Practice safe sex

Sexually transmitted infections can lead to infertility in both sexes. Such infections can spread through the reproductive system, causing damage, scarring, and inflammation in reproductive organs, leading to infertility.

Use the right protection to safeguard yourself and your partner from sexually transmitted infections. Check out our range of contraceptives.

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6. Treat existing conditions

Identifying and controlling chronic diseases increases your chances of conception. Regular physical examinations (including Pap smears) help to detect early signs of infections or abnormalities.

Specialist To Visit

If you have tried conceiving for a year or six months or if you are 35 or above, you may consider going to the following doctors:

Gynaecologist

Endocrinologist

IVF specialist

A gynecologist is a doctor who treats issues related to the female reproductive tract. An endocrinologist is a doctor who has special training in diagnosing and treating disorders of the glands and organs that make hormones. An IVF specialist is a doctor who specializes in treating infertility.

Consult India’s best doctors online to give you all the care and guidance you need in this journey.

Connect here

Treatment Of Female Infertility

Treatment of fertility problems needs an accurate diagnosis of the condition and a comprehensive and holistic approach. It consists of the following:

Medications

Fertility treatments are most commonly focused on infertility due to problems with ovulation. The most common medications used to treat infertility help stimulate ovulation. Some of them are:

Clomiphene

Gonadotropins

Letrozole

Bromocriptine

Metformin

Ordering medicines has never been easier!

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Hormonal therapy

Hormone treatment is particularly suitable for women with impaired egg maturation or impaired no ovulation at all. It includes:

Gonadotropins

Human menopausal gonadotropin (HMG)

Follicle-stimulating hormone (FSH)

Luteinising hormone (LH)

Pergonal

Clomiphene citrate-human menopausal gonadotropin (CC-HMG) combination

Surgery

If infertility is due to anomalies in the reproductive organs like the uterus or fallopian tubes, the following surgeries might be advised:

Laparoscopic surgery: It helps with problems with the uterus (womb) by removing endometrial polyps and fibroids (growths made of the uterine muscle).

Tubal surgery: If the fallopian tubes are found to be blocked, scarred, or damaged, they can be repaired surgically.

Assisted reproduction

Intrauterine insemination: In this, many sperms that are washed and concentrated are placed in your uterus around the time of ovulation. It can help if you or your partner have a low sperm count, mild endometriosis, unexplained infertility, or issues with ejaculation or erection.

IVF (in-vitro fertilization): During this process, mature eggs are taken and fertilized by sperm in a lab. The fertilized egg/eggs are then transferred to the uterus. This procedure is suggested if you have endometriosis, blockage in fallopian tubes, genetic disorder, or unexplained infertility.

GIFT (gamete intrafallopian transfer) and ZIFT (zygote intrafallopian transfer): In these procedures, the sperm and egg are collected and placed in the fallopian tube. In GIFT, both the sperm and egg are placed without fertilization. But in ZIFT, the sperm and egg are fertilized, and the embryo is placed in the fallopian tube.

Home-care For Infertility in Females

An amazing way to manage infertility is to have a healthy lifestyle. Here are a few home remedies that can help you:

1. Tweak your diet

We all know the importance of food and diet in fertility. Adding these foods can prove to be very beneficial while trying to conceive:

Pomegranate (Anaar): It is very useful in treating female infertility. Have at least one fresh pomegranate every day to keep your ovaries healthy.

Know more about other benefits of pomegranate.

Click here

Indian ginseng (Ashwagandha): Using this herb powder in milk balances hormones and reproductive organs.

Cinnamon (Dalchini): Studies suggest that cinnamon has been found to have a positive effect on hormones and improve menstrual cyclicity in women with PCOS.

Dates (Khajoor): Adding dates to your diet helps in reducing the risks of infertility.

2. Cut down on caffeine

Caffeine in small quantities does not affect female infertility. But you may consider cutting down on it if you are trying to conceive. If you have already conceived, then it is best to stay away from it altogether.

3. Make no excuse to skip exercise

Exercise can positively influence fertility in women. Women who do regular, moderate exercise may get pregnant quicker than women who don't exercise at all.

Too lazy to go to the gym and sweat? Try our range of exercise equipment to help you get that daily dose of activity at home.

Explore now

4. Take time to relax

Infertility comes with numerous tests and visits to the doctor. So it is not surprising that it can be stressful. It can mess up hormones in women as well. So take time to relax and unwind from time to time.

5. Add supplements

Micronutrients have essential roles in fertility, and inadequate levels can have an adverse impact on the ability to conceive. Taking folic acid, vitamin D, and omega-3 fatty acids can help improve fertility.

Explore our widest range of vitamin and mineral supplements to meet all your needs.

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Complications Of Female Infertility

Infertility and infertility treatments can lead to a few complications. Here are some of them:

1. Multiple pregnancies: One of the most common complications of infertility treatment is the chance of multiple pregnancies. Having twins, triplets, or more can put you at risk of premature labor and delivery.

2. Ovarian hyperstimulation syndrome (OHSS): It is an exaggerated response to hormones. Some fertility medicines can cause your OHSS in which the ovaries become swollen and painful.

3. Infections: Although rare, there are chances of getting an infection with reproductive surgery.

4. Psychological stress: Infertility procedures can increase degree of stress leading to depression and anxiety during the entire therapy procedure, due to lack of emotional and educational support. Infertility can sometimes lead to difficulties in marriages as well.

Alternative Therapies For Female Infertility

Alternative options can act as an adjunct to the conventional treatment for infertility and help in your journey to conception. Some of these therapies include:

Relaxation techniques

Multiple relaxation techniques like meditation, deep breathing, guided imagery, and yoga, have been shown to reduce anxiety scores in women undergoing infertility treatment. Yoga, specifically, increases the quality of life and decreases negative feelings and thoughts that are associated with infertility.

Understand other benefits of yoga that even doctors swear by!

Read this piece now

Acupuncture

It works by putting tiny, delicate needles into particular body locations. Acupuncture may assist boost blood flow to the reproductive organs, stimulate hormones, control ovulation, and reduce stress, all of which may help in conceiving. However, it is better to consult your doctor before starting acupuncture therapy.

Living With Female Infertility

Infertility treatment can take a physical and emotional toll on you. Living with it can be difficult as it can cause feelings of hopelessness and frustration in you and your partner. Here are a few aspects of infertility and infertility treatment that can help you out.

Psychological impact

Infertility can cause anger, depression, and anxiety. Women with infertility have a number of psychological commonalities like fear of complications during pregnancy, delivery, or maternity. Moreover, the negative thoughts of fear of losing your life or the child during delivery, or fear of failing as a mother are some of the underlying causes of stress that can hamper your chances of being pregnant.

Addressing these psychological problems is the basis of good overall health and increases the chances of conception. The following points can help you out:

Learn stress-coping techniques

Have realistic expectations from every phase of treatment

Talk to your partner about every aspect of your physical and mental health

Opt for infertility counseling by a qualified medical health practitioner

Take professional help for psychological issues

Psycho-Social impact

This includes low self-esteem, poor quality of life, and social isolation which is associated with infertility treatment. Also, comparisons between women undergoing repeated IVF cycles and first-time participants may lead to an increase in depressive symptoms. As you navigate through things, you have to make sure:

That you do not rely on only one option

Know the other alternatives

Learn ways to manage stress and anxiety

Communicate your fears and apprehensions with your partner

Keep your doctors updated about your mental and physical conditions

Psycho Economical impact

Treatment of infertility can have an economic impact on the couple's lives. Hence, it is important to keep in mind the financial aspect as well. The tips that can help you are :

Talk to your partner about all the expenses and chart out a proper financial plan

Select a treatment that fits your budget and expectations

Know if there is any insurance coverage

Are you tired of hearing all that you need to do to get pregnant? Here are all the myths debunked for you.

Enlighten yourself now

Frequently Asked Questions

Does infertility affect only women?

Can my overall health affect fertility?

Can leading a stressful lifestyle cause infertility?

Should my partner get evaluated for infertility?

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Fistula

Also known as Fistulae

Overview

A fistula is an abnormal passage that connects two organs or cavities in the body. It may occur anywhere in the body but they're most common in the anus and rectum because these areas are prone to infection. General symptoms include pain, diarrhea, constipation, fever, weight loss, nausea, vomiting, and fatigue.

A fistula forms when bacteria get into the tissues around the area where two organs join together. It is commonly caused by injury, infection, cancer, or congenital defects. A fistula may be congenital (present at birth) or acquired (develop later in life).

Fistula can be categorized depending on the type, nature and location. Fistulae are usually hard to deal with but can be prevented and treated. Treatment for fistulas depends on how severe the problem is. If the fistula fails to respond to the medications and antibiotics, surgical treatment might be needed to remove the fistula.

Key Facts

Usually seen in

Adults above 40 years of age

Gender affected

Both men and women

Body part(s) involved

Anus

Cervix

Lung

Heart

Rectum

Vagina

Uterus

Stomach

Brain

Colon

Urinary bladder

Mimicking Conditions

Bowel continence

Urine leakage

Necessary health tests/imaging

Anoscopy

Complete blood count

Endoscopy

CT Scan

X-ray

Magnetic resonance imaging (MRI)

Treatment

Surgery: Fistulotomy, Transabdominal surgery & Laparoscopic surgery

Antibiotics: Metronidazole and Ciprofloxacin

Anti-inflammatory medicines

Immunomodulatory drugs: Azathioprine

Pain relief medications

Non-invasive treatment: Fibrin glue & Collagen plugs

Specialists to consult

Gynecologist

Urogynecologist

Urologist

Colorectal surgeon

Gastroenterologist

See All

Types Of Fistula

Fistulas can occur in different parts of the body, thereby can be defined and termed differently as well. A fistula can form between:

Artery and a vein

Cervix and the vagina

Neck and throat

Bile ducts and surface of the skin

Skull and nasal sinus

Bowel and vagina

Stomach and the surface of the skin

Navel and the gut

Artery and the vein in lungs

Uterus and peritoneal cavity (space between the abdomen and internal organs)

Colon and surface of the body, causing feces to exit through an opening other than the anus

Based on the nature

Based on the nature, the different types of fistula:

Blind: As the name suggests, the fistula that opens in only one end and is closed at the other end is called the blind fistula.

Complete: A complete fistula has openings both outside and inside the body.

Horseshoe: A horseshoe fistula connects the anus to the surface of the skin after going around the rectum.

Incomplete: An incomplete fistula is a tube from the skin that is closed on the inside and does not connect to any internal structure.

Based on anatomical location

Based on the location, the different types of fistulae are listed below:

Anal fistulas: Anal fistulas are the most common type of fistulas. The anal fistula is developed between the anus and another organ system such as the rectum, vagina and colon. These three therefore can be defined as three subcategories of aval fistulas:

Anorectal fistula

Colovaginal fistula

Anovaginal fistula

Intestinal fistulas: Intestinal fistula is developed between the small intestine and the skin or colon and the skin.

Bladder or urinary tract fistula: A bladder fistula is when an opening forms between the bladder and some other organ or the skin. Commonly the bladder opens to the bowel (enterovesical fistula) or the vagina (vesicovaginal fistula).

Gastrointestinal fistula: It is an abnormal opening in the stomach of intestines that allows the leakage of contents. They can be classified as enteroenteric (where the leaks go through a part of the intestines) or enterocutaneous (where the leaks go through to the skin) fistula.

Obstetric fistula: It is an abnormal opening formed between the birth canal (genital tract) and the urinary tract or rectum due to obstructed labor during childbirth.

Vaginal fistulas: It is an abnormal opening that connects the vagina to another organ such as the bladder, colon or the rectum. The different types of vaginal fistulas include:

Vesicovaginal fistula: Also called bladder fistula, it is a common type of vaginal fistula. The opening develops between the vagina and urinary bladder.

Urethrovaginal fistula: It is also called urethral fistula. This type of fistula develops between the vagina and the tube that carries urine out of the body (urethra).

Ureterovaginal fistula: This type of fistula develops between the vagina and the ducts that carry urine from the kidneys to the ureters (bladder).

Rectovaginal fistula: This type of fistula develops between the vagina and the lower portion of the large intestine (rectum).

Colovaginal fistula: This type of fistula develops between the vagina and the colon.

Enterovaginal fistula: This type of fistula develops between the vagina and the small intestine.

Symptoms Of Fistula

Symptoms vary depending upon where the fistula is located. They range from mild to serious ones. Most commonly, there will be no specific symptom until the condition becomes more advanced. However, some individuals experience one or two symptoms only. But others might develop multiple symptoms simultaneously.

Some of the commonly observed symptoms of fistula are:

Body pain

Pain around the anus

Vague feeling of being unwell or uncomfortable

Constant urine leakage from the vagina

Irritation in the external female genital organs

Nausea

Abdominal pain

Vomiting

Fever

Weight loss

Diarrhea

Constipation

Frequent urinary tract infection

Causes of Fistula

Depending on the type and location of the fistula, there could be different reasons for occurrence. In some cases, they could be formed naturally and in others could be an after-effect of an injury or surgery.

Gastrointestinal diseases: People suffering from gastrointestinal diseases such as Crohn’s disease, colitis and irritable bowel diseases are at a higher risk of developing fistulas near the anus. Around 1 in 3 people with Crohn’s will likely develop a fistula at some time.

Diverticular diseases: Diverticular disease is a digestive disease. Diverticulosis is a condition that occurs when small sacs form and push outward through weak spots in the wall of the colon.

Radiation therapy: Patients undergoing radiation therapy as a cancer treatment or otherwise, are at a high risk of developing fistulas.

Certain infections: Some infections and diseases such as HIV and tuberculosis can also cause fistulas.

Women’s health and childbirth: Prolonged or obstructed childbirth, injury during pelvic surgery, radiation treatment in the pelvic or genital area are common causes for vaginal fistulas.

Surgical and medical treatment: Certain surgical treatments can lead to fistulas.eg. Complications from gallbladder surgery can lead to biliary fistulas. Radiation therapy to the pelvis can lead to vesicovaginal fistulas.

Therapeutic use: In people with kidney failure, requiring dialysis, a cimino fistula is often deliberately created in the arm in order to permit easier withdrawal of blood for hemodialysis. During treatment of portal hypertension, surgical creation of a portacaval fistula produces an anastomosis between the hepatic portal vein and the inferior vena cava. This spares the portal venous system from high pressure which can cause many complications.

The cause for developing different types of fistulas vary according to the type and are discussed separately below:

Anal fistula: Anal fistula are more common in men aged between 30-50 years of age. Anal fistulas can be caused by damaged tissues and is often linked to cysts or an infection of the anal glands.

Clogged anal glands

Anal abscesses

Crohn’s disease

Tuberculosis

Diverticulosis

Cancer

Radiation therapy

Trauma

Sexually transmitted diseases

Vaginal fistula: In women, fistulas involve the genitals and urinary tracts. Common causes of these fistulas are:

Prolonged or obstructed childbirth

Injury during pelvic surgery

Radiation treatment in the pelvic or genital area

Infection and inflammation

Did you know?

Obstetric fistula is one of the most serious childbirth injuries.According to the World Health Organization (WHO), between 50,000 to 100,000 women are affected by obstetric fistula every year. Here are top 5 pregnancy tips every woman must know.

Click To Know!

Risk Factors For Fistula

Though the exact cause of fistula is still unknown. However, there are conditions that put some individuals at a higher risk of developing fistulas. Some of these risk factors include:

Previous history of anal abscess or fistula

Anal fistulas can be caused by damaged tissues and is often linked to cysts or an infection of the anal glands.

Crohn’s disease

As per studies, 70% of Crohn’s disease patients suffer from fistula and resulting intestinal obstruction during their disease course.

Certain infections

Some infections and diseases such as HIV and tuberculosis can also cause fistulas.

Previous surgery or radiation therapy

Patients who have had surgeries in the past or are undergoing radiation therapy as a cancer treatment or otherwise, are at a high risk of developing fistulas.

Can aging cause constipation? This & 5 more myths about constipation!

Know More!

Diagnosis Of Fistula

Fistula has characteristic symptoms. When you experience the symptoms, book an appointment with your physician at the earliest. Your doctor may ask you questions and enquire about your medical history. Based on the answers, he may suggest some medical tests and physical examination to confirm the presence of the disease.

During the physical examination, he may use a speculum (a metal or plastic device used during a pelvic exam) to look at the vaginal walls.

Medical tests that the doctor may ask you to get done:

Urine test

The doctor may suggest getting a laboratory test done to confirm the presence of a urinary tract infection by taking a urine sample.

Anoscopy

It is an examination of the anal canal with a scope to detect the presence of the fistula. Use a dye in the vagina or bladder or rectum to find all signs of leakage

Complete blood count (CBC)

A complete blood count (CBC) is a blood test used to detect a wide range of disorders and infections. The test measures several components of the blood, including : red blood cells, white blood cells, platelets and others.

X-rays scan

Fistula can cause tissue damage at the site of infection. An X ray produces images of the organs and confirms the presence of any tissue damage due to fistula.

Magnetic resonance imaging (MRI)

It is an imaging test that uses a magnetic field to take pictures of organs and structures inside the human body.

CT scan

A CT scan (also known as computed tomography) is a machine that takes a series of x-rays to make a picture with minute details. The scan helps to image bones, blood vessels and soft tissues from different angles.

Endoscopy

It is a common imaging test that uses a thin, flexible, light viewing instrument called an endoscope that allows the doctor to examine the inside of the organs, canals and cavities in the body.

Fistulogram

It is a special type of X-ray that provides a detailed imaging of the fistula. It is a procedure during which a dye is injected into the fistula to make imaging better. In a case where the fistula connects to the outside of the body, a catheter may be used to insert the dye. Whereas, if the fistula is present in the rectum, the dye will be injected via the anus before taking the X-rays images.

Intravenous pyelogram

It is a type of X-ray commonly used for diagnosing bladder fistulas. Prior to the procedure, you may be asked to follow a liquid diet or fast in order to make sure the colon does not contain any remains of stool at the time of imaging. Presence of stool can block the view of the bladder and therefore obstruct the diagnosis. In this case as well, a dye is injected into the body (usually via the arm) to get better images.

Did you know?

Anorectal fistulas are more common in men than in women. Most anorectal disorders can be caused by diet, lifestyle, body structure, or bacteria present in the waste produced by the body. Here’s more about the common anorectal problems.

Read More!

Prevention Of Fistula

Fistulae are preventable and treatable. The risk of certain types of fistula (such as anal fistula) can be lowered by:

Practicing good hygiene

Carefully cleaning and treating the anal/ rectal wounds

Managing the risk for other health conditions that increases the chances of fistula

As per WHO, fistulas such as obstetric fistula can be prevented by:

Delaying the age of first pregnancy

Cessation of harmful traditional practices

Access to obstetric care

In many cases, the cause of fistula is unknown and therefore it becomes difficult to suggest a prevention strategy. Patients with Crohn’s are at an increased risk of developing fistula at some point in life.

Specialist To Visit

If you observe any of the relevant symptoms, do not delay consulting a physician. The physician will ask for your medical history and do an examination to determine if a fistula exists. In most cases, the physician will examine the area around which the fistula is expected. The physician may recommend you to get some tests such as MRI or ultrasound done to get better clarity.

Depending on the location and severity of the fistula, the physician may recommend you to see a specialist such as:

Gynecologist

General surgeon

Urogynecologist

Urologist

Colorectal surgeon

Gastroenterologist

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Consult Now!

Treatment Of Fistula

If proper medical care is provided to the patient, fistulas can be treated and prevented. Different treatment options for fistula includes:

Surgical treatment

If the fistula fails to respond to the medications and antibiotics, surgical treatment might be needed to remove the fistula.

Fistulotomy

It is the most effective and common type of surgery that involves cutting along the whole length of the fistula to open it up so it heals as a flat scar. It is a surgical treatment for many fistulas (such as anal fistula) that do not pass through much of the sphincter muscles, as it may cause a risk of incontinence.

Transabdominal surgery

It is the simple procedure wherein the rectovaginal septum is dissected, the fistula is divided and the rectum and vagina are closed primarily without bowel resection.

Laparoscopic surgery

It is a minimally invasive surgery that involves a tiny incision and the use of cameras and small tools to repair the fistula.

Endorectal flap procedure

It is a procedure where healthy tissue is pulled over the internal side of the fistula to keep feces or other material from reinfecting the channel.

Medications

Depending on the condition and severity of the disease, the doctor prescribes medications that include:

Antibiotics will help fight against bacterial infection that if left untreated could worsen the patient’s condition. Commonly prescribed drugs include metronidazole and ciprofloxacin that may help reduce the discharge and promote comfort.

Anti-inflammatory medicines are usually recommended for people with Crohn’s diseases or diverticular disease. It helps control the existing fistula from worsening and prevents new ones from developing.

Immunomodulatory drugs have shown to help close the fistula in some. Commonly prescribed drugs include azathioprine, it acts slowly therefore may take up to 3 months to show results.

Pain relief medications help to reduce the pain and discomfort caused due to the fistula.

Non-invasive treatment

For small and relatively simple fistulas, doctors often use a minimally invasive technique to manage it. Commonly used non-invasive treatment options include:

Fibrin glue is a specialized, simple and painless therapeutic for fistulas that are small and do not require an invasive treatment. It is a medicinal adhesive that activates thrombin to form a fibrin clot that forms a clot and seals the fistula tract.

Collagen plugs are another method to seal the fistulas. Fistula is plugged up using collagen and is seen as a first line treatment for patients with simple fistulas.

Seton technique is performed by inserting surgical thread inside the fistula tract that allows it to drain and heal completely.

Follow-up treatment for fistulas

Most people respond well to surgeries, however it is recommended to follow up with your doctor to avoid any complications. Book follow up appointments with your specialist or doctor in order to make sure the body is effectively responding to the medication and surgery and you are recovering well.

Home-care For Fistula

If you have had a surgery to remove the fistula, give yourself a few days to heal. You may be advised to take some medications post surgery, so make sure you are regular with them. Most people can go back to work and their normal routine a week or two after the surgery depending on the size and severity of the fistula.

To expedite the recovery process, here is what you must take note of w.r.t your diet:

Eat your normal diet, unless stated by your doctor. Include bland, low fat foods like rice, toast and yogurt in your diet.

Drink plenty of fluids (unless stated by your doctor not to)

Include high fiber foods, such as fruits, vegetables, beans, and whole grains in your diet.

You may notice that your bowel movement is not regular right after the surgery. It is common and you need not worry.

Here is what you must take note of w.r.t your activity and movement :

Get enough sleep and rest when you feel tired. Do not overexert your body.

Try to walk each day. Gradually, increase your mobility. Walking will boost your blood flow and help prevent constipation.

Do not hesitate to take shower or bath. Pat your anal area dry with a towel when you are done.

Your doctor may recommend or prescribe a barrier cream to protect ypur skin surrounding the wound/ fistula from any infection.

If you notice swelling, try lying on your stomach with a pillow under your hips.

When you sit on the toilet seat, support your feet with a small step stool. This helps flex your hips and places your pelvis in a squatting position. This can make bowel movements easier after surgery.

Wear loose fitting clothing and cotton undergarments.

Apply ice several times a day for 10 to 20 minutes at a time. Put a thin cloth between your skin and the ice.

Try a sitz bath. Sit in 8 to 10 centimeters of warm water for 15 to 20 minutes. Then pat the area dry. Try it as long as you have pain in your anal area.

Wear a pad over your anal area until healing is complete.

Here are some of the common foods to relieve constipation at home.

Read More!

Complications Of Fistula

Fistulas can be difficult to deal with as they cause a lot of discomfort and pain. If the fistula is left untreated, it can cause serious complications.

Bacterial infection or sepsis

As is with any surgery, one of the common complications is infection. It can have severe consequences and affect different body parts. If you notice an abscess, there is a chance for you to develop sepsis which can be threatening. Make sure to contact your doctor immediately if you notice any pus formation or infection.

Bowel incontinence

Damage to the anal sphincter muscles causes bowel incontinence. It can cause fecal leakage from the rectum.

Fistula recurrence

Even after surgery, there are chances of recurrence of anal fistula. However, this recurrence primarily depends on the complexity and type of surgery performed.

Bowel obstruction

Damage to the anal sphincter muscles can cause bowel blockage or obstruction.

Living With Fistula

Fistula can mentally and physically challenging. Though the condition can be treated using medications and home remedies, here are some tips that could help patients with fistula in their day to day life.

Regular warm baths help to relieve fistula pain and discomfort. Keep your bathtub clean to avoid any risk of infection.

Use portable bidets (also called sitz baths) to keep the area clean and hygiene.

Avoid the use of soap, perfumed products or salts in the water as they can cause irritation and make it worse. Instead use speciality soaps formulated for sensitive skin.

Avoid the use of talc. It may cause irritation to the skin as well.

Your doctor may recommend the use of a barrier cream that can help protect the affected area. Avoid using any other lotion or cream.

If you have an anal or vaginal fistula, avoid the use of tampoons without confirming with your doctor.

If you experience discharge while you are on medication, use pads and panty liners.

Avoid foods that can cause constipation as it can make it worse. Stay hydrated and include fibrous foods in your diet.

Here our expert explains in detail about how to manage and prevent hemorrhoids.

Read To Know!

Alternative Therapies For Fistula

Medical assistance is often recommended for treating fistulas, as they can be painful and hard to deal with. However, there are some alternative therapies that can help alleviate the symptoms and fasten the process of healing.

Some easy and common home therapies that can be used for fistula include:

Enteral diets

People with fistulas in the small and large intestines are often prescribed with a special diet called the enteral diet. In this type of diet, the person is recommended to consume only liquid food for a period of time. Consumption of a liquid diet will help reduce the amount of stool that passes through the intestines and rectum and also provide the body with the required nutrition therefore reducing chances of malnutrition and weakness. An enteral diet may help the fistula close on its own and has been found to heal fistulas completely.

Tea tree oil

It is known for its antibacterial, antiviral, antiseptic and anti inflammatory properties and therefore makes it a good home remedy for fistula. Tea tree oil can be used as a natural ointment for killing germs and promoting growth of white blood cells.

Tea tree oil can be mixed with olive oil and dabbed on the affected area. Leave it for half an hour and wash it with cold water. Follow this regime once a day for a few days to get relief from anal fistula.

Oregano oil

Oregano oil has soothing and healing properties that can help to cure fistula by consuming it. It helps to boost immunity, reduce swelling, prevent bleeding and kill bacteria around the anus. You can consume the oregano leaves oil by mixing it with lukewarm water twice a day.

Cloves (laung)

A common condiment used in all Indian kitchens, cloves have antibacterial and anti-viral properties. It has been found to be beneficial in cleansing the colon and boosting the immune system. It also helps prevent the occurrence of parasite infections in the body. You can boil a few cloves or clove powder in water and consume that water. Alternatively, you can also add cloves to your green tea.

Turmeric milk (haldi doodh)

Turmeric is a well known natural and powerful antibacterial and antiviral agent. It helps to boost the immune system, fight infections and expedite healing of wounds. You can boil turmeric powder with milk and consume it once a day.

Frequently Asked Questions

Can you live with a fistula without surgery?

Can feces come out of a fistula?

Is fistula a sign of cancer?

How serious is fistula surgery?

Does fistula heal on its own?

What are the complications of obstetric fistula?

How do you stop an obstetric fistula?

What does a fistula smell like?

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Food allergies

Also known as Food hypersensitivity and Allergic reaction to food

Overview

If you have a food allergy, your immune system mistakenly identifies a food protein as something harmful, and coming in contact with that protein triggers an allergic reaction. Symptoms can occur when coming in contact with just a tiny amount of food.

The most common triggers of this reaction include eggs, fish, milk, peanuts, shellfish, soy, tree nuts, and wheat. The symptoms of food allergy include difficulty breathing, chest tightness, rashes (hives), and itching all over your body.

Children between the age of 6-11 years are most commonly affected and the common risk factors include a family history of allergic reactions, asthma, and age of introduction to solid foods.

The best way to prevent any allergic reaction is to avoid the food items that are causing it. In case of accidental exposure or emergency, adrenaline can be used. Antihistamines and bronchodilators may be used to provide relief from symptoms.

Accurate diagnosis and successful management of allergies are essential to prevent any severe reactions in the future. An allergist or immunologist has specialized training and experience to diagnose the problem and develop a prevention plan.

Key Facts

Usually seen in

Children between 6 to 11 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Skin

Respiratory system

Gastrointestinal system

Cardio-vascular system

Central nervous system

Prevalence

Worldwide: 3% to 10% (2020)

India: 0.14% (2020)

Mimicking Conditions

Factitious disorder

Esophagitis and esophageal motility disorders

Giardiasis

Gastroesophageal reflux disease (GERD)

Irritable bowel syndrome

Bacterial or viral gastroenteritis

Lactose intolerance

Whipple disease

Necessary health tests/imaging

Skin prick test (puncture or scratch test)

Serum-specific IgE

Atopy patch tests (APT)

Oral food challenge (OFC)

Treatment

Adrenaline (epinephrine) injection

Antihistamines

Bronchodilators

See All

Symptoms Of Food Allergies

The type and severity of symptoms change from one person to another. The symptoms include:

Skin symptoms

Angioedema (swelling under the skin)

Urticaria (itching)

Flushing

Warm feeling

Respiratory symptoms

Chest tightness

Wheezing

Cough

Swelling in tongue, palate, or uvular

Upper airway stridor (high-pitched breathing sound)

Hoarseness of voice

Sneezing

Gastrointestinal symptoms

Vomiting

Nausea

Abdominal pain

Diarrhea

Cardiovascular symptoms

Tachycardia (increased heart rate)

Bradycardia (decreased heart rate)

Chest pain

Hypotension (decreased blood pressure)

Syncope (fainting)

Arrhythmias (abnormal heart rate)

Heart palpitations

Neurological symptoms

Headache

Altered mental status

Seizure

Dizziness

General symptoms

Anxiety

Pallor

Weakness

Did you know?

Food and skin allergies are very common in children. Read about the common causes of skin allergies in kids.

Tap now

Causes Of Food Allergies

Food allergies refer to an abnormal immunologic response to a food that occurs in a susceptible person. These reactions happen each time the food is ingested and they are often not dose-dependent. Based on the immunological mechanism involved, food allergies may be caused due to the following responses:

IgE-mediated: These are mediated by antibodies belonging to the Immunoglobulin E (IgE) and are the best-characterized food allergic reactions.

Cell-mediated: When the cell component of the immune system is responsible for food allergy and primarily involves the gastrointestinal tract.

Mixed IgE mediated-cell mediated: When both IgE and immune cells are involved in the reaction.

Foods that can commonly cause allergic reactions

In young children

Cow’s milk

Egg

Peanut

Soy

Tree nut

Shellfish

In adults

Shellfish

Peanut

Tree nut

Fish

Do you want to know which food you are allergic to? There is a test for it that measures the levels of allergen-specific antibodies.

Read now

What is Allergy - Adult Comprehensive Panel, ImmunoCAP?

It comprises 30 tests that help to identify certain allergens that trigger your body. Know more about this test.

Read now

Risk Factors For Food Allergies

There is no way to accurately predict who will develop a food allergy, but there are certain factors that can act as increase the risk and they include:

Risk factors during pregnancy

Tobacco smoke: Exposure to smoking increases the risk of sensitization to food allergens.

Unbalanced diet: Studies have shown a link between maternal diet and risk of childhood asthma and other allergic diseases.

Food habits during pregnancy are important! Read more about what foods to eat and what to avoid.

Click now

Risk factors during childbirth

Birth via cesarean section: Children born through cesarean section might have an increased risk of developing food allergies.

Risk factors after childbirth

Gut microbiota: The presence of specific bacterial strains can influence the development of food allergy

Infections: Exposure to infections in early childhood might increase susceptibility to allergic disease by altering the development of the immune system.

Age of the introduction of solid foods: Introduction of solids into a child's diet from the age of 7 months or later is associated with a higher risk of food allergy or intolerance.

Other risk factors

Family history of allergic diseases: Having a single family member with a history of the allergic disease increases the risk of food allergy in the child.

Infant eczema: Studies suggest that any break in the skin (which can happen due to eczema) increases the chances of exposure to the allergen.

Do you suffer from itchy eczema? Know about 6 home remedies to relieve the symptoms.

Read This

Vitamin D deficiency: A deficiency of vitamin D is considered a possible risk factor for food allergy development.

Advanced glycation end-products (AGEs): These are derived from cooked meat, oil, and cheese, and have a high concentration of sugar. AGEs initiate signals, leading to the development of food allergies.

Read more about signs and symptoms of vitamin D deficiency.

Read Now

Age: Food allergies are more common in children, especially toddlers and infants.

Asthma: Asthma and food allergy commonly occur together. Also, individuals with food allergies have a higher risk of developing asthma and rhinitis.

Race: Racial differences have also been associated with a higher prevalence of food allergy.

Sex: Males are known to be at a higher risk of food allergies than females.

Diagnosis Of Food Allergies

Clinical history along with allergy and other lab tests are used in the identification of allergen triggers. These include:

Patient’s history and examination

The patient’s clinical history and examination are the first-line approaches in diagnosing food allergy. It includes a systematic review of the patient’s diet, the timing of the first and last occurrences of similar allergic reactions, and history that considers the symptoms of allergic reactions to food.

Laboratory tests

1. Skin prick test (puncture or scratch test): This test inspects for immediate allergic reactions to different allergens at the same time. It is usually performed on the forearm in adults and on the upper back in children.

2. Serum-specific IgE: This test was known as RAST(Radioallergosorbent testing). It measures how much IgE your body makes in response to a single allergen and is preferred when the skin prick test (the favored allergy test) is not suitable or not available.

3. Atopy patch tests (APT): This test is used to assess delayed-type hypersensitivity reactions.

Other tests

1. Oral food challenge (OFC): The gold standard for food allergy diagnosis. During this test, the allergist feeds the suspect food in measured doses. With each dose, the allergist will watch the individual for a period of time for any signs of a reaction.

2. Endoscopy and biopsy: These may not be very useful for the detection of food allergy, but are used to diagnose non-IgE-mediated disorders.

Get all your labs in the safety and comfort of your homes with the best professionals.

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Celebs affected

Ekta Kapoor

Ekta Kapoor, the Indian TV Czarina, got tested and found that she is allergic to cauliflower. Taking to Instagram's story, the producer shared pictures of her hands and wrote: "Testing food allergies, if anyone else has them, is the great way to find out."

Sabrina Carpenter

Sabrina Carpenter is an American singer, confirmed her apple allergy on Twitter in 2016, telling fans that a previous tweet about loving apples referred to Apple products, not the fruit.

Malia Obama

When President Barack Obama signed a 2013 bill to increase the availability of epinephrine in schools, he spoke about his daughter, Malia's, peanut allergy. Obama said at the time. "Making sure that EpiPens are available in case of emergencies in schools."

Prevention Of Food Allergies

Dealing with food allergies can be daunting. As all know prevention is better than cure, strategies for the prevention of food allergy might include primary prevention, which seeks to prevent the onset of the reaction, and secondary prevention, which seeks to interrupt the development of the reaction. They include:

Prevention in pregnant women

Some food allergies develop in the womb itself, and unborn children may be sensitized to the foods their mothers consume.

Understand what foods to avoid during pregnancy and more diet tips.

Prevention in breastfeeding mothers

Read Now

It has been hypothesized that mothers may inadvertently sensitize their children to certain foods through breast milk, but there is little evidence that changing what mothers consume when breastfeeding prevents food allergies in infants.

What does every new mother need to know? Read more about 5 foods to eat while breastfeeding.

Click to Know

Prevention during infancy

The prevention strategies include:

Age at introduction of solid foods: Studies found reduced food allergy when solids were introduced as early as 4 months.

Supplements: Postnatal fish oil consumption is associated with decreased food sensitization and food allergies in infants and may provide an intervention strategy for allergy prevention.

Shop from our widest range of omega-3 fatty acids and fish oil supplements.

Visit Now

Prevention for older children and adults

The prevention strategies for children and adults include:

Avoidance of allergens: This is very important but not always easy. Some allergens are easier to avoid than others, if avoiding an allergen is difficult, try to reduce your contact with it.

Taking medicines as prescribed: They can be helpful for managing the symptoms of an allergic reaction.

Maintaining a diary: this is to track what you eat when symptoms occur and what seems to help. This may help you and your doctor find what causes or worsen your symptoms.

Eat 2 hours before exercise: Some food allergies can be triggered by exercise, so to prevent that from happening, eating 2 hours prior to exercise is a good practice.

Specialist To Visit

Food allergies can lead to severe allergic reactions that become a medical emergency. Always be prepared and contact the emergency department of the nearest hospital in case of severe food allergy. Doctors that can help you with this are:

General physician

Allergist

Immunologist

Dietician

Pediatrician

An allergist is a medical practitioner specializing in the diagnosis and treatment of allergies. An immunologist is a doctor who diagnoses, treats, and works to prevent immune system disorders.

If you notice any symptoms of food allergy, seek advice from our world-class professionals.

Consult Now

Treatment Of Food Allergies

There is currently no treatment for food allergy, except for avoidance of the responsible food/ foods. Once a food allergy is diagnosed, strict elimination of the offending food allergen from the diet is necessary.

In the case of accidental exposure

The treatment of choice during accidental exposure leading to a severe allergic reaction (anaphylaxis), adrenaline (epinephrine) injection is used. It is administered by intramuscular injection into the thigh.

Medicines to manage the symptoms

Several medicines are available in the market for initial immediate treatment of food allergy like:

1. Antihistamines: They can relieve gastrointestinal symptoms, hives, sneezing, and a runny nose.

2. Bronchodilators: They can relieve the symptoms of asthma, however, they are not effective in preventing an allergic reaction when taken prior to eating the food.

Know how to tackle allergies in the risk-free way.

Read This

Home-care For Food Allergies

The best way to avoid unpleasant symptoms of a food allergy is by avoiding the food entirely. Though the list of remedies that can work for food allergies is short , it can be very effective. If there is a mild reaction here are some home remedies that can prove beneficial to relieve the food allergy symptoms:

Ginger (Adrak): Ginger is believed to help speed up digestion, which may benefit those with stomach discomfort and indigestion caused by trigger foods. It can also prevent gas and reduce bloating and cramping.

Probiotics: Unbalanced bacteria in the gastrointestinal (GI) tract can play a role in many chronic conditions, including food allergies. Probiotics have been found to be preventive and therapeutic against food allergies.

Lemon (Nimbu): Lemons are high in vitamin C, a powerful antioxidant that helps maintain a robust immune system and protects against infection and disease.

Green tea: Green tea is rich in antioxidants and can help fight inflammation. There are certain studies that suggest that green tea can hinder mast cell activation and block histamines, which can be helpful for allergic reactions.

Carrots (Gajar): Carrots are rich in beta-carotene, a powerful antioxidant that has been shown to increase immune cell numbers and activity.

Drinking large amounts can lead to carotenemia, which can cause your skin to turn slightly yellowish.

Read more about the benefits of carrots that are good for your health.

Read More

Complications Of Food Allergies

Food allergy is an important public health problem that affects children and adults. Food allergy complications include:

Anaphylaxis: It is a life-threatening condition that can lead to constriction and tightening of the airways.

Respiratory distress: Exposure to food allergens can trigger respiratory symptoms like isolated asthma or rhinitis in rare cases.

Heart attack: Cardiovascular symptoms can be the sole manifestation of exercise-induced food allergies.

Did you know?

Very rarely, a severe allergic reaction (anaphylaxis) can occur post-COVID-19 vaccination as well. Get all your queries answered on COVID-19 vaccination.

Click Now

Alternative Therapies For Food Allergies

Food allergies can be irritating, but the mild ones do not generally cause a lot of problems. Apart from regular medications, there are other therapies as well that have proven to be beneficial. Some of them include:

Chinese herbal therapies

Studies suggest that an herb-based formula (FAHF-2) used in traditional Chinese medicine may be an effective approach to food allergy treatment that is not specific to any one food allergen and can be potentially used to treat multiple food allergies

Acupuncture

It is the practice of inserting hair-thin needles into the body at strategic points to relieve specific symptoms. Acupuncture supports the immune system and can relieve symptoms associated with seasonal and food allergies.

Homeopathy

Homeopathy works by correcting the immune responses of individuals rather than suppressing or modifying the immune system. It has proven to be beneficial for individuals with allergic reactions or allergic diseases.

Read about 6 homeopathy facts that everyone should know.

Click Now

Living With Food Allergies

Food allergies are not very serious and do not affect the quality of life in most cases. All you need to do is make certain lifestyle modifications and learn to manage in case of emergency. A number of general strategies and tips may be helpful in managing food allergies. A few of them include:

Always read the food labels

Read every label, every time to see whether any additives contain milk protein or byproducts of wheat, or whether a food was produced in a facility that processes nuts. Manufacturers frequently change ingredients and an allergen may be part of a new formulation.

Take care while cooking

It's a good idea to have two sets of cooking and eating utensils one exclusively for the allergic person and all dishes and utensils should be thoroughly washed in hot, soapy water between uses.

Be extra cautious while dining out

Dining out may seem fun, but if an unknown food allergen is consumed by mistake it can lead to complications. So it is wise to let the manager or chef know about the food allergy before placing the order.

Wear a medical ID bracelet

Make sure it lists relevant information about your food allergy and always carry your medication, ideally two doses.

Know what to do during an allergic reaction

If someone is suffering from a severe allergic reaction the:

Call the local medical emergency number immediately.

See If the person is carrying an epinephrine auto-injector

Help the person inject the medication by pressing the autoinjector against the person's thigh.

Make the person lie face up and be still.

Loosen their tight clothing and cover the person with a blanket.

Turn the person to the side to prevent choking if there's vomiting or bleeding from the mouth.

Position the patient in the Trendelenburg position i.e lying flat on the back with legs elevated in order to allow blood flow to the heart.

If there are no signs of breathing, coughing, or movement, begin CPR (start uninterrupted chest presses about 100 every minute).

Correct first aid can help save a life! Know more about step-by-step instructions for emergency management.

Read Now

Frequently Asked Questions

How common are food allergies?

How do food allergies affect my body?

What is the difference between food allergies and food intolerances?

What are the life-threatening symptoms of food allergies?

When should one see their doctor for a food allergy?

When should one rush to the hospital?

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Food poisoning

Also known as Foodborne illness and Foodborne disease

Overview

Food poisoning refers to the sickness experienced after eating contaminated food. The source of contamination in most cases is bacteria. However, it can also be caused by toxins or chemicals that may contaminate the food during its production, processing, harvesting, cooking, or storing.

The classical symptoms of food poisoning include diarrhea, stomach pain, nausea, vomiting, and fever. Children, elderly, pregnant women, and individuals with low immunity are at high risk of food poisoning. Most cases of food poisoning can be prevented by basic hand hygiene, sanitation of the kitchen and refrigerator, and storing the food as per the recommendations.

Food poisoning can be usually treated at home by maintaining the fluid and electrolyte balance through regular intake of clean boiled water, oral rehydration solution (ORS), coconut water, clear soups and fresh fruit juices. In cases of severe dehydration, hospital admission might be required.

Key Facts

Usually seen in

Children under 5 years of age

Elderly above 65 years of age

Gender affected

Both men and women

Body part(s) involved

Stomach

Small Intestine

Large Intestine

Nervous system

Prevalence

India: 13.2% (2015)

Global: 7.69% (2021)

Mimicking Conditions

Coumaphos intoxications

Inflammatory bowel disease

Peptic ulcer disease

Bowel obstruction

Cholecystitis

Irritable bowel syndrome

Lactose intolerance

Celiac disease

Acute HIV infection

Colorectal cancer

Necessary health tests/imaging

Blood tests

Urine test

Stool analysis

Abdominal X-ray

Abdominal ultrasound

Treatment

Fluid therapy: Water, Oral rehydration solution, Saline solution & Lactate Ringer’s solution.

Antibiotics: Metronidazole, Ceftriaxone & Azithromycin

Antiemetics: Ondansetron & Metoclopramide

Anti-diarrheal medications: Diphenoxylate & Loperamide

See All

Symptoms Of Food poisoning

The symptoms of food poisoning range from mild to severe. The symptoms can start appearing from a few hours to several weeks later after having contaminated food. In most cases, symptoms resolve on their own or with the right home care within a few days of contracting the infection.

Early signs

These symptoms are the first to appear and are common to most types of food poisoning. These include:

Nausea

Vomiting

Diarrhea

Dull stomach ache, cramps, or a sharp pain

Dealing with constant stomach aches? Here are some of the causes of stomach ache along with the information about when to consult a doctor.

Read To Know

The other symptoms might include:

Headache

Dizziness

Intense thirst

Diarrhea which may contain blood or mucus

Dehydration

Decreased urination

Cold and clammy skin

Slow pulse

Fever

Chills

Muscle ache

Lack of energy

Loss of appetite

Individuals can also experience several long-term severe symptoms in some cases which include:

Reactive arthritis (sometimes known as Reiter's Syndrome)

Severe vomiting

Profuse watery diarrhea

Severe dehydration

Confusion

Seizures

Muscle weakness

Double vision

Slurred speech

Did you know?

Stomach flu/viral gastroenteritis and food poisoning often share similar symptoms. The difference lies in the transmission. Stomach flu is mostly caused by viruses and is transmitted from person to person while food poisoning is caused by the ingestion of contaminated food and water.

Causes Of Food poisoning

Food poisoning is caused by the contamination of food by either microbes or any other toxins.

A. Microbial contamination

1. Bacteria: It is the most common cause of food poisoning. The symptoms and severity of the infection depend upon the type of bacteria that has contaminated the food. Some of the bacteria that cause food poisoning are:

Campylobacter: These bacteria usually contaminate raw/undercooked meat, raw milk, and contaminated water. The incubation period (time between exposure of bacteria to the onset of symptoms) is 2-5 days. The symptoms of this infection generally last for a week.

Salmonella: The contaminated raw/undercooked meat, raw eggs, milk, and other dairy products are the main sources of these bacteria. The symptoms start appearing between 12 to 72 hours.

Listeria: These bacteria are found in “ready-to-eat” foods such as pre-packed sandwiches, hot dogs, cooked sliced meats, and soft cheeses. The symptoms can appear from a few days to several days. The food poisoning usually resolves within 3 days.

Note of caution: Pregnant women are 10 times more likely than other people to get Listeria infection. It can cause complications such as miscarriage, stillbirth, or premature birth.

Escherichia coli (E. coli): These bacteria normally inhabit the intestines of several animals and humans. Most of their types are harmless but some of them can cause food poisoning. The bacteria contaminate food such as undercooked beef and unpasteurized milk. Symptoms usually start appearing within 1 to 8 days of contracting the bacteria and last for a few days.

Shigella: Any food such as fruits and vegetables washed in contaminated water can be exposed to shigella. Symptoms typically develop within seven days of eating contaminated food and last for up to a week.

Bacillus cereus: This microorganism mainly develops in improperly stored food. The infection with Bacillus is characterized by diarrhea and vomiting.

Staphylococcus: It is most commonly found in undercooked meats, eggs, and dairy products.

Vibrio: This type of bacteria are commonly found in coastal water and can contaminate oysters, fish, and shellfish. Symptoms can start appearing 1 day after infection and usually resolves in 3 days.

Clostridium: This bacteria contaminates food that is cooked in large batches. The common food items that may contain this bacteria include poultry and meat.

Other less common microbes

1. Parasites: Parasites are the organisms that drive their nutritional requirements from other living organisms. The symptoms of food poisoning caused by parasites develop within 10 days of exposure to the parasite. The common examples of parasites that cause food poisoning are:

Giardia intestinalis

Cryptosporidium

Entamoeba histolytica

2. Viruses: The viruses that can cause food poisoning spread through contaminated water. It can also spread via a person infected with the virus while preparing or handling food. The common viruses that cause food poisoning include:

Rotavirus

Adenovirus

Parvovirus

3. Fungi: There are several fungi that may cause food poisoning. Some fungi produce harmful chemicals that contaminate foods. The common examples of fungi that can cause food poisoning are:

Alternaria

Aspergillus

Candida

Fusarium

B. Non-microbial

In some cases, harmful chemicals are already present in the food which can cause food poisoning. Fish and shellfish may contain toxins produced by algae or bacteria present in water.

Unwashed produce may also cause food poisoning due to the presence of pesticides used during crop production.

The contaminants can be of:

Vegetable origin (Mushrooms)

Animal origin (Shellfish)

Chemicals (Flavouring agent, coloring agent, and preservatives)

How does the food get contaminated?

Food is not only contaminated in the kitchen. It can be exposed to contamination during its production, harvesting, processing, storing, shipping and preparation.

Microbes can cause food poisoning if they are not washed off or killed before consuming. The following things can keep the microbes alive to cause food poisoning:

Consuming partially cooked food

Keeping cooked food unrefrigerated for a long period

Storing packaged food at the wrong temperature

Promptly refrigerating hot food

Keeping raw foods such as beef, poultry, and eggs together with ready-to-eat foods

The microbes of food poisoning can also spread through an infected person via:

Eating food that is touched by the infected person

Cross-contamination (where harmful bacteria are spread between food, surfaces and equipment)

Sometimes, food poisoning can also occur through having ready-made contaminated food

Touching contaminated surfaces and objects such as handrails, elevator buttons, utensils, and doors while eating or handling food

Sharing food and beverages with the infected person

Did you know?

Salt and sugar can contain chalk powder as an adulterant. It can be identified by dissolving a teaspoon of salt / Sugar in a glass of water. If it is pure, it will dissolve. If chalk is present, it will sink to the bottom. Find out more tips to expose the hidden poison in commonly used food items that can lead to food poisoning and other health hazards.

Read To Know!

Risk Factors For Food poisoning

Any individual can suffer from food poisoning but there are some groups of people that are more prone to it. These people include:

1. Children younger than 5 years of age

Children have an underdeveloped immune system so the chances of getting any infection is higher in them. Food poisoning can cause severe diarrhea and dehydration in children. It is also seen that children are 3 times more prone to be hospitalized if they get Salmonella infection.

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2. Pregnant women

Pregnant women are more prone to food poisoning. Studies suggest that pregnant women are 10 times more likely to get a Listeria infection.

3. Older people above 65 years of age

The immune system of older people is compromised due to which the chances of infections in these groups of people are high.

4. People with weakened immune system

Some individuals have a weakened immune system which can be a cause of recurrent food poisoning. The disorders that can contribute to the weakened immune system include:

Diabetes

Liver disease

Kidney disease

Cancer

HIV infection

5. Consuming certain food

There are some food items that are more prone to microbial contamination and thus food poisoning. Such items include raw meat, unpasteurized milk, fish, shellfish, eggs, poultry, cheese, raw fruits, vegetables, nuts, spices, beef, salad, seafood, sprouts, and raw flour. The frequent consumption of such foods increases the risk of food poisoning.

6. Other factors

Purchasing food from unauthorized sources

Cooking the food at the wrong temperature

Storing the food without refrigeration

Practicing poor personal hygiene such as not washing hands before eating or serving food

Using contaminated food and utensils.

Up your stomach care game by a notch with our widest range of products to look after your stomach and help you get better faster if you are suffering from food poisoning.

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Diagnosis Of Food poisoning

There are no specific tests to diagnose food poisoning. In most of the cases, symptoms are mild and last for a few hours. In case of severe poisoning, the following steps can help your doctor determine cause of your food poisoning:

1. History taking

It is the first step to establishing food poisoning. Your doctors will ask for a set of questionnaires to identify the agent of food poisoning. The questions can be asked regarding:

Recent meal that you have taken

Recent place of travel, if any

Other people you know having similar symptoms

Medicines you are taking

Your doctor also asks about the symptoms you are experiencing. This information helps in establishing the cause and type of food poisoning.

2. Physical examination

It is done to see the changes in the body as per the symptoms experienced. During a physical exam, your doctor may:

Examine the blood pressure to check the signs of dehydration

Check the temperature to confirm fever

Assess the abdomen using a stethoscope

Inspect any tenderness or pain in the abdomen through tapping.

3. Laboratory tests

The type of contaminant is diagnosed through several tests. The microbial contaminant is assessed using samples of blood, urine, vomit or stool. It also reveals the severity of poisoning. It usually include following tests:

Stool tests: The stool is examined for the presence of bacteria, parasites or blood.

Blood test: Blood tests are performed to look for any sign of complications such as dehydration and kidney abnormalities. It includes assessing the level of electrolytes and other markers of kidney function.

Urine test: It is also done to look for bacterial infection.

4. Imaging tests

Abdominal ultrasound: This imaging test look at organs in the abdomen, including the intestine, liver, gallbladder, spleen, pancreas, and kidneys. It is an extremely useful imaging modality for evaluating the patient with acute abdominal symptoms.

Abdominal X-ray: In some cases of poisoning, an abdominal x-ray may check the presence and location of the ingested substances. Toxins that may be visible on x-rays include iron, lead, arsenic, and other metals.

Get your lab tests done in the comfort and safety of your home.

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Celebs affected

Manisha Koirala

She is an Indian actress who revealed her story of food poisoning through her blogs. She managed her condition through homemade soups and green tea.

Miranda Lambert

She is an American actress. She reportedly developed a severe case of food poisoning after eating shrimp.

Specialist To Visit

Food poisoning often resolves on its own without seeking medical advice. The specialty of doctor that may help in diagnosing and treating food poisoning include:

General physician

Gastroenterologist

Pediatrician (for kids)

A gastroenterologist is a specialist in the disorders and diseases that affect the digestive system. A pediatrician is a doctor who deals with the diseases of children.

When to see a doctor?

Some symptoms of food poisoning should not be ignored. Consult your doctor immediately if you have any of the following symptoms:

Persistent vomiting or diarrhea for more than three days

Inability to keep fluids down for a day or longer

Watery or bloody diarrhea

Fever higher than 102 degrees

Signs of dehydration

Any sign of dehydration should not be ignored. The sign of dehydration include:

Extreme thirst

Dry mouth

Dark urine

Infrequent urination

Dizziness

Tiredness

To get the right diagnosis, it is important to consult the right doctor. Get advice from India’s best doctors online.

Talk Now

Prevention of Food poisoning

Food poisoning can be prevented by practicing hygiene while storing, handling or preparing food. The following measures can reduce the chances of food poisoning:

A. Follow safe practices

1. While buying food items

Buy foods such as meat and seafood from hygienic outlets

Do not buy food items whose expiry has elapsed

Do not purchase undercooked or raw meats

Buy only pasteurized (heat treated to kill the disease-causing microbes) milk and cheese

Do not buy cracked or leaked eggs

Choose fresh fruits and vegetables

Check for any damage, rusk or dent on cans while buying beverages

Take frozen and refrigerated items from an authentic grocery store

2. While storing food

Keep raw meat, poultry and seafood in separate bags during refrigeration to avoid cross-contamination

Keep the temperature of the main section below 4oC

Store the food as per the instructions on the label

Keep cooked leftovers quickly in the refrigerator

Keep raw cereals and dough away from the reach of children

3. While cooking and handling food

Do not leave cut vegetables and fruits uncovered

Cook the food thoroughly

Cook the eggs until both the yolk and white are firm

Discard the food in case of a suspicious look and smell

Make sure that the food is steaming all the way through while reheating

Avoid reheating food more than once

4. While traveling

Drink only boiled or bottled water

Avoid eating raw vegetables and salads

Avoid buying food from unhygienic vendors

5. While dining out

Avoid taking dishes that contain undercooked eggs, sprouts, meat, poultry, or seafood

B. Maintain proper hygiene

Wash your hands, counters, and cutting surfaces between preparation of different foods

Use glass or plastic cutting boards for chopping vegetables or meat instead of wooden boards for ease of cleaning

Wash fresh fruits and vegetables under running water

Avoid contact with sick persons while handling or preparing food

Ensure sanitation of the painting floors, utensils, and other articles in the kitchen

The first step in maintaining hygiene is having clean hands. Hand Washing can prevent about 30% of diarrhea-related illnesses. Learn the right way of washing your hands!

Read To Know

C. Clean the refrigerator frequently

The refrigerator should be cleaned thoroughly along with removable parts. The following measures should be taken while cleaning refrigerator:

Dispose off the contaminated food in a garbage bag

Wash the container in which contaminated food was stored with soap and water

Avoid leaving food out of the refrigerator for more than 2 hours

Treatment of Food poisoning

The treatment of food poisoning is based upon the cause and symptoms. The most important goal of the therapy is to maintain hydration and electrolyte balance.

Fluid therapy

Most cases of mild dehydration can easily be managed at home through fluid therapy.

It is advised to drink plenty of fluids like water, coconut water to compensate for water loss and prevent dehydration.

Oral rehydration solutions(ORS) are preferred over other clear fluids for managing diarrhea.

Patients having severe dehydration and persistent vomiting may require hospital admission for continuous monitoring of electrolyte levels.

Enteral (oral or nasogastric) and intravenous fluids (saline solution and lactate Ringer’s solutions) are given to patients facing difficulty in taking fluids due to nausea, vomiting, and to correct electrolyte levels.

Medications

Antibiotics: They are mostly used to treat food poisoning caused by bacteria. Some of the commonly used antibiotics are:

Metronidazole

Ceftriaxone

Azithromycin

Antiemetics: Antiemetic medications are the drugs that are used to control nausea and vomiting. The commonly used antiemetic medications are:

Ondansetron

Metoclopramide

Antidiarrheal medications: These are drugs that relieve symptoms of diarrhea. These are used only in those patients who are not able to maintain a well-hydrated status. Medications include:

Diphenoxylate

Loperamide

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Home Care For Food poisoning

1. Keep a watch on fluid intake

It is advised to have plenty of fluids like fresh fruit juices, coconut water, clear soups etc. In case of severe vomiting, take small sips of fluids at regular intervals. The mothers of the infected infants should make sure that their babies are getting enough breast milk.

2. Have ice chips

If you are facing difficulty in digesting fluids, try to suck ice chips. This also helps in rehydration. The ice chips should not be given to small children.

3. Consume BRAT diet

B.R.A.T stands for bananas, rice, applesauce, and toast. These food items should be included in the diet as it helps in making the stool smooth and helps in compensating the nutrient loss from vomiting and diarrhea.

It is also advised to consume smaller easy to digest meals at regular intervals.

4. Try herbal remedies

In most of the cases, food poisoning can be managed by simple home remedies like:

Ginger (Adrak): It possesses anti-inflammatory, anti-viral, and anti-bacterial properties. It also eases nausea. It can be taken in raw form or can be boiled in water or tea.

Apple cider vinegar (ACV): It can soothe an irritated stomach and thereby reduce nausea, vomiting, and abdominal cramps. Add 1 teaspoon of apple cider vinegar to a glass of warm water and drink 30 minutes before eating a meal.

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Tap here!

Yogurt (Dahi): It contains a lot of good bacteria that help in maintaining the overall good health of the gut. It also helps in reducing watery diarrhea. It should be added to every meal of the patient suffering from food poisoning.

Cinnamon (Dalchini): It has antibacterial and antiviral properties which can be used for combating food poisoning. It also helps in reducing stomach pain and bloating.

Turmeric (Haldi): Curcumin, present in turmeric, possesses anti-inflammatory properties. It can be consumed by adding a glass of warm water or milk.

Looking for some turmeric products?

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Basil (Tulsi): It possesses antispasmodic properties and helps in reducing spasms in food poisoning. It also has gastroprotective properties which aid in relieving symptoms of food poisoning.

Peppermint (Pudina): It soothes the stomach and helps in treating bloating and gas. The most effective way to use it is to consume it in the form of tea.

Triphala: It is known to improve digestive health and also helps in the absorption of nutrients.

Coriander (Dhania): It possesses healing properties and it is known to alleviate the symptoms of upset stomach and diarrhea.

Asafoetida (Hing): It is known for years to strengthen the digestive system. It possesses antiviral and antibacterial properties. It can be added in meals or can be consumed with lukewarm water.

Licorice (Mulethi): It also promotes the healing of an inflamed stomach and treats indigestion.

Rice water: It is used especially in infants to reduce diarrhea.

Chamomile tea: It is used as a digestive relaxant and can help in the treatment of many gastrointestinal disturbances, like diarrhea and vomiting, which is most commonly observed in food poisoning.

Did you know?

Probiotics are not just good for your gut, they boost immunity as well. The good bacteria present in probiotics check the growth of harmful microorganisms and prevent illness.

Explore probiotics here

5. Avoid certain foods

Certain food items should be avoided as they can make the stomach upset and can cause indigestion. The impaired digestion can aggravate diarrhea and vomiting. These include:

Milk

Greasy and spicy food containing chilly, black pepper, and garlic

Drinks with caffeine, such as coffee and tea, and soft drinks.

Fatty junk foods such as fried foods, pizza, and fast foods.

Foods and drinks containing large amounts of simple sugars, such as sweetened beverages and packaged fruit juices.

6. Take proper rest

People should take proper rest even after the completion of therapy. This will lead to complete recovery and healing of the digestive system.

7. Try heating pad

Some patients suffer from severe abdominal pain. Such patients can use a heating pad to relieve cramps.

8. Say no to alcohol

Alcohol can cause inflammation in the stomach. This can increase the secretion of gastric acid. So, alcohol should be avoided as it can increase the feeling of vomiting (nausea).

Complications of Food poisoning

Untreated food poisoning can lead to the following complications :

Chronic diarrhea

Inflammatory bowel disease (condition in which there is an inflammation of small intestine and large intestine)

Irritable bowel syndrome (condition characterized by abdominal pain)

Arthritis

Hemolytic uremic syndrome (a kidney condition that happens when red blood cells are destroyed and block the function of the kidney)

Guillain-Barre syndrome (neurological disorder in which immune system attack the nervous system)

Nervous system infections such as meningitis.

Frequently Asked Questions

What can be eaten during food poisoning?

What foods to avoid during food poisoning?

Can food poisoning be serious?

Do symptoms of food poisoning can be mistaken for any other illness?

Why is Listeria dangerous for pregnant women?

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Fungal skin infections

Also known as Dermatophytosis, Fungal infection

Overview

Did you know dandruff, diaper rash, and athlete’s foot are types of fungal infections? According to numerous studies published in the Journal “The Lancet”, fungal skin infections affect more than a billion people worldwide. In some cases they can result in life-threatening infections, however, they often remain the most neglected infection in the general population.

Fungal skin infections as the name suggests are caused by fungus. These mostly affect the damp areas of the body and skin folds such as between the toes, in the genital area, in the armpits, under the breasts, and in the groin area. These infections are mostly caused by yeast and dermatophytes (a type of fungi that causes superficial infections of the skin, hair, and nails). Poor personal hygiene and living in a hot, humid and crowded environment increases your risk of contracting the infection.

Most of these infections aren’t life-threatening but they can be contagious depending on the type of fungal infection. However, if left ignored, in certain cases they can lead to severe complications. Treatment typically consists of topical therapy like use of antifungal gels, ointments, and sprays or oral medication. Apart from medications, maintaining personal hygiene like keeping your skin/feet dry, wearing well-fitting shoes, etc can help to avoid fungal infections.

Key Facts

Usually seen in

All age groups

Gender affected

Both men & women

Body part(s) involved

Skin

Scalp

Oral cavity

Nails

Prevalence

Worldwide: 36.6-78.4% (2018)

Mimicking Conditions

Annular lesions

Nummular eczema

Erythema annulare centrifugum

Tinea versicolor

Cutaneous candidiasis

Subacute cutaneous lupus erythematosus

Pityriasis rosea

Contact dermatitis

Atopic dermatitis

Seborrheic dermatitis

Psoriasis

Necessary health tests/imaging

Physical examination

Treatment

Topical antifungals: Clotrimazole, Ketoconazole & Miconazole

Oral antifungals: Terbinafine, Fluconazole & Itraconazole

See All

Causes Of Fungal Skin Infections

Fungal skin infections are caused by a variety of fungi and yeasts. Some of the common fungal skin infection-causing microbes are Candida or Malassezia furfur and dermatophytes such as Microsporum, Epidermophyton, and Trichophyton. These fungi tend to live only in the topmost layer of the epidermis (stratum corneum) and do not enter the deeper tissues or bloodstream.

Only some fungi cause infections by attacking a healthy host. Most of these disease-causing fungi are harmless unless they encounter an immunocompromised person. In such a case, these otherwise harmless fungi can invade the defense system of the patient increasing the chance of infection. Common fungal skin infections include:

1. Athlete’s foot

Known as tinea pedis, it is a common fungal infection caused by fungi that live on dead tissue of toe nails, space between toes, sole of the feet. The fungus grows preferably in warm and moist environments. Hence, it mostly occurs in people who wear tight shoes, stay in sweaty socks, sports equipment, or by walking barefoot on damp, contaminated floors of common bathing, locker rooms or swimming areas.

The symptoms of an athlete's foot may vary from patient to patient. Common symptoms include:

Redness, itching, stinging, or burning sensations in the infected area especially between the toes or on the soles of the feet

Cracked or blistered skin

Skin may become dry, flaky and scale or peel away

Infected skin may become soft and start to break down

2. Yeast infection

They are commonly caused by yeast-like fungi Candida. It usually lives inside the digestive system or genitals without causing any harm. But in warm, moist, creased areas of the body such as the groin and armpits, or people suffering from diabetes, obesity or taking some antibiotics, candida can multiply and start to cause symptoms. However, these infections are not contagious. It can present as skin rash like diaper rash (in kids), oral thrush or candidiasis (infection of the mouth), nail fungus, and vaginal yeast infections. The signs and symptoms of various yeast infections are as follows:

3. Cutaneous or skin yeast infection

Burning and itching in infected area

Rashes

Bumps or patches that contain clear fluid

4. Nail yeast infection

Toenail fungal infection is very common although fingernails can also get affected.

Thick, yellowish or brittle nail that separates from the nail bed

Pain and swelling accompanied by pus discharge

5. Oral thrush

White or yellow patches involving the tongue, inside your cheeks, tonsils, gums or lips

Pain, soreness and burning sensation in the mouth

6. Vaginal yeast infection

Redness and soreness on and surrounding the vagina

Itching and swelling around the vagina

Unusual discharge resembling cottage cheese or a very watery discharge from vagina

Burning sensation during urination or coitus

How is vaginal yeast infection caused?

Normally, overgrowth of yeast in the vagina is kept in check by a bacterium called lactobacillus, which maintains an acidic environment in the vagina. Conditions that upset this balance such as prolonged antibiotic therapy, pregnancy, diabetes or HIV infection can lead to vaginal candidiasis. Consult a doctor to get treated.

Consult Now!

7. Ringworm infection

Ringworm infection is not caused by a worm (as most commonly misunderstood). Instead, it is caused by a fungus. Known as tinea corporis, it is usually not a serious condition but can be highly contagious. It can spread by coming in direct contact with an infected person, pet, sharing clothes or contaminated items that carry the organism. Heat and humidity also aid in spreading the infection. Ringworm infection can present like:

Ringworm on body: Ringworm is usually very easy to recognise because of its shape. It presents as a ring-shaped rash where the border of the ring is red and slightly raised, while the inside of the ring looks clear or scaly. It may even spread out into several rings. The rash is often bothersome and itchy. It is commonly seen on parts of your body that are exposed, such as your arms, legs or trunk.

Ringworm on scalp: This fungal infection affects the scalp and the hair shafts. One can get this at any age, but it is mostly seen in children. It is usually transmitted by sharing a hairbrush or clothing contaminated with the fungus. It presents as localized bald, scaly and itchy patches on the scalp. Sometimes, the patches become inflamed and have pus-filled spots. One may also develop a pus-filled area known as a kerion.

Did you know? Ringworm can also affect your pet and you can get infected by handling your pet animal.

Jock itch: Also known as tinea cruris, jock itch is a fungal infection that presents as an red, itchy and raised rash on the genitals, groin, inner thighs and buttocks. It is more common in men and teenage boys. The fungus favours warm and humid conditions and usually exercising in workout clothes makes it flourish. It is mildly contagious and can spread through close contact with the infected person.

How is vaginal yeast infection caused?

Normally, overgrowth of yeast in the vagina is kept in check by a bacterium called lactobacillus, which maintains an acidic environment in the vagina. Conditions that upset this balance such as prolonged antibiotic therapy, pregnancy, diabetes or HIV infection can lead to vaginal candidiasis. Consult a doctor to get treated.

Consult Now!

Risk Factors For Fungal Skin Infections

Some of the common factors that increase your risk of contracting fungal skin infections:

Living in warm or wet areas

Profuse sweating

Sharing personal items like clothing, towels, shoes or combs

Poor personal hygiene like not keeping body clean and dry

Wearing tight clothes or footwear

Frequent human contact

Contact with animals that may be infected

Visiting overcrowded places with poor ventilation

Diabetes

Obesity/ overweight

Immunocompromised individuals suffering from HIV, cancer or undergoing chemotherapy or immunotherapy

Do you know?

Fungal infections are opportunistic, meaning they infect people whose immune system is severely compromised. Such infections can cause symptoms such as fever, cough, and shortness of breath. Fungal infections due to COVID-19 infection are more common in people with severe COVID-19 or those admitted to ICU. The most common fungal infections in patients with COVID-19 include aspergillosis or invasive candidiasis.

Click To Read!

Diagnosis Of Fungal Skin Infections

To diagnose a fungal skin infection, your doctor will physically examine the area and look out for rashes, red, flaky and inflamed skin. To find out the specific fungi causing your skin condition, the doctor will scrape off a little amount of skin. This skin is then examined under a microscope or placed in a culture medium where the specific fungus is grown and identified.

Prevention Of Fungal Skin Infections

Though fungal skin infections are very common and may even occur in healthy individuals, there are certain preventive measures that can help in avoiding the risk of contraction:

It is advised to keep your feet and skin dry if you are prone to fungal infections.

You must shampoo regularly and keep your scalp clean.

It is best to avoid sharing personal belongings such as towels, clothes, combs, or other personal care items. If you still use shared items, it is advised to clean and dry them thoroughly before use.

Keep your feet covered and wear closed shoes at public places like gyms, public pools and locker rooms.

Do not wear tight footwear. Go easy on your feet and wear breathable shoes or open-toed shoes.

Use an antifungal powder in your shoes if you tend to sweat a lot.

Don’t wear synthetic socks and change your socks often.

Keep your toenails short and clean.

Pay extra attention to the skin around your genital region, and keep it dry. Prefer wearing loose-fitting, cotton underwear.

Specialist To Visit

Consult a doctor and avoid relying on over-the-counter medication if your infection does not improve. It is also important to seek medical help if you are an immunocompromised individual as in those cases a simple skin infection can enter deeper tissues and bloodstream and lead to complications.

Doctors who can help in the diagnosis and treatment of fungal skin infections are:

General physician

Dermatologist

Treatment Of Fungal Skin Infections

The treatment of fungal infections usually comprises topical or oral preparations. Localized fungal infections are usually treated with topical treatment that needs to be typically applied once or twice a day for usually for two to three weeks. Symptom resolution is the end goal of antifungal therapy. Following are the topical treatments for fungal skin infections:

Clotrimazole

Ketoconazole

Miconazole

Terbinafine

Oxiconazole

Econazole

Treatment with oral therapy is important for more widespread infections or cases that show no improvement with topical treatment. Oral antifungals are expected to clear the condition in about 2 to 3 weeks.

Following are the suggested oral medications (one or more) to be used in the treatment of fungal skin infections:

Terbinafine

Fluconazole

Itraconazole

Griseofulvin

Home Care For Fungal Skin Infections

You can follow some of these simple tips at home to get faster results and relief from fungal skin infections:

If you are on an anti-fungal treatment, do not stop the treatment in between. Treat the affected area for as long as it is recommended by your dermatologist. With proper care and treatment, you will start noticing the results within a few days. This will help in ensuring that the ringworm does not reappear after you have stopped continuing the treatment

If you happen to touch the infected area, wash your hands before touching another area of your body. Touching or scratching the infected area and then touching another area can spread the infection. Washing your hands is the best way to prevent this.

Keep the infected area clean and dry at all times. The fungus thrives to grow in a warm, and moist environment, so it is advised to keep the area clean and dry.

Avoid wearing clothes, socks, and shoes that make you sweat a lot.

It is advised to use a different towel to dry off uninfected areas.

Treat all fungal infections at the same time. If you treat only one area at a time, you can still have an infection, which can quickly spread to other areas.

It is advised to change your clothes, underwear, gym wear and socks, every day. Wash the clothes before using them again.

It is advised to shower after working out.

Avoid sharing towels and other items of personal use. Fungal infections can easily spread to others by sharing towels, combs, and other personal items.

Infected items should be either disinfected or thrown. This includes your clothes, shoes, and other personal items.

If your treatment isn’t working, it is best to tell your dermatologist and keep regular follow-up.

The chances of fungal infections increase during the summer season, owing to hot and humid weather conditions and excessive sweating. Here are a few ways to help you deal with fungal infections during the summer season.

Click Here!

Complications Of Fungal Skin Infections

It is rare to see complications in fungal skin infections. One such complication includes Majocchi granuloma. It is a rare skin condition in which the fungi invade your skin via a follicle and go deeper into the dermis or subcutaneous tissues of the skin. Shaving or minor cuts on your skin can predispose patients to Majocchi granuloma. Lesions arising due to Majocchi granuloma involve the hair follicles and the lesions appear as erythematous nodules or papules. These skin lesions can even turn to abscesses in severe cases.

Alternative Therapies Of Fungal Skin Infections

Home remedies for fungal skin infections

1. Plumbago zeylanica (doctor bush)

The whole plant is crushed with an added pinch of salt and the paste is applied externally in case of ringworm infection.

2. Cannabis sativus (ganja)

Ganja or cannabis sativa is externally applied to give relief from itchy skin conditions. Hemp seed oil strengthens your skin and can resist fungal infections.

3. Aloe vera

Aloe vera is known to be beneficial in various skin diseases. It is often consumed as a health drink. Aloe vera gel is effective in healing wounds and improving blood circulation in the area. Aloe vera gel also has certain properties that are harmful for certain types of fungi. It is thus effective against fungal skin infections.

4. Tea tree oil

Tea tree oil can be applied topically twice a day for the treatment of bacterial and fungal infections.

5. Thyme oil

Thyme oil is extracted from the herb thyme. It can be used topically as an antibacterial and antifungal agent. You can apply it over the affected area for faster relief.

Living With Fungal Skin Infections

Some of the common tips and tricks for people living with fungal skin infections (especially those at high risks like diabetics and obese people) are:

1. Steer clear of high-risk activities

Fungi are widespread but are more prevalent in damp places such as soil and near water bodies. If you are prone to fungal infections, it is advised to either avoid activities like gardening and swimming. Or, pay close attention to hygiene after finishing these activities.

2. Do not self medicate

It has been reported that people who take antibiotics can develop fungal infections such as vaginal candidiasis. Therefore, it is important to tell your doctor if you are prone to fungal infections and avoid taking antibiotics on your own.

3. Pay attention to personal hygiene

Hygiene plays an important role in preventing fungal skin infections. It is advised to avoid sharing personal items. Keep your feet clean and dry. Consult your dermatologist if you see a new rash.

4. Avoid getting fungal infections from pets

Some people may get fungal infections from their pets. If you notice any new circular or irregular patches on your pet, it is best to take them to a veterinarian. This will reduce your chances of contracting the infection.

5. Take care of your overall health

If you are immunocompromised or have conditions that lower your immunity, then you are at higher risk of fungal infections. Your doctor will prescribe you certain antifungal ointments and powders that will reduce your chances of getting a fungal infection.

Frequently Asked Questions

How will I know if it is a fungal infection?

What are the causes of fungal skin infections?

How long does it take for a fungal skin infection to clear up?

What foods are bad for fungal infections?

Why do I keep getting fungal infections on my face?

Can oral antifungal drugs be taken during pregnancy?

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Gallbladder stones

Also known as Gall stones, Gallstone disease, Cholelithiasis and Cholecystolithiasis

Overview

A gallbladder stone or cholelithiasis is a health condition in which pieces of solid stone-like objects develop in the gallbladder or bile duct. These gallstones are usually made up of cholesterol or bilirubin, and may trigger a sudden, intense pain in the abdomen. For some individuals, it may either develop as a single large gallstone, while for others, it may develop several small gallstones.

The primary cause of gallbladder stones is not clearly understood. However, numerous factors increase the risk of developing gallstones; which includes chemical imbalance of bile in the gallbladder, excessive secretion of cholesterol in the liver, post organ transplant adverse effects, and/or certain medications.

People who do not show any symptoms, usually don’t need any treatment. The treatment for gallbladder stones largely depends on the size and location of the gallstones. The common treatment involves dietary modification, medications, non-invasive ultrasound therapy (lithotripsy), and surgery.

Key Facts

Usually seen in

Adults above 30 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Gallbladder

Prevalence

Worldwide: 10-20% (2019)

India: 6.12% (2013)

Mimicking Conditions

Stomach flu

Gastroenteritis

Mirizzi syndrome

Appendicitis

Ulcers

Pancreatitis

Gastroesophageal reflux disease

Bile duct strictures

Bile duct tumors

Cholangiocarcinoma

Gall bladder cancer

Peptic ulcer disease

Pancreatic cancer

Necessary health tests/imaging

Abdominal ultrasound

Endoscopic ultrasound

Complete blood count (CBC)

Magnetic resonance imaging (MRI)

Cholangiogram

Computed tomography (CT) abdomen scan

Endoscopic retrograde cholangiopancreatography (ERCP)

Treatment

Medications: Ursodeoxycholic acid & Chenodiol

Surgical treatments: Open cholecystectomy, Laparoscopic surgery, & Endoscopic gallbladder stenting

See All

Symptoms Of Gallbladder Stones

Gallbladder stones symptoms differ from person to person, depending on the size and location of gallstones. The most prominent and visible gallbladder stones symptoms are sudden intensifying abdominal pain and other related digestive problems. For most people, the gall stones may remain silent and do not show any signs and symptoms. These types of silent gallstones usually do not pose any major risks of health concerns. However, if the gallstones block or get into the bile duct, they may cause other health complications. So it is always advised to consult a physician immediately for an early diagnosis and treatment.

Some of the common signs and symptoms of gallbladder stones include:

1. Sudden intensifying pain in the stomach

Sudden pain in the stomach is the most common symptom of gallbladder stone. The pain usually occurs at the upper right portion of the abdomen and may radiate to other regions.

Increased pressure within the gallbladder or a block in the bile duct due to gallstones may cause pain in the abdomen.

This pain can last for around 20 minutes to several hours.

2. Flatulence

Some people with gallstones may develop flatulence.

An increased amount of gas secretion or gas buildup in the digestive system due to underlying health conditions such as gallbladder stones can also trigger flatulence.

3. Nausea and vomiting

Another common symptom of gallbladder stones is nausea and vomiting. Increased pressure in the gallbladder caused by gallstones may increase the fluid imbalance in the stomach, which in turn may cause nausea and vomiting.

Other gallbladder symptoms include:

Pale or yellowish skin

Loss of appetite

Abdominal bloating

Chest pain

Radiating pain in the right shoulder

Fever

Clay-colour stools

The warning symptoms that require urgent medical care include:

Severe or radiating abdominal pain

Yellowing of skin or whites of the eye

Stomach bloating

Most of the above-mentioned symptoms of gallbladder stones may resemble other gastrointestinal problems, such as ulcer, appendicitis, or pancreatitis. So early recognition and treatment of gall bladder stones are crucial to reducing the risks associated with it.

Kidney stones are not the same as gallstones. Here’s everything you need to know about kidney stones.

Click To Know!

Causes Of Gallbladder Stones

The exact causes of gallbladder stones are not clearly understood. However, several factors are believed to contribute to the development of gallstones. Some possible causes of gallbladder stones include,

1. Imbalance of bilirubin in the bile

Elevated levels of bilirubin, a pigment secreted by the liver, may cause the accumulation of excess bilirubin in the body tissue. This, in turn, may contribute to the formation of gallstones.

2. Excessive secretion of cholesterol

Gallbladder stones develop when the liver secretes excessive cholesterol and results in the formation of cholesterol crystals, which develop into gallstones.

3. Improper emptying of the gallbladder

Improper emptying of the gallbladder, overtime may lead to the formation of mucus-like gallbladder sludge. This, in turn, may eventually develop into gallstones.

4. Insufficient bile salt concentration

Insufficient or imbalance in bile salt concentration correlates with an increased risk of developing gallbladder stones.

5. Diet and lifestyle

Certain lifestyle factors and improper dietary practices may also lead to the formation of stones in the gallbladder. These include:

Regular eating of highly processed and fried food items

Alcohol consumption

Stress

Obesity

Inactive or sedentary lifestyle

Did you know?

Lifestyle factors such as drinking too much of carbonated beverages, not drinking enough water and smoking can have a significant impact on your kidneys. Here’s more about the everyday habits that can harm the kidneys.

Read To Know!

Risk Factors For Gallbladder Stones

Gallstones develop because of the imbalance in the chemical composition of the bile inside the gallbladder. The accumulation of high levels of cholesterol in the bile over time may form small crystals (gallstones), causing pain in the abdomen.

Some of the most common risk factors associated with gall bladder stones are listed below:

Smoking

Men older than the age of 60

Sedentary lifestyle

Pregnancy

Oral contraceptives

Rapid weight loss

Liver disease

Diabetes

Obesity

Metabolic disorders such as hyperparathyroidism (excessive secretion of thyroid hormone),.

Individuals with a family or medical history of gallstones

Eating low-fiber diet

Taking certain medications that have anticholinergic effects

Crohn disease, ileal resection, or other diseases of the ileum decrease bile salt reabsorption and increase the risk of gallstone formation.

Other illnesses or states that predispose to gallstone formation include burns, use of total parenteral nutrition, paralysis, ICU care, and major trauma.

Types Of Gallstones

The composition of gallstones is affected by age, diet and ethnicity. On the basis of their composition, gallstones can be divided into the following types: cholesterol stones, pigment stones, and mixed stones. An ideal classification system is yet to be defined.

Cholesterol stones

Cholesterol stones vary from light yellow to dark green or brown or chalk white and are oval, usually solitary, between 2 and 3 cm long, each often having a tiny, dark, central spot. To be classified as such, they must be at least 80% cholesterol by weight (or 70%, according to the Japanese–classification system). Between 35% and 90% of stones are cholesterol stones.

Pigment stones

Bilirubin ("pigment", "black pigment") stones are small, dark (often appearing black), and usually numerous. They are composed primarily of bilirubin (insoluble bilirubin pigment polymer) and calcium (calcium phosphate) salts that are found in bile. They contain less than 20% of cholesterol (or 30%, according to the Japanese-classification system). Between 2% and 30% of stones are bilirubin stones.

Mixed stones

Mixed (brown pigment stones) typically contain 20–80% cholesterol (or 30–70%, according to the Japanese- classification system). Other common constituents are calcium carbonate, palmitate phosphate, bilirubin and other bile pigments (calcium bilirubinate, calcium palmitate and calcium stearate). Because of their calcium content, they are often radiographically visible. They typically arise secondary to infection of the biliary tract which results in the release of β-glucuronidase (by injured hepatocytes and bacteria) which hydrolyzes bilirubin glucuronides and increases the amount of unconjugated bilirubin in bile. Between 4% and 20% of stones are mixed.

Gallstones can vary in size and shape from as small as a grain of sand to as large as a golf ball. The gallbladder may contain a single large stone or many smaller ones. Pseudoliths, sometimes referred to as sludge, are thick secretions that may be present within the gallbladder, either alone or in conjunction with fully formed gallstones.

Practicing Dhanurasana Yoga Asana may help manage gallbladder stones better.

Have you ever thought that practicing a specific type of yoga may help you manage gallstones? According to a study, ayurvedic integrated yoga may help improve gastrointestinal mobility, reduce pain, abdomen bloating and provide relief from the signs and symptoms of gallbladder stones. Regular practicing of dhanurasana yoga or bow pose may also improve the normal functioning of the digestive system as it involves stretching of the spine. However, this pose is not usually recommended for severe gall bladder stone cases.

Diagnosis Of Gallbladder Stones

If you are experiencing any symptoms of gallbladder stones, such as intense abdominal pain, extreme fatigue, flatulence, or stomach bloating, it is wise to consult a gastroenterologist or primary care physician. Early diagnosis and prompt treatment for gallstones reduce the risks associated with their own.

If your symptoms are mild, your physician might not recommend any tests. However, if your symptoms fail to show any improvement post-treatment or if you experience symptoms such as nausea or bloody stools, then your physician might recommend further investigation. The tests include:

Physical examination of the abdomen

If you experience any symptoms, your physician might perform a physical examination of your abdomen. Assessment of your abdomen may provide critical information about the internal organs. Some of the common physical examination for gallstones involves,

Evaluation of your physical appearances, such as yellow discolouration of skin and sclera (white layer of the eye).

Checking your vital signs such as blood pressure, body temperature, heart rhythm, and other signs of gallstones in your body

Examination of your abdomen for tenderness and distensions.

Abdominal ultrasound

Ultrasound, a non-invasive imaging procedure, is commonly used to diagnose the signs of gallstones. This test involves the use of high-frequency ultrasounds to visualize the organs and structures within the abdomen.

Endoscopic ultrasound

Endoscopic ultrasound (EUS) is also an accurate and relatively noninvasive technique to identify stones in the distal common bile duct. Sensitivity and specificity of CBD stone detection are reported in range of 85%-100%.

Complete blood count (CBC)

The blood test may help reveal the cause of gastrointestinal obstruction. The elevated levels of bilirubin and cholesterol in the blood test may also help detect infection, pancreatitis, and other related abnormalities in the gallbladder.

Magnetic resonance imaging (MRI)

An MRI scan of the abdomen can help detect the stones in the gallbladder. This test involves the use of strong magnetic fields and radio waves to create images of the internal organs. It is usually an outpatient procedure. So, you can go home the same day as the test.

Cholangiogram

Cholangiogram, also known as DISIDA (diisopropyl iminodiacetic acid) scan or gallbladder radionuclide scan, uses radioactive dye and a special scanning probe to detect small stones that may be missed on other imaging techniques. This scanning method is commonly used to detect and locate blocks in the bile.

Computed tomography (CT) abdomen scan

During this procedure, your doctor uses a special x-ray probe and a computer to create a cross-sectional image of the gallbladder. These images may help physicians spot ruptures (tears in the gallbladder wall) and infections in the gallbladder.

Other imaging tests include:

Abdominal X-ray

Oral cholecystography

Hepatobiliary iminodiacetic acid (HIDA) scan

Endoscopic retrograde cholangiopancreatography (ERCP)

To get the right diagnosis, it is important to consult the right doctor. Consult India’s best doctors online.

Consult Now!

Celebs affected

Manoj Kumar

Veteran Bollywood actor Manoj Kumar underwent gall bladder surgery in the year 2013.

Bharti Singh

Bharti Singh, an Indian comedian and television personality, was admitted to the hospital after complaining of stomach ache. She was diagnosed with gallstones.

Jack Black

The famous American actor, comedian, musician, and songwriter was also diagnosed with gallbladder stones. He underwent gallbladder removal surgery very early in his career.

Dalai Lama

The highest spiritual leader of Tibet, Dalai Lama, underwent surgery for the removal of gallbladder stones in the year 2008.

Prevention Of Gallbladder Stones

Although there are no definite steps to prevent gallbladder stones completely, some of the following preventive measures may help you manage the condition and reduce its implications.

1. Consume balanced diet

The food we eat has a huge impact on the health of the gallbladder. A 2020 study on the association of diet with symptomatic gallstones has reported that high consumption of high saturated fats increases the risk of gallstones. Hence, eating a healthy diet packed with all vital nutrients is crucial for preventing gallstone formation.

2. Maintain healthy body weight

Being obese or overweight puts you at a higher risk of developing a gallbladder stone. Consult a nutritionist or a doctor who may help you chart out a proper diet plan to decrease the frequency of disease.

3. Don't skip your meal

Skipping your meal on a regular basis can cause adverse effects on health. Especially for people with gallbladder diseases, skipping meals may cause stress buildup in the bladder, which may lead to serious health complications. In general, it is advised to stick to mealtimes every day.

4. Be active

A sedentary lifestyle or being physically inactive can lead to the development of gallstones and many other health complications. Therefore, you should incorporate moderate exercises like jogging, stretching, and yoga to reduce your risk of gallstone.

5. Try to lose weight gradually

Rapid weight loss may trigger cholesterol secretion in the body. Especially for an obese patient who has undergone bariatric surgery (gastric bypass to lose weight), the sudden weight loss may increase the risk of developing gallstones. Thus, it's important to lose weight in a healthy, safe and gradual manner.

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6. Take preventive medication if necessary

Gallbladder stones have a multifactorial etiology, and it shares similar symptoms with other related gastrointestinal disorders. However, if the symptoms are recognized as soon as possible, early interventions can reduce the risk of complications.

Specialist To Visit

The signs of gallbladder stones often resemble those caused by other gastrointestinal conditions. In addition to that, some gallstones do not show any signs and remain silent. In such cases, the symptoms of gallbladder stones can rapidly get worse or lead to serious health complications.

Early diagnosis of gallbladder stones helps prevent complications and increases the outcomes of surgery. So if you are bothered about symptoms or experiencing any warning signs of gallbladder stones, it is always better to seek immediate professional help to eliminate the progression of the gallstones.

Specialists that can help manage gallbladder stones include:

Gastroenterologist

General physician

General surgeon

Gastrointestinal surgeon

If you or anyone in your family are experoeicng any symptoms of gall bladder stones, seek medical help immediately.

Consult Now!

Treatment Of Gallbladder Stones

People who have silent gall bladder stones (asymptomatic gallstones) show mild symptoms and may not require any treatment. However, for people with gallstone complications and having intense pain in the abdomen, the following treatments may be required:

Nonsurgical treatments

Medications

The medications used to treat the gallbladder either work by breaking the cholesterol accumulation in the stomach acids or decreasing the cholesterol secretion in the bile. The most commonly used medicines for gallbladder stones include:

Ursodeoxycholic acid: Ursodeoxycholic acid or ursodiol is a naturally-occurring bile acid effective in the prevention of gallstones. It works by dissolving the excess cholesterol or gall stone crystals in the gut.

This class of medications is approved by the FDA for the treatment of gallstones. However, it may require a longer time to work. So the use of these medications is only considered for mild and less serious cases.

Chenodiol: Chenodiol or Chenodeoxycholic acid is also a naturally occurring bile acid used to treat gallstones. It works by preventing the secretion of excess cholesterol in the liver that develops into gallstones.

However, the use of this medication does not guarantee immediate recovery or results. It is commonly used by people who cannot undergo gallbladder surgery.

Other non-FDA approved medications to treat small gallbladder stones include::

Actigall

Reltone

Extracorporeal shock wave lithotripsy

Extracorporeal Shock Wave Lithotripsy is a non-invasive procedure that uses pressured waves to break gallstones externally. However, this technique involves the use of high-tech equipment and is rarely used along with other treatment methods.

Surgical treatments

Open cholecystectomy: One of the effective methods to cure gallstones is surgery. Surgical treatment usually involves removal of the gallbladder to avoid recurrence of gallstones.

However, like other surgery, gallbladder surgery also comes with its own risk of complications.The most common complication is an internal bleeding injury to the bile ducts, infection. For which you may need one or more additional operations to repair the bile ducts.

Laparoscopic surgery (cholecystectomy): Laparoscopic surgery, often known as keyhole surgery, is a highly effective technique widely used to treat gallbladder stones. It involves the use of a special probe to access the internal organs.

The main advantage of laparoscopic surgery over traditional open surgery is that it requires minimal opening and a small incision to perform surgery. This, in turn, eliminates the major risks of open surgery such as infection, internal bleeding, or delayed recovery.

Endoscopic gallbladder stenting: Endoscopic gallbladder stenting is effective for elderly patients with gallbladder diseases who are poor surgical candidates. This procedure uses stents (metal or plastic tube inserts) to keep the bile duct narrowed by gallstones open.

Gallbladder stenting may also help resolve the symptoms caused by gallstones.

Did you know?

Breaking a large meal into small meals has numerous health benefits ranging from stabilizing blood sugar levels to boosting the overall body's metabolism. According to the article published in the Nutrition Journal, the frequency and timing of the diet play an important part in gallstone formation. Following healthy eating habits, fasting, regular meal frequency, and timing may help prevent the occurrence of gallbladder stones.

Home-care For Gallbladder Stones

Diet plays a crucial role in the management and treatment of gallbladder stones. Here are some dos and don'ts you need to follow to help your body manage gallstones symptoms:

Dos

Consume food rich in fiber, such as vegetables and fruits.

Don’t miss out on micronutrients, consume a well-rounded diet such as legumes and whole grains.

Keep your blood pressure under control.

Make sure to break your large meal into small meals—for example, instead of eating one large meal, break it into 3 small meals.

Practice low intense stretch exercises to help proper digestion.

Make sure to chew your food slowly and properly.

Stay hydrated, drink lots of water.

Herbs such as Saindhava lavanam and peppermint may help you manage the signs of gallstones.

Don'ts

Eat too many fried, spicy, or ready-made packed food items like pasta, noodles, polished rice, and sugar.

Drink aerated cool drinks such as soda and ice beverages, excessively

Smoke or consume alcohol

Perform high intense physical activities like weight lifting, sprinting, or boxing

Eat high fat or calcium-rich food

Self-medicate

Complications Of Gallbladder Stones

Usually, asymptomatic gallstones do not cause any complications. However, if the symptoms are left untreated, it can lead to severe complications. According to the Nigerian Journal of Surgery, the medical complications associated with gallbladder stones are as follows:

Inflammation of the gallbladder can lead to a more serious medical condition called cholecystitis

Blockage of bile duct resulting in bile infection or jaundice

Gallbladder cancer

Blockage in the pancreatic duct leading to pancreatitis, a serious medical condition where the pancreas get inflamed due to the presence of blockage

Small bowel obstruction or gallstone ileus, a rare but serious complication where the intestine losses its ability to contraction

Mirizzi's syndrome, a condition where the bile stone becomes impacted with the neck of the gallbladder

Internal bleeding or gastrointestinal distress

Alternative Therapies For Gallbladder Stones

Home remedies for Gallstones

Here are a few quick home remedies to control and get relief from gallstones.

1. Turmeric (haldi)

Turmeric has potent anti-inflammatory properties. The active compound of turmeric curcumin is scientifically proven to have health benefits.

Tip: Take warm water or milk infused with 3 g of turmeric after meals. This drink can help with gut inflammation and gallstone problems

2. Aloe vera

Aloe vera leaves are enriched with antioxidants and vitamins.

Tip:

Extract the gel from aloe vera leaves.

Boil a cup of leaf extract in water.

Add salt to taste.

Drink this concoction two times a day. This drink can help fight acid reflux, gas trouble, and other symptoms of gallstones.

3. Gokshura

Gokshura is loaded with a variety of Saponins that slow down the progression of the galls stones.

Tip: Taking Gokshura with Ashwagandha and Shilajit as Gokshura suranum or simply as a powdered form can help detoxify the gallbladder.

4. Black pepper (kali mirch)

Black pepper neutralizes the excess acid and helps regulate the bile secretion in the liver. It also contains numerous medicinal compounds such as piperine which improves the proper functioning of the gallbladder.

Tip: Drink a glass of black pepper with warm water every day after meals if you are prone to frequent stomach distress.

5. Onion seeds (kalonji)

Kalonji contains antioxidant thymoquinone, which aids in reducing abdomen pain, infection, and gallstones.

Tip:

Add a teaspoon of Kalonji oil to around 2-3 glasses of water and boil.

Strain it and drink this water at regular intervals post meals/breakfast for quick pain relief.

6. Cucumber beet juice

People with gallstones may have increased bile or cholesterol secretion and suffer from indigestion problems. Cucumber beet juice serves as an excellent source of remedy for this.

Tip:

Mix equal volume of cucumber, beetroot, carrot.

Dilute it by adding glasses of water.

Drink this water at regular intervals post meals/breakfast to replenish your body.

7. Dandelion tea

Dandelion tea has antibacterial and antimicrobial properties that help fight gastric infection. It also has numerous positive benefits on your digestive system.

Tip: Add 10g of dry Dandelion leaves to around 2-3 glasses of water and boil. Strain it and drink. This boiled water can also be taken as a natural substitute for coffee.

8. Pear

Pear is loaded with antioxidants and antimicrobial properties that help fight the symptoms of gallbladder stones.

Tip: Make fresh pear juice. Strain it and drink. Drinking pear juice at regular intervals (weekly once) may reduce the formation of bile stones and cholesterol deposits.

Yoga for gallbladder stones

Some common yoga poses for peptic ulcers include the following:

Bhujangasana (Cobra Pose)

Dhanurasana (Bow Pose)

Paschimottanasana (Seated forward bend)

Sarvangasana (Shoulderstand)

Shalabhasana (Locust Pose)

Did you know?

Drinking lemon juice regularly keeps you hydrated throughout the day. In addition to that, lemon juice has numerous health benefits, such as preventing gallstone formation and aiding in digestion and regulation of cholesterol secretion in the liver. According to an article published in the Scientific report Journal, lemon juice is loaded with nutrients, including vitamin C, B-complex vitamins, calcium, iron, magnesium, potassium, fiber, and has anti-aging properties.

Living With Gallbladder Stones

If you have been diagnosed with gallbladder stones, your physician will provide the right treatment plan. However, making significant diet and lifestyle changes along with medication are also crucial. With adequate treatment and care, gallstones heal over time. However, you need to follow a high fiber and low salt diet to reduce the chances of relapse.

In addition, here are a few tips that can help you manage and prevent gallbladder stones.

Stop smoking

Moderate alcohol consumption

Maintain healthy BMI (Body Mass Index) limit

Stay hydrated

Avoid eating unhealthy fats

Don't skip meals

Take all the medications as recommended by your doctor.

Seek professional help if need

Participate in support groups

Frequently Asked Questions

Is gall bladder stones a serious medical condition?

How many types of gallstones are there?

What is the role of the gallbladder?

Can people with gallstones exercise?

Who is more likely to get gallbladder stones?

Is turmeric beneficial in the case of gallstones?

Can gallbladder stones be treated without operation?

How long does gallbladder surgery take?

What are the side effects of gallbladder surgery?

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Gastritis

Overview

Gastritis is a digestive disorder that involves inflammation, irritation and erosion in the stomach lining. It can occur suddenly (acute) or gradually (chronic).

Symptoms of gastritis include abdominal pain, nausea, vomiting, bloating, loss of appetite, and a feeling of fullness. In some cases, gastritis can lead to bleeding, resulting in blood in vomit or dark stools.

The most common causes of gastritis include H.Pylori bacterial infection and long-term use of Nonteroidal anti-inflammatory drugs (NSAIDs) like aspirin, ibuprofen.

Individuals experiencing persistent or severe symptoms should seek medical attention for proper evaluation and personalized guidance. Healthcare professionals can provide tailored treatment plans based on specific needs and medical and personal history.

The treatment goal of gastritis is to address the underlying cause and reduce the amount of acid in the stomach to relieve symptoms, allowing the stomach lining to heal. Lifestyle changes such as avoiding triggers, adopting a healthy diet, and managing stress can aid in management and promote healing.

Key Facts

Usually seen in

Individuals between 45 - 64 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Stomach

Mimicking Conditions

Peptic ulcer disease

Gastric cancer

Cholecystitis

Zollinger-Ellison syndrome

Dyspepsia

Gallstone disease

Pancreatitis

Gastric involvement with inflammatory bowel disease, particularly Crohn disease

Menetrier disease

Lymphoma

Celiac disease

Multiple endocrine neoplasias

Necessary health tests/imaging

Esophageal pH test

Lab tests: Blood tests, stool test

Imaging tests- Upper endoscopy

Biopsy

Barium swallow test

Treatment

Antibiotic medications: clarithromycin, amoxicillin, metronidazole

Proton pump inhibitor (PPI): Esomeprazole, lansoprazole, omeprazole, pantoprazole, rabeprazole

H2 blockers: Cimetidine, ranitidine, nizatidine, famotidine

Antacids: Aluminium hydroxide , magnesium hydroxide, calcium carbonate, sodium bicarbonate

Specialists to consult

General physician

Internal Medicine specialist

Gastroenterologist

Symptoms Of Gastritis

Gastritis refers to the inflammation of the lining of the stomach. This inflammation can disrupt the normal production of stomach acid and digestive enzymes, which are important for the breakdown and digestion of food. As a result, individuals with gastritis may experience the following symptoms:

Piercing, gripping pain in the stomach

Feeling of fullness

Burning feeling in the stomach between meals or at night

Burning feeling in the chest due to acid reflux

Belching or burping

Lack of appetite

Stomach bloating

Hiccups

Nausea and vomiting

Diarrhea

Symptoms of severe gastritis may include:

Blood in vomit

Black, tarry stools

Chest pain

Shortness of breath

Weakness

High fever

Inability to take any foods or liquids by the mouth.

Did you know there is a potential link between covid 19 and digestive conditions?

The SARS-CoV-2 virus, which causes COVID-19, can affect various parts of the digestive system. Individuals with pre-existing gastritis or other digestive conditions may be at a higher risk of experiencing adverse outcomes if they contract COVID-19.

Learn more about COVID-19

Types of Gastritis

There are broadly two types of gastritis, acute and chronic.

1. Acute gastritis

It is characterized by a sudden inflammation of the stomach lining, commonly caused by irritants or infections.

It leads to symptoms like nausea, vomiting, bloating, gas, weight loss, and loss of appetite.

Simple treatments and removal of the underlying cause usually result in a quick resolution of symptoms.

2. Chronic gastritis

It refers to persistent, low-grade inflammation and damage to the stomach lining, often associated with H. pylori infection.

People with chronic gastritis often have no symptoms or only mild symptoms. Symptoms might include tiredness and anemia.

Note: Gastritis refers to inflammation of the stomach lining, while antral gastritis specifically involves inflammation of the antrum, which is the lower part of the stomach near the entrance to the small intestine.

Did you know that gastritis can be common during pregnancy?

Gastritis can develop during pregnancy due to hormonal and physical changes. The pressure exerted on the stomach by the growing uterus also exacerbates gastritis symptoms. Explore our exquisite collection of pregnancy care essentials and embrace the beautiful journey of pregnancy.

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Causes Of Gastritis

A. Major Causes and Risk factors

Infectious agents especially Helicobacter pylori, and NSAIDs are responsible for the majority of people with gastritis:

1. H.Pylori-associated gastritis

H.pylori gastritis is one of the most common causes of gastritis. It occurs due to the presence of Helicobacter pylori (H. pylori) bacteria in the stomach that infect the stomach lining and cause inflammation. It is often contracted through contaminated food or water.

2. Nonsteroidal anti-inflammatory drugs (NSAIDs)

Frequent or long-term use of NSAIDs such as aspirin, ibuprofen, or naproxen can irritate the stomach lining, causing erosive gastritis. These medications can disrupt the protective mechanisms of the stomach, leading to inflammation.

Prolonged use of painkillers can affect the regulation of prostaglandin hormones. Prostaglandins help regulate stomach mucus and substances that neutralize the gastric acid. Without enough prostaglandin, the stomach wall loses protection from acid.

Note: Combined use of painkillers with steroids can worsen the damaging effects on the gastric lining.

B. Other Causes and Risk factors

The following factors can also contribute to the development of gastritis. Chronic gastritis is a condition that may develop due to repeated or persistent exposure to many of these factors.

Virus: Viruses such as enterovirus, epstein-Barr virus, can cause viral gastritis.

Parasitic infections: Parasites such as cryptosporidium are also known to cause gastritis.

Fungal infections: Fungal infections such as candidiasis can also cause gastritis. Fungal infections typically occur in individuals with weakened immune systems.

Alcohol: Heavy or prolonged alcohol consumption can irritate and damage the stomach lining, making individuals more susceptible to alcohol gastritis.

Smoking: Smoking has been identified as a risk factor for gastritis. It can weaken the protective lining of the stomach and impair the healing process, increasing the risk of inflammation.

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Age: Gastritis can affect individuals of any age, but the risk tends to increase with age. Older adults may have a higher risk due to factors such as a weakened immune system, prolonged use of medications, and a higher likelihood of H. pylori infection.

Stress: While stress itself may not directly cause gastritis, it can worsen symptoms and increase the risk of developing the condition. Chronic stress may influence the production of stomach acid and disrupt the normal functioning of the digestive system.

Autoimmune disorders: In some cases, the immune system may mistakenly attack the cells of the stomach lining, leading to autoimmune gastritis. This type of gastritis is less common but can be chronic and severe.

Systemic conditions: Certain systemic diseases can also contribute to the development of gastritis. Some of them are discussed below:

Crohn's disease (a type of inflammatory bowel disease)

Vasculitis (inflammation of blood vessels)

Sarcoidosis (growth of inflammatory cells)

Ischemia (reduced blood flow)

Bile reflux: When bile from the small intestine flows back into the stomach, it can irritate and inflame the stomach lining, causing gastritis.

Radiation Therapy: Exposure to high doses of radiation, such as during radiation therapy for cancer treatment, can cause gastritis. The radiation damages the cells of the stomach lining, leading to inflammation and discomfort.

Obesity: While obesity itself is not considered a direct risk factor for gastritis, it can still play an indirect role in its development. Obesity-related factors such as acid reflux, increased stomach pressure, and unhealthy dietary choices have the potential to irritate the stomach lining and exacerbate symptoms of gastritis.

Do you know the difference between gastritis and gastroenteritis?

Gastritis is inflammation of the stomach which is mostly but not always caused by an infection. Whereas, gastroenteritis is inflammation of the stomach and intestines, which is principally caused by an infection.

Read more about gastroenteritis.

Diagnosis Of Gastritis

Your doctor will take a thorough medical history, including any medications you are taking and your family history. This will be followed by a physical examination.

To diagnose gastritis, doctors typically use a combination of the following tests:

1. Esophageal pH test

This test helps measure stomach acid by checking how much stomach acid enters through the food pipe and how long it stays in the stomach.

2. Lab tests

CBC - This test checks for high levels of white blood cells indicative of inflammation or infection. The test also looks for anemia, or a low red blood cell count, an indicator of blood loss, which can be linked to gastritis.

Stool test- It checks for H. Pylori or other infections. It is also useful in ruling out other infections that cause chronic diarrhea.

H. Pylori Breath test- In this test, you are given a special solution to swallow. If the H. pylori bacteria are present in the gut, gas by-products are released and detected in your breath.

Helicobacter Pylori Antibodies Panel (IgA, IgG & IgM) test - This test is used to detect the presence of IgA, IgG and IgM antibodies against H. pylori infection.

3. Imaging tests

Upper Endoscopy- During this procedure, a small flexible tube (known as an endoscope) is inserted down the throat to examine the lining of the esophagus, stomach, and small intestine.

Barium swallow test (esophagram): In this procedure, you need to drink a liquid barium mixture. An X-ray of the chest and upper abdomen is then done to help identify any physical excessive alcohol consumption or any other abnormalities in the stomach or esophagus.

4. Biopsy: A small piece of tissue is removed from the inside of the stomach for further testing and analysis.

Celebs affected

Deepika Samson

Hindi Tv Soap actor, Deepika Samson once shared her experience of back pain which was an the outcome of severe gastritis.

Lady Gaga

Lady Gaga, a renowned singer and actress, revealed in 2013 that she had to cancel several tour dates due to a severe case of gastritis. Her condition improved with the help of relaxation techniques.

Prevention Of Gastritis

While it is not possible to completely eliminate the risk of gastritis, there are measures you can take to reduce it. Here are some tips that may help prevent gastritis:

1. Make dietary changes

A clean, well-balanced wholesome diet is the cornerstone of overall health and immunity and can help evade gastritis. At the same time, it is important to identify and avoid any specific foods or beverages that seem to worsen your symptoms.

Consume

Fiber-rich foods

Flavonoid and antioxidant-rich fruits, vegetables, and beverages

Foods high in B vitamins, calcium, and protein like almonds, whole grains, leafy greens, and lean meats.

Healthier cooking oils like olive oil, ghee

6 to 8 glasses of filtered water daily

Avoid or limit

Refined foods such as white breads, pastas, sugar etc.

Excessive intake of oily and spicy foods.

Refined white sugar and sugar-containing items like cakes, muffins, cookies etc.

Stomach irritants like coffee, alcohol, and carbonated drinks.

Overeating to prevent excessive acid production and strain on digestion.

2. Avoid excessive use of NSAIDs

Excessive and prolonged use of NSAIDs, commonly used for pain relief, are a main culprit when it comes to gastritis.

It is crucial to adhere to healthcare professional’s instructions when using NSAIDs, avoid long-term usage without medical supervision, and consider alternative pain management methods whenever available.

3. Reduce the risk of H. pylori infection from contaminated food and water

Practice good hand hygiene, wash hands before handling food, after using the bathroom, and after contact with potentially contaminated surfaces.

Cook meat thoroughly, avoid cross-contamination, and promptly refrigerate perishable foods.

Drink safe, clean water and avoid consuming raw or undercooked foods.

4. Quit smoking

Smoking weakens the stomach lining and impairs healing.

Seek supportive measures like counselling, nicotine replacement therapy, and behavioral therapies for quitting.

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5. Limit or abstain from alcohol

Excessive intake of alcohol can cause irritation and inflammation of the stomach lining. It is important to avoid engaging in binge drinking. Consumption of alcohol should always be practiced in moderation.

Men should limit their alcohol intake to a maximum of two drinks per day, while women and the elderly should not exceed one drink per day.

However, it is advisable to consider complete abstinence from alcohol, particularly if one has liver disease.

6. Manage stress effectively

Long term stress can worsen gastritis symptoms and delay healing.

Techniques like deep breathing exercises, meditation, yoga, and mindfulness-based stress reduction can help manage stress levels and promote relaxation.

Engaging in activities that bring joy and practicing good self-care habits can also be beneficial.

Try some relaxation techniques to manage stress and stress-induced gastritis.

Read Here

Do you know eating smaller meals can help manage gastritis?

Yes, consuming smaller, more frequent meals throughout the day can be helpful in managing gastritis. It's recommended to eat every two to four hours, avoiding skipping breakfast, and finishing the last meal at least three hours before bedtime. Develop healthy eating habits, and feel the difference!

Watch This Video

Doctor To Visit

You must consult a doctor if you experience the following symptoms especially more than twice a week or on a regular basis :

Worsening or right lower belly pain

Sudden chest pain spreading to the back, neck, shoulder, or arm

Frequent vomiting

Blood in stool or vomit

Weakness, or dizziness

Unexplained weight loss

Feverish, or worsening of symptoms or new symptoms.

Specialists that can help manage gastritis include:

General physician

Internal medicine specialist

Gastroenterologist

A general physician may evaluate your symptoms initially, and may refer you to an internal medicine specialist or a gastroenterologist for specialized care.

An internal medicine specialist and a gastroenterologist can help in diagnosing and treating conditions like gastritis, providing expert care for the gastrointestinal tract and associated organs.

Consult India's best doctors online. Click here to book an appointment.

Consult Now

Treatment Of Gastritis

The treatment of gastritis depends on the underlying cause and severity of the condition. The treatment starts with identifying the possible causes of acute gastritis, such as long-term use of NSAIDs, excessive alcohol consumption, or H. pylori infection. The following medications and supplements are usually prescribed for the management of gastritis:

A. Medications

1. Antibiotics: If an infection causes gastritis, such as H. pylori, the following antibiotics may be prescribed to eliminate the bacteria

Clarithromycin

Amoxicillin

Metronidazole

2. Proton pump inhibitor (PPI): Proton pump inhibitors (PPIs) aid in relieving the symptoms of gastritis by decreasing gastric acid production. Examples include:

Esomeprazole

Lansoprazole

Omeprazole

Pantoprazole

Rabeprazole

Note: Doctors commonly use "triple therapy" to treat H. pylori-related gastritis and ulcers. This therapy includes a combination of a proton pump inhibitor and two antibiotics. In most cases, triple therapy will successfully eliminate the infection. If additional treatment is required, doctors usually recommend quad therapy. This involves one PPI and three different antibiotics.

4. Antacids: Antacids neutralize the acid already in your stomach. It may relieve heartburn or indigestion but will not treat an ulcer. A few antacids include:

Aluminum hydroxide

Magnesium hydroxide

Calcium carbonate

Sodium bicarbonate

3. Histamine-2 (H2) blockers: H2 blockers reduce acid production. These are usually more effective than antacids in relieving symptoms, and many people find them far more convenient.

H2 blockers include:

Cimetidine

Ranitidine

Nizatidine

Famotidine

Note: Doctors may also prescribe sucralfate, which helps to coat the stomach lining and treat stomach ulcers.

Place an order for the medicines with a single click.

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B. Nutrition and Dietary Supplements

Nutrition and diet go hand in hand with the medical management of gastritis. The following supplements may also be prescribed with digestive health:

1. Probiotics: High-quality probiotic supplements and foods like yogurt or kefir contain beneficial bacteria that can help restore the natural balance of gut flora. They may help reduce inflammation and promote a healthy stomach lining.

Check out our prebiotics and probiotics supplement range.

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2. Omega-3 fatty acids: Omega-3 fatty acids have anti-inflammatory properties and can help reduce inflammation in the stomach. They are commonly found in fatty fish like salmon, mackerel, and sardines. You may also consider taking a fish oil or algae-based omega-3 supplement.

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3. Vitamin C: Vitamin C is an antioxidant that can help protect the stomach lining from oxidative damage. It also plays a role in tissue repair. Include foods rich in vitamin C in your diet, such as citrus fruits, strawberries, kiwi, and bell peppers. If needed, vitamin C supplement can also be taken.

Explore our widest range of nutritional supplements.

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Home-care For Gastritis

Here are some home remedies that may help alleviate symptoms of gastritis.

Ginger (Adrak): Ginger has anti-inflammatory properties that may help reduce irritation and inflammation in the stomach. It can be consumed in different forms, such as ginger tea, ginger ale, or by adding fresh ginger to your meals.

Peppermint (Pudina): Peppermint has a soothing effect on the stomach and may help alleviate symptoms of gastritis. Drink peppermint tea or suck on peppermint candies, but be cautious if you have gastroesophageal reflux disease (GERD) as peppermint can worsen symptoms for some individuals.

Chamomile tea: Chamomile has anti-inflammatory and calming properties that can help ease digestive discomfort. Drink chamomile tea between meals to soothe the stomach.

Aloe vera: Aloe vera juice may help reduce inflammation and promote healing of the stomach lining. Drink a small amount of aloe vera juice (about 1/4 cup) before meals.

Garlic (Lehsun): Garlic possesses antimicrobial properties that inhibit the growth of Helicobacter pylori. Consuming raw crushed garlic is another good option to help alleviate symptoms of gastritis.

Liquorice (Mulethi): It protects your stomach lining and reduces the chances of ulcer formation or gastritis.

Cumin (Jeera) water: It has anti-inflammatory and anti-bacterial properties which help reduce gastritis symptoms.

Broccoli: It has antibacterial properties and is known to help relieve gastritis symptoms.

Turmeric (Haldi): Turmeric contains a compound called Curcumin which possesses anti-inflammatory and antioxidant properties. It also inhibits the growth of Helicobacter pylori.

Black seed oil: It has antioxidant and anti-inflammatory properties which help in reducing inflammation in the stomach and manage gastritis.

Note: Remember, these home care remedies may provide some relief but they do not replace professional medical advice.

Complications Of Gastritis

Acute gastritis usually does not cause any serious or long-term health problems. However, if it happens frequently, is left unattended, and becomes chronic, it can lead to:

Peptic ulcers: Gastritis can lead to the development of open sores on the stomach lining or the upper part of the small intestine, known as peptic ulcers.

Atrophic gastritis: Chronic gastritis, including H. pylori gastritis and autoimmune gastritis, can progress to atrophic gastritis. In this condition, ongoing inflammation leads to the destruction of stomach glands responsible for producing acid and enzymes.

Iron-deficiency anemia: Chronic bleeding from the stomach due to gastritis can cause iron deficiency anemia, where there is a decrease in red blood cells or hemoglobin due to inadequate iron levels.

Vitamin B12 deficiency: Autoimmune gastritis, a type of gastritis, can lead to vitamin B12 deficiency as the immune system mistakenly attacks cells that produce intrinsic factors, a protein required for vitamin B12 absorption.

Deficiency of other vitamins and minerals: Atrophic autoimmune gastritis can lead to deficiencies in vitamins C, D, and folic acid, as well as minerals like zinc, magnesium, and calcium.

Gastric bleeding: Severe inflammation and erosions in the stomach lining can result in gastrointestinal bleeding, leading to the presence of blood in vomit or dark stools.

Gastroesophageal reflux disease (GERD): Gastritis can contribute to the development of GERD, a condition where stomach acid flows back into the esophagus, causing heartburn and other symptoms.

Gastric polyps: These are small masses of cells that form on the lining of the stomach.

Does gastritis increase the risk of stomach cancer?

Yes, long-term, untreated gastritis, particularly caused by H. pylori infection, can increase the risk of developing stomach (gastric) cancer. Regular monitoring and appropriate treatment of gastritis can help reduce this risk. You must know some common signs and symptoms that could be suggestive of cancer.

Read Here

Alternative Therapies For Gastritis

Here are some complementary and alternative therapies that may be beneficial for gastritis:

Acupuncture

It is a technique that involves inserting thin needles into specific points on the body. It is believed to stimulate the body's natural healing processes and improve energy flow. Some studies suggest that acupuncture may help reduce inflammation and relieve symptoms associated with gastritis. Seek a qualified acupuncturist who has experience in treating digestive disorders.

Living With Gastritis

Living with gastritis can be challenging, but with proper management and lifestyle adjustments, you can effectively cope with the condition. Here are some tips to help you live with gastritis:

Follow your healthcare provider's recommendations: It's important to work closely with your healthcare provider to develop a treatment plan that suits your specific needs. Follow their advice regarding medication usage, lifestyle modifications, and dietary recommendations.

Take prescribed medications: Your healthcare provider may prescribe medications to reduce stomach acid production, neutralize acid, or treat any underlying infection. Take these medications as directed and report any side effects or concerns to your healthcare provider.

Stay hydrated: Drink plenty of water throughout the day to keep your body hydrated and promote healthy digestion. Avoid excessive consumption of carbonated beverages, as they can increase stomach acid production and worsen symptoms.

Practice portion control: Overeating can put additional strain on your stomach and aggravate gastritis symptoms. Eat smaller portions and avoid eating late at night.

Get enough sleep: Aim for a consistent sleep schedule and ensure you're getting enough quality sleep. Sleep deprivation and irregular sleep patterns can contribute to stress and exacerbate symptoms.

Keep a symptom diary: Consider keeping a journal to track your symptoms, food triggers, and any patterns you notice. This can help you identify specific triggers and make informed decisions about your diet and lifestyle.

Reach out for support: Living with gastritis can be challenging, both physically and emotionally. Seek support from friends, family, or support groups who can provide understanding, encouragement, and advice.

Adopt a gastritis-friendly diet: Avoid foods that trigger or worsen your symptoms.

Include food in your diet:

High-fiber food, such as whole grains, fruits, vegetables, and beans

Low-fat food, such as fish, lean meats, and vegetables

Less acidic food, such as vegetables and beans

Probiotic food, such as kombucha, yogurt etc.

Non-carbonated drinks

Caffeine-free drinks

Avoid food:

Alcohol

Caffeine

Fried food

Spicy food

Sweet and sugary food or drinks

Acidic food or drinks, such as orange juice and tomato juice

Refined carbohydrates, such as white bread and pasta

Processed meats, such as bacon, ham and hot dogs

Frequently Asked Questions

How long does gastritis take to heal?

Is it safe to practice intermittent fasting if I have gastritis?

Can gastritis lead to stomach bloating?

Is gastritis contagious?

Are gastritis and GERD the same thing?

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Gastroenteritis

Also known as Stomach flu and Intestinal flu

Overview

Gastroenteritis is inflammation in the digestive system including the stomach, small and large intestines.It can be caused by viruses, bacteria, toxins, parasites, some chemicals and medications, although viruses are the leading cause.It is often called as the ‘stomach or intestinal flu,’ although it is not caused by the influenza viruses.The typical symptoms of gastroenteritis include watery diarrhea, vomiting, and abdominal cramps.It is contagious and can easily spread from an infected person to others through close contact or touching contaminated surfaces. Consumption of contaminated food and beverages can also be a source of infection of gastroenteritis.

Most cases of gastroenteritis can be prevented by basic hand hygiene measures, prompt disinfection of contaminated surfaces, and avoiding contaminated food and water.Gastroenteritis caused by rotavirus can be prevented by vaccination of children during their first year of life.

Gastroenteritis can be usually treated at home by maintaining the fluid and electrolyte balance by regular intake of clean boiled water, oral rehydration solution (ORS), coconut water, clear soups and fresh fruit juices.In cases of severe dehydration, hospital admission might be required.

Key Facts

Usually seen in

All age groups but more common in children

Gender affected

Both men and women

Body part(s) involved

Stomach

Small intestine

Large intestine (colon)

Prevalence

Acute appendicitis

Esophagitis

Diverticulitis

Inflammatory bowel disease

Peptic ulcer disease

Bowel obstruction

Cholecystitis

Pseudomembranous colitis

Microscopic colitis

Irritable bowel syndrome

Lactose intolerance

Celiac disease

Acute HIV infection

Colorectal cancer

Necessary health tests/imaging

Stool test

Blood test: Complete blood count (CBC) & Serum electrolytes

Urine test: Blood urea nitrogen (BUN) & Creatinine

Imaging tests: CT scan, Ultrasound & X rays

Treatment

Physical examination & medical history

Fluid therapy: Water, Oral rehydration solution, saline solution & Lactate Ringer’s solution.

Antibiotics: Metronidazole, Ceftriaxone & Azithromycin

Antiemetics: Ondansetron & Metoclopramide

Anti-diarrheal medications: Diphenoxylate & Atropine

Specialists to consult

General physician

Infectious disease specialist

Gastroenterologist

Pediatrician

Symptoms of Gastroenteritis

Gastroenteritis is an acute illness that usually lasts between 1-2 days. However, symptoms may take 1-3 days to develop depending upon the causative agent and may range from slight discomfort to severe dehydration which can be fatal especially in children. The typical symptoms of the infection, irrespective of the cause include:

Diarrhea

Vomiting

Nausea

Abdominal cramps

Abdominal pain

Headache

Body ache

Chills

Bloating

Loss of appetite

Gastroenteritis caused by bacteria also includes bloody diarrhea which is called dysentery. It occurs due to the damage of the intestinal wall by the bacteria.

Signs of dehydration

Decreased urine output

Dark-colored urine

Dry skin

Thirst

Dizziness

Feeling dehydrated? Read the following tips to treat dehydration.

Click Here!

Signs of dehydration in infants and toddlers

Vomiting is more commonly seen in young children and infants which can even lead to severe dehydration. It is very important to notice the signs of dehydration which include:

Thirst

Dry diapers

Less urination

Lack of urination

Dry mouth

Lack of tears

Drowsiness

Lack of energy

Sunken fontanel (the soft spot on the top of an infant’s head)

Sunken eyes and cheeks

Fever

Read the important things that one should keep in mind if your child has continuous vomiting.

Read Now!

Causes of Gastroenteritis

1. Infectious gastroenteritis

Infections causing gastroenteritis can be viral, bacterial, or parasitic in origin.

Viruses: The most common viruses responsible for gastroenteritis are:

Norovirus: It is the most common cause and is responsible for most cases of viral gastroenteritis. The virus is mostly responsible for outbreaks within closed communities such as nursing homes, schools, military populations, athletic teams, and cruise ships.

Rotavirus: The virus is mostly responsible for severe vomiting in young children and infants. The infection of rotavirus in children and infants may require hospitalization.

Less common viruses that can cause gastroenteritis include astrovirus and adenovirus.

How does viral gastroenteritis spread?

Viral gastroenteritis is highly infectious. Viruses are present in the vomit and stool of the infected person and can live outside the human body for a long time. It can spread through:

Direct contact with vomit or stool of infected person

Shaking hands with infected person

Touching contaminated surfaces and objects such as handrails, elevator buttons, utensils, doors etc.

Sharing food and beverages with the infected person

Bacteria: Although not common, several species of bacteria can also cause gastroenteritis. They include:

Campylobacter: This bacteria spreads through contaminated milk and poultry products.

Staphylococcus: It is most commonly found in undercooked meats, eggs, and dairy products.

E. coli: This bacteria is mostly present in undercooked beef, and unwashed fruits and vegetables.

Shigella: This bacteria usually grows in raw food and contaminated water such as swimming pools.

How does bacterial gastroenteritis spread?

Improper storage and unhygienic handling of food can allow the bacteria to grow. Bacterial gastroenteritis spreads very quickly by:

Eating contaminated food and beverages

Handling stool of infected person

Parasite: Parasites refer to the organism that requires a host to grow and multiply. These organisms usually live in the intestine of the patient. The parasites that can cause gastroenteritis include:

Entamoeba histolytica

Giardia lamblia

Cryptosporidium

How does parasitic gastroenteritis spread?

The parasites are usually present in the bowel of infected humans and animals and can spread through:

Swimming in a contaminated pool and accidentally swallowing water, or through contact with infected animals

Handling infected animals

Changing the nappy of an infected baby and not washing your hands afterwards

2. Chemicals

Gastroenteritis can also be caused by foods contaminated with chemicals such as lead, mercury, cadmium, and arsenic or by directly consuming a heavy metal or chemical.

3. Medications

Gastroenteritis can be a side effect of some medications such as :

Antacids containing magnesium as a major ingredient

Antibiotics

Chemotherapy drugs

Colchicine

Digoxin

Laxatives

Confirming the drug as a cause of gastroenteritis is difficult. To recognize this, doctors are usually asked to discontinue the therapy and observe the clinical changes.

Did you know?

Rains provide respite from the scorching heat and dripping sweat. However, this season puts you at a risk of various diseases that are spread through contaminated food and water such as gastroenteritis. So in monsoons, keep a tab on what you eat and drink. Here is a quick list of foods to avoid in monsoons.

Read Now!

Types of Gastroenteritis

Depending upon the duration of illness, gastroenteritis can be:

Acute: The disease is considered as acute if the duration is 14 days or less than that.

Persistent: If the symptoms persist for 14-30 days, gastroenteritis is considered as persistent.

Chronic: The duration of more than 30 days makes the disease chronic in nature.

Recurrent: Gastroenteritis is considered chronic in nature if it recurs after 7 days without diarrhea.

Risk Factors For Gastroenteritis

1. Age

Infants and young children are more prone to gastroenteritis because they have low immunity.

Episodes of high temperature are common in children during their early years due to their developing immunity. Read what to do if your child gets a fever.

Read Now!

2. Malnutrition

It is also seen that people having certain nutritional deficiencies such as Vitamin A or zinc deficiency are more prone to gastroenteritis.

3. Poor hygiene

People living in poor hygienic conditions with improper sanitation are also at higher risk of catching bacteria and parasites that are responsible for causing gastroenteritis.

4. Weak immune system

People with weak immunity are more prone to bacterial, viral infections that can cause gastroenteritis. This includes patients undergoing chemotherapy, infected with HIV infections etc.

Read about 10 ways to boost the immune system.

Read Now!

5. Poverty

Poor people living in crowded areas having less access to a balanced diet are at higher risk of gastroenteritis infection.

6. Season

It is also seen that viral infections such as rotavirus and norovirus are more prevalent in winter.

7. Traveling

People who frequently travel especially to the gastroenteritis endemic areas are at higher risk of catching the infection.

Read some important tips to keep in mind while traveling.

Read To Know!

Diagnosis of Gastroenteritis

Gastroenteritis is diagnosed by observing the symptoms of the patients. Laboratory examination is necessary to determine the cause that helps in initiating the right treatment plan.

Medical history and physical examination

In most cases, the doctor will ask about your medical history to rule out the possibility of other diseases that may present with the same set of symptoms. However, if the patient has consistent fever, bloody stool, and severe dehydration, tests are required.

A. Stool tests

The examination of the stool sample is done to diagnose bacteria and parasites in the stool. The test does not diagnose specific viral causes of gastroenteritis. Patients with bloody stool, high fever, severe abdominal pain, and chronic dehydration are usually recommended for stool tests due to their high specificity for bacterial gastroenteritis.

1. Examining the stool for blood

Blood in the stool can be a sign of infectious gastroenteritis. The stool sample is checked for the presence of hidden blood.

2. Stool culture

The culturing of the stool is done to identify the disease causing bacteria. For a stool culture, loose and fresh stool samples are taken. Sometimes, more than one stool samples are collected for the culture. The identification of the virus through stool culture can also be done, however it takes longer.

3. Testing the stool for parasites and ova

The presence of parasites and ova (the egg stage of the parasite) can also be detected in a stool sample. The identification is done by examining the stool smear under the microscope.

B. Blood tests

The complete blood count (CBC) is performed to check the infection. The infection can cause mild leukocytosis (high white blood cell count). In case of severe dehydration, electrolytes levels are also measured by blood tests.

Sometimes, serum inflammatory markers are also examined through blood tests.

C. Urine test

Dehydration can be due to acute kidney injury. Blood urea nitrogen and creatinine tests are also recommended to rule out the possibility of kidney disease.

D. Imaging tests

The imaging tests are rarely done for gastroenteritis. In some cases, imaging studies such as CT scans, ultrasound, and X-ray are done to diagnose the condition of the intestine. CT scans may show thickened walls of the colon or other inflammatory changes of the bowel. Imaging studies are mostly done to rule out other major causes of the symptoms.

Specialist To Visit

In most of the cases, gastroenteritis does not lead to severe complications. However, patients with severe dehydration should consult the doctor immediately as it may cause hypoglycemia and electrolyte imbalance.

Diarrhea should not be ignored in newborns and infants as it can lead to severe dehydration and can prove to be fatal. The immediate medical attention is also advised in case of:

Old age

Pregnancy

Low immunity

The following doctors can be consulted for diagnosis and treatment:

General physician

Infectious disease specialist

Gastroenterologist

Pediatrician (in case of children)

Consult India’s best doctors here with a single click.

Consult Now!

Prevention of Gastroenteritis

Vaccination

Immunization for rotavirus is recommended for young children and infants to prevent the risk of gastroenteritis, hospitalization, and death from rotavirus infection.

There are currently 2 vaccines available that are given two or three doses as per the type of vaccine. The first dose is given before the child is 15 weeks of age. Children should receive all doses of rotavirus vaccine before they turn 8 months of age.

Hand washing

Most viral gastroenteritis can be prevented by washing of hands with soap and water for at least 10 seconds after going to the toilet, before preparing or handling food, before eating food, after handling vomiting of an infected patient, and after changing diapers of the child. The hand washing facilities should be available for staff, residents, children, and visitors in child care centers and hospitals.

There is also evidence that alcohol-based hand sanitizers in addition to handwashing reduces the chances of gastroenteritis in offices and daycares. Reduction in school absenteeism is also observed.

Learn the right way of washing your hands!

Tap To Know!

Education

People, especially children, should be educated about the importance of hand washing and maintaining good hygiene as the most effective way of preventing gastroenteritis. There should be signs of hand washing in toilets and eating areas to constantly remind the same.

Hygiene measures

Infectious gastroenteritis spreads through contaminated surfaces. Practicing good hygiene is the best way to prevent infection. The following measures can be taken to ensure the cleanliness:

Keep the nails short and avoid wearing false fingernails, nail extenders and nail polish, and jewelry as they restrict adequate cleaning of hands.

Clean the surfaces or objects that have been exposed to vomits or feces.

Wear disposable gloves and masks while handling feces or vomit of infected individuals.

Use disposable paper towels to dry your hands. Clothes towels should be avoided as bacteria can survive on objects.

Keep kitchen tops, toys, toilet seats, nappy change tables clean to avoid the growth of bacteria and viruses.

Isolation

As gastroenteritis is highly contagious, isolation of the patient prevents the spread of the infection. Children who have experienced diarrhea should not return to childcare until 24 hours after symptoms have resolved. Anyone with diarrhea should not swim for at least 2 weeks after complete recovery.

Dietary modifications

As contaminated food and beverages are the most important source of infection, some dietary modification can help prevent the infection.

Cook the foods thoroughly

Avoid consuming uncooked and unpasteurized milk

Drink only bottled water while traveling.

Avoid food buffets, uncooked foods or peeled fruits and vegetables, and ice in drinks.

Studies also suggest that daily administration of probiotics especially in children reduces the occurrence of acute gastroenteritis.

The intake of zinc supplements also has a preventive effect on diarrhea associated with gastroenteritis.

Breastfeeding

Antibodies in human milk enhance the infant’s immunity and play a major role in the prevention of certain diseases. The complete breastfeeding for the initial four months of life lowers the risk of acute gastroenteritis and it also decreases the rate of hospitalization due to diarrhea.

Treatment of Gastroenteritis

The treatment of gastroenteritis is based upon the cause and symptoms. The most important goal of the therapy is to maintain hydration and electrolyte balance that is disturbed due to vomiting and persistent diarrhea.

In some cases such as severe dehydration, uncontrolled vomiting, severe electrolyte disturbances, significant renal failure, continuous abdominal pain, and pregnancy, hospital admission is required. The treatment protocols may include:

Fluid therapy

Most cases of mild dehydration can easily be managed at home through fluid therapy.

It is advised to drink plenty of fluids to compensate for water loss and prevent dehydration.

Oral rehydration solutions are preferred over other clear fluids for managing diarrhea.

Fluids high in sugar (such as cola, apple juice, and sports drink) should be avoided as they may aggravate dehydration and diarrhea.

Patients having severe dehydration and persistent vomiting may require hospital admission for continuous monitoring of electrolyte level.

Enteral (oral or nasogastric) and intravenous fluids (Saline solution and lactate Ringer’s solutions) are given to patients facing difficulty in taking fluids due to nausea, vomiting, and to correct electrolyte levels.

Zinc supplementation

Zinc is a metal that is found in a variety of foods such as meat, fish, almonds, and cereals. Diarrhea, the most common symptom of gastroenteritis, is associated with severe zinc deficiency.

Zinc supplementation is a very safe and effective way for reducing complications due to gastroenteritis in children. WHO recommends the intake of 10 to 20 mg of zinc for 10 to 14 days for the management of diarrhea in children. It is given in the form of zinc sulfate, zinc acetate, or zinc gluconate.

Probiotics

Probiotics are effective in the treatment of diarrhea, especially for diseases with an infectious origin. The use of probiotics is associated with the reduction in the duration of the diarrhea, if started immediately after the onset of symptoms.

Antibiotics

They are mostly used to treat gastroenteritis caused by bacteria. Some of the commonly used antibiotics in gastroenteritis include metronidazole, ceftriaxone, and azithromycin.

Antiemetics

Antiemetic medications are the drugs that are used to control nausea and vomiting. The commonly used antiemetic medications are ondansetron and metoclopramide.

Antidiarrheal medications

Antidiarrheal medications are used only in those patients who are not able to maintain a well-hydrated status. Medications such as diphenoxylate, atropine are used.

Home-care For Gastroenteritis

Keep a watch on fluid intake

It is advised to have plenty of fluids like fresh fruit juices, coconut water, clear soups etc. In case of severe vomiting, take small sips of fluids at regular intervals. The mothers of the infected infants should make sure that their babies are getting enough breast milk.

Have ice chips

If you are facing difficulty in digesting fluids, try to suck ice chips. This also helps in rehydration. The ice chips should not be given to small children.

Add these foods to your diet

B.R.A.T stands for bananas, rice, applesauce, and toast. These food items should be included in the diet as it helps in making the stool smooth and helps in compensating the nutrient loss from vomiting and diarrhea.

Foods like chicken or other lean meats, whole grains and potatoes help in reducing the symptoms of gastroenteritis

It is also advised to consume smaller easy to digest meals at regular intervals.

Avoid certain foods

Certain food items should be avoided as they can make the stomach upset and can cause indigestion. The impaired digestion can aggravate diarrhea and vomiting. These include:

Greasy and spicy food containing chilly, black pepper, and garlic

Drinks with caffeine, such as coffee and tea, and some soft drinks.

Fatty junk foods such as fried foods, pizza, and fast foods.

Foods and drinks containing large amounts of simple sugars, such as sweetened beverages and packaged fruit juices.

Milk and milk products, containing the sugar lactose which can cause some people to develop lactose intolerance

Take proper rest

People with gastroenteritis should take proper rest even after the completion of therapy. This will lead to complete recovery and healing of the digestive system.

Try heating pad

Some patients of gastroenteritis suffer from severe abdominal pain. Such patients can use a heating pad to relieve cramps.

Say no to alcohol

Alcohol can cause inflammation in the stomach. This can increase the secretion of gastric acid. So, alcohol should be avoided as it can increase the feeling of vomiting (nausea).

Myths and Facts

A lot of us try to defend our drinking habits by citing imaginary benefits of alcohol. With a lot of research that backs the ill-effects of alcohol, there are some myths about alcohol that are read true by a lot of us. Here are a few common myths about the ‘benefits’ of alcohol which are not true.

Bust Now!

Complications Of Gastroenteritis

In most of the cases, gastroenteritis is resolved through fluid therapy and medications. However, persistent diarrhea and vomiting can lead to:

1. Dehydration

2. Metabolic acidosis

3. Electrolyte imbalance

Hypernatraemia (high levels of sodium)

Hyponatraemia (low levels of sodium)

Hypokalaemia (high levels of potassium)

Development of intolerance to food such as lactose, glucose, cow’s milk, and soy protein

4. Increase susceptibility to infection

5. Dehydration can lead to more serious problems, such as:

Heat stroke: Lack of fluids could lead to heatstroke. This is more common in physically active patients.

Kidney disorders: The long episode of dehydration can develop or trigger kidney stones, urinary tract infections (UTIs), or even kidney failure.

Seizures: The electrolyte imbalance can also develop seizures in the long run.

Hypovolemic shock: This can develop due to low blood volume and a drop in blood pressure.

Alternative Therapies For Gastroenteritis

Home remedies

Tea: Caffeine-free teas are proven to be beneficial in nausea and vomiting. Peppermint and lemon can be added to improve the taste.

Ginger (Adrak): It possesses anti-inflammatory, anti-viral, and anti-bacterial properties. It also eases nausea. It can be taken in raw form or can be boiled in water or tea.

Apple cider vinegar: It can soothe an irritated stomach and thereby reduce nausea, vomiting, and abdominal cramps.

Add 1 teaspoon of apple cider vinegar to a glass of warm water and drink 30 minutes before eating a meal.

Yogurt: It contains a lot of good bacteria that help in maintaining the overall good health of the gut. It also helps in reducing watery diarrhea. It should be added to every meal of the patient suffering from gastroenteritis.

Cinnamon (Dalchini): It has antibacterial and antiviral properties which can be used for combating gastroenteritis. It also helps in reducing stomach pain and bloating.

Turmeric (Haldi): Curcumin, present in turmeric, possesses anti-inflammatory properties. It can be consumed by adding in a glass of warm water or milk.

Basil (Tulsi): It possesses antispasmodic properties and helps in reducing spasms in gastroenteritis. It also has gastroprotective properties which aid in relieving symptoms of gastroenteritis.

Peppermint: It soothes the stomach and helps in treating bloating and gas. The most effective way to use it is to consume it in the form of tea.

Triphala: It is known to improve digestive health and also helps in the absorption of nutrients.

Coriander (dhania): It possesses healing properties and it is known to alleviate the symptoms of upset stomach and diarrhea.

Asafoetida (hing): It is known for years to strengthen the digestive system. It possesses antiviral and antibacterial properties. It can be added in meals or can be consumed with lukewarm water.

Licorice (mulethi): It also promotes the healing of an inflamed stomach and treats indigestion.

Rice water: It is used especially in infants to reduce diarrhea.

Chamomile tea: It is used as a digestive relaxant and can help in the treatment of many gastrointestinal disturbances, like diarrhea and vomiting, which is most commonly observed in gastroenteritis.

Acupressure

Patients suffering from excessive nausea and vomiting can also try acupuncture finger pressure techniques as it is shown to stimulate trigger points that may help in reducing nausea and vomiting.

Frequently Asked Questions

For how long does gastroenteritis is contagious?

How long does gastroenteritis last in a child?

Are gastroenteritis and flu the same illness?

How common is gastroenteritis in children?

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Gestational diabetes

Also known as Gestational diabetes mellitus, GDM, Pregnancy-induced diabetes, and Type III diabetes

Overview

Gestational diabetes refers to the high blood glucose that is diagnosed first time during pregnancy. It mostly develops during the second and third trimester of pregnancy. It can also include undiagnosed type 2 diabetes identified early in pregnancy.

The major cause of gestational diabetes are the release of placental hormones that contribute to the increase in the blood glucose.

The factors that can increase the risk of gestational diabetes include increased body weight, decreased physical activity, family history of diabetes, polycystic ovarian syndrome (PCOS), and prior history of gestational diabetes.

Managing gestational diabetes is very important to avoid both fetal and maternal complications. Dietary and lifestyle modifications are the cornerstone treatment approaches for this condition. In case of failure of these conventional approaches, insulin might be required.

Key Facts

Usually seen in

Women aged between 35 to 39 years of age

Gender affected

Women

Body part(s) involved

Pancreas

Necessary health tests/imaging

Glucose challenge test

Oral glucose tolerance test

Treatment

Dietary modifications

Exercise

Insulin

Specialists to consult

Physician

Diabetologist

Endocrinologist

Nutritionist

Neonatologist

Obstetrician

Symptoms Of Gestational diabetes

In most of the cases, gestational diabetes does not have any symptoms. So, screening is very important to diagnose the condition.

Some women might have mild symptoms such as:

Increased urination

Increased thirst

Fatigue

Nausea

Vomiting

Weight loss in spite of eating more

If the blood sugar levels are very high, women may experience:

Blurred vision

Delayed wound healing

Genital itching

Diabetes can cause dry mouth

Dry mouth is a common symptom of high blood sugar. It can worsen the side effects of diabetes and increase the sugar level of the body. Here are several other causes of dry mouth.

Tap To Read!

Causes Of Gestational Diabetes

Diabetes is characterized by high blood glucose levels in the blood. Normally, the level of glucose is maintained by a hormone called insulin. Insulin helps in the utilization of the glucose. During pregnancy, the sensitivity of insulin is reduced by about 56% via:

Placental hormones: Such as human placental lactogen (hPL), human placental growth hormone (hPGH), growth hormone (GH), adrenocorticotropic hormone (ACTH), prolactin (PRL), estrogens, and gestagens.

Inflammatory chemicals: Such as tumor necrosis factor alpha (TNF-α), IL-6, resistin, and C-reactive protein (CRP).

Glucose: Produced by the body for the fetus. Studies suggest that endogenous glucose production is increased by 30% in the third trimester of pregnancy.

In most cases, adaptation occurs in the body by increasing the secretion of insulin. But, gestational diabetes happens if insulin secretion is not able to withstand the demand.

Learn more about gestational diabetes from our experts.

Watch this video

Types Of Gestational Diabetes

Gestational diabetes is classified according to the treatment approach:

1. A1GDM

GDM that is managed without taking any medication is termed A1GDM. Here, the treatment approach includes dietary modifications.

2. A2GDM

The term A2GDM refers to blood glucose that needs to be managed with the help of medications.

Risk Factors For Gestational Diabetes

Gestational diabetes increases the risk of developing type 2 diabetes both in the mother and baby. It can also be turned out as a cause of obesity in the later life of the child. It is always advisable to get tested for diabetes in the second and third trimester of pregnancy.

The chances of developing diabetes in pregnancy increase with the following risk factors:

1. Age

The prevalence of diabetes is more common in women over 30 years of age. Women at the age of 35-39 are at the highest risk of developing gestational diabetes.

There are several changes in the woman’s body as she turns 30. Explore what the 30s have in store for every woman!

Read this now

2. Being overweight and obesity

Pregnant women having BMI greater than 25 have more chances of developing complications such as diabetes during pregnancy.

Being overweight or obese causes hormonal imbalances in women which in turn negatively affects their ovulation and menstrual cycles. Know more about how obesity can impact fertility, pregnancy, and childbirth.

Read To Know!

3. Decreased physical activity

There is an increased risk of gestational diabetes in women living a sedentary lifestyle.

4. Western diet

Studies suggest that the “Western pattern” diet that includes food such as red meat, processed meat, refined grain products, sweets, french fries, and pizzas is associated with an increased risk of GDM.

5. Lack of vitamins and minerals

The deficiencies of certain vitamins and minerals also predispose women to develop gestational diabetes. It is seen that women whose intake of Vitamin C is less than 70 mg/day have 1.8 times increased risk of GDM.

Note: Lack of Vitamin D is also associated with an increased risk of gestational diabetes.

Get your Vitamin D levels checked from the comfort of your home to know whether or not you have the deficiency.

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6. Dyslipidemia

It refers to high levels of bad cholesterol and low levels of good cholesterol in the blood. The triglycerides greater than 250 mg/dl and HDL levels less than 35 mg/dl indicate the risk of gestational diabetes.

7. Polycystic ovarian syndrome (PCOS)

Pregnant women having PCOS have more chances of developing gestational diabetes. It is seen that more than twice the percentage of pregnancies with diabetes is observed in women with PCOS.

8. High glycosylated hemoglobin (Hba1c)

HBa1c is a blood test marker that reflects the glucose control of the last three months. Pregnant women with Hba1c greater than 5.7 % and abnormal oral glucose tolerance test (OGTT) have an increased risk of diabetes.

Keep the guesswork away and get yourself tested with Tata 1mg.

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9. Previous history of GDM

Studies suggest that women who have a prior history of gestational diabetes are six times more prone to it in the next pregnancy.

10. Family history

The history of diabetes in the first-line relatives of the women also makes the woman more prone to gestational diabetes.

11. High-risk race or ethnicity

Women that belong to particular races are more prone to gestational diabetes. These include African American, Hispanic or Latino, American Indian, Alaska Native, or Native Hawaiian.

12. History of delivery of infant >4000 gms

Women who have previously birthed an infant weighing 4000 grams or more have more chances of developing gestational diabetes in the next pregnancy.

13. Season

Recent studies suggest that the chance of getting gestational diabetes is more in summer.

14. In vitro fertilization (IVF)

There is a 50% increase in diabetes in pregnancy that results from in vitro fertilization (IVF), where the joining of a woman's egg and a man's sperm happens in a laboratory setting.

15. Other medical conditions

The presence of cardiovascular disease and hypertension in women is also a risk factor for diabetes during pregnancy.

Diagnosis Of Gestational Diabetes

The diagnosis of gestational diabetes in all pregnant women is very essential since it is mostly asymptomatic. It is diagnosed with the help of the following:

1. Screening

There are two types of screening:

Universal screening: It involves screening of diabetes in all women between 24 and 28 weeks of pregnancy. The screening in the third and fourth trimesters is essential because insulin resistance is well-established during this period.

Selective screening: Selective screening is done only in the presence of the risk factors mentioned above. It is done in the first trimester. The high blood sugar level in this stage may indicate pre-existing type 1 or type 2 diabetes rather than gestational diabetes.

2. Blood tests

There are two tests that are recommended to confirm gestational diabetes. These include:

Glucose challenge test: It is also known as a glucose screening test. It is the first test that is performed to diagnose gestational diabetes. In this, the blood glucose is analyzed after 1 hour of consuming glucose-rich liquid.

Oral glucose tolerance test: In this, 75g of glucose is given in 100-200 ml of water after 8-12 hours of fasting. The blood glucose is measured at regular intervals – fasting, 1 hr, 2 hr, and 3 hr. High blood glucose at any two-time point confirms gestational diabetes.

Getting your tests done has never been easier. Book your tests with TATA 1mg to get accurate results.

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Celebs affected

Celina Jaitly

Celina Jailty is an Indian actress. She was diagnosed with gestational diabetes and kept a strict watch on her diet to manage the condition.

Debina Bonnerjee

She is an Indian television actress. Recently, she gained popularity through her videos sharing her pregnancy and motherhood journey. She was diagnosed with gestational diabetes and managed her condition through dietary modifications.

Specialist To Visit

Gestational diabetes is managed by a team of doctors due to its multi-treatment approach. The speciality of doctors that can help include:

General physician

Diabetologist: Help in the management of diabetes.

Endocrinologist: Specialize in managing endocrine disorders.

The panel should also include:

Nutritionist: Expert on the relationship between food and health

Neonatologist: Diagnose and treat health conditions of newborn

Obstetrician: Provide medical care during pregnancy, childbirth and postnatal care

If you suffer from any complications due to diabetes, then getting in touch with the respective specialist can help you to manage and prevent these problems. Some of the common specialists who can help are:

Nephrologists: Specialize in diagnosing and treating kidney conditions.

Neurologists: Diagnose and treat disorders that affect the brain, spinal cord, and nerves.

Podiatrists: Help with problems that affect your feet or lower legs.

Dentists: Specialize in treating problems related to teeth.

Ophthalmologists: Experts in treating problems related to the eyes.

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Consult Now

Prevention Of Gestational Diabetes

Gestational diabetes is not completely preventable but some measures can lower the risk of the same. These include:

1. Go for pre-pregnancy counselling

It consists of a complete assessment of diabetes and associated complications to check the possibility of any medical condition during pregnancy. This will help to start the treatment plan even before pregnancy.

2. Indulge in some physical activity

It is seen that physically active women have 38% lesser chances of developing diabetes during pregnancy. Exercising 3 times a week has been shown to reduce the risk of gestational diabetes by 24% even in overweight individuals.

Here are 9 exercise tips during pregnancy.

Click To Know!

3. Tweak diet

The risk of gestational diabetes can be reduced by dietary modifications, especially in overweight and obese women. However, it is important to make sure that the woman is getting nutrient-dense foods during pregnancy.

Are you a new mom-to-be?

Listen to our experts talk about what to eat and what not to eat during the first trimester.

Watch now

3. Keep a check on your weight

Women who gain a lot of weight during pregnancy are more likely to develop gestational diabetes. Most of us think that putting on weight is very common during pregnancy. But there are some recommendations regarding weight gain:

For women who were underweight before pregnancy (BMI of less than 18.5): 12.5 to 18 kilograms of weight gain during pregnancy.

For women with an average weight before pregnancy (BMI of between 18.5 and 24.9):11.5 to 16 kilograms of weight gain during pregnancy.

For women who were overweight before pregnancy (BMI of between 25 and 29.9): 7 to 11.5 kilograms of weight gain during pregnancy.

For women who were obese before pregnancy (BMI greater than 30): 5 to 9 kilograms of weight gain during pregnancy.

So, it is advisable to keep weight within this limit to reduce the risk of gestational diabetes.

Keep a check on your weight with our widest range of weighing scales.

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Treatment Of Gestational Diabetes

Comprehensive care is very essential for the management of gestational diabetes. Diet and exercise are the pillars to manage it and medications are used in case of no response to these. The treatment includes:

1. Nutritional therapy

The management of gestational diabetes starts with modifications in the diet. The diet plan should be customized for each individual. It is highly advisable to consult a nutritionist. The meal should contain an appropriate amount of carbohydrate, fats, and proteins considering the health of the fetus. The eating plan created by the doctor/dietitian should always be followed which usually include:

Bedtime eating to prevent the development of ketosis overnight

5 Frequent meals– three small to moderate sized meals and 2-3 snacks to maintain optimum blood glucose level

Cultural preferences of the women to promote adherence

Proteins to avoid hunger

Foods to eat

Healthy fats from nuts, olive oil, fish oils, flax seeds, or avocados

Fruits and vegetables—ideally fresh, the more colorful the better; whole fruit rather than juices

High-fiber cereals and breads made from whole grains

High-quality proteins such as eggs, beans, low-fat dairy, and unsweetened yogurt

Foods to avoid

Trans fats or deep-fried foods

Packaged and fast foods, especially those high in sugar, baked goods, sweets, chips, desserts

White bread, sugary cereals, refined pastas

Processed meat and red meat

Low-fat products that have replaced fat with added sugar, such as fat-free yogurt

2. Exercise

It plays a very important role in maintaining optimum blood glucose. The activities that can be included in the regimen are:

Walking

Swimming

Selected pilates

Low-intensity fitness exercises.

Studies have shown that 20–30 min of activity 3–4 times a week has significantly reduced fasting and postprandial glucose. However, the exercise regimen should always be discussed with the doctor considering the safety of the baby.

Here is a detailed video on the types of activities that can be safely performed during pregnancy.

3. Insulin

The injection of insulin is recommended when the individual is unable to achieve optimal glucose level even with diet and exercise. It is the first-line drug for gestational diabetes due to its safety and effectiveness. The dosage is based on the weight of the mother.

The injection of insulin is self-administered by the patient. The insulin is usually taken in two halves – one half is taken at bedtime and the other half is divided between three meals. The injection is administered before meals to prevent the abrupt rise in glucose.

4. Metformin - A new and safe prospect in managing gestational diabetes??

For several decades, insulin has been the most reliable treatment and the gold standard in the management of gestational diabetes.

Metformin is an effective oral hypoglycemic drug and an established first-line treatment in type 2 diabetes currently.

As it crosses the placenta, a safety issue remains an obstacle and, therefore, metformin is currently not recommended in the treatment of gestational diabetes.

Nevertheless, recent research has supported metformin for its equivalent safety and efficacy compared to insulin along with the following reasons:

Ease of its use

Acceptability by the patients

Significantly less maternal weight gain

Less maternal hypoglycemia

Reduction in the complications associated with GDM such as preterm delivery, early pregnancy loss, and neonatal hypoglycemia.

Order your medicines from India’s largest online pharmacy for guaranteed delivery.

Add prescription

5. Management of labor

Gestational diabetes can impact the time and type of delivery. It is very important to manage blood glucose during labor to avoid maternal and fetal complications.

Routine glucose monitoring at least 4 times a day is essential to track glucose fluctuations. It includes daily monitoring of fasting glucose and 1 or 2 hours after each meal. The level of glucose after meals helps to assess maternal and fetal complications.

The frequency of monitoring is less in women whose glucose is diet controlled.

Buy glucose monitors to keep track of your blood glucose levels in the comfort of your home.

Explore here

Home-care For Gestational Diabetes

Along with exercise and diet, there are certain kitchen ingredients that have shown good results in the management of gestational diabetes:

Vitamin C rich foods: Studies have shown that consuming approximately 600 mg of Vitamin C helps in alleviating blood glucose. Women with gestational diabetes are advised to include Vitamin C-rich foods in their diet. Common examples of such food items that can be safely used during pregnancy are tomatoes, oranges, blueberries, strawberries, kiwis, and grapes.

Indian gooseberry (Amla) is also a good source of Vitamin C that helps to control blood sugar levels. It makes the body more responsive to insulin.

Is your diet not able to meet your bodily Vitamin C demand? Fill the gaps in your diet with Vitamin C supplements

Shop them here!

Fenugreek (Methi): It is known to keep diabetes in check while improving glucose tolerance, lowering blood sugar levels, and stimulating the secretion of insulin. It is always available in the Indian kitchen and can be easily included in the daily diet.

Drumstick (Moringa): It is rich in antioxidants and Vitamin C along with its anti-diabetic property. It can be consumed by sipping the water boiled with its pieces. It can also be added to the daal or curry.

Cinnamon (Dalchini): It is known to control blood glucose levels due to the presence of a bioactive compound that regulates insulin activity. It can be taken with warm water. However, it should be taken in moderation as it can stimulate involuntary contractions during pregnancy. It is always better to consult your healthcare provider before starting it.

Complications Of Gestational Diabetes

The blood glucose usually returns to normal after the delivery of the baby. But, some women can develop type 2 diabetes later in their lives. The poor glucose control during pregnancy can lead to:

1. Spontaneous abortion

The women who have persistently high blood glucose during pregnancy are at high risk of early miscarriage.

2. Unexplained stillbirths

Miscarriages that happen after the 20th week of pregnancy are termed as stillbirths. Uncontrolled blood glucose over a long period of time can cause stillbirths. The excessive production of lactic acid as a result of diabetes can also cause fetal death.

3. Preterm delivery

Gestational diabetes can cause preterm labor before 37 weeks of pregnancy. Babies born this early might suffer from long-term intellectual and developmental problems.

4. Cesarean delivery

Diabetes in pregnancy increases the chances of cesarean delivery due to a large baby.

The other complications can be categorized as:

1. Maternal complications

Preeclampsia

Type 2 diabetes

Diabetic ketoacidosis (Formation of ketones bodies)

Severe hypoglycemia (Low blood sugar levels)

Diabetic nephropathy (Damage to the blood vessels of the kidneys)

Diabetic neuropathy (Nerve damage)

Diabetic retinopathy (Damage to the blood vessels of the eye).

2. Fetal complications

Macrosomia (Large fetus weighing about 4000 gms to 4500 gms).

Hypoglycemia (Severe drop in blood glucose)

Polycythemia (High number of red blood cells)

Shoulder dystocia (failure to deliver the fetal shoulders during vaginal delivery)

Hyperbilirubinemia (High levels of bilirubin in the blood)

Respiratory distress (Difficulty in breathing)

Hypocalcemia (Low level of calcium)

Type 2 diabetes later in life

Alternative Therapies For Gestational diabetes

Some alternative therapies have shown promise in the management of gestational diabetes. However, it is crucial to consult the doctor before initiating any of them.

1. Chinese herbal medicine

It includes several medicines that are prepared from plant products such as leaves, stems, flowers, roots, and seeds. Studies show that Chinese herbal medicines can be used in the management of gestational diabetes.

2. Yoga

Yoga plays a very important role in controlling blood sugar levels. It also keeps stress under control and helps in balancing the other vital parameters along with aiding in building strength, endurance capacity, and flexibility of the mother.

Living With Gestational Diabetes

1. Postpartum Care for Diabetes

The management of diabetes after delivery depends upon its severity during pregnancy. GDM which is diagnosed in the third trimester usually resolves on its own after delivery. There is no need for immediate testing postpartum. However, a glucose tolerance test is advisable at 6 weeks postpartum to check recurrence.

Women with a history of gestational diabetes are at higher risk of developing type 2 diabetes within 20 years of diagnosis. The yearly evaluation of diabetes is recommended in such women. The following tips can reduce the chances of occurrence of diabetes in the future:

Maintain a healthy weight

Stay active

Make healthy food choices

Breastfeed your baby. It gives the right nutrition to the baby and also helps the mother to control her weight.

2. Neonatal care

A baby born to a diabetic mother has a higher chance of developing diabetes. Such neonates require a special care unit to monitor blood glucose at least for the first 48 hours. Early breastfeeding reduces the chances of developing diabetes both in the baby and the mother.

Frequently Asked Questions

Will diabetes developed during pregnancy stay a lifetime?

Which week is highly critical for gestational diabetes?

Is gestational diabetes genetic?

Are there any ways to reduce the risk of gestational diabetes?

What should be done after delivery if the woman had gestational diabetes?

Will the child born to a mother with gestational diabetes be diabetic?

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Glaucoma

Also known as silent thief of sight

Overview

Glaucomas are a group of eye disorders characterized by progressive optic nerve damage. It is a condition in which there is a relative increase in intraocular pressure (pressure inside the eyes) which can lead to irreversible loss of vision.

Glaucoma is the second most common cause of loss of vision worldwide after cataract with more than 70 million people affected worldwide.

Glaucoma can occur at any age but is more common among people above 60 years of age. Several risk factors can increase the risk of glaucoma which include old age, family history of glaucoma, and history of eye injury. Other causes are poor blood flow to the optic nerve and conditions such as high blood pressure and diabetes.

Glaucoma is a silent thief of vision. In the early stages of glaucoma, there are no symptoms. In reality, most of those who have glaucoma are completely unaware of their condition. Hence regular eye checkups by an ophthalmologist play an important role in managing the disease at an early stage. Treatment protocols include medications and surgical procedures.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women

Body part(s) involved

Eyes

Prevalence

Worldwide: 70 Million (2014)

India: 12 Million (2016)

Mimicking Conditions

Compressive or infiltrative lesions of the optic nerve

Previous ischemic optic neuropathy (both arteritic and non-arteritic)

Congenital and hereditary optic neuropathies

Post-traumatic optic neuropathy and inflammatory

Demyelinating optic neuritis

Necessary health tests/imaging

Tonometry

Pachymetry

Ophthalmoscopy

Gonioscopy

Treatment

Prostaglandins: Latanoprost, Travoprost, Tafluprost & Bimatoprost

Beta-blockers:Timolol & Betaxolol

Alpha adrenergic agonists: Apraclonidine and Brimonidine

Carbonic anhydrase inhibitors: Dorzolamide, Brinzolamide & Acetazolamide

Inhibitor of the Rho kinase: Netarsudil

Miotic/cholinergic agents: Pilocarpine

Surgery: Trabeculoplasty, Iridotomy & Cataract surgery

See All

Causes Of Glaucoma

The clear fluid inside the eye is called the aqueous humor. This fluid nourishes the eye and gives it its shape. The eye constantly makes aqueous humour. As the new aqueous enters the eye the same amount should drain out of the eye through an area called the drainage angle. This procedure maintains a constant intraocular pressure (IOP) in the eye. Any blockade or problem in drainage results in fluid build up in the eye. As the IOP increases, the optic nerve may get damaged.

More than a million microscopic nerve fibres make up the optic nerve. It's similar to an electric cable, which is made up of numerous little wires. When these nerve fibres begin to perish, one may start getting blind spots in the vision. These blind spots are mostly noticed when the majority of the optic nerve fibres have been destroyed. In case all the fibres are lost, it leads to blindness.

Types Of Glaucoma

1. Open angle glaucoma or wide angle glaucoma

Open-angle glaucoma is the most prevalent type of glaucoma. It occurs when the drainage canals get partially occluded. As a result, the pressure in the eye begins to rise, thereby harming the optic nerve. This process happens gradually and may go unnoticed for years as most people don’t show any symptoms initially. Open-angle glaucoma usually tends to run in families. The risk of acquiring the disease is higher if your parent or grandparent suffered from it.

2. Angle-closure glaucoma or narrow angle glaucoma or closed-angle glaucoma

Angle-closure glaucoma is a relatively less common condition in which the iris (the colored part of the eye that controls light exposure) bulges forward, narrowing or blocking the drainage angle created by the cornea (clear outer part of the eye) and iris. As a result, the drainage of aqueous humor is affected, thereby causing an acute rise in eye pressure. People with small drainage angles are more likely to develop angle-closure glaucoma.

Angle-closure glaucoma can develop quickly (acute angle-closure glaucoma) or gradually (progressive angle-closure glaucoma or chronic angle-closure glaucoma). Glaucoma with acute angle closure is a medical emergency.

3. Normal tension glaucoma

Even though your eye pressure is within the usual range, your optic nerve is injured with normal-tension glaucoma. No one knows why this is the case. It's possible that you have a sensitive optic nerve or that your optic nerve isn't getting enough blood. Atherosclerosis, or the accumulation of fatty deposits (plaque) in the arteries, or other disorders that affect circulation could be blamed for the reduced blood flow.

4. Congenital glaucoma or childhood, infantile or pediatric glaucoma

Congenital Glaucoma is a condition that can affect newborns and children who have a defect in the angle of their eye. It might be present from birth or evolve over time. Drainage blockages or an underlying medical issue could cause optic nerve injury. It is thought to be genetic in origin which usually runs in families or due to any abnormal development during pregnancy.

5. Pigmentary glaucoma

Pigmentary Glaucoma is also a form of secondary open-angle glaucoma. In pigmentary glaucoma, pigment granules that give colour to the iris disperse and build up in the drainage ducts of the eye, delaying or stopping the fluid to exit the eye. This leads to an increase in IOP and eventual damage to the optic nerve.

6. Secondary glaucoma

Secondary glaucoma is a condition in which other diseases cause increase in eye pressure, resulting in optic nerve damage and eventually loss of vision. Eye trauma, eye diseases like uveitis which cause inflammation in the eye, eye tumors, advanced cases of cataract or diabetes or use of drugs like corticosteroids etc. can give rise to this condition.

7. Pseudoexfoliative glaucoma

In this form of secondary open-angle glaucoma, a flaky material exfoliates from the outer layer of the eye lens. This material accumulates in the angle between the cornea and iris and occludes the drainage system of the eye, increasing the eye pressure and damaging the optic nerve. It is usually seen in people of Scandinavian descent.

8. Iridocorneal endothelial syndrome

In this rare form of glaucoma, cells on the back of the cornea spread over the eye's drainage tissue and across the surface of the iris. These cells also form adhesions that stick the iris to the cornea, further congesting the drainage channels.

Risk Factors For Galucoma

Because chronic types of glaucoma can cause vision loss before any symptoms or signs appear, be aware of the following risk factors:

Very high internal eye pressure (intraocular pressure)

Being over 60 years of age

Having a family history of glaucoma

People of African American, Russian, Irish, Japanese, Hispanic, Inuit, or Scandinavian origin

Decrease in corneal thickness and rigidity

Having high degree of nearsightedness (myopia) or farsightedness (hypermetropia) or conditions that affect vision

Eye injury or in certain types of eye surgery

Medical conditions like diabetes, heart disease, high blood pressure, and sickle cell anemia

Long-term use of corticosteroid medicines, particularly eye drops.

Symptoms Of Glaucoma

Glaucoma usually has no early warning signs or symptoms. It progresses slowly and can go years without causing apparent vision loss.

Because the early loss of vision is of side or peripheral vision, and the visual acuity or sharpness of vision is preserved until late in the disease, most persons with open-angle glaucoma feel fine and do not notice a change in their vision at first. The condition is usually fairly advanced by the time a patient notices vision loss. Glaucoma causes vision loss that is irreversible, even with surgery.

However, there are certain signs and symptoms of glaucoma that should not be ignored. These include:

Halos around light: When the pressure rises quickly due to closed angle glaucoma, the cornea becomes waterlogged which can affect the vision leading to halos around lights.

Pain in the eyes: It is mostly seen when there is a sudden buildup of pressure. It does not act as one of the characteristic features/symptoms of glaucoma when the rise in pressure is gradual and not sudden. In some cases, vomiting or nausea accompanying severe eye pain is also seen.

Tunnel vision: It is one of the common symptoms of glaucoma. In this, the pressure on the nerves can damage the retinal nerve fibres which can lead to a characteristic pattern of vision loss. This leads to tunnel vision in which the peripheral vision is blocked. For example, when seeing a photo, you may not be able to see the peripheral picture but can see the centre portion of the picture with clarity. This can be seen when undergoing testing of the eyes.

Changes in the optic disc: The rise in intraocular pressure can lead to cupped, pale optic disc which acts as the key symptoms of glaucoma.

Enlargement of the eye: In kids below three years of age, enlargement of the eye due to raised intraocular pressure can occur. It is one of the characteristic symptoms of glaucoma. In adults, the eye cannot enlarge greatly because growth has ceased.

Did you know?

Glaucoma can happen in 1 eye or both eyes. This means you might have normal eye pressure in one eye but the pressure on the other eye might be on the higher end. Hence, it is wise to consult your doctor and get tested.

Consult Now!

Diagnosis Of Glaucoma

A comprehensive eye exam is the only approach to diagnose glaucoma with certainty. Only checking ocular pressure during a glaucoma screening is insufficient to detect glaucoma.

Your ophthalmologist will do the following during a glaucoma exam:

Measure the pressure in your eyes

Examine the drainage angle of your eye

Check for damage to your optic nerve.

Check your peripheral vision (side vision).

Take a picture of your optic nerve or use a computer to calculate its size.

Take a measurement of your cornea's thickness

Slit lamp is used by an ophthalmologist to check a woman's eyes.

Before making a glaucoma diagnosis, five variables should be checked to ensure safety and accuracy. These include:

The inner eye pressure

The shape and color of the optic nerve

The complete field of vision

The angle in the eye where the iris meets the cornea

Thickness of the cornea

Tests for glaucoma

Two common eye tests for glaucoma patients are tonometry and ophthalmoscopy, however other tests such as perimetry, gonioscopy and pachymetry also help with the diagnosis.

1. Tonometry

Tonometry is a test that measures the pressure inside your eye. Eye drops are used to numb the eye during tonometry. A small device or a warm puff of air is used to apply a small amount of pressure to the eye to measure the intraocular pressure.

Pressure is measured in millimetres of mercury (mm Hg). When the pressure in the eye exceeds 20 mm Hg, glaucoma is diagnosed. Some people, however, might develop glaucoma at pressures ranging from 12 to 20 mm Hg as each person's eye pressure is different.

2. Ophthalmoscopy

This diagnostic procedure allows your doctor to check the damage in the optic nerve. After dilatation of the pupil with eye drops, the doctor will use a magnifying tool called an ophthalmoscope and a light source to see inside the eye.This allows the doctor to check the structure and colour of the optic nerve through your eye.

If your intraocular pressure (IOP) is abnormally high or the optic nerve appears abnormal, your doctor may order one or both of the following glaucoma exams: perimetry and gonioscopy.

3. Perimetry

Perimetry is a test that measures the visual field function ie. the total area where objects can be seen in the peripheral vision while the eye is focused on a central point.

You will be asked to look straight ahead while a light spot is repeatedly presented in different areas of your peripheral vision during this test. This aids in the creation of a "map" of your vision.

3. Gonioscopy

Gonioscopy is a painless examination to determine whether the drainage angle, which is the area where fluid drains out of the eye, is open or closed.

4. Pachymetry

Pachymetry is a painless test that determines the thickness of the eye’s cornea using a probe called a pachymeter.

Did you know?

Not every person with high eye pressure suffers from glaucoma. On the contrary, even people with normal eye pressure can get glaucoma. Hence, the best way to prevent glaucoma is to consult the right doctor if you experience any symptoms or go for regular eye check-ups. Here’s how to pick.

Read To Know!

Prevention Of Glaucoma

These self-care tips can help you diagnose glaucoma in its early stages, which is critical for preventing or reducing vision loss.

Get dilated eye exams on a regular basis. Glaucoma can be detected early on in the course of a full eye checkup, before it causes major damage.

If you're under 40 years old, the American Academy of Ophthalmology recommends a comprehensive eye exam every five to ten years; every two to four years if you're 40 to 54 years old; every one to three years if you're 55 to 64 years old; and every one to two years if you're over 65 years old. If you're at risk for glaucoma, you'll need to get your eyes checked more frequently. Inquire with your doctor about the best screening schedule for you.

You should be aware of your family's eye health history. Glaucoma is a disease that runs in families. If you're at a higher risk, you may need to be screened more frequently.

Exercise in a safe manner. Regular, moderate exercise can lower ocular pressure and may help to prevent glaucoma. Consult your doctor about an exercise regimen that is right for you.

Use the eyedrops as directed on a regular basis. Glaucoma eye drops can dramatically lower the risk of glaucoma developing from excessive eye pressure. Even if you don't have any symptoms, eye drops prescribed by your doctor must be used on a regular basis to be effective.

Protect your eyes by wearing sunglasses. Glaucoma can develop as a result of serious eye damage. When utilising power tools or playing high-speed racquet sports in enclosed courts, wear eye protection.

The key to protecting your eyesight against glaucoma damage is early detection, which can be achieved through regular and comprehensive eye exams. Five typical glaucoma tests are included in a comprehensive eye exam.

It is critical to have your eyes tested on a regular basis. At the age of 40, you should get a baseline eye examination. At this age, you may notice the first indicators of eye disease and vision problems. Based on the results of this screening, your eye doctor will advise you on how often you should have follow-up checks.

If you have high risk factors for glaucoma, such as diabetes, high blood pressure, or a family history of glaucoma, you should get an eye check right once.

5 simple tips to prevent vision problems.

Click To Read!

Specialist To Visit

Glaucoma can be diagnosed by an ophthalmologist, who can be referred by your family doctor or general practitioner. Regular eye exams can aid your ophthalmologist in detecting this condition before it causes vision loss. Your ophthalmologist can advise you on how frequently you should have your eyes examined.

Glaucoma can be detected by an optometrist, but the illness must be diagnosed and treated by an ophthalmologist. Glaucoma cannot be diagnosed or treated by an optician.

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Consult Now!

Treatment Of Glaucoma

Glaucoma can't be reversed once it's started. Treatment and regular examinations, on the other hand, can help decrease or prevent vision loss, especially if the disease is caught early.

Reduced eye pressure is used to treat glaucoma (intraocular pressure). Prescription eye drops, oral drugs, laser treatment, surgery, or a combination of these may be available depending on your situation.

1. Eyedrops

Prescription eye drops are frequently used to treat glaucoma. These can help lower eye pressure by changing the way fluid drains from your eye or reducing the amount of fluid produced by your eye. Depending on how low your eye pressure needs to be, you may require more than one of the eyedrops listed below. Prescription eye drops include the following:

Prostaglandins: These reduce your eye pressure by increasing the outflow of the fluid in your eye (aqueous humour). Mild reddening and stinging of the eyes, darkening of the iris, darkening of the pigment of the eyelashes or eyelid skin, and blurred vision are all possible adverse effects. This medication is only to be taken once a day. Some of the medications in this category are:

Latanoprost

Travoprost

Tafluprost

Bimatoprost

Beta-blockers: Beta-blockers are a type of medication that prevents the body from lowering the pressure in your eye by reducing the production of fluid in your eye (intraocular pressure). Breathing difficulties, a decreased heart rate, lower blood pressure, impotence, and weariness are all possible adverse effects. Depending on your condition, this class of medicine may be given for once- or twice-daily use. Examples include:

Timolol

Betaxolol

Alpha adrenergic agonists: These decrease aqueous humour production and promote fluid outflow in your eye. An erratic heart rate, elevated blood pressure, weariness, red, itchy, or swollen eyes, and a dry mouth are all possible adverse effects. This class of medication is normally administered twice daily, although it can also be prescribed three times a day. Common examples are:

Apraclonidine

Brimonidine

Carbonic anhydrase inhibitors: These medications lessen the amount of fluid produced in your eyes. A metallic taste, frequent urination, and tingling in the fingers and toes are all possible adverse effects. This class of medication is normally administered twice daily, although it can also be prescribed three times a day. Examples are:

Dorzolamide

Brinzolamide

Acetazolamide

Inhibitor of the Rho kinase: This medication decreases ocular pressure by inhibiting the rho kinase enzymes that cause fluid accumulation. Eye redness, irritation, and deposits accumulating on the cornea are all possible side effects. Netarsudil is an example of this class of medicine which is taken once a day.

Miotic/cholinergic agents: These medicines enhance the amount of fluid that leaves your eye. Headache, eye discomfort, smaller pupils, hazy or poor vision, and nearsightedness are all possible side effects. This type of medication is typically administered up to four times per day. These drugs are no longer commonly recommended due to the risk of side effects and the requirement for daily administration. Pilocarpine is an example of this medicine.

Note!

You may notice certain adverse effects unrelated to your eyes since some of the eye drop medicine is absorbed into your circulation.

Close your eyes for one to two minutes after placing the drops in to reduce absorption.

You can also squeeze lightly at the corner of your eyes near your nose for one or two minutes to shut the tear duct.

Remove any unused drops from your eyelid using a cotton swab.

If you need to use artificial tears or have been prescribed many eye drops, space them out so that you wait at least five minutes between drops.

2. Oral medications

If eye drops alone aren't enough to lower your eye pressure, your doctor may prescribe an oral drug such as carbonic anhydrase inhibitors. Frequent urination, tingling in the fingers and toes, sadness, stomach distress, and kidney stones are all possible adverse effects.

3. Surgery

To treat glaucoma, laser surgery is mostly done to aid in the drainage of aqueous humor from the eye. These treatments are frequently performed in an outpatient surgical centre or at an ophthalmologist's office. Some of the procedures are:

Trabeculoplasty: This operation can be used instead of or in addition to drugs for persons who have open-angle glaucoma. The eye surgeon uses a laser to improve the drainage angle. As a result, fluid drains effectively and ocular pressure is reduced.

Iridotomy: It is advised for people with angle-closure glaucoma. In this, a laser is used by the ophthalmologist to make a tiny hole in the iris which aids in the passage of fluid to the drainage angle.

Trabeculectomy: Trabeculectomy is a type of glaucoma surgery that creates a new pathway for drainage of fluid inside the eye. It is used to prevent vision loss due to glaucoma by lowering the eye pressure.

Drainage devices for glaucoma: A small drainage tube may be implanted in your eye by an ophthalmologist. The fluid is sent to a collection region by the glaucoma drainage implant (called a reservoir). Following that, the fluid is absorbed into neighbouring blood arteries.

Cataract surgery: Cataract surgery is a procedure that is used to remove a cataract. The removal of the normal lens of the eye can reduce ocular pressure in some patients with narrow angles. The iris and cornea are too close together when the angles are narrow. This can obstruct the drainage duct in the eye. When the lens of the eye is removed during cataract surgery, more space is created for fluid to exit the eye.

Home-care For Glaucoma

1. Eat a nutritious diet

Nutritional factors have been demonstrated to influence eye health and may even prevent the progression of diseases like glaucoma.

Some vitamins and nutrients may influence IOP, as well as the occurrence and progression of glaucoma. Fruits and vegetables strong in vitamins A and C, as well as carotenoids, tend to be particularly beneficial.

As a result, leafy greens like spinach, collard greens, kale, and brussels sprouts are among the most vital vegetables to eat in your diet.

Antioxidants may also aid in the prevention of additional optic nerve injury. Antioxidants can be found in cranberries, black and green teas, flax seeds, pomegranates, and acai berries, among other foods.

Other fruits and vegetables to include in your fruit and vegetable intake include peaches, carrots, beets, green beans, and radishes. Caffeine may increase ocular pressure, so experts advise avoiding consuming too much coffee and caffeinated beverages.

2. Exercise every day

Exercise on a regular basis to maintain a healthy IOP. Moderate exercise can aid in the maintenance of a healthy IOP. This is due to the fact that exercise boosts blood flow to your eyes and throughout your body. Exercising vigorously, on the other hand, might raise IOP, so don't overdo it. Exercising can help you to maintain a healthy body mass index (BMI) as high or low BMI is known to increase the risk of glaucoma.

Remember that certain yoga poses might cause an increase in IOP, which is bad for glaucoma patients. Avoid headstands and extended downward-facing dog, legs on the wall, plough, and standing forward bends if you have glaucoma and practise yoga. Instead, practise meditation. Stress appears to raise a person's chances of having a high IOP. Daily meditation can help reduce ocular pressure.

3. Try supplements

Glaucoma supplements made from natural ingredients: If you have a vitamin or mineral shortage, you can restore it with natural and over-the-counter supplements such as:

Zinc

Calcium

Magnesium

Vitamin A

Vitamin B-complex

Vitamin C

Vitamin E

All of these things are especially crucial for people who have glaucoma. Taking a daily multivitamin can assist if you feel like your nutrition is lacking. Vitamin supplements, on the other hand, have not been clinically shown to prevent or cure glaucoma.

4. Go for regular checkups

Get your eyes checked for glaucoma. If you have a family history of the condition, this is extremely crucial. Also, maintain proper dental hygiene and schedule frequent dental visits. Periodontal (gum) disease has been linked to an increased incidence of primary open-angle glaucoma in some studies (POAG).

Even if you are considering natural alternatives to cure your glaucoma, always ask your doctor before using any medicine or supplements. Certain herbs are thought to benefit in the treatment of glaucoma are ginkgo, bilberry, and forskolin.

Read article on eye care in diabetes and tips to prevent eye complications.

Click To Read!

Home-care tips for caregivers

If you have a friend or family member who suffers from glaucoma, you'll want to learn everything you can about the disease. You will be able to provide supportive, caring, and practical assistance in this manner. Although asking for help may be difficult for your loved one, it is critical to communicate freely and precisely. Encourage him/her to be as specific as possible about how you can assist.

Here are some suggestions for assisting a loved one with glaucoma:

Aids for people with low vision

1. Low-vision aids

These are specialized optical equipment that can help people make better use of their remaining vision and continue to perform the things they enjoy. Health insurance covers a lot of low-vision aids. Here are a few examples:

Magnifiers made to order for reading, crocheting, and other close work

Text-to-speech machines that are computerised

Telescopes that may be carried in one's hand or worn on one's spectacles for seeing distant objects

You can assist your loved one by accompanying him or her to the eye doctor on their next visit. Take a notepad and a pen or pencil with you to jot down the doctor's advice.

Create customized resources that lists organisations, products, and services that can assist people with low vision.

You or the patient might inquire with the doctor about which optical aids will be most beneficial for his or her specific needs.

2. Non-optical aids

These may also be recommended by the doctor to assist a person with impaired vision enjoy life more fully. Here are several examples:

Large-print books, Audio books

Playing cards, clocks, phones, and pillboxes are examples of large-print goods.

3. Household security

You can assist your loved one in making home improvements to improve visibility and lessen the chance of falling. Here are some ideas:

Lighting: Use high-wattage light bulbs and additional lamps or task lighting to ensure that your home is well illuminated. The kitchen, bathroom, and work rooms are all important areas to concentrate on.

Remove any unwanted clutter from your home. Offer to assist in the organisation and labelling of critical materials.

Information about how to contact us: Make a large-print list of vital phone numbers on bold-lined paper. Include doctors, transportation, and emergency contacts on the list, and keep it in a handy location.

Mark stairwells or slopes with brightly coloured tape to aid mobility. The ideal colours to use are those that contrast with the flooring.

Complications Of Glaucoma

Because you can't feel the pressure in your eye, the major concern with glaucoma is the lack of symptoms. Only a small percentage of people experience headaches, red eyes or blurred vision. If you don't get your eyes examined on a regular basis, you may discover permanent "holes" in your vision or, in advanced stages, "tunnel vision." Glaucoma treatment failure frequently results in blindness.

It could be a sign of an angle-closure attack if you have acute eye discomfort, redness, nausea and vomiting, and blurred vision. The iris expands or slides forward to completely block the trabecular meshwork in this acute condition.

If you have angle-closure glaucoma, you're more likely to have an acute episode in the dark because the pupil opens up and the angle narrows in low light. There may be halos surrounding objects and slight blurring in a moderate assault, but there is no pain.

Extreme discomfort and a red, swollen eye indicate a medical emergency; if not treated, people can go blind quickly.

Did you know?

Normal eye pressure varies from person to person. What could be normal for 1 person may be higher for another. Eye pain is one of the common symptoms of glaucoma. Here’s more about the causes of eye pain.

Read To Know!

Living With Glaucoma

To effectively control your glaucoma, you will usually just need to make a few lifestyle changes. You can continue to live a full life as long as you are diagnosed early, see your doctor on a regular basis, and follow your doctor's treatment recommendations.

Schedule medication intake around daily routines like waking, mealtimes, and bedtime. Your drugs will become a natural part of your day in this manner.

It's just as vital to pay attention to your emotional and psychological health just like your physical health.

Make sure to express your emotions. It can be beneficial to talk about your anxieties, especially in the beginning. Confide in your spouse, a family member, a close friend, or a clergy member.

Speak with other glaucoma sufferers. It can be beneficial and soothing to share thoughts and feelings regarding living with a chronic illness.

Points to remember when outdoors

Some everyday tasks such as driving or participating in sports, may become more difficult. Some of the possible impacts of glaucoma that may interfere with your activities are loss of contrast sensitivity, glare issues, and light sensitivity.

For example, if you have difficulty seeing at night, you might want to avoid driving at night. Stay safe by changing your schedule so that you accomplish most of your trips during the day.

Sunglasses or tinted lenses can aid with glare and contrast. Yellow, amber, and brown are the finest tints to filter away glare from fluorescent lights. On a bright day, try utilising brown lenses for your glasses. Use lighter shades of yellow and amber on overcast days or at night.

Other tips and tricks that can help!

Even though some glaucoma treatments make your eyes feel irritated or blurry, do not rub them.

It's a good idea to use goggles when swimming and protective glasses when doing yard work or playing contact sports if you've undergone eye surgery.

Pay attention to the rest of your body. It's just as vital to look after your whole health as it is to look after your eyes.

It's critical to eat healthy meals, exercise regularly, avoid smoking, limit caffeine use, and maintain a healthy weight.

Before beginning any intense exercise regimen, see your physician.

Drink alcohol in moderation.

Make time for relaxation and reduce stress in your life.

Frequently Asked Questions

Will I lose my sight from glaucoma?

How often should I visit my optometrist?

What is the importance of family members getting eye exams?

Is there a treatment for glaucoma?

Is it a hereditary trait?

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Goiter

Overview

Goiter refers to swelling of the thyroid gland that appears like a lump in the neck. The thyroid is a small butterfly shaped gland present in the neck. It produces thyroid hormones that help in the regulation of the body's metabolism. They also aid in smooth functioning of the brain, heart, digestive system, and muscles.

The main causes of goiter are overactive thyroid, underactive thyroid, or any other underlying disease. It may or may not be associated with abnormal thyroid hormone level.

The main symptom is enlargement of the throat, ranging from a small lump to a huge mass. It can be seen in people from any age group starting from new born baby to elderly. Pregnant or menopausal women, people older than 40, and people who have an autoimmune disease or a family history of goiter have a higher risk of developing goiter.

The treatment of goiter depends on the cause, symptoms, and complications associated with the disease. It can be successfully managed by medications, hormone therapy, and surgery.

Key Facts

Usually seen in

All age groups but more common in elderly

Gender affected

Both men and women but more common in women

Body part(s) involved

Thyroid gland

Surrounding organs

Prevalence

Worldwide: 15.8 % (2020)

Mimicking Conditions

Branchial cleft cyst

Carotid artery aneurysm

Lymphatic malformation (cystic hygroma)

Fibroma

Lipoma

Lymphadenopathy (common)

Parathyroid adenoma

Parathyroid cyst

Pseudogoiter (common)

Thyroglossal duct cyst

Thyroid abscess

Thyroid lymphoma

Necessary health tests/imaging

Physical examination and medical history

Blood tests: TSH test & Antibody test

Imaging tests: Thyroid ultrasound, Radionuclide thyroid scan, MRI & CT scan

Biopsy

Treatment

Medications: Thionamide, Methimazole, Levothyroxine & Radioactive iodine

Surgery: Hemithyroidectomy or lobectomy, Isthmusectomy & Total thyroidectomy

See All

Symptoms Of Goiter

The main distinguishing feature of goiter is a swollen thyroid gland which looks like a lump at the front of the neck. It does not present any symptoms if the swelling is small. The size of the goiter may vary from person to person. In some cases, the enlarged thyroid gland obstructs the respiratory tract and larynx (voice box) and can cause symptoms such as:

Coughing

Tight feeling in the throat

Difficulty in swallowing

Difficulty in breathing

Hoarseness

Snoring

Some symptoms depend upon changes in thyroid function. People with goiter can have either underactive (hypothyroidism) or overactive (hyperthyroidism) thyroid gland. However, both hypothyroidism and hyperthyroidism can develop without goiter also.

Symptoms of hypothyroidism

The common symptoms include:

Tiredness

Weight gain

Constipation

Body aches

Dry skin

Increased sensitivity to cold

Muscle weakness

Symptoms of hyperthyroidism

The common symptoms include:

Weight loss

Sweating

Shortness of breath

Diarrhea

Palpitations

Hair thinning

Menstrual changes

Tiredness

Muscle weakness

Did you know?

Gaining too much weight could be a sign of hypothyroidism. Read in detail to know more about it.

Read To Know!

Types Of Goiter

Classification based on levels of thyroid hormones

Toxic goiter

In this, the amount of thyroid hormones produced by the enlarged thyroid gland increases.

Non toxic goiter

In this, the thyroid gland is enlarged without an increase in the level of thyroid hormones. Non toxic goiter is associated with the absence of hypothyroidism or hyperthyroidism.

Classification based on the cause

Endemic goiter

It occurs due to deficiency of iodine in a community. More than 10% of the people of the community are affected.

Sporadic goiter

In this a lesser number of individuals from the community are affected. It can affect people with possible factors such as family history, iodine deficiency, age (over 40 years) and female gender.

Classification based on how it enlarges

Simple (diffuse) goiter

In this, the whole thyroid gland swells and it feels smooth to touch.

Nodular goiter

In this, thyroid nodules develop in the thyroid gland. Nodules are solid or fluid filled lumps in the thyroid gland. They can be:

Uninodular (with one nodule)

Multinodular (with more than one nodule)

Myth: Goiter and thyroid nodules are the same.

Fact: No, goiter and thyroid nodules are not the same thing. Thyroid nodules are lumps in the thyroid gland while goiter is termed an overall enlargement of the thyroid gland. Bust more such myths related to thyroid disorders.

Tap To Read!

Causes Of Goiter

Iodine deficiency

Iodine is the crucial element needed by the thyroid gland to make thyroid hormones. Lack of iodine in the diet can lead to swelling of the thyroid gland as it tries to make enough hormones. About 30% of the world’s population remains at a risk of iodine deficiency due to lack of iodine in the diet.

Know more about iodine deficiency.

Click To Know!

Grave’s disease

It is an autoimmune disorder in which the body starts attacking the thyroid gland. This can result in swelling of the thyroid gland.

Know more about Grave’s disease.

Click To Read!

Thyroiditis

Thyroiditis refers to the inflammation of the thyroid gland and can predispose to goiter. It can be due to several causes such as:

Hashimoto’s thyroiditis (autoimmune disease)

Infections

Radiotherapy

Thyroid cancer

Infiltrating papillary thyroid cancer, lymphoma, and anaplastic thyroid cancer can also be a possible cause of goiter.

Medications

Some medicines such as lithium, phenylbutazone and amiodarone can cause the thyroid gland to swell.

Goitrogenic food

Goitrogens are food items that can interfere with the thyroid function. The excessive consumption of these foods may lead to goiter. It includes foods such as Brussel sprouts, kohlrabi, turnips, strawberries, radishes, cabbage, broccoli, kale, and cauliflower.

Risk Factors For Goiter

Gender

The chances of goiter are higher in women than men when exposed to iodine deficiency. Women have 2 to 10 times more chances of developing it than men.

Age

The association between age and goiter is dependent on iodine status. In case of severe iodine deficiency, the risk of developing goiter is more in teenagers.

Smoking

Tobacco smoking is also linked with the increase in chances of developing goiter due to the formation of thiocyanate in smokers. Thiocyanate leads to deficiency of iodine and is an important risk factor in the formation of multiple nodules.

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Pregnancy

Pregnancy is also a risk factor for goiter in iodine deficient women. The incidence of goiter can be easily prevented by increasing the iodine in the diet.

Menopause

The postmenopausal women are at higher risk of developing goiter.

Family history

People with a family history of thyroid disorders are having higher chances of developing goiter.

Radiations

Studies suggest that exposure of radiation (such as during CT scans) to the thyroid gland increases the risk of nodular goiter in early years of life. This is commonly seen in people under 20 years of age.

Environment

The exposure to several harmful chemicals such as nitrates, benzene, formaldehyde, pesticides, bisphenol A, polychlorinated biphenyl, polyhalogenated aromatic hydrocarbons, and polybrominated diphenyl ether also increase the chances of developing goiter. These chemicals can be consumed through contaminated water, air, and food.

Mutations

Mutations refers to the change in the gene which is a unit of heredity. Several mutations such as change in genes RAS, SPOP (4/38), ZNF148 (6/38), and EZH1 (3/38) are known to be associated with an increase in risk of nodular goiter and benign nodules.

Insulin resistance and metabolic syndromes

Several studies suggest that insulin resistance and other metabolic syndromes such as obesity increases the risk of goiter and papillary thyroid cancer. Obesity in both males and females makes the individuals more prone to thyroid cancer also.

Elevation in thyroid stimulating hormone (TSH)

The elevated levels of TSH increases the thyroid volume over a period of time. This increases the risk of goiter, especially nodular goiter. This is commonly seen in iodine sufficient endemic goiter and in obesity. Obese person often have high levels of TSH than normal people. This makes them more prone to goiter.

Hyperinsulinemia

It refers to the excess insulin secretion in the body. Insulin receptor levels have been shown to be increased in thyroid cancers. It is also associated with an increased risk of thyroid nodules.

Diagnosis Of Goiter

1.Physical examination & medical history

The doctor physically examines the patient for any signs of thyroid enlargement. The lymph nodes adjacent to the thyroid gland are also checked. Patient is asked about his/her medical history and the symptoms he/she is experiencing for the detailed understanding of the disease.

2. Blood tests

Thyroid stimulating hormone (TSH): TSH is the principal hormone that regulates the production of thyroid hormones which includes triiodothyronine (T3) and thyroxine (T4).

High level of TSH mostly indicates underactive thyroid gland (hypothyroidism). Low levels can be due to an overactive thyroid gland(hyperthyroidism).

Thyroxine total (T4): Most of the T4 in the blood is attached to a protein called thyroxine-binding globulin. The “bound” T4 can’t get into body cells. Only about 1%–2% of T4 in the blood is unattached (“free”) and can get into cells. The free T4 and the free T4 index are both simple blood tests that measure how much unattached T4 is in the blood and available to get into cells. In hypothyroidism, the thyroxine levels are lower than normal whereas in hyperthyroidism, they are elevated.

Thyroxine total (T3): Triiodothyronine (T3) Total Test measures the total levels (both free and bound forms) of triiodothyronine (T3) hormone in the blood and is usually done as a part of the thyroid profile total test.

Along with these three tests, supporting tests may be required to evaluate and monitor the condition, such as:

Anti thyroglobulin antibody

Thyroxine binding globulin

3. Imaging tests

The following imaging tests can be used to find the cause of hypothyroidism:

Thyroid scan: Thyroid scan can help to evaluate the size, shape, and position of the thyroid gland. This test uses a small amount of radioactive iodine to help diagnose the cause of goiter and check for thyroid nodules as well.

Ultrasound: Ultrasound of the thyroid is used to closely look at thyroid nodules. Thyroid nodules are solid or fluid-filled lumps that form within the thyroid gland. Ultrasound can also help the doctor to evaluate if the nodules are cancerous in nature.

Radioactive iodine uptake test: A radioactive iodine uptake test also called a thyroid uptake test, measures how much radioactive iodine the thyroid takes up from the blood after swallowing a small amount of it. It can help check thyroid function and find the cause of goiter.

MRI or CT scan: These imaging tests are used in case the size of the goiter is very large or the goiter has spread to the chest.

4. Biopsy

During biopsy, a small amount of tissue is removed from the nodule which is then examined for the presence of cancer. It is mostly recommended in case the size of the thyroid nodule is more than ½ inch.

Specialist To Visit

You should visit a doctor, if you are experiencing symptoms of either hypothyroidism or hyperthyroidism alongwith the enlarged thyroid gland. You can consult the following doctors for a diagnosis:

General physician

Endocrinologist

Surgeon

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Prevention Of Goiter

Take proper diet

The iodine is very essential for the synthesis of thyroid hormones. If deficiency of iodine in diet is the cause of goiter, the following measures can be taken to maintain the iodine levels:

Use iodized salt

Iodized salt is the major source of iodine in the diet. It has been the mainstay of the prevention of iodine deficiency. Use of iodine-containing supplements is recommended in areas where iodized salt is not available.

The recommended dietary allowance (RDA) for iodine in adult men and women is 150 microgram/day as per The Institute Of Medicine. The recommendations are higher in pregnant and breastfeeding women. It is 220 microgram/day for pregnant women and 290 microgram/day for breastfeeding women.

Consume iodine rich foods

Iodine is a mineral that is mostly found in soil and oceans which makes it available in seafoods. Iodine rich foods should be included in the diet to prevent goiter and other thyroid related problems such as hypothyroidism. The iodine rich food include:

Cheese

Cows milk

Eggs

Frozen yogurt

Saltwater fish

Seaweed (including kelp, dulce, nori)

Shellfish

Soy milk

Soy sauce

Limit goitrogenic foods

Some foods reduce the absorption of iodine which can be a cause of goiter. Limiting such foods and avoiding their raw form may help in the prevention of goiter through balancing the body's iodine demand. The common goitrogenic foods include:

Cabbage

Cauliflower

Brussels sprouts

Broccoli

Turnips

Mustard greens

Kale

Cassava root

Lima beans

Sweet potato

Millet

Soy and soy products

Green tea

Avoid overexposure to radiation

Radiation at the workplace or during any treatment can cause several thyroid disorders including goiter. Avoiding radiation helps prevent goiter.

Did you know?

Lifestyle changes that include diet and exercise helps in maintaining and regulating your thyroid function. Read in detail about the type of foods taken during thyroid treatment.

Read Now!

Treatment Of Goiter

The cause and size of goiter decides the treatment approach for it.

Iodine supplements are recommended, if the cause is deficiency of iodine in the diet. The iodine supplements prevent the enlargement of the thyroid gland, however reducing the size of the already enlarged gland is difficult.

There are various cases of asymptomatic goiter with normal thyroid function. If such cases are found to be benign in ultrasound, normal follow-up ultrasounds are required depending upon the size of nodules without specific treatment.

Depending upon the other conditions causing goiter, the following treatment approaches are discussed in detail:

Medications

Goiter can be due to hypothyroidism or hyperthyroidism, both of them have a different treatment approach.

Medications for hyperthyroidism

In case of overactive thyroid or hyperthyroidism, there is an excess production of thyroid hormones. Here the objective of the treatment is to control the production of hormones. Antithyroid medicines such as thionamide, methimazole, and propylthiouracil are given to reduce the function of the thyroid gland.

Medications for hypothyroidism

In hypothyroidism, treatment involves the use of synthetic replacement of thyroid hormone to restore the activity of underactive thyroid. The common medication used is levothyroxine. The dose of the medication (hormone) is gradually increased to avoid the chances of side effects. The hormone helps in reducing the size of enlarged thyroid gland and symptoms usually start to improve within the first week of initiating the treatment.

Anti-inflammatory medications

In some conditions associated with the thyroid such as thyroiditis, anti-inflammatory medications are used to reduce the size of the thyroid. One such commonly used medication is aspirin.

Radioactive iodine

In this, the iodine is given to the patient as a capsule or liquid which accumulates in the thyroid gland. This helps in shrinking the enlarged thyroid or goiter.

Surgery

Surgical removal of the goiter is required if the size of goiter is very large and is compressing the adjacent cervical structures. It involves removal of either the entire thyroid gland or part of it. Thyroid gland surgery is advised in the following conditions:

If the nodule of the thyroid gland is cancerous or may become cancerous. This can be confirmed by biopsy.

If the size of the gland has become so big that it is causing symptoms such as trouble swallowing, difficulty in breathing, or changes to the voice due to the compression of nearby structures.

If the patient with an overactive thyroid is not responding to the treatment, this can be seen in conditions such as Grave’s disease.

Types of surgery

The removal of the thyroid gland can be performed in several ways. A certain type can be recommended to you considering the condition of your thyroid gland and overall health.

Hemithyroidectomy or lobectomy: This surgery involves removal of only one lobe of the thyroid gland. It is performed in case a nodule is only present on one side of the thyroid gland.

Isthmusectomy: It involves removal of the isthmus which acts as a bridge between two lobes of the thyroid. It is useful in cases where small tumors are present only on the isthmus.

Total thyroidectomy: As the name suggests, it involves removing the entire thyroid gland. It is required in case of thyroid cancer, bilateral thyroid nodules, and Graves’ disease.

Home-care For Goiter

Showers with cold water

It is advisable to end the shower with cold water targeting mainly the thyroid gland (throat and neck). It is known to stimulate the blood flow to the thyroid gland and increases the accessibility of essential nutrients to it. This helps in the smooth functioning of the thyroid gland.

Use of medications

Some medications can trigger goiter, so it is important to keep a tab on medications taken for any other disease.

Regular neck exercises

These exercises help in reducing swelling by targeting the tissues of the thyroid gland. It is always good to recommend your doctor before including these exercises in your regimen. Some common neck exercises are:

1. Upward neck stretch:

Sit on a chair

Lift your chin towards the ceiling

Stretch the neck as much as possible

Stay in that position for a few seconds

Repeat this exercise 10-12 times.

2. Sideways neck stretch

Slowly bend your neck to the side

Make sure that ear touches your shoulder

Stretch as much as possible

Repeat on the other side.

Do 10 repetitions on each side.

Note: Avoid overexertion while doing these exercises. Stretch as much as you can without a feeling of discomfort or pain. Stop the exercise immediately, in case you are experiencing any pain.

Gentle massages

Gentle massages over the area of swelling with olive oil or coconut oil is also helpful for the patients with enlarged thyroid gland.

Complications Of Goiter

The major complications that can develop due to untreated goiter are:

Compression of the trachea

Iodo-Basedow phenomenon, which is the development of hyperthyroidism if exposed to iodine intake

Intra-nodular hemorrhage or necrosis

Complications due to hyperthyroidism:

Bulging eyes, blurred vision, double vision or even vision loss

Tachycardia and problems with heart rhythm.

Osteoporosis

Red and swollen skin

Thyrotoxic crisis

Complications due to hypothyroidism:

Hypercholesterolemia

Tingling sensation in the nerves

Infertility

Birth defects

Miscarriage

Depression

Myxedema

Read more about complications of hypothyroidism.

Read To Know!

Complications associated with thyroid surgery

Thyroid surgery is a safe procedure, however it is associated with certain risks which includes:

Bleeding in the neck

Hoarseness/voice change

Hypocalcemia

Seromas

Infection

Alternative Therapies For Goiter

Home remedies

Apple cider vinegar: It is mildly acidic and helps to restore the pH balance of the body. It also helps in the balanced production of hormones. It also increases the iodine absorption and is also found to reduce swelling. It can be consumed with honey and warm water, preferably on an empty stomach.

Watch this video by our expert to know more about apple cider vinegar.

Castor (Arandi) oil: It reduces swelling of the thyroid gland as it possesses anti-inflammatory properties. It has to be massaged around the swollen neck area. Leave it overnight until the swelling reduces.

Coconut (Nariyal) oil: It contains medium chain fatty acids that help in the proper functioning of the thyroid gland. It also possesses anti-inflammatory and anti-microbial properties. It is also shown to improve metabolism. It can be added to hot drinks, smoothies, or can be used in cooking for health benefits.

Bentonite clay: It is a natural clay with antimicrobial properties. It is useful in goiter due to its toxin absorption property which helps in the absorption of toxins from the goiter. This helps in reducing the swelling. A smooth paste of bentonite clay made by adding water to it is applied on the swollen area. It is then rinsed off with water after drying.

Seaweed: It is a good source of iodine that helps in the production of thyroid hormones. It also contains amino acids such as tyrosine that aids the production of thyroid hormones. It can be taken as a salad or can be added as dressing.

Dandelion leaves: It also helps in reducing swelling of the thyroid gland due to its antioxidant and anti-inflammatory properties. The leaves are grinded with some water to make a paste that is applied on the neck.

Lemon juice: It aids in removing toxins that may be present due to infection in the thyroid gland. It also possess antimicrobial properties that help in killing any microbes present in the thyroid gland.

Turmeric (Haldi): It is shown to exhibit healing properties. It also reduces swelling of the thyroid gland due to its antiinflammatory nature.

Garlic (Lehsun): Garlic stimulates the production of glutathione in the body. Glutathione increases the amount of selenium in the body which is required for normal functioning of the thyroid gland.

Acupuncture

This is also known to ease the symptoms of goiter. However, the efficacy of acupuncture also needs more relevant research.

Living With Goiter

Goiter is not a very severe disease but it is not something that can always be treated with the right medical intervention. It is necessary to visit the doctor for the correct diagnosis and effective treatment.

Correcting iodine levels

It is not always necessary that the cause of goiter is iodine deficiency. After the consultation with the doctor, he/she will guide you about the recommendations of iodine needed by your body. It is necessary to correct the iodine levels to make the treatment plan work.

So, the following measures should be considered for correcting iodine levels:

This recommended daily serving of iodine is 150 mcg/day for adults. It helps in the normal functioning of the thyroid gland. If the goiter is caused due to malnutrition, then getting enough iodine could help treat it.

If iodine deficiency is diagnosed as the cause of thyroid, do not start taking supplements without medical consultation. This is because too much iodine can also cause several thyroid problems.

The main source of iodine is iodized salt. Switch over to iodized salt, if you are using non-iodized salt to get your daily iodine serving. Frozen and processed foods are usually very salty, but in most cases they don’t use iodized salt. Don’t rely on these food items for your daily iodine intake.

It is advised to reduce the iodine if the cause of goiter is excess iodine. In this case, take steps to reduce your iodine intake. For this following measures can be taken such as switching from iodized to non-iodized salt and reducing the intake of seafood and seaweed

Cut your iodine intake after the consultation with your doctor, if the cause of goiter is found out to be because of excess of iodine.

The excess consumption of salt can also cause several other health problems, so take it as per recommendations.

Post-operative care

The patients who have undergone surgery are advised to limit their physical activity. The patient can resume his lifestyle including exercise and physical activity gradually as per the surgeon’s indications.

Post-operative medications

In case of thyroidectomy, where all the thyroid gland is removed, lifelong thyroid supplements are required to be taken by the patient. Sometimes, calcium supplements are also required to be taken by patients after surgery. These are required for a short period of time depending on the calcium levels.

Lifestyle modifications

Some lifestyle changes are also required to be adopted by the patient for the smooth functioning of the thyroid gland. This includes:

Limiting alcohol

Limiting smoking

Eating healthy

Planning while traveling

Patients with goiter can travel normally but they are recommended to carry the medications for the entire trip. Patients who have undergone their surgery should pack their thyroid supplements with them.

Goiter during pregnancy

Pregnant women should inform their endocrinologist about their condition well in advance. This will help the doctor to create a customized treatment plan for them.

Frequently Asked Questions

Does goiter always lead to cancer?

Do benign goiters turn cancerous?

Which doctor treats goiter?

Can you have a goiter without thyroid problems?

Can goiter make you gain weight?

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Gonorrhea

Also known as The clap

Overview

Gonorrhea is a sexually transmitted disease (STD) caused by bacteria, Neisseria gonorrhoeae. It is transmitted from one person to another during sexual contact which includes oral, vaginal, and anal sex. Pregnant women can also transmit the infection to the newborn. It can infect both men & women.

It targets male and female reproductive organs, urethra, eyes and throat. It can affect people of any age group but is more common in young people of age 15 to 24 years.

The disease is usually asymptomatic. Even when a patient has symptoms, they are often mild and nonspecific. The symptoms are often mistaken for a bladder or vaginal infection in females. Swabs from the genital organs are taken for examination. The presence of bacteria is confirmed either through nucleic acid amplification tests or culture methods.

The disease can be treated with antibiotics. Untreated gonorrhea can lead to long term complications such as pelvic inflammatory diseases (in women) and epididymitis (in men). One can prevent gonorrhea by adopting safe sexual practices such as using condoms, dental dams, and avoiding multiple sexual partners.

Key Facts

Usually seen in

All age groups

Adults between 15 to 24 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Urethra

Vagina

Uterus

Penis

Cervix

Throat

Prevalence

Worldwide: 30.6 million (2016)

Mimicking Conditions

Chlamydia

Trichomoniasis

Syphilis

Mycoplasma genitalium

Herpes simplex virus

Conjunctivitis

Urethritis

Cervicitis

Proctitis,

Pharyngitis

Arthritis

Necessary health tests/imaging

Physical examination

Nucleic acid amplification test (NAAT)

Culture test

Smear test

Treatment

Ceftriaxone

Doxycycline

Gentamicin

Azithromycin

Gemifloxacin

Amoxicillin

Erythromycin

See All

Causes Of Gonorrhea

Gonorrhea is caused by an obligate pathogen, Neisseria gonorrhoeae. Obligate pathogens are the bacteria that transmit disease from one host to another. These bacteria cannot survive outside the host body.

The bacteria is mainly present in the discharge of penis & vagina. The disease can be transmitted through:

Unprotected vaginal, anal & oral sex

Sharing of contaminated vibrators & sex toys

Infected mother to baby during childbirth

Neisseria gonorrhoeae cannot survive on the surfaces outside the body. Due to which, the infection of gonorrhea does not spread by kissing, hugging, or sharing swimming pools, toilet seats, towels, or utensils.

Types of Gonorrhea

Gonorrhea can be classified as either uncomplicated or complicated.

Uncomplicated gonorrhea

This type is much more common and causes urogenital, anogenital, or pharyngeal infections.

Complicated gonorrhea

The infection that leads to the spread of bacteria to joints and other tissues is considered as complicated gonorrhea.

Symptoms Of Gonorrhea

The incubation period of gonorrhea (the time between exposure to the infection and the appearance of symptoms) is 10 days in women and 1-3 days in men. The various symptoms are listed below:

A. Symptoms of uncomplicated gonorrhea in men

Urethral discharge

Dysuria (painful urination)

Urgency

Frequent urination

Urinary itch

Painful erection

B. Symptoms of uncomplicated gonorrhea in women

Dysuria

Hematuria (blood in urine)

Inflammation of the anus

Increase in vaginal discharge

Here’s more on the common causes & treatment of vaginal discharge.

C. Symptoms of complicated gonorrhea in men

1. Epididymitis: It refers to inflammation of epididymis(a coiled tube attached to each of the two male reproductive organs, the testes). The typical symptoms include:

Swelling of the epididymis

Severe pain in epididymis, groin and lower abdomen

Discharge from the urethra

2. Seminal vesiculitis: It refers to the inflammation of the tube that produces fluid for the semen known as the seminal vesicles. The typical symptoms include:

Dysuria (painful urination)

Frequent urination

Hematuria (passage of clear urine with blood)

Hemospermia (blood in semen)

Lower abdominal pain

3. Prostatitis: It refers to the inflammation of the prostate gland. The typical symptoms in gonorrhea include:

Chills

Fever

Frequent urination

Pain or discomfort in the pubic region

D. Symptoms of complicated gonorrhea in women

1. Pelvic inflammatory disease: It refers to the inflammation of the female genital tract). It is characterized by the following symptoms:

Chills

Fever

Anorexia (loss of appetite)

Nausea

Vomiting

Lower abdominal pain

Irregular vaginal bleeding

Abnormal vaginal discharge

2. Perihepatitis: It refers to the inflammation of the liver capsule. It is characterized by:

Sudden pain in the upper abdomen

Fever

Nausea

Vomiting

E. Symptoms of gonorrhea at other sites

1. Oral gonorrhea: It is also known as pharyngeal gonorrhea. Oral contact with either penis or vagina can cause oral gonorrhea. Usually oral gonorrhea remain asymptomatic but can cause following symptoms:

Sore throat

Difficulty in swallowing food

Redness of the throat

White spots on the throat

Swollen lymph nodes in the neck

Fever

These symptoms are common for men and women and usually take 7-21 days to appear after oral contact with the infected genitals. Kissing does not spread oral gonorrhea as bacteria do not infect the mouth and tongue.

2. Gonococcal conjunctivitis (GC): GC infects the eyes and spreads through the direct contact of the eye with the infected secretions of the genitals.

An infected pregnant woman can also transmit the infection to the neonates during delivery. It occurs due to exposure of the neonate to the vaginal secretions which contain bacteria. When it occurs in neonates, GC is also known as gonococcal ophthalmia neonatorum. Symptoms take 24 to 28 hours following exposure to the bacteria and include:

Red eyes

Thick pus in the eyes

Swelling of the eyelid and conjunctiva

Turbid and foggy cornea

3. Proctitis: It refers to the inflammation of the lining of the rectum. It is developed due to anal-genital intercourse. In most of the cases, it is asymptomatic. Some patients may experience symptoms such as :

Itching and burning sensation in anus

Discharge from the anus

Rectal bleeding

Blood in the stool

Rectal pain

Tenesmus (frequent and urgent feeling of passing the stool)

Risk Factors For Gonorrhea

You are at higher risk of gonorrhea if you:

Have unprotected oral, anal or vaginal sex with an infected partner

Have low immunity

Have been diagnosed with gonorrhea in the past

Are having multiple sexual partners

Have sexual partner who has multiple partners

Are sexually active

Are a sex worker

Have sex with somone from endemic are, having previous gonorrhea, having any sexually transmitted infections & having human immunodeficiency infection (HIV)

Lack of education & low socioeconomic status also increases the risk of developing gonorrhea. If the condom breaks during sex with an infected partner, it increases the risk of gonorrhea. Men who have sex with men (MSM) are more likely to cause gonorrhea.

Diagnosis Of Gonorrhea

The laboratory confirmation is done through the detection of bacteria in samples from the urinary tract, rectum, throat or eyes. In various cases, urine samples are also used. In case of any symptoms of gonorrhea, abstain from any kind of sexual activity until it is confirmed negative by the tests. The following tests helps in the diagnosis of gonorrhea:

1. Physical examination: It includes looking for any signs of gonorrhea. Manifestations such as discharge from throat, rash, eye symptoms, and pain in abdomen are evaluated by the health-care provider.

2. Nucleic acid amplification test (NAAT): This method detects the genetic material of the Neisseria gonorrhoeae in either urine or swab samples of the patients. The swab sample is taken from urethra for males. In females, the sample is taken from vagina or cervix. In case of rectal or pharyngeal infection, samples may be taken from rectum or throat respectively.

3. Culture: This test is one of the most widely used tests for gonorrhea as it has a specificity of 100%. The test can be done from the samples collected from the throat, urethra, vagina or rectum except the urine in both men and women.

4. Smear test: This test is usually used to diagnose uncomplicated gonorrhea in men. It involves examination of urethral smears under the microscope.

Prevention Of Gonorrhea

Gonorrhea is a sexually transmitted disease (STD) that spreads by sharing sexual fluids. This can be prevented by following safer sex practices like:

Using condoms, dental dams or latex/nitrile gloves while having oral, anal or vaginal sex

Getting tested for STDs regularly, if you are sexually active

Avoiding sex with your partner until he/she has finished his/her treatment for any STD

Washing hands after touching your partner’s genitals

Washing the sex toys with soap and water regularly

Using condoms on sex toys

Avoiding multiple partners

Note: Washing the genitals, urinating, or douching after sex will not prevent gonorrhea.

Are you using condoms in the right way? Here’s 9 condom mistakes that you should avoid.

Click To Read!

Specialist To Visit

Gonorrhea can affect anyone who is sexually active. You should immediately consult the doctor if you fall under the following category:

If you have symptoms such as genital discharge, burning during urination, rash, unusual rash etc.

If your partner has been recently diagnosed with any STD

The annual gonorrhea screening is also recommended, if you:

Are young and sexually active

Are old but have risk factors such as multiple sex partners etc.

Pregnant women should also be tested for any STD including gonorrhea as a part of routine examination. This will help in reducing complications in the fetus.

In most cases, the best place to visit is a sexual health clinic also called a genitourinary medicine clinic (GUM). The specialists who can help treat this infection include:

General physician

Infectious disease specialist

Gynecologist

If you are falling into any of the categories mentioned above, seek advice from our professionals.

Book Now!

Treatment Of Gonorrhea

Gonorrhea can be treated by antibiotics. The various treatment options for different symptoms or types of gonorrhea are discussed as follows:

Urogenital infections

The following antibiotics are prescribed for managing urogenital infections:

Ceftriaxone

Doxycycline

If a person is allergic to ceftriaxone other antibiotics can be used such as:

Azithromycin

Gemifloxacin

Gentamicin

Gonococcal conjunctivitis

Newborns who developed gonococcal conjunctivitis are treated with ceftriaxone as per their body weight. The eyes should be washed every hour with normal saline. Mothers of infected newborns should be examined, and those with gonorrhea should be treated.

Gonorrhea during pregnancy

Erythromycin or amoxicillin are the drug of choice for treating gonorrhea during pregnancy.

Follow-up

Usually follow-up testing is not recommended for rectal and genital infections. However, if the symptoms persist even after getting treatment for a few days, he/she should consult the doctor.

Re-evaluation after 7-14 days of treatment is recommended for throat infection.

Re-test is advised after 3 months of treatment to check re-infection.

Sexual partner management

If you are diagnosed with gonorrhea, it is important to test the sexual partner, if you had sex before the onset of symptoms or within two months of the diagnosis.

Any kind of sexual activity should be avoided before the completion of treatment.

The mother of a neonate diagnosed with gonococcal conjunctivitis should be tested for gonorrhea alongwith her sexual partner.

Complications Of Gonorrhea

Untreated gonorrhea usually spread to other part of the body leading to several complications:

1. Pelvic inflammatory disease (PID)

Gonorrhea can spread from vagina to the other reproductive parts of the female such as the fallopian tubes & uterus. The symptoms of PID include fever & abdominal pain and can lead to reproductive complications such as:

Long term pelvic pain

Infertility

Internal abscesses

Endometritis

Ectopic pregnancy

2. Pregnancy related complications

Gonorrhea in pregnant women increases the chances of miscarriages, premature labor, and first trimester abortion.

A pregnant woman can also pass the infection to the fetus. It can develop several abnormalities in the baby such as conjunctivitis, joint pain, blindness, and blood infections.

However, early treatment of the pregnant woman can reduce the chances of these complications.

3. Infertility in men

Gonorrhea can cause a painful infection in the testicles and prostate gland. It can also cause inflammation of the epididymis. All these changes can affect the fertility in men.

4. Disseminated gonococcal infection (DGI)

DGI occurs as a result of untreated gonorrhea over a long period of time. In DGI, infection spreads through the bloodstream and can cause sepsis. It can also lead to conditions such as

Septic arthritis (inflammation of the joints)

Tenosynovitis (inflammation of a tendon and its sheath)

Endocarditis (inflammation of the inner lining of the heart's chambers and valves)

Dermatitis (inflammation of the skin)

5. Fitz- Hugh-Curtis Syndrome

It is also known as perihepatitis. It is developed due to PID and is characterized by inflammation of the liver capsule. It causes formations of adhesions in the liver that results in persistent pain.

Did you know?

Gonorrhea, if not treated, increases the risk of acquiring or spreading HIV infection. Read more about HIV infection.

Tap To Read!

Home-care For Gonorrhea

Home remedies

Gonorrhea can be easily treated with antibiotics. However, the following home remedies can be used as an adjunct to the antibiotics:

1. Garlic (lehsun): It possesses antibacterial properties and can be used to combat bacterial infections like gonorrhea.

2. Apple cider vinegar: It is well known for its antibacterial properties. It is consumed every morning using a metal straw as it can abrade the teeth.

3. Aloe-vera gel: It moisturizes the skin and fastens the recovery of wounds due to its antibacterial and antiinflammatory properties.

4. Goldenseal: This plant is also known for its antimicrobial properties. It is available in capsule and cream form. It is advised to take recommendation from the doctor for the right dosage before taking or applying it.

5. Echinacea: This plant is used to reduce inflammation in the genitals due to its anti-inflammatory properties. It is available in the form of creams and gels.

Living With Gonorrhea

Though gonorrhea can be managed with antibiotics a few important points are to be kept in mind:

Avoid sexual activity

Patient diagnosed with gonorrhea should avoid any kind of sexual actvity for atleast 1 week following antibiotic treatment. It is advised to resume the sexual activity only after the symptoms subside.

Retesting for gonorrhea

It is advised to test for the infection after the completion of the therapy or if symptoms persist for a long period of time. Retesting helps in identifying any antibiotic resistance and avoiding further treatment failure.

Testing for other sexually transmitted infections(STIs)

Infected patients with gonorrhea are also at increased risk of contracting other STIs, including HIV. So, it is necessary for the patients to get themselves tested for other STIs such as HIV infection.

Frequently Asked Questions

Is gonorrhea contagious?

When can I have sex after gonorrhea treatment?

Can I get gonorrhea more than once?

What to do If I am pregnant and have gonorrhea?

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Gout

Also known as Crystalline arthritis, Gouty arthritis, and Urethritis, Tophaceous gout and Podagra

Overview

Gout is one of the most common and painful forms of arthritis. It causes inflammation in the joints due to high levels of uric acid in the body. Uric acid is a waste product which in excess can lead to accumulation in the form of urate crystals in the joints.

The symptoms of gout include swelling and redness in joints along with sudden sharp pain. The most common area to be affected by high uric acid is the joint at the base of the big toe. Gout in feet is immensely tender and painful that even a mere touch on the swollen area becomes unbearable.

Gout often causes a burning sensation with severe pain that often results in an emergency visit to the hospital. However, with early detection and keeping the uric acid levels under control, gout can be controlled without much suffering.

In addition to medicines, diet also plays a key role in the management of gout. Some beneficial foods to eat with gout include green leafy vegetables, fruits, legumes, etc. Eggs and low-fat dairy products like slim milk and yogurt also qualify as foods good for arthritis and gout.

Key Facts

Usually seen in

Adults between 40-60 years of age

Gender affected

Both men and women

Body part(s) involved

Joints

Knee

Foot

Wrist

Elbow

Hand

Prevalence

Worldwide: 0.54% (2017)

India: 0.12 - 0.19% (2022)

Mimicking Conditions

Septic arthritis

Stress fracture

Pseudogout

Rheumatoid arthritis

Cellulitis

Psoriatic arthritis

Necessary health tests/imaging

Blood test: Uric acid

Urine test: Uric Acid

Imaging tests: X-ray of affected joint, Ultrasound, Conventional CT (CCT), Dual-energy CT (DECT), Magnetic resonance imaging (MRI), Nuclear scintigraphy & Positron emission tomography (PET)

Other tests: Synovial fluid analysis & Synovial biopsy

Treatment

Nonsteroidal anti-inflammatory drugs (NSAIDs): Naproxen, Indomethacin, Ibuprofen & Celecoxib

Corticosteroids:Dexamethasone, Methylprednisolone, Prednisolone, Prednisone & Triamcinolone

Colchicine

IL-1 blockers: Canakinumab

Xanthine oxidase inhibitors (XOI): Allopurinol & Febuxostat

Urate lowering drugs: Losartan, Flurbiprofen & Probenecid

Uricosurics: Sulfinpyrazone & Benzbromaron

See All

Causes Of Gout

Gout arises from deposition of urate crystals in joints. Urate crystals are formed due to high levels of uric acid in the body. Uric acid is formed by the breakdown of purine in the body. Purine is a natural substance found in the body. It is also found in certain foods.

Usually, uric acid is excreted via the kidneys into the urine. However due to overproduction of uric acid or reduced excretion of uric acid, it can build up, forming sharp, needlelike urate crystals. Once the blood is saturated with urate crystals, they are deposited in the bones and joints leading to pain, inflammation and swelling. The main factors affecting serum urate concentration include:

Overproduction of uric acid

This condition is known as hyperuricemia, where uric acid level in the blood rises above the normal i.e. 6.8 mg/dL (milligrams per deciliter). The causes include:

Diet: Foods rich in purines such as cooked or processed food from animal and seafood origin is a key element of increasing uric acid precursors. They are:

Red meat

Fish

Alcohol (particularly beer and spirits)

Endogenous urate production: Turnover of urate crystals increases in the following conditions:

Chronic haemolytic anemia

Haemoglobinopathies

Secondary polycythaemia

Thalassaemia

Glucose-6-phosphate dehydrogenase (G6PD) deficiency,

Lesch-Nyhan syndrome

Malignancies (cancer)

Lead poisoning

Drugs: Some drugs are linked with overproduction of uric acid. These include:

Diuretics

Low dose salicylates

Pyrazinamide

Ethambutol

Cytotoxics

Decreased excretion of uric acid

Most urate excretion occurs in the kidneys while the rest is excreted through the gastrointestinal tract (GIT). Reduced renal excretion is seen in the following:

Hypertension

Hypothyroidism

Sickle cell anemia

Hyperparathyroidism

Chronic renal disease

On the basis of causes, gout can be classified into two categories, namely:

Primary gout: That is caused due to either overproduction or underexcretion of the uric acid.

Secondary gout: That is caused due to chronic kidney disease or prolonged medications affecting the kidney’s ability to remove uric acid from the body .

Stages of gout

Gout can progress in four stages, starting with asymptomatic gout under which the individual experiences no symptoms of the medical condition; however, the levels of uric acid keep on increasing in the body.

This stage is followed by the acute gout stage, accompanied by symptoms of severe pain and redness and can last for a few weeks.

The third stage is intercritical gout wherein recurring gout attacks are experienced without pain in between the attacks.

The final stage is chronic tophaceous gout, leading to other medical complications, especially kidney disease.

Symptoms Of Gout

An attack of gout generally happens overnight, which is so sharp and sudden that it often wakes up the affected person in the middle of the night with a burning sensation in the affected area. Acute gout attacks can last for somewhere between 3 and 10 days, and if you do not get the uric acid treatment in time, it can become chronic, causing permanent damage to your joints.

Some of the common symptoms and signs of high uric acid include:

1. Severe joint pain

Gout generally causes severe pain in the joint of the big toe, but the attack can occur in other joints as well, like the knee, ankle, foot, wrist, hand, and elbow or even fingers.

This pain is caused due to high uric acid in the joints, which can go out to the space between the bones and end up running against the soft lining of the joints, causing unbearable inflammation. This scenario is referred to as a gout attack. The pain is at peak within the first 4 to 12 hours of the attack and generally occurs either early morning or after midnight.

2. Prolonged discomfort

Even after the episode of the gout attack, the joint discomfort can last for days or weeks, but the pain gets subsidized. However, any gout attack in the future on the same joint generally lasts longer, causing sharper pain. Such later gout attacks can also affect other joints which were not affected in the previous strikes.

3. Swelling and redness

The area affected by gout swells up and becomes red with a feeling of tenderness, making it extremely sensitive to any sort of touch or weight over it. In cases of severe gout attacks, high uric acid can also turn the affected area purple in color.

4. Trouble in movement

As the gout attack becomes more frequent over one joint, high amounts of uric acid crystals get deposited in the joints. This reduces the ease of movement or the comfort of movement, which can also get converted into abnormal movement of the joints. This is one of the common high uric acid symptoms of chronic gout.

5. Tophi

The presence of high uric acid can lead to crystallization of the compound in the affected joint, resulting in the formation of small and firm lumps called tophi. These visibly large urate crystals are white and generally form near the toes, knees, elbow, fingers, wrist, or ears. Tophi, which generally occurs in the case of chronic tophaceous gout, can get swollen up to the point of a breakdown or burst and leak a pus-like fluid.

The fluid generally does not cause any pain but can prevent the affected person from doing normal activities on a day-to-day basis. In some cases, tophi can also potentially damage the cartilage and bone, leading to extreme pain while using the joint for routine activities.

In addition to the above-mentioned symptoms, another one of the common symptoms of gout in the ankle includes shiny and flushed skin. This is one of the externally visible symptoms, which can help you with gout’s early detection. Apart from this, there may also be a burning pain in the ankle.

Did you know?

Gout is also known as “Disease of Kings” as many wealthy kings suffered from it, owing to their lavish standard of living and high consumption of alcohol.

Risk Factors For Gout

The root cause of gout is high uric acid concentration in the body, and thus the factors leading to a higher level of uric acid in the body are also the risk factors of gout, which primarily include:

Non- modifiable factors

1. Family history

If the history of gout attack runs through the family, then the chances of a person inheriting the genes, which makes it more likely that the kidney would not drain or urate the uric acid out of the body, increase, even if the kidneys are healthy. This happens especially when parents or grandparents have suffered from gout during their lifetime.

2. Gender and age

Men are more prone to developing gout as their body naturally contains a higher level of uric acid, and the risk is at its peak during the age of 30-50 years. Whereas for women, the levels of uric acid generally tend to be lower than that of males. However, after menopause, the concentration of uric acid in a female body reaches almost equivalent to that of a male body and puts them at an equivalent risk of developing gout.

3. Surgery or trauma

If an individual has undergone surgery or a traumatic experience, then the chances of developing gout increase. This is true especially in the case of an organ transplant due to the effects of the anti-rejection drugs prescribed to the patient after such surgical procedures.

4. Race/ethnicity

The risk of development of gout varies across populations according to race and ethnicity. According to studies, African Americans had a twofold increased risk of gout when compared to other people.

5. Genetic factors

Genetic aberrations in genes SLC22A12 SLC22A12 which are integral to uric acid absorption can also predispose to gout.

6. Other chronic diseases

Other ailments like high blood pressure, diabetes, heart diseases, and kidney-related diseases put an individual at a greater risk of being vulnerable to developing gout on top of foot, ankle joint, and other joints. Thus, if you are suffering from any medical condition, it is prudent that you consult a doctor to avoid the risk of developing gout further.

Modifiable factors

1. High purine diet

Food and beverages with high purine content like red meat, shellfish, or beer increase the risk of high levels of uric acid in the blood and, thus, the risk of developing gout. To reduce uric acid levels in your blood and avoid the risk of gout on top of foot or any other joint, you should ensure that you eat a balanced diet with low purine content.

2. Obesity

Being overweight increases the amount of uric acid produced by the body, which puts a lot of stress on the kidneys to excrete it. This often leads to saturation of uric acid in the blood due to the inability of the kidney to eliminate high levels of uric acid daily. Thus, to avoid the risk of gout, particularly chronic tophaceous gout, you must exercise and maintain an active physical regime to keep your body mass index (BMI) in check and reduce uric acid content in the body.

3. Certain medications

Some medications used to control hypertension or low dose aspirin or beta-blockers can also cause a higher level of uric acid concentration in the blood and hence increasing the risk of gout. Thus, it is always wise to check the side effects of your medications with your doctor before consuming them so that you can find a solution to reduce uric acid concentration in your body.

4. Alcohol consumption

Studies have reported that alcohol intake increases the risk of developing gout. Alcohol ingestion increases lactate levels which inhibit uric acid excretion via the kidneys. Alcohol also prompts purine degradation, leading to an increased uric acid level.

5. Fructose/sweetened- sugar beverages

Increased quantities of fructose and sugar-sweetened beverages (main sweetener being fructose) in the diet, contribution to gout.

Did you know?

Eating chocolates may help relieve the symptoms of gout. Chocolates have polyphenols that act as antioxidants and anti-inflammatory agents. Chocolates can also lower uric acid concentration in the body along with reducing raised blood pressure levels; thereby, providing much-need pain relief during gout attacks.

Diagnosis Of Gout

A diagnosis of gout is usually simple as it is externally visible due to inflammation and redness of the skin of the affected joint. Any person experiencing symptoms like swelling, sharp pain, redness, and tenderness over their joints should consult a doctor to check the presence of gout and get the right uric acid treatment.

A diagnosis for gout is usually done in any of the following ways:

Physical examination

Depending upon the case, a doctor might be able to confirm the presence of gout via a physical examination of the patient as the effects of a gout attack are visible near and over the affected skin area. During physical examinations, the most commonly and easily found gout is gout on top of foot.

Blood test

Uric acid : This test checks the concentration of uric acid in the blood, which can hint toward the possibility of the presence of gout as the correlation between uric acid and gout is quite high. A uric acid level in the blood over 6.8 mg/dL (milligrams per deciliter) is high. However, not everyone with a high uric acid level has gout.

Urine test

Uric acid: The uric acid urine test can also be used to measure the level of uric acid in urine. A 24-hour urine sample is needed for the same.

Imaging tests

X-ray of affected joint: The medical condition can also be detected with the help of an x-ray examination of the affected joint. An x-ray enables the doctors to check the presence of uric acid crystals as well as bone damages in the affected area.

Ultrasound: Ultrasound is used for detection of joint effusion, synovitis (inflammation of soft tissues lining the joint spaces) and evaluation of cartilage, bone contour, and crystal deposition.

Conventional CT (CCT): CT is characterized by excellent resolution and high contrast, hence it is the best technique for the assessment and characterization of urate crystals.

Dual-energy CT (DECT): This new imaging technique for diagnosis of gout that allows the differentiation of deposits.

Magnetic resonance imaging (MRI): MRI helps in assessment of inflammation, synovial thickening and erosion of joints.

Nuclear scintigraphy: It uses very small, tracer amounts of radioactive molecules to diagnose diseases involving bone and soft tissues.

Positron emission tomography (PET): This technique is helpful when gout presents at unusual locations.

Other tests

Synovial fluid analysis: Synovial fluid is a thick, straw-colored liquid found in small amounts in the joints. Its analysis helps to diagnose and treat joint problems like Gout.

Synovial biopsy: Synovial membrane refers to the tissue lining a joint. The examination of this tissue helps in diagnosing gout, or rule out other infections.

Here’s more on what uric acid test means and what the results indicate.

Click To Know!

Celebs affected

Jared Leto

American actor Jared Leto, best known for movies like Fight Club, Dallas Buyers Club, and Requiem for a Dream, developed gout after gaining weight for a film.

Jim Belushi

American actor and comedian Jim Belushi also suffered from gout. He got to know about his medical condition when he suffered from a gout attack during one of his performances.

Prevention Of Gout

Gout can be prevented in several ways, usually, a combination of such ways can lead to a reduced level of uric acid in the body and hence gout pain relief. Some of the ways in which you can relieve gout knee pain, gout pain in foot, and other joints are:

1. Avoid or limit alcohol

Alcohol consumption impacts the ability of the body to excrete uric acid from the system, which as a result increases the concentration of uric acid in the blood and poses a greater threat of developing or undergoing a gout attack. Similarly, fructose-sweetened drinks also cause the same condition, and hence their consumption should be either avoided or limited to reduce the risk of gout.

2. Increase intake of water

Increasing water consumption aids the kidney in flushing out the uric acid with urine and hence, reducing the chances of developing urate crystals in the body. However, the ideal amount of water consumption varies on an individual basis, depending upon their age, sex, level of fitness, and other factors.

3. Maintain a healthy body weight

An individual with healthy body weight is less vulnerable to a gout attack, as obesity leads to a higher level of uric acid in the body, making the job of kidneys of flushing out the uric acid difficult. However, it is important to note that weight loss should not be sudden as it can cause other complications. You should aim for a gradual and steady weight loss journey that will help reduce the risk of developing gout.

4. Avoid a high purine diet

Certain food items naturally contain a higher level of purine, which can lead to a higher level of uric acid in the body. This is because purine is naturally broken down in the body to form uric acid. Food items like red meat, tuna, turkey, bacon, and alcoholic beverages should be either avoided or consumed in a limited quantity to avoid the risk of developing a higher concentration of uric acid in the blood. Foods good for arthritis and gout include nuts, olive oil, berries, dark leafy greens, garlic, and onion.

5. Avoiding certain medications

Medications like diuretics can cause hyperuricemia - which is a higher level of uric acid concentration in the blood. If someone is consuming such medications, they should consult their doctor to see if there is a replacement or substitute for such drugs. Otherwise, regular consumption of such drugs can lead to the formation of urate crystals in the body.

Specialist To Visit

Gout can lead to potential bone damages, and hence if a person experiences a sudden sharp gout pain in the foot or other joint along with redness and swelling, they should not ignore such gout symptoms and consult a doctor at the earliest.

Specialists that can help and consult with gout are:

General physician

Orthopediacian

Rheumatologist

Consult India’s best doctors from the comfort of your place with a single click.

Book Now!

Treatment Of Gout

A gout pain relief can be treated on the basis of the following:

Treatment of gout attacks

1. Nonsteroidal anti-inflammatory drugs (NSAIDs): These drugs reduce both pain and inflammation. However, in some cases they may cause side effects, including ulcers, bleeding, and stomach pain.

Some of the common examples of these drugs include:

Naproxen

Indomethacin

Ibuprofen

Celecoxib

2. Corticosteroid medications: Corticosteroids help reduce gout pain and inflammation. They are available as both oral pills and in the form of injections. Corticosteroids used for gout include:

Dexamethasone

Methylprednisolone

Prednisolone

Prednisone

Triamcinolone

3. Colchicine: This drug has been found to be effective in reducing inflammation which causes pain, swelling and other symptoms of gout. However, it is contra-indicated in severe cases of chronic kidney diseases.

4. IL-1 blockers: Canakinumab, a long lasting antibody to IL-1 beta, is considered for the management of gout flares in patients with frequent flares contraindicated to NSAIDs, colchicine and steroids (oral or injectable).

Treatment of chronic gout

1. Xanthine oxidase inhibitors (XOI): XOI works by inhibiting uric acid synthesis. This class includes:

Allopurinol

Febuxostat

2. Non-steroidal anti-inflammatory drugs: Long term treatment with non-steroidal antiinflammatory drugs is sometimes used to prevent recurrent gout.

3. Urate lowering drugs: These drugs act by reducing serum urate concentration. Initiation of urate lowering drugs is associated with an increased risk of gout flares due to crystal mobilization. This should be explained to the patient before the treatment. These include:

Losartan

Flurbiprofen

Probenecid

4. Uricosurics: Uricosuric drugs should not be used in patients with significant kidney impairment or a history of kidney stones. Drugs used are:

Sulfinpyrazone

Benzbromaron

Use ice pack for immediate relief from gout pain

Gout attacks are highly painful and often need instant remedies to relieve the distress. In such situations, you can apply an ice pack to control swelling and pain. However, you should try not to keep the ice pack for more than 20 minutes at a time. However, if pain or swelling still persists, consult a doctor right away.

Click Here!

Home-care For Gout

Gout is a rare medical condition but is known to cause high levels of pain and discomfort. If someone at your home is suffering these sudden gout attacks and pain breakout, you can practice the following do’s and don’ts, especially to keep a check on food to eat with gout.

Do’s

Drink at least 9-10 glasses of water to keep yourself well-hydrated.

Include citric fruits such as orange and lemon in your diet.

Eat more cherries to reduce inflammation in the body.

Drink coffee to lower uric acid levels in the body.

Elevate your joint to reduce swelling.

Avoid taking stress as it increases the inflammation in the body.

Don’ts

❌ Do not consume alcohol

❌ Do not consume fructose-sweetened drinks

❌ Do not consume foods containing high levels of purine

❌ Do not delay seeking medical consultation for gout

❌ Do not starve yourself for losing weight

❌ Do not consume sugar-rich foods

Here’s more on what to eat and what to avoid in case of gout.

Click To Read!

Complications Of Gout

Chronic tophaceous gout can lead to the following medical complications:

1. Joint damage and deformation

Chronic gout can lead to swelling in your joints, deformation of joints, permanent joint damage, as well as permanent movement disabilities. In severe cases, individuals suffering from gout pain in foot and other joints can also require joint replacement surgery.

2. Tophi

Lumps of urate crystals are called tophi. They harden the skin over and near the joints, damaging cartilage. In rare cases, Tophi can also occur on the ears. These pointed crystals usually do not cause gout pain in the foot or other joints but can cause severe damage, restricting their movement permanently.

3. Kidney stones

Uric acid and gout go hand in hand. Therefore, individuals suffering from gout are more vulnerable to developing kidney stones in their urinary tract as the kidneys filter the uric acid.

4. Kidney damage and chronic kidney diseases

As the uric acid passes through the kidneys, its high concentration can damage the organs and cause permanent damage, leading to various chronic kidney diseases (CKDs) such as loss of kidney function, glomerulonephritis, and chyluria.

5. Psychological and emotional breakdown

A chronic tophaceous gout can cause permanent walking issues due to chronic gout knee pain and discomfort in other joints. This can affect the mental and emotional well-being of individuals suffering from medical conditions. This can further lead to severe issues, including anxiety and depression. Thus, if you have been suffering from uric acid and gout issues, it is wise to reach out for medical help to maintain your physical and emotional health.

Alternative Remedies For Gout

You can make use of the following home remedies for gout pain relief and its treatment.

Naturotherapy

1. Cherries: Consumption of cherries, including strawberries, blueberries, red cherries, etc., help prevent gout attacks and relieve gout knee pain and discomfort in other affected joints.

2. Ginger (adrak): Ginger is a great culinary ingredient for reducing inflammation in joints. You can have ginger by grading it in veggies, tea, or you can even try having raw ginger. Studies have found ginger to be effective in reducing gout pain. It ranks significantly among the foods good for arthritis and gout.

3. Celery (ajmoda): Celery is known for treating urinary issues. You can consume its extract, sticks as well as seeds to reduce the inflammation in your joints.

4. Hibiscus (gudhal): Hibiscus is a traditional herb that can be consumed in tea or with your regular food to treat gout at home. The flower has been found to be potentially effective in reducing uric acid levels in the body.

5. Hot/cold packs: Applying hot or cold water bags may also help in reducing joint inflammation and pain caused due to gout.

6. Dandelion: Dandelion is a flowering plant known for improving the functioning of the kidneys and liver. Research has shown that consumption of its extract in tea or as a supplement may reduce uric acid levels in the body.

7. Lemon water: Drinking two liters of water with two freshly squeezed lemons helps reduce the levels of uric acid in the body. Lemon effectively reduces uric acid as it neutralizes and helps get some relief from the pain.

Yoga

Yoga poses can also help in management of gout. You can try the following yoga poses along with meditation to treat gout and get some relief from sudden pain:

1. Ardha matsyendrasana: The spinal twist pose can help reduce uric acid levels in the body. It can be performed by sitting with legs stretched in front and bending your left leg so that its heel touches your right hip. After this, place your right leg over your left knee and twist your waist, shoulder, and neck.

2. Dhanurasana: The bow pose can be performed by lying on your stomach with your knees and elbows folded backward to hold your ankles.

3. Salabhasana: The locust pose can be simply performed by lying on your stomach with your arms by your side. With the pose, keep inhaling and exhaling for at least 20 seconds.

4. Ananda balasana: The happy baby pose can be performed by lying on your back and bringing your knees close to your chest from front. Remember to keep your arms inside your knees during this pose and hold your big toes gently.

5. Viparita karani: The legs-up-the-wall pose can be performed by sitting next to a wall with legs spread and pressed against the wall. Lie on your back and breathe gently for around 5 minutes.

Traditional chinese medicine (TMC)

TMC has also been used as an alternative therapy for management of gout. The main mechanisms of TCM treatment for gout during the remission stage include:

Benefiting Qi ( the force that makes up and binds together all things in the universe)

Nourishing blood

Tonifying spleen and kidney

Inhibiting inflammatory factors in joint fluid

Reducing blood uric acid level

Promotion of uric acid excretion

Enhancing immune function

Blocking the sensation of peripheral nerves

However, TMC needs more research and in-depth studies for scientific backing.

Did you know?

Elevating your foot having a gout can help reduce the feeling of inflammation as well as the recurring pain. You can do this while lying down by placing 2-3 pillows or cushions under your affected foot. Make sure to keep the elevation above your heart level.

Living With Gout

Living with gout can be painful and difficult. However, you can manage and reduce its effects by adopting the following lifestyle recommendations.

1. Follow your medication diligently: Medication plays a highly significant role in the treatment of gout. You should follow your medication schedule timely and without fail. Also, if you start experiencing relief after following the prescribed medication, you should not make the mistake of leaving the medication in between without seeking your doctor’s permission.

2. Check your uric acid levels every 6 months: You should monitor and keep a check on your uric acid levels. Ideally, you should check your uric acid concentration twice a year and maintain it below 6 milligrams per decilitre.

3. Maintain a healthy body weight: You should maintain healthy body weight as per your body mass index (BMI). However, you should not indulge yourself in fad diets as it can strain your health, resulting in adverse effects on your body instead of doing any good.

4. Follow a 30-minute walk regimen: You should follow a 30-40 minutes walk routine to keep your body movements functional. This will also help you in achieving your ideal body weight.

5. Drink at least 7-8 glasses of water: Drinking water may help remove excess uric acid from the blood. Ideally, you should drink at least 7-8 glasses of water in a day to keep yourself hydrated.

Frequently Asked Questions

Does walking on foot with gout make it worse?

Should i wear socks with gout?

Is cheese bad for gout?

Is salt bad for gout?

Why does gout hurt more at night?

What is the best thing to drink if you have gout?

What are the main triggers of gout?

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H1N1 Influenza (Swine Flu)

Also known as H1N1 flu, Pig influenza, Hog flu, and Pig flu

Overview

Swine flu, also known as H1N1 influenza, is a common respiratory infection in pigs worldwide.

However, the H1N1 swine influenza viruses can potentially cause infections in humans if the capability of stimulating an immune response of the virus changes. Swine flu was at its peak in the 2009-10 flu season and the World Health Organization (WHO) declared the H1N1 flu to be a pandemic in 2009 due to human-to-human transmission. The H1N1 flu strain from the pandemic later became one of the strains that cause seasonal flu.

This condition causes upper and in some cases lower respiratory tract infections. The most common symptoms include nasal secretions, chills, fever, and decreased appetite.

Though anyone can get affected by it, the people at higher risk are individuals on the extreme spectrum of age like children below 5 years, or adults over 65 years of age. Also, individuals who have other health conditions like asthma, diabetes, or an autoimmune disorder, or pregnant women are at a greater risk.

The best way to prevent infection is to maintain proper hand hygiene, avoid crowded areas during the outbreak, and get vaccinated. The treatment generally includes supportive measures like bed rest, intake of fluids, eating a healthy balanced diet, etc. Antiviral drugs may also be prescribed in some cases.

Key Facts

Usually seen in

Children between 9-12 years of age

Gender affected

Both men and women

Mimicking Conditions

Acute respiratory distress syndrome

Adenovirus

Arenaviruses

Cytomegalovirus

Dengue

Echovirus infection

Hantavirus pulmonary syndrome

HIV infection and AIDS

Human parainfluenza viruses and other parainfluenza viruses

Legionnaires disease

Necessary health tests/imaging

Real-time PCR

Nucleotide sequencing

Phylogenetic analysis

Treatment

Antivirals: Oseltamivir, Zanamivir, and Peramivir

Analgesics and Antipyretics: Acetaminophen (paracetamol) and Ibuprofen

Antibiotics: Cefuroxime, Cefotaxime, Clarithromycin, and Erythromycin.

Specialists to consult

General Physician

Emergency medicine doctor

Internal Medicine specialist

Pediatrician (in children)

Pulmonologist

Symptoms Of Swine Flu (H1N1 Influenza)

The clinical manifestations of swine flu are similar to any other flu. The symptoms include:

Fever ( (100 F or greater)

Chills

Runny or blocked nose

Cough

Sore throat

Watery and redness of eyes

Fatigue

Body aches

Joint pains

Headache

Shortness of breath

Rapid breaths

Vomiting

Diarrhea

Rare symptoms include:

Conjunctivitis

Parotitis in toddlers (inflammation of the parotid salivary gland)

Note: The immuno-compromised patients and patients in extremes of age (infants and elderly) may show altered mental status and respiratory distress.

Stay one step ahead of these symptoms with our widest range of cold and cough products.

Check them out now

Differences and similarities between swine flu and the common cold

Swine flu and the common cold are both contagious respiratory tract illnesses, but they are caused by different viruses. They have a lot of similarities and it becomes difficult to distinguish between them. Some of the most common similarities and differences include:

1. Symptoms

Similarity: The symptoms of cold and flu are very similar at the onset with a runny nose, headache, fatigue, and difficulty in breathing.

Difference: Cold symptoms are usually milder than the symptoms of swine flu and it generally does not result in serious health problems.

2. Cause

Similarity: Both cold and influenza are caused by viruses.

Difference: Swine flu is caused by the H1N1 influenza virus. Whereas the common cold can be caused by a number of other viruses, including rhinoviruses, parainfluenza, and seasonal coronaviruses.

3. Incubation period

Similarity: Both diseases are highly contagious and have an incubation period (the period between exposure to an infection and the appearance of the first symptoms) of a minimum of 1 day before the individual starts experiencing symptoms.

Difference: The incubation period for influenza is usually 1-4 days and 1-7 days for colds.

4. Duration of illness

Similarity: Swine flu and the common cold cause respiratory tract illnesses ranging from 4 days to two weeks.

Difference: A cold's duration (how long it lasts) is about 7 to 10 days; however, depending upon the viral strain, it can last up to two weeks. The swine flu's duration varies from about 5 days to two weeks with an average of 8 days.

5. Risk factors

Similarity: Both have similar risk factors i.e. younger children, old people, pregnant women, and immunocompromised individuals are at a higher risk.

Difference: Individuals who do not receive the swine flu vaccine are more likely to risk getting infected with the flu virus but there is no vaccination to prevent the common cold.

Are you confused if it is a common cold or swine flu?

Know if your cold is more than just a common cold.

Read this

Differences and similarities between swine flu and COVID-19

Swine flu and COVID-19 are both contagious respiratory infections of the respiratory system but are caused by different viruses. COVID-19 is caused by an infection with a coronavirus (first identified in 2019). And swine flu is caused by the H1N1 virus. They are both quite similar yet different, some of the common similarities and differences between them include:

1. Duration of illness

Similarity: It is two days on average before an infected person starts experiencing the symptoms of illness.

Difference: COVID-19 may take a longer duration for the symptoms to start whereas, in the case of flu, the symptoms begin between 1-4 days.

2. Mode of the spread

Similarity: Both COVID-19 and swine flu can spread from person to person between people who are in close contact with one another i.e. within about 6 feet through droplets from sneezing, coughing, or talking.

Difference: COVID-19 is generally more contagious than the swine flu virus.

3. Risk factors

Similarity: Older adults, individuals with certain underlying medical conditions, pregnant women, and children are at higher risk of getting both COVID-19 and swine flu.

Difference: COVID-19 seems to cause more serious illnesses in some people resulting in hospitalization and death can occur even in healthy people.

4. Complications

Similarity: Respiratory complications occur in patients infected with swine flu and COVID-19.

Difference: Most people with swine flu can recover on their own in a few days to two weeks whereas COVID-19 complications can happen even after the recovery (long covid syndrome).

The only trusted way to know for sure, if your symptoms are that of the flu or COVID is to get tested. Do not neglect your symptoms thinking it's just the flu.

Book your RT PCR to know if it is COVID

Tap Here

Differences and similarities between swine flu and seasonal influenza

Regular flu or influenza may be caused by RNA viruses belonging to the family Orthomxoviridae. Swine flu is caused by a family of viruses that affects pigs. Some of the similarities and differences between them include:

1. Cause

Similarity: Both swine flu and influenza are caused by viruses.

Difference: The strains that cause Influenza viruses A, B, and C. The known strains that cause swine flu include subtypes of influenza also known as H1N1.

2. Symptoms

Similarity: Both present with similar symptoms that include fever, chills, sore throat, body ache, headache, coughing, and fatigue.

Difference: In swine flu, some people may experience gastrointestinal symptoms, such as nausea or diarrhea. This is thought to be one of the ways it differs from seasonal flu.

3. Incubation period

Similarity: Symptoms for both begin after about two days from the contraction of the virus.

Difference: The known incubation period for H1N1 swine flu ranges from 1 to 4 days, but for some individuals, it may be as long as 7 days. In the case of seasonal flu, symptoms typically begin about two days but can range from 1-4, after flu viruses infect the respiratory tract.

4. Mode of transmission

Similarity: Both spread through droplets of nuclei from an infected person.

Difference: The virus is transmitted through larger droplets in the case of swine flu, and infection can spread from an infected animal to humans.

Learn more about influenza (seasonal flu)

Read Here

Causes Of Swine Flu (H1N1 Influenza)

H1N1 swine influenza is a common respiratory infection in pigs worldwide, and hence the name, swine flu. Sometimes, people who are in the close proximity of pigs develop swine flu (zoonotic swine flu). The H1N1 swine influenza viruses can potentially cause infections in humans if the capability of stimulating an immune response of the virus changes.

Influenza A pandemics such as the one in 2009 occurred due to person-to-person transmission through airborne droplets, and potentially, through human contact with inanimate objects contaminated with the virus which got transferred to the eyes or nose.

Did you know?

A person cannot acquire swine flu from eating pig products such as bacon, ham, and other pig products.

Risk Factors For Swine Flu (H1N1 Influenza)

There are a number of factors that can increase your risk of contracting swine flu. They include:

Individuals above 65 years of age

Children below 5 years of age

People with chronic diseases like

Diabetes

Chronic pulmonary conditions including asthma

Congestive cardiac failure

Kidney failure

Liver failure

Blood abnormalities including sickle cell disease

Neurologic conditions

Neuromuscular disorders

Pregnant women

Teens receiving long- time period aspirin therapy

Immunocompromised individuals

People on medications for HIV.

Diagnosis Of Swine Flu (H1N1 Influenza)

A physical exam is done to look for symptoms of H1N1. There are many tests used to diagnose influenza. But not everyone who has the flu needs to be tested. A diagnosis of confirmed swine flu requires laboratory testing of a respiratory sample (a simple nose and throat swab). The tests include:

1. Real-time PCR

This test is used to detect seasonal influenza A, B, H1, H3, and avian H5 serotypes. The test is done by collecting samples from the throat and nose of the suspected individual. It provides an accurate and rapid diagnosis of swine flu.

2. Nucleotide sequencing

It refers to the general laboratory technique for determining the exact sequence of nucleotides, or bases, in a DNA molecule. It is helpful in determining the H1N1 strain.

3. Phylogenetic analysis

It is done to isolate the gene from the pigs. This test is indicated to determine the exact strain of swine flu.

Not sure where can you get these tests done? We are here to help.

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Celebs affected

Brian Litrell

Backstreet Boys member Brian Littrell was diagnosed with the H1N1 virus in 2009, according to a statement released by the band. As a preventative measure, Litrell and his fellow band-mates were prescribed antiviral medication and had to cancel appearances in New York.

Rupert Grint

‘Harry Potter’ star Rupert Grint reportedly caught the H1N1 virus in 2009 while filming the latest installment of the "Harry Potter" series. After taking a few days off from filming, he was able to attend the premiere of the film and later return to filming.

Prevention Of Swine Flu (H1N1 Influenza)

Prevention and control measures for swine influenza are based on understanding how the disease is transmitted. Preventive measures include

1. Prevention of pig-to-human transmission

The transmission between pigs and humans mainly occurs in swine farms where farmers are in close contact with live pigs. Measures to prevent it include vaccines for swine to prevent their infection. Avoiding smoking near the infected animal, and wearing gloves while handling them can decrease infections to a larger extent.

2. Prevention of human-to-human transmission

This virus is not transmitted through food. In humans, it is most contagious during the first 5 days of the illness. However, children can remain contagious for up to 10 days. Recommendations to prevent the spread of the virus among humans include:

a. Take quarantine seriously: The close contacts of the suspected, probable, and confirmed swine cases are advised to remain at home and avoid traveling for at least 7 days. In case of any symptoms, the contacts should undergo a prompt test for H1N1 influenza and consult a physician.

b. Follow cough and hand hygiene:

Hands must be frequently washed with soap and water or alcohol-based or antiseptic handwash or hand rub.

The infected persons should cover their nose and mouth with a single-use tissue while coughing or sneezing

The used tissue must be disposed of immediately

The healthcare workers who are involved in the direct care of patients with confirmed or suspected swine should use gowns, eye protection, gloves, and disposable N95 respirators.

c. Give importance to chemo-prophylaxis: Antiviral medicines can be used for prophylaxis (to prevent) contact with the patient with a high risk for complications and the healthcare personnel. Oseltamivir is given once a day until 10 days after the individual’s last contact with the patient and can be given for a maximum of 6 weeks.

d. Get vaccinated: WHO recommends vaccination of all the healthcare staff coming in contact with the suspected or confirmed cases of swine flu (physicians, nurses, paramedical, and ambulance staff). This vaccine against influenza A/H1N1 can be taken yearly. The immune response of the body takes about 2-3 weeks to develop after vaccination.

e. Other general measures

Early self-isolation of those feeling unwell or have symptoms

Avoid close contact with sick people

Avoid touching your eyes, nose, or mouth

Disinfect surfaces that have come in contact with the infected person

Cook red meat at 1600F (700C) to kill the virus.

Disinfect used tissues before discarding them.

Keep this in mind!

Children and teenagers recovering from flu-like symptoms should never take aspirin. This is due to the risk of Reye syndrome, a rare but potentially life-threatening condition.

Listen to our experts talk how viruses spread and about effective ways to prevent it.

Watch this video

Doctor To Visit

People who have the swine flu with a fever above 100 F (38 C), cough, or sore throat might need medical interventions from:

General Physician

Emergency medicine doctor

Internal Medicine specialist

Pediatrician

Pulmonologist

An emergency medicine doctor is a specialist who treats patients in the emergency department. An internal medicine specialist specializes in the internal organs and systems of the body. A pediatrician is a doctor who deals with the diseases of children whereas a pulmonologist is a doctor who specializes in the respiratory system.

Consult India’s best doctors here

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Treatment Of Swine Flu (H1N1 Influenza)

The treatment is basically supportive care in mild to moderate cases. Depending on the severity, the treatment options include the following:

1. Supportive measures

Swine flu requires supportive management, with or without antiviral medications. These include:

Bed rest

Staying hydrated

Electrolytes

Administration of intravenous fluids in severe cases

Painkillers and antipyretics (like paracetamol and ibuprofen) to manage pain and fever

Broad-spectrum antibiotics (like cefuroxime, cefotaxime, clarithromycin, and erythromycin) to treat or prevent secondary bacterial pneumonia

Oxygen therapy or in severe persistent hypoxia (decreased oxygen)

Note: Corticosteroids may be used in case of management of septic shock.

2. Antiviral therapy

Your doctor may prescribe antiviral drugs to reduce the severity of symptoms and lower the risk of complications. Examples of antiviral medications used to treat swine flu include:

Oseltamivir

Zanamivir

Peramivir

Looked everywhere but couldn't get your medications on time? Don’t worry.

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3. Management in Pigs

Though swine influenza isn’t deadly to pigs, little treatment beyond rest and supportive care may be required. Vaccination and animal management techniques with antibiotics are used to prevent bacterial pneumonia and different secondary infections in animals weakened by the influenza virus.

Home Care For Swine Flu (H1N1 Influenza)

Like any other flu, even swine flu can be managed at home by taking adequate rest, getting enough sleep, being well hydrated, and managing fever and body aches with painkillers and antipyretics. Along with these, there are certain home remedies that can help get rid of the symptoms soon. They include:

Turmeric (Haldi): Turmeric is known for its anti-inflammatory properties. Add a pinch of turmeric to a glass of warm milk and drink it every night to help your body fight the swine flu infection.

Buy turmeric products online

Garlic (Lahsun): Studies show that garlic has anti-viral properties. It also improves your body's immunity and is loaded with antioxidants. Swallow 2 garlic pods with warm water on an empty stomach every morning to reap the benefits. People on blood thinners should avoid too much consumption of garlic.

Basil (Tulsi): Research suggests that tulsi is one of the major herbs used for influenza-like disease treatment. Eating tulsi leaves can clear up infections in your throat and lungs, along with building immunity.

Indian gooseberry (Amla): It is rich in vitamin C, and research suggests that it is blessed with immune-boosting properties. You can eat the whole fruit or drink its juice to keep your body infections at bay.

Ginseng: Studies demonstrate that oral administration of ginseng extract can protect against the H1N1 influenza virus. Drinking a cup of ginseng tea every day can prove to be beneficial for individuals with swine flu. People on blood thinners should avoid Ginseng as it can cause a risk of bleeding.

Olive (Zaitoon) leaves: Studies indicate that these are rich in properties that can help your body fight the symptoms of swine flu like nausea, chills, fever, and headaches effectively. Give your body the extracts of this herb regularly to keep swine flu at bay.

Tulsi: Consuming tulsi leaves can aid in clearing the infection in your throat and lungs, while also strengthening your immune system to combat swine flu infection.

Buy Tulsi products to keep your immune system robust.

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Aloe vera: Aloe vera is not just an immune system enhancer, it also possesses anti-inflammatory properties. It can be beneficial in fighting infections and alleviating swine flu symptoms such as joint pain.

Check out our range of aloe vera juice to keep up your immunity.

Click Here

Giloy: It is a herbaceous plant that has been used in Ayurveda to treat various disorders. Giloy juice helps in reducing high fever.

Complications Of Swine Flu (H1N1 Influenza)

Swine flu is a respiratory tract illness that can cause mild to moderate symptoms. However, in some cases, it can lead to complications like:

Pneumonia: This is due to a secondary bacterial infection. Swine flu can lead to more serious problems like lung infection and other breathing problems.

Respiratory failure: Studies suggest that the infection causes severe hypoxemic respiratory failure or acute respiratory distress syndrome (ARDS, fluid build-up in lungs) with multi-organ involvement.

Seizures: these are generally seen in children along with encephalopathy (disease of the brain).

Prevent complications by understanding how viruses spread from the surface.

Listen to our experts

Alternative Therapies For Swine Flu (H1N1 Influenza)

Flu symptoms can be managed with complementary therapies along with supportive treatment. Even the cases that require antiviral therapy can benefit from the following alternative therapies:

1. Homeopathy

Studies suggest that Oscillococcinum is a highly diluted homeopathic preparation that some people take regularly over the winter months either to prevent flu or as a treatment for flu symptoms.

2. Traditional Chinese medicine

Research suggests that some plants that are extensively used in traditional Chinese medicine could prove useful for the management of swine flu. The herbal blend used in this therapy can be the most effective formula, especially if started within the first 24 hours of symptoms.

Living With Swine Flu (H1N1 Influenza)

Swine flu is an upper respiratory tract infection that generally clears up within a week or so. Both adults and children can get affected by it, however, it is more common among teenagers and severe in some of the very young.

Tips for Parents

In kids, diarrhea and vomiting are more common than in adults. Infants may present with fever and lethargy without respiratory symptoms. Managing kids while they are sick can be quite a task. Here are a few things to keep in mind:

Be vigilant, and watch your kids closely

Make sure you wash your hands while handling the kids

Wash their hands frequently

Avoid crowded areas

Avoid direct contact with sick individuals

If your kid is sick, do not send them to school

Get them vaccinated.

Here are 10 more tips to follow if your child has a fever.

Read This

Frequently Asked Questions

Is there a difference between swine flu and Spanish flu?

Is swine flu (H1N1) contagious?

When should I see my doctor?

What kind of face mask is required to protect against swine flu?

What is the vaccination against swine flu?

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Hiccups

Also known as Hiccough and Singultus

Overview

Almost every one of us must have experienced hiccups in our lifetime.

A hiccup is a repeated involuntary contraction of the diaphragm (the muscle that separates the chest from the abdomen) followed by a sudden closure of the vocal cords. This checks the inflow of air and produces the characteristic “snap” or “hic” sound.

Eating or drinking too quickly, having very hot or freezing foods, spicy food, alcohol and carbonated beverages are common causes of getting hiccups. Babies also may get hiccups after feeding, crying or coughing. However, many times a reason for hiccups cannot be identified.

Hiccups are usually harmless and settle by themselves in a few minutes. Breath-holding, drinking a glass of water or eating sugar are common ways to stop hiccups.

However, in some cases, prolonged hiccups that last for days or weeks may be suggestive of some underlying disorder. It is essential to identify the cause and treat it accordingly.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but more common in men

Body part(s) involved

Diaphragm

Epiglottis

Nerves that supply the diaphragm

Mimicking Conditions

Coughing

Gagging

Necessary health tests/imaging

Laboratory tests: Serum electrolytes, Calcium test, Blood urea nitrogen (BUN) test, Creatinine test, Lipase test, Liver function tests

Imaging tests: ECG, Chest radiograph, CT and MRI.

Treatment

Acute hiccups: Self resolving

Persistent and intractable hiccups:

Treatment of underlying disorder

Medications to calm the diaphragm

Invasive procedures

Specialists to consult

General physicians

Otolaryngologists

Gastroenterologists

Neurologists

Pulmonologists

Symptoms of Hiccups

The only symptom of hiccups is a slight tightening sensation in your chest, abdomen, or throat that causes the hiccup sound.

The hiccup reflex involves the synchronized action of the

Diaphragm: It is a large muscle located below the lungs that demarcates the chest from the abdomen. It contracts rhythmically and continually to aid in respiration.

The muscles that open and close the windpipe

The nerves that act upon the diaphragm

If any of the nerves involved in this cycle are triggered, for whatever reason, the diaphragm may contract involuntarily, allowing the air to be drawn into the lungs. As a result, epiglottis( the top of the windpipe) closes, resulting in the distinctive cough-like ‘hic’ hiccup sound.

Types of Hiccups

On the basis of the duration hiccups can be classified as:

Acute hiccups: Less than 48 hours duration

Persistent hiccups: Last over 2 days

Intractable hiccups: Last over a month

Causes of Hiccups

Common causes of acute hiccups:

Eating too quickly or too much

Eating very hot or very cold foods

Consuming spicy food

Drinking alcohol and carbonated beverages

Swallowing air with chewing gum or sucking on candy

Indigestion

Bad odor

Inhaling toxic fumes

Cigarette smoking

Over-stretching the neck

Sudden temperature changes

Feeling nervous or excited

Causes of persistent and intractable hiccups:

1. Nerve damage or irritation

Conditions that may cause damage or irritation to the nerves that control the diaphragm including Gastroesophageal Reflux Disease(GERD), sore throat, goiter, tumor or cyst.

2. Medications

Certain medications can cause hiccups, such as-

Antibiotics like azithromycin

Psychiatric medications like aripiprazole

Anesthetic drugs like propofol

Steroids

Certain epilepsy medications

3. Instrumentation

Certain procedures that require the use of instruments can mechanically irritate the nerves that control the diaphragm and induce hiccups. For eg. abdominal or chest surgery .

4. Other medical conditions

Some of the conditions that may prompt frequent or prolonged attacks of hiccups include:

Oesophagitis (inflammation of the food pipe)

An overactive thyroid gland

Pleurisy (inflammation of the membrane surrounding the lungs)

Pneumonia (inflammation of the lungs)

Tuberculosis

Influenza (flu)

Pericarditis (inflammation of the tissue surrounding the heart)

Diabetes

Malaria

Hernia

Uremia (increased levels of waste products in blood)

Hypocalcemia (deficiency of calcium)

Chronic kidney failure

Multiple sclerosis

Stroke

Cancer

Causes of Hiccups in Infants

It is prevalent for babies under 12 months to get hiccups. Newborns and infants may experience hiccups more frequently during or after feeding as they may swallow food too quickly or overfeed.

This can lead to stomach distension, and when the stomach distends, it pushes against the diaphragm, which causes it to contract and cause hiccups.

Hiccups can be a sign of an infant being full. Therefore, pediatricians typically recommend short feeds with burping breaks.

Your baby will usually stop hiccupping within 5 to 10 minutes, but if your baby's hiccups do not stop within a couple of hours, you should see your doctor.

Note: Generally, hiccups are a sign of healthy growth and development.

Did you know ?

Babies often hiccup in the womb before they are born. In most cases, fetal hiccups are completely normal and not a cause for concern. They usually indicate that the baby’s respiratory and nervous systems are developing well, as are their reflexes.

Risk Factors For Hiccups

Men are more prone to develop long-term hiccups as compared to women

Anxiety, stress and intense emotions

Patients who have received general anesthesia

Post-surgery, particularly abdominal surgery or chest surgery

Pregnancy

Did you know?

Beyond respiratory symptoms, persistent hiccups have been reported as a rare symptom of hospitalized COVID-19 patients. Learn more about COVID-19.

Click Here

Diagnosis of Hiccups

No specific test is required in the diagnosis of hiccups, but in the case of persistent or intractable hiccups, it is important to detect any probable underlying illness.

1. History

A physician may ask for the history of the current sickness that includes the length of the hiccups, any treatments used, and their relevance to a recent condition or operation. They may also ask about your past medical history, including information about known gastrointestinal and neurologic disorders, and drug history that also includes details concerning alcohol use.

2. Physical examination

During the physical exam, the doctor may perform a neurological exam to check your-

Balance and coordination

Muscle strength and tone

Reflexes

Sight and sense of touch

4. Laboratory testing

While no specific evaluation is required for acute hiccups, the following lab tests might be suggested for diagnosis of long term hiccups:

Serum electrolytes

Calcium test

Blood urea nitrogen (BUN) test

Creatinine test

Lipase

Liver function tests

5. Imaging techniques

These tests may help to identify abnormalities inside the chest, neurological changes or lesions causing hiccups.

ECG (Electrocardiogram)

Chest radiograph

Computerized tomography (CT)

Magnetic resonance imaging (MRI)

Specialists To Visit

The majority of hiccup bouts are self-limiting and pass quickly. However, if they persist even after 2 days, it can be because of an underlying condition. Doctors that can help diagnose and treat hiccups include:

General physicians

Otolaryngologists

Gastroenterologists

Neurologists

Pulmonologists

An otorhinolaryngologist is a surgical doctor for the management of conditions of the head and neck.

A gastroenterologist is specialized in the diagnosis and treatment of the gastrointestinal tract disorders.

A neurologist specializes in the treatment of disorders affecting the brain, spinal cord, and nerves. A pulmonologist is a doctor who treats disorders of the lungs.

When to see a doctor?

Contact a doctor if the hiccups last for more than 48 hours, return frequently, or are interfering with your life. Consult them right away if you experience the following symptoms along with the hiccups:

Headache

Problems in balancing

All-over numbness

If you are facing such an issue, consult a professional immediately. To book a consultation

Click Here

Prevention Of Hiccups

Hiccups are very common and usually resolve on their own. Try these tips to prevent hiccups by making some changes in your habits:

Do’s:

Eating smaller meals

A cold water shower

Managing stress and anxiety effectively

Self-protection from sudden changes in temperature

Don'ts:

Eating too fast

Consuming spicy food

Drinking alcoholic, fizzy, or carbonated drinks

Eating or drinking something very cold immediately after something hot

Chewing gum

Smoking

Over-stretching your neck

Inhaling toxic fumes

Say goodbye to ‘hic’ or hiccups. Read about hiccups in a nutshell.

Click Here

Treatment of Hiccups

The doctor will want to know if your hiccups are caused by a medical condition or medication you are taking. If the underlying problem is treated or you switch medications, the hiccups should go away. The underlying cause determines the pharmacological treatment, which may include:

Medications based on specific causes:

1. For nasal symptoms: Nebulized 0.9% saline (2 mls over 5 minutes)

2. To reduce gastric irritation: Proton pump inhibitors can be given. They include:

Omeprazole

Pantoprazole

Lansoprazole

3. To reduce gastric distension (enlargement): Medications include:

Metoclopramide

Domperidone

Itopride

4. Antiflatulent: These medications are used to treat or prevent excessive intestinal gas. They include-

Simethicone

Peppermint water

Carminative agent

Medications for Intractable Hiccups

1. Dopamine antagonists: These medicines can relax the diaphragm muscle or its

nerve supply and may stop persistent hiccups. They include:

Haloperidol

Olanzapine

Chlorpromazine

Methylphenidate

2. GABA agonist: Baclofen is the medication of choice as it helps relax muscles.

Note: Caution is advised in the elderly and patients with kidney dysfunction.

3. Local anesthetic: Low-dose of lignocaine infusion or nebulization help stop hiccups.

4. Antiepileptic: These help relax the nerve supply to the diaphragm and relieve hiccups. The most commonly used drugs include:

Gabapentin

Sodium valproate

5. Calcium channel blocker: These blockers, such as nifedipine, can help control hiccups.

Invasive procedures

More invasive options might be attempted only in case of extreme cases of hiccups. These include the following:

Nasogastric intubation: Insertion of a tube into the stomach via the nose.

Phrenic nerve block: The phrenic nerve which supplies the diaphragm can be blocked using anesthetic medication.

Diaphragmatic pacemaker: It is a battery-powered device that can be implanted surgically. It helps to stimulate or pace the nerves supplying to the diaphragm (the phrenic nerve or vagus nerve) and regulating breathing.

Did you know?

As per a study, rectal massage can also be helpful in relieving intractable hiccups. It can be done by inserting a finger into the rectum and massage using sterile gloves and sufficient lubricant. However, your doctor’s consent should be taken before trying this.

Home-care For Hiccups

Hiccups usually resolve on their own. However, if the hiccups don't stop, here are some tips that can help. Not many studies evaluate the effectiveness of these hiccup remedies. However, they are backed by anecdotal evidence. Additionally, some of the most common remedies stimulate your vagus or phrenic nerves, which are connected to your diaphragm.

Posture and breathing tips:

Pull your knees up to the chest and lean forward

Hold your breath for several seconds or longer

Breath out against closed mouth and nose

Breathe into a paper bag (do not put it over your head)

Pressure points tips:

Pull hard on the tongue

Put pressure on your diaphragm (the diaphragm separates your abdomen from your lungs)

Squeeze your nose closed while swallowing water.

Use your thumb to apply pressure to the palm of your other hand.

Give a gentle massage on your carotid artery on both sides of your neck.

Dietary tips:

Swallow a teaspoon of sugar

Slowly drink a glass of warm water without stopping to breathe.

Sip ice-cold water or gargle with ice water.

Bite on a lemon or taste vinegar.

Other tips:

Distract yourself with something engaging.

Tapping or rubbing the back of your neck.

Home- Care tips for hiccups in infants:

Here are some tips that can be helpful in toddler or infant hiccups.

Feeding tips:

Encourage your baby to burp as you switch from one breast to another or after feeding.

After each feeding, keep the baby upright for 20 to 30 minutes.

Resuming feeding can sometimes stop hiccups.

If your baby is bottle-fed, make sure to tip the bottle while feeding to limit the amount of air the baby swallows.

You can also use anti-colic bottles, which do not allow air passage during feeding.

Explore our extensive range of anti-colic feeding bottles.

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Other general tips:

Cold water can be given to the baby.

Teas containing fennel, chamomile or peppermint can be introduced into your infant's mouth using a dropper. It relieves the muscle spasms that cause hiccups.

Rubbing the baby's back.

Applying light downward pressure to the infant's upper stomach.

Tickling can distract your toddler's attention from their hiccups.

It is always advisable to seek the child's pediatrician's consent before starting these tips.

What not to do:

Never startle or scare the baby.

Never try holding the baby's breath.

Complications of Hiccups

Frequent episodes of acute hiccups, persistent and intractable hiccups, can significantly impact the quality of life and cause physical pain, humiliation or psychological distress.The following complications are associated with them:

Dehydration

Malnutrition

Tiredness

Insomnia (lack of sleep)

Weight loss

Anxiety and depression

Delay the healing of a scar (wound) after recent abdominal surgery. This increases the likelihood of wound complications.

Strong hiccups can also cause:

Reduced heart rate

Drop in blood pressure

The collapse of the lung due to air or gas in the space between the lungs and the chest wall

Alternative Therapies For Hiccups

Acupuncture

Acupuncture can be explored as an alternative treatment option for persistent and intractable hiccups. It stimulates the nerves that are responsible for hiccups.

Some case studies show that acupuncture may effectively treat persistent hiccups, even when conventional forms of treatment don’t work.

Although there is insufficient evidence evaluating the safety and effectiveness of acupuncture in resolving hiccups, some people have been able to cease their long-term hiccups with this therapy, so it may be worth a shot.

Massage

A carotid sinus massage may be suggested to manage chronic hiccups. This involves rubbing the main carotid artery in the neck by the healthcare provider.

Living With Hiccups

Hiccups are usually harmless and resolve themselves in a few minutes. Simple home remedies also come in handy to manage them.

However, chronic or prolonged hiccups can be highly stressful, annoying and disrupt daily routines. They can make sleeping difficult or wake you up in the middle of the night. If the condition lasts for a long time, the lack of sleep can cause a loss of energy throughout the day, leading to exhaustion. All these factors can negatively impact a person's quality of life.

To cope with the condition, getting plenty of rest, eating and drinking small amounts regularly, and being aware of potential complications are critical.

Take prescribed medications on time. Keep yourself busy and distracted. Develop a hobby. Join support groups facing the same challenges.

Maintain regular contact with your doctor throughout treatment to avoid the recurrence of hiccups and complications associated with chronic hiccups.

Did you know?

An interesting case report suggested that a 40-year-old man’s 4 days of continuous hiccuping ceased immediately following sexual intercourse.

Celebs affected

Jennifer Lawrence

Actress Jennifer Lawrence once shared her bizarre hiccup cure. She said, “The only thing that ever works for getting rid of hiccups for me is when I drink water and raise my arms over my head and lower them very slowly.”

Frequently Asked Questions

Are hiccups common in newborn babies?

Can stress cause hiccups?

Will holding my breath cure hiccups?

Can honey stop hiccups?

How long do hiccups last?

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Hirsutism

Also known as Excessive hair, Pilosity and Hairiness

Overview

Hirsutism or excessive hair growth is a common clinical condition that can be seen in women of all ages. This condition is caused by hormonal imbalance where increased levels of androgens (male sex hormones like testosterone) are produced in women.

Hirsute women usually present with increased growth of hair on the sides of the face, upper lip, chin, upper back, shoulders, sternum, and upper abdomen. Hirsutism requires in-depth clinical evaluation and investigation for treatment. Before starting the treatment, the right diet and exercise are advised for all women. For obese women, weight loss therapy is recommended, as obesity has been associated with increased free testosterone levels which can contribute to hirsutism.

Most women resort to hair removal by different epilation methods such as plucking, shaving, and waxing before reporting to a clinic. Though simple and inexpensive, these methods are temporary and have their own side effects like physical discomfort, scarring, folliculitis, irritant dermatitis, or discoloration. Medications such as oral contraceptives and antiandrogens along with lasers are the main stays in treatment of hirsutism.

Key Facts

Usually seen in

Female of all age groups

Gender affected

Women

Body part(s) involved

Face

Chest

Back

Mimicking Conditions

Congenital adrenal hyperplasia

Adrenal tumor

Polycystic ovary syndrome

Ovarian tumor

Hypertrichosis

Cushing's syndrome

Thyroid dysfunction

Hyperprolactinemia

Necessary health tests/imaging

Lab tests: Testosterone, Dehydroepiandrosterone sulfate (DHEAS)

& 17 Hydroxy progesterone

Urine test:Serum thyroid-stimulating hormone (TSH), Prolactin & LH/FSH (Luteinising hormone to Follicular stimulating hormone)

Imaging tests: Pelvic ultrasonography & Magnetic resonance imaging (MRI)

Treatment

Oral contraceptive pills (OCP)

Androgen receptor blocker: Spironolactone (SPA) & Cyproterone acetate (CA)

5-alpha-reductase inhibitors (5-RA inhibitors): Finasteride

Adrenal suppression: Glucocorticoids (dexamethasone)

Specialists to consult

Endocrinologists

Dermatologists

Psychologist

Dietician

Symptoms Of Hirsutism

Hirsutism is a condition in which stiff or dark body hair appears on those body parts where women usually do not have hair. These areas include face, chest, lower abdomen, inner thighs, and back. Hirsutism is caused by high levels of androgen or male sex hormones. It can be accompanied by various other symptoms like:

Decreased breast size

Enlarged ovaries

Enlarged shoulder muscles

Acne

Oily skin

Enlarged clitoris

Irregular periods

Deepening of voice

Causes Of Hirsutism

Increased levels of androgens (male sex hormones such as testosterone) or oversensitivity of the hair follicles to androgens can cause hirsutism.The conditions that can cause hirsutism include:

Polycystic ovarian disorder (PCOS)

It is a common hormonal condition that causes excessive production of androgens. Some women with this disorder do not have cysts, while some women without the disorder can develop cysts. Other than Hirsutism, PCOS can also cause:

Thinning hair on the head

Infertility

Acne

Mood changes

Pelvic pain

Headaches

Sleep problem

Weight gain/ obesity

Genetic disorder

A group of genetic disorders that affect the adrenal glands (a pair of walnut-sized organs above the kidneys) like congenital adrenal hyperplasia can cause hirsutism.

Adrenal and ovarian tumor

Tumors of the adrenal glands, pituitary glands, and ovaries can sometimes lead to hirsutism. In the rare group of ovarian and adrenal tumors female sex hormone levels are often suppressed to or below the lower limit of normal, while the levels of androgen in the circulation is twice the upper limit of normal or higher.

Idiopathic hirsutism

Hirsutism with normal androgen levels is called idiopathic hirsutism. Idiopathic Hirsutism may be due to increased sensitivity to androgens. A typical example is familial Hirsutism, a typical symptom of this is a gradually increased growth of rough facial hair.

Cushing’s syndrome

Cushing syndrome is a sign of very long exposure of cortisol. Cortisol is a steroid hormone and its level is increased in case of high levels of stress and low blood glucose concentration. Along with excessive hair growth, some visible signs are having a big stomach but thin arms and legs. It can also lead to abnormal weak muscles, weak bones, breakouts, and sensitive skin.

Increased sensitivity to Androgens

Under a quarter of premenopausal women who have hirsutism have normal androgen levels. This happens due to increased sensitivity to androgens.

Certain medications

The following medications can lead to excessive hair growth or hirsutism:

Anabolic steroids

Testosterone

Glucocorticoids

Minoxidil

Cyclosporine

Phenytoin

Diazoxide

Progestin-containing medications

Did you know?

Polycystic ovary syndrome (PCOS) is the most common endocrine disorder in women which is known to affect around 6-8% of women in reproductive years. PCOS is one of the cause of hirsutism which causes hormonal imbalance in the body and leads to unwanted hair growth. Here are a few home remedies for PCOS that can help manage the symptoms and help in the treatment.Click to know more about it.

Click To Read!

Risk Factors

Several factors can influence your likelihood of developing hirsutism, including

Family history

Several conditions that cause hirsutism, including congenital adrenal hyperplasia and polycystic ovary syndrome, run in families.Up to 50% of women with hirsutism have a family history of the disorder.

Regional differences

Women of Mediterranean, Middle Eastern, and South Asian ancestry are more likely to have more body hair with no identifiable cause than are other women.

Obesity

Obesity or being overweight can cause an increase in androgen production, which can lead to hirsutism.

Did you know?

Obesity also increases the risk of hirsutism, infertility, and pregnancy complications in women with PCOS. Here are a few tips how to maintain weight and combat many serious issues related to it.

Click To Read!

Diagnosis Of Hirsutism

Medical history

A physician will look at the detailed medical history with a special focus on the menstrual cycle.

Detailed history includes the age of onset of hirusitsm (puberty, middle age, menopause), rate of onset of symptoms (gradual or sudden), and any other signs or symptoms (acne, deepening of voice, infrequent menstruation, loss of breast tissue, increased muscle mass as in shoulder girdle, malodorous perspiration, etc).

The doctor will also inquire about the history of weight gain or diabetes and whether a drug history prior to onset should be taken.

Physical examination

Complete general physical examination is done including the palpation of the abdomen for any ovarian mass.

To evaluate hirsutism in females, the Ferriman-Gallwey score is used to measure the amount and location of the hair. The score is used to determine whether a patient’s hirsutism is considered mild, moderate, or severe. Ferriman–Gallwey Scoring System for Hirsutism evaluates the extent of hair growth (score 0-4) in 9 areas of the body. A score of 8-15 is mild, score >15 is moderate/severe. This score can be helpful in determining response to treatment.

Lab tests

Testosterone: Serum testosterone may be normal or elevated in case of PCOS (polycystic ovarian syndrome) and CAH (Congenital adrenal hyperplasia) but is significantly raised (>200 ng/ml) in case of malignant tumor of the adrenal or ovary.

Dehydroepiandrosterone sulfate (DHEAS): DHEA stands for dehydroepiandrosterone. This is a hormone produced by the adrenal glands which are located above the kidneys. A raised DHEAS (>700 μg/dl) always indicates an adrenal cause, benign or malignant.

17 Hydroxy progesterone: This serum marker is unique for congenital adrenal hyperplasia.

Cortisol: Cortisol is measured for those having signs and symptoms of Cushing's syndrome. Cushing syndrome occurs when the body makes too much of the hormone cortisol.

Serum Thyroid-stimulating hormone (TSH): Serum TSH is usually regarded as a marker of thyroid function. TSH is responsible for the synthesis and secretion of thyroxine (T4) and triiodothyronine (T3) by the thyroid gland. Hypophyseal hypothyroidism (a condition resulting from decreased production of thyroid hormones) can act as a cofactor in hirsutism causing raised TSH levels.

Prolactin: A prolactin (PRL) test measures the level of prolactin in the blood. Prolactin is a hormone made by the pituitary gland, a small gland at the base of the brain. High levels of prolactin may induce hirsutism via several mechanisms.

LH/FSH (Luteinising hormone to follicular stimulating hormone): Luteinising hormone and follicular stimulating hormones play an important role in sexual development and functioning. The change in the LH to FSH ratio can disrupt ovulation. This ratio can be a useful indicator in diagnosing PCOS.

If you are looking to book a test just sitting back at home, you are just a click away.

Click Here!

Imaging tests

Pelvic ultrasonography: A pelvic ultrasound is a test that uses sound waves to take pictures of the organs inside your pelvis. It is a noninvasive diagnostic exam that produces images that are used to assess organs and structures within the female pelvis. This test can be useful in detecting an ovarian neoplasm or a polycystic ovary.

Computed tomography (CT) /Magnetic resonance imaging (MRI) of abdomen or pelvis: These imaging technologies create three-dimensional detailed images of the organs and tissues of the abdomen or pelvis.

Prevention Of Hirsutism

Though, hirsutism cannot always be prevented, the following measures can control the causative factors of excessive hair growth like PCOS:

Maintaining a healthy weight

PCOS can be managed by losing weight. It can also improve reproductive health,lower the risk of heart disease and make it easier to manage diabetes.

Exercising regularly

Burning more calories while reducing the number of calories you eat creates a calorie deficit. Exercise can help prevent excess weight gain and help maintain healthy weight. This in turn helps in maintaining the hormonal balance in the body.

Eating a well-balanced diet

A well balanced diet should include high-fiber foods, lean proteins (skinless chicken and fish), and healthy fats (coconut, olive, and fish oils). Dairy, sugar, processed, baked and junk foods should be avoided. Foods like wheatgrass, barley grass, and spirulina, can help manage PCOS and hence prevent hirsutism.

Managing stress

Too much stress can result in weight gain, difficulty losing weight and elevated levels of cortisol, which all predispose to excessive hair growth. Consider chatting with friends, doing a hobby, trying yoga, listening to music, journaling, or whatever else eases your stress levels.

Getting regular and adequate sleep

Adequate sleep can help in managing your stress and anxiety level. Including long walks in nature, yoga or meditation, switching off electronic devices at least two hours before sleeping can ensure sound sleep.

Specialist To Visit

Sometimes it is difficult to diagnose the cause of hirsutism, a general practitioner may be concerned with the cause of the issue. The general practitioner can further suggest other doctors according to the needs of the patient.

Endocrinologist: Specializes in the function and disorders of the endocrine system of the body. The doctor will help you with managing conditions like congenital adrenal hyperplasia and will also help with managing associated conditions such as diabetes. Once the underlying cause is treated, the hirsutism will gradually disappear.

Dermatologists: Specializes in the study of the skin and its disorders. In the case of familial hirsutism, which means excessive hair growth runs in your family’s genes, an appointment with a dermatologist can be taken.

Psychologist: If a person experiences any psychological issues such as anxiety or depression, a person may be referred to a psychiatrist for medical support.

Dietician: If a person is having obesity issues, you can discuss how to maintain a healthy weight and work on a nutrition plan together with a dietitian.

If someone is facing such issues, contact and seek medical help immediately.

Consult Now!

Treatment Of Hirsutism

Lifestyle modifications are first-line treatments in women with polycystic ovary syndrome, particularly if they are overweight. It has been shown that obese women with polycystic ovary syndrome who manage to lose more than five percent of their initial body weight have a significant improvement in their biochemical profile, including a reduction of testosterone, an increase in sex hormone-binding globulin, and an improvement in their Ferriman-Gallway scores.

All medical therapies require a minimum of 8 weeks before the noticeable result appears.

Cosmetic therapies (temporary solution)

Most women adapt to the removal of hair by different epilation methods, such as plucking, shaving, and waxing before presenting to the clinic. Though these methods are simple and inexpensive, these methods are temporary and have side effects like physical discomfort, scarring, irritant dermatitis, and discoloration.

Electrolysis (50% efficacy)

Hair follicles are damaged by inserting a needle that emits a pulse of electrical current into each hair follicle. With repeated treatments, the efficacy ranges from 15 to 50% permanent hair loss. However, it is difficult to treat large areas like hairs on the chest or upper back with electrolysis and it can be time-consuming.

Laser hair treatment (80% reduction)

Lasers have gained wide popularity in the past two decades and can achieve permanent reduction of hair (not removal).

Laser therapy works on the principle of selective photothermolysis where the laser energy acts specifically to destroy the target (melanin) and it acts specifically on anagen hair follicles. Therefore, multiple treatments are required to get a significant (i.e. 80%) reduction. An ideal candidate for laser hair removal is a patient with light skin color and dark-colored hair.

The possible side effects like skin irritation, swelling, and redness can be explained by the dermatologist.

Mostly used lasers are the 755-nm alexandrite laser, 800-nm diode laser, and 1064-nm Nd: YAG laser and pulsed light sources

Medications

Before starting any medications, the right diet and exercise are advised for all women with PCOS. For all obese women, weight loss as a therapy should be advised. The drugs usually used in the treatment of hirsutism are:

1. Oral contraceptive pills (OCP): OCP is the first-line treatment for hirsutism, particularly in women desiring contraception. These estrogen/progesterone combinations act by

Reduction of gonadotropin secretion and thereby reducing ovarian androgen production.

Inhibiting adrenal androgen production.

Increasing levels of SHBG (Sex hormone-binding globulin, which is a protein that binds to the sex hormones testosterone and estrogen) resulting in lower levels of free testosterone.

Various drugs used as OCPs are:

Ethinyl estradiol

Norgestimate

Desogestrel

Norethindrone

Ethynodiol diacetate

Drospirenone

2. Anti- androgen therapy

Spironolactone (SPA): It is an androgen blocker and competes with Dihydrotestosterone (DHT) (a sex hormone created from testosterone in the body) for binding to the androgen receptor. Spironolactone is more effective in treating hirsutism when combined with Oral Contraceptives, because, together, these drugs have complementary anti-androgenic actions.

Cyproterone acetate (CPA): It has strong progestogenic and anti-androgen properties. It produces a decrease in circulating androstenedione (androstenedione is a precursor of testosterone and other androgens) levels and has been used as an effective treatment for hirsutism. However, CPA has steroidal side effects and can cause abnormalities in liver function and menstrual irregularities.

Flutamide: It is used primarily in the management of prostate cancer, but has been used off-label for managing hirsutism.

Note: Although anti-androgens are an effective therapy for hirsutism, their use is not suggested because of the potential adverse effects on a developing male fetus in the uterus. However, in women who cannot conceive, or who are using a reliable contraceptive method, anti-androgens may be considered for monotherapy.

3. 5-alpha-reductase inhibitors (5-RA inhibitors)

Finasteride, a 5-alpha reductase inhibitor, is effective in the treatment of Idiopathic hirsutism (IH).

4. Gonadotropin-releasing hormone (GnRH agonists)

This therapy is reserved for women with severe hirsutism who don't respond to oral contraceptives (OC) and antiandrogens. GnRH analogs reduce ovarian stimulation, estrogen production, and hence testosterone. This therapy is used in combination with an oral contraceptive pill containing estrogen and progestin. An example of this class of this drug is leuprolide acetate.

5. Corticosteroids

Glucocorticoids: The main use of corticosteroids (dexamethasone and prednisone) has been to treat hirsutism associated with congenital adrenal hyperplasia .

6. Biological modifiers

Topical eflornithine hydrochloride: This is a new agent, which is used as a topical cream for decreasing or arresting facial hair growth in women. It is thought to inhibit hair growth by inhibiting an enzyme involved in keratin synthesis. Gradual improvement is seen in six to eight weeks. It can also be used in combination with laser treatments for better effects.

Insulin lowering agents: Insulin-sensitizing agents may improve hirsutism by reducing insulin levels and, therefore, circulating free and biologically active androgens. An example of this drug is metformin.

Home-care For Hirsutism

Home remedies

Spearmint tea (pudina): This tea is among the best natural remedies for hirsutism. Drinking spearmint tea regularly is shown to have a strong anti-androgenic activity which can help manage hirsutism.

Zinc: Zinc works by blocking an enzyme involved in testosterone metabolism that causes excessive and unwanted hair growth. Some of the sources of zinc include chickpeas, pumpkin seeds, yogurt, beans, beef, chicken, and oyster.

Cinnamon (dalchini): It is one the best natural remedies for hirsutism. In women with PCOS, it is known to improve insulin sensitivity and lipid profile.

Folic acid: It helps in balancing the levels of homocysteine, which is a common amino acid found in the blood. This is also helpful in improving reproductive health.

Licorice (mulethi) tea: One of the main compounds of the tea, glycyrrhizic acid, has proven to be effective in halting hair growth for those suffering from unwanted hair growth.

Flax seeds (alsi): Flax seeds can cause reduction in Body Mass Index (BMI), total serum testosterone, and free serum testosterone levels, leading to decrease in excessive hair growth.

Astragalus polysaccharide: Astragalus polysaccharides can be effective in improving insulin resistance, high androgen hormone status, and lipid metabolism in patients with PCOS.

Alternative Therapies For Hirsutism

Diet

Reduce calorie intake, especially during the evening. Distribute calorie intake into 5 to 6 meals per day. This keeps the weight under control and reduces the chances of obesity and hence, hirsutism.

Eat foods with a low glycemic index (GI) that do not increase blood glucose levels sharply such as non-starchy vegetables and legumes. Include at least 20g of protein with every meal like eggs, chicken, fish, shellfish, and turkey.

Drink lots of fresh, filtered water between meals, about half your body weight in ounces per day

Increase your intake of vitamin B, especially B2, B3, B5, and B6.

Avoid trans fat. Eating foods with trans fat contributes to issues such as hormonal imbalance and symptoms like hirsutism. Trans fat is found in packaged processed foods such as cookies, cakes, unhealthy vegetable oils, pastries, and crackers replace these with healthy fats like avocado oil, nuts, and seeds.

Acupuncture

Acupuncture is a traditional Chinese medicine technique that involves sticking finely pointed needles in areas of the body known as acupuncture points. It has shown promise in management of excessive hair growth.

Yoga and exercise

Doing yoga and exercises regularly can help improve blood circulation, help the body to feel fresh and prevent it from feeling fatigued all the time. They are useful in reducing stress or pressure on the body and have also proven to relieve stress, manage anxiety, and pain management.

Hot water bath

A hot water bath has muscle relaxant properties, the heat from the water can improve the blood circulation in the body and also ease tension in the muscles.

Living With Hirsutism

Self-management can help in taking care of yourself.

Know about your condition: Sometimes hirsutism can affect the mental health of a person and it can lead to anxiety and depression. Talking to your near and dear ones can eliminate cases of emotional drainage and thus an effective treatment plan.

Exercising daily: It increases the blood circulation of the body and frees the mind from tension and stress.

Take your medicine on time: Medicines if prescribed, should be taken regularly under medical supervision.

Talk with a doctor openly in case of any questions related to the issues faced: Feel free to ask as many questions that come to his mind.

Lower stress levels: Practicing meditation and yoga help in eliminating stress and keeps the person happy.

Take adequate sleep: Sleep activates and calms the body and mind. This makes the person feel less fatigued.

Frequently Asked Questions

What causes excessive facial hair in women?

What are the complications of hirsutism?

How much time is required for the treatment of hirsutism?

What Is the connection between hirsutism and irregular menstruation?

What is the pathophysiology of hirsutism?

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HIV infection

Also known as AIDS and HIV

Overview

HIV (Human Immunodeficiency Virus) attacks the immune system of the body and leads to AIDS (Acquired Immunodeficiency Syndrome). The first signs of HIV infection are flu-like symptoms that are seen within 2 to 4 weeks after getting infected. This is known as primary or acute HIV infection. Some people do not have any symptoms during this phase. It is followed by a latent stage during which the virus multiplies and usually there are no detectable signs and symptoms. Gradually the virus weakens the immune system and progresses to AIDS.

The most common cause of HIV is sexual contact with the infected person. A person can also get infected by blood transfusion, sharing infected needles and syringes contaminated with infected blood. Pregnant women infected with HIV can transmit the virus to the fetus through shared circulation.

Although the cure for the disease is still under research, some medications at certain stages can prolong the life of HIV-positive patients. These medications include protease inhibitors, fusion inhibitors, multidrug combinations, HIV-positive and reverse transcriptase inhibitors.

Key Facts

Usually seen in

Individuals between 15 to 24 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Immune system

Prevalence

Worldwide: 37.7 million (2020)

Mimicking Conditions

Flu

Dementia

Pneumonia

Cancer

Lymphoma/leukemia (blood cancer)

Celiac disease

Crohn's disease and ulcerative colitis

Necessary health tests/imaging

HIV 1 and HIV 2 antibody test

CD4 count

Enzyme linked immunosorbent assay (ELISA)

Western blot

Rapid antibody screening

Rapid antigen/antibody test

Treatment

Antiretroviral therapy (ART): Maraviroc, Fostemsavir, Raltegravir & Dolutegravir

Nucleoside reverse transcriptase inhibitors (NRTIs): Lamivudine, Didanosine & Zidovudine

Non-nucleoside reverse transcriptase inhibitors (NNRTIs): Efavirenz, Nevirapine & Etravirine

Multi-drug combination: Dolutegravir+tenofovir+emtricitabine & Raltegravir+tenofovir+emtricitabine

See All

Symptoms Of HIV Infection

There are several symptoms of HIV infection which vary from person to person and also as per the stage of the infection. The three stages of HIV infection are:

Stage 1: Acute HIV infection

It is estimated that 50-70% of individuals with HIV infection experience a flu-like illness within 2 to 4 weeks after a primary infection. This is known as primary or acute HIV infection and lasts for weeks. Some people do not have any symptoms during this phase. The symptoms can include:

Fever

Chills

Rashes

Headache

Swollen lymph glands, mainly on the neck

Night sweats

Mouth ulcers or genital ulcers

Joint Pain

Fatigue

Stage 2: Clinical latency

In this stage, the virus is getting multiplied, but at a very low level. There are no detectable signs and symptoms in this stage. This stage is called Chronic HIV infection. Although the length of time from initial infection to the development of clinical disease varies greatly, the median time for untreated patients is ~10 years. The rate of ongoing progression is directly correlated with HIV RNA levels. Patients with high levels of HIV RNA in plasma progress to symptomatic disease faster than do patients with low levels of HIV RNA. The transmission of HIV is highest during this stage if viral load is detected in the blood. There is a risk of transmitting HIV to your sexual partner.

Stage 3: AIDS

If a person is having HIV and is not on HIV treatment, gradually the virus will weaken the immune system and progress to AIDS. A diagnosis of AIDS is made in any individual age 6 years and older with HIV infection and a CD4+ T cell count <200 per microliter and in anyone with HIV infection who develops one of the HIV associated diseases considered to be indicative of a severe defect in cell mediated immunity.

Symptoms of AIDS include:

Pneumonia

Sores of the mouth and anus

Extreme tiredness

Rapid weight loss

Recurring fever

Memory loss and depression

Each of these symptoms can lead to another illness. Many of the severe symptoms of HIV are opportunistic infections. These infections come into action when the immune system of the body weakens.

Causes Of HIV Infection

The human immunodeficiency virus belongs to the family of human retroviruses and subfamily of lentiviruses, it causes AIDS. HIV is a sexually transmitted disease (STD). AIDS is caused by HIV. HIV is a virus that attacks the immune system of the body. As HIV progressively damages the immune cells of the body, the immunity of the body gets compromised and it will get prone to many opportunistic infections. The point of very advanced HIV infection is called AIDS. It can take many years for AIDS to develop.

The main causes of HIV include:

1. Sexual contact: The most frequent cause of transmission of the virus is through sexual contact through unprotected vaginal or anal sex.

2. Blood transfusion: In some cases, you can come in contact with the virus through blood transfusion.

3. Sharing Infected needles: HIV can be transmitted by sharing infected needles and syringes.

4. From mother to child: The virus is passed from the expectant mother to the child, during or before birth or even during breastfeeding.

5. Through body fluids: These fluids have also proven to spread HIV infection like blood, semen, vaginal fluid, breast milk, the amniotic fluid surrounding the fetus, and cerebrospinal fluid surrounding the brain and spinal cord.

Myth: AIDS is transmitted through mosquito/insect bite

Fact: This is not true. Mosquitoes or insects cannot transmit HIV. Researchers have found out that HIV cannot replicate or survive in the saliva of insects nor through mosquito bite. Moreover, HIV is a fragile virus that does not live outside the human body. Read to know more common myths & facts about HIV.

Check Out Here!

Risk Factors For HIV Infection

A risk factor increases the chances of getting the disease. Certain lifestyle factors are related to HIV infection, by changing them the risk of getting HIV gradually lowers. The most common risk is:

Having unprotected sex: Most people get HIV by having unprotected sex. During sex, the rectum, mouth, and genitals allow the virus to enter the body. To avoid this protection should be used. The use of condoms will lower the risk of sexually transmitted diseases. The chances are also higher for men having men as a partner and having multiple partners.

Drug use: Sharing needles used by other people increases the risk of getting HIV. Even a small amount of blood is enough to transmit HIV.

Certain health problems: Having certain sexually transmitted diseases increases the risk of HIV. The common ones are gonorrhea, warts, syphilis, and genital herpes.

Blood products: Blood banks do not test for HIV. The infection can be passed on to normal individuals during a blood transfusion.

Having certain professions: Working in places where you come in contact with bodily fluids and blood samples of patients makes you at a higher risk of having HIV. Like healthcare professionals and people working in laboratories.

The risk factors for mother-to-child transmission of HIV via breastfeeding include:

1. Detectable levels of HIV in breast milk

2. The presence of mastitis(inflammation in breast tissues)

3. Lower maternal CD4+ T cell counts

4. Maternal Vitamin A deficiency

Diagnosis Of HIV Infection

HIV test is done to test Human Immunodeficiency Virus in serum, saliva, and urine. The only way one could be sure if the person is infected with HIV is to have an HIV test. The symptoms of HIV may not appear for many years. Anyone who thinks they could have HIV should get tested.

Clinical history

The doctor will ask about your symptoms and health history. A physical examination is done to confirm certain risks that make your chances of infection higher. If the doctor suspects HIV, you need confirmatory tests to start the treatment as soon as possible.

Laboratory tests (nucleic acid testing and antigen/antibody tests)

The following test can be done to confirm if a person is HIV positive or negative.

HIV 1 and HIV 2 antibody test: HIV is of two types HIV-1 and HIV-2. HIV-1 is found in people having a higher risk of AIDS. HIV -2 infected patients are found in West Africa. This test primarily checks the amount of virus present and p24 antigen present in the blood, these usually increase during the first week of infection.

CD4 count: The CD4 cells are a type of White Blood Cells (WBC) that are specifically destroyed and targeted by HIV. A healthy person has a CD4 count of up to 1000. The CD4 count is associated with immunity levels of the patient, the higher the CD4 count the better the immunity, But when HIV infection progresses to AIDS the CD4 count becomes less than 200.

Enzyme-linked immunosorbent assay (ELISA): The ELISA test is a blood antibody test that detects the proteins that are made during HIV infection. It is the most sought-after method for the detection of HIV. The ELISA test is also called enzyme immunoassay, as it is used to detect HIV antibodies.

Western blot: A positive ELISA test is always followed by a western blot. It is a confirmatory diagnostic test for AIDS.

Rapid antibody screening

It is usually done by taking blood from a finger prick or with oral fluids. The results are obtained within 30 minutes.

Rapid antigen/antibody test

The rapid test is an immunoassay used for screening and produces results within 30 minutes. It uses blood or oral fluids to look for antibodies for HIV. All immunoassays that give a positive result need further follow-up from a doctor.

Oral fluid antibody self test

The OraQuick in-home HIV test is a self-administered over-the-counter test (OTC). The test uses oral fluid to check for antibodies to HIV-1 and HIV-2, the virus that causes AIDS.

Note:

No HIV test can detect HIV soon after the infection. The time between acquiring the infection and when a test can tell for sure whether the virus is present or not is called the Window Period. The window period varies from person to person and depends on the type of test to detect HIV.

A nucleic acid test usually tells after 10 to 33 days after HIV exposure.

An antigen/antibody test performed in the laboratory detects HIV infection after 18 to 45 days after exposure. A rapid finger prick usually takes a longer time than 18 to 90 days.

Antibody tests usually take 23 to 90 days to detect the infection.

Celebs affected

Billy Porter

The Emmy-winning star of the TV show Pose was diagnosed with HIV in 2007 and revealed the news during the covid.

Freddie Mercury

The flamboyant front man for the band Queen kept quiet about his HIV until the day before his death from AIDS-related HIV due to bronchial pneumonia in 1991. A popular movie was made on his life in 2018 by the name of ‘Bohemian Rhapsody’.

Did you know?

HIV testing is the only way to know the HIV status of a person meaning whether a person is HIV positive or negative. It is important to get tested and know your HIV status so as to keep you and your partner healthy. The Centers for Disease Control and Prevention (CDC) recommends that everyone above 13 years to 64 years should get tested for HIV at least once as a part of a routine health care check-up. Want to know more about testing and diagnosis of HIV.

Click Here!

Prevention Of HIV Infection

There is no vaccine to prevent HIV infection and no cure for HIV has been discovered till now. To help prevent the spread of HIV following are some measures:

Spreading awareness among the masses.

Safe blood transfusion from authorized and accredited blood banks.

Get tested for HIV: Before having sex get yourself tested and talk to your partner about this.

Use of condoms: It is a protection against HIV and many Sexually Transmitted Infections. It is very important if condoms are put on before any sexual contact occurs between the vagina, penis, mouth, or anus.

Don’t share syringes and needles: While injecting drugs, always use sterile drug injection equipment and water and never share them with others.

Limit the number of sexual partners: The partner HIV-positive person has more chances of having STDs increase.

Get tested and treated for STDs: Having a Sexually Transmitted Disease increases the risk of getting HIV or spreading it to others.

HIV prevention medicine: If you are HIV negative, you can take pre-exposure prophylaxis (PrEP) medicine to reduce the risk of HIV. PrEP is available for people who are at a higher risk of having HIV infection( whose partner is HIV positive). A tablet is usually taken before you have sex and are exposed to HIV infection.

Prevention of mother to child transmission of HIV: Pregnant women with HIV take HIV medicines for their health and prevention of HIV from mother to child.

Specialist to Visit

In most cases, a general physician is a go-to doctor when it comes to the diagnosis of HIV infection. You can also visit an HIV healthcare provider who helps to track the progress and helps to guide whether HIV treatment is going in the right direction.

Most people with HIV see their health care provider after every six months. Some people seek their doctors more frequently during the first two years of treatment. It also varies from person to person and symptoms. People taking HIV medications regularly and having an undetectable viral load only need to have their lab tests checked twice a year.

Consult India’s best doctors online from the comfort of your home.

Consult Now!

Treatment Of HIV Infection

There is no cure for HIV as of now, there are very effective treatments that enable most people with the virus to live a healthy and long life.

A. Antiretroviral therapy (ART)

It reduces HIV-related morbidity at all stages of HIV infection and HIV transmission. HIV-positive. It suppresses viral load, maintains the CD4 count, prevents AIDS, and prolongs survival. Healthcare providers play a crucial role in helping patients initiate ART which leads to viral load suppression. Most people take daily HIV treatment to reach an undetectable viral load within six months of starting treatment. These include nasal sprays, inhalers as well as some recreational drugs

There are different classes of ART and some of them are:

1. Entry inhibitors: These work by blocking the entry of the virus into human cells. Some of the common examples include:

Maraviroc

Enfuvirtide

Ibalizumab

Fostemsavir

2. Integrase inhibitors: They are a class of antiretroviral drugs that prevent HIV by inserting its genetic code into the HIV-positive, DeoxyriboNucleic Acid (DNA) of an infected individual. It blocks the enzyme integrase of the hosts that HIV requires to make multiple copies of itself. These drugs do not cure HIV infection, they can only decrease the amount of HIV in the body. The most common side effects are nausea, headache, vomiting, fatigue, nasal infection, and throat infection. Examples include:

Isentress

Raltegravir

Dolutegravir

Carbotegravir

Abamune (abacavir)

3. Protease inhibitors: They are a class of HIV antiviral drugs. These inhibitors break down the structural proteins that are necessary for the assembly and morphogenesis of virus particles. The role of protease is to break down viral particles into smaller fragments required for the assembly of new virus particles. Protease inhibitors block this step and hence the virus cannot replicate. Examples include :

Indinavir

Ritonavir

Atazanavir

4. Fusion inhibitors: It works on host CD4 cells and thus prevents HIV from entering a cell. They bind to the envelope protein of the virus and block the fusion with the host CD4 cells. Enfuvirtide is the commonly used medicine in this category.

B. Nucleoside reverse transcriptase inhibitors (NRTIs)

They are active inhibitors of reverse transcriptase in retrovirus. The different NRTIs are activated differently but they all have the same mechanism of action. But it has the major side effect of mitochondrial dysfunction which has been confirmed by side effects like cardiomyopathy, bone marrow suppression, and mitochondrial diseases.

Examples are:

Lamivudine

Didanosine

Stavudine

Zidovudine

Emtricitabine

Tenofovir

C. Non-nucleoside reverse transcriptase inhibitors (NNRTIs)

These are a therapeutic class of compounds. They are used in combination with antiretroviral drugs to treat HIV-1 infection. NNRTIs. It blocks HIV-1 infection by preventing reverse transcriptase from completing the reverse transcription of the single-stranded RNA genome into DNA. Examples are:

Efavirenz

Nevirapine

Etravirine

D. Multi-drug combination

It combines two or more different classes of drugs. It is a combination therapy against multidrug resistance. It has potential benefits such as broad-spectrum, greater potency than drugs used in monotherapy, and reduction in the number of resistant organisms. Common examples are:

Dolutegravir + tenofovir + emtricitabine

Raltegravir + tenofovir + emtricitabine

Home-care For HIV Infection

Living with someone who has HIV is itself a life-changing experience for the person and the family itself. HIV symptoms vary from person to person and hence the care required also varies. However, a few tips can help to take care of someone.

1. Talk and understand the situation

Be available to have an open and honest conversation about HIV. Do things together like you used to do before the diagnosis. Make them feel like the same person and make them realize that they matter.

2. Listen

Being diagnosed with HIV is life-changing news. Listen to your loved ones and reassure them that it is a manageable health condition.

3. Learn

To educate yourself about HIV, from the transmission to treatment. Having an understanding of HIV is a big step in forwarding your support to the family member.

4. Encourage treatment

Starting HIV treatment early, adhering to the treatment, staying with the caregiver thus helps to control the viral load and prevent HIV infection from progressing to AIDS.

5. Support medication adherence

HIV patients need to adhere to HIV medication. Help them in making a routine and following them.

6. Join HIV support groups

Connecting with people facing the same challenges may help the person and boost morale. Few societies in India help people with HIV and encourage them to take advantage to engage with other patients in a safe and supportive environment.

Complications Of HIV Infection

If left untreated, HIV may severely hamper a patient’s life and can cause various complications like:

1. HIV does not directly invade the neurons but it infects the glial cells that support neurons. HIV triggers inflammation that leads to damage to the brain and spinal cord. Some common symptoms of this are:

Inability to concentrate

Headache

Behavioral changes

Anxiety and depression

Lack of coordination and walking

2. HIV infection can cause the shrinking of the brain that is involved in learning and information processing.

3. Some nervous system complications that occur as a result of HIV infection and drugs are pain, seizures, stroke, vision loss, and coma.

4. In children, HIV infection can cause developmental delays, nerve pain, slow growth, eye problems, and brain lesions.

5. HIV-associated dementia occurs in the most advanced stages of infection that include a decline in cognitive functions, concentration, memory, and slowing of motor functions.

6. Damage to the peripheral nerves causes progressive weakness and loss of sensation in the arms and legs.

7. Cardiomyopathy or chronic disease of the heart muscle can happen during stage IV infection that can result in heart failure.

8. Hepatobiliary diseases (heterogeneous group of diseases of the liver, bile ducts, and/or gallbladder)commonly occur in HIV patients. These include granulomatous hepatitis and AIDS cholangiopathy.

9. Diseases of the kidney and urinary tract: HIV-associated nephropathy is seen in the majority of the patients.

10. AIDS-associated arthropathy: This syndrome is characterized by joint disorders like subacute oligoarticular arthritis developing over a period of 1-6 weeks and lasting up to 6 months.

11. Higher risk of genitourinary infections seen with patients with HIV infection.

12. Immune reconstitution inflammatory syndrome (IRIS): It starts following the initiation of ART, a worsening of pre-existing, untreated, or partially treated opportunistic infections may be noted.

Alternative Therapies For HIV Infection

Many people use alternative health treatment in addition to medical treatment. Some alternative therapies include:

1. Physical therapies

Physical, and body therapies include activities such as yoga, massage, and aromatherapy. It promotes healing of the body.

Yoga: It is a set of exercises that improve fitness, reduce stress, and increase flexibility. Many people, including those with HIV, use yoga to relax and become more relaxed.

Massage: It is an excellent way to reduce stress and reduce muscle and back pain, headache, and soreness.

Acupuncture: During acupuncture, tiny needles are inserted into certain areas. It is used to treat symptoms like nausea, fatigue and help with neuropathy.

Aromatherapy: It is based on the idea that certain smells can change the way you think. People use aromatherapy to deal with stress or fatigue.

2. Relaxation therapies

Relaxation therapy such as meditation and visualization can promote overall health and well-being.

Meditation: It helps people to relax and calm their minds.

Visualization: It helps people to feel more relaxed and less anxious.

3. Herbal medicines

Herbal medicines are substances that come from plants, roots, leaves, and flowers and they work like standard medicines. These medicines can only reduce the symptoms, there is no cure as of now.

Did you know?

1 December is observed as World AIDS day. According to the World Health Organization (WHO), HIV infection is one of the major public health concerns as it has claimed more than 32 million lives. Although there has been a significant decrease in the number of cases of HIV, there still needs to be an improvement in the treatment and quality of life of HIV-infected people. Here are a few FAQs answered on HIV by experts.

Read More!

Living With HIV Infection

Taking care of yourself when living with HIV:

Taking antiretroviral treatment (ART) for HIV

If you’ve been diagnosed with HIV then start treatment as soon as possible. ART is not a cure for HIV, but it keeps HIV under control, protecting your immune system so that you can stay healthy and live a long life.

Adopt positive healthy living with an appropriate balanced diet

HIV infection weakens the immune system, for longevity and productive life positive people need to take special care of their health and well-being. Eating the right amount of food to maintain weight and including a variety of foods from the five food groups: fruits, vegetables, grains, protein foods, and dairy.

Exercising regularly

Having a healthy diet and exercising regularly are a must to boost your immunity along with the medication. Till date, there is no cure for HIV infection but taking antiretroviral therapy (ART medicines) and exercising regularly are helping people live a healthy and happy life for almost decades.

Avoid excessive alcohol or drug use

Consumption of alcohol can damage the liver. The liver helps in the processing of anti-HIV drugs, so it is recommended to keep your alcohol consumption within the recommended limits. Heavy drinking and taking recreational drugs can also weaken your immune system, making it harder for your body to recover from infections.

Managing stress and getting support

Stress-management techniques, such as yoga, meditation, cognitive restructuring, coping skills training, and interpersonal-skills training may reduce anxiety, depression, and social isolation in HIV-infected persons by lowering physical tension and increasing a sense of control and self-efficacy.

HIV and pregnancy

Women living with HIV who become pregnant or who acquire the virus during pregnancy are at risk of both maternal and perinatal morbidity and mortality mainly if the virus is poorly controlled. There is a risk of transmission to the fetus during pregnancy labor and postpartum through breastfeeding.

Breastfeeding is a potential source of infection for the baby. Appropriate management reduces the consequences of HIV in pregnancy, ideally starting with preconception counseling and planning pregnancies when the viral load is minimum. During pregnancy, an appropriate combined antiretroviral (cART) medication is mandatory with very close monitoring of the viral load. Planning delivery and in special cases care must be taken to limit vertical transmission in women whose viral load is unknown or not controlled at the time of delivery.

Frequently Asked Questions

What is the name of the virus that causes AIDS?

When to get tested for HIV after exposure?

Can a woman living with HIV pass the virus on to her baby?

What are the ways that HIV cannot be transmitted?

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Hypercalcemia

Overview

Hypercalcemia is a condition in which the calcium level in the blood is above normal (8.8 mg/dL-10.8 mg/dL). Hypercalcemia is classified into mild hypercalcemia (10.5 to 11.9 mg/dL), moderate hypercalcemia (12.0 to 13.9 mg/dL), and hypercalcemic crisis (14.0 to 16.0 mg/dL).

Calcium plays an important role in nerve function, muscle contraction, activity of enzymes, normal heart rhythms, and clotting of the blood. It is present in the bones as calcium phosphate while a small percentage is found in the cells and extracellular fluids.

Primary hyperparathyroidism and malignancy account for most of the cases of hypercalcemia. Other causes of hypercalcemia can include certain other medical disorders, some medications, and increased consumption of calcium or Vitamin D supplements.

Signs and symptoms of hypercalcemia range from mild to severe depending on the amount of calcium in the blood. Excessive calcium in the blood can weaken the bones, create kidney stones, and interfere with how the heart and brain work. Treatment of hypercalcemia is focused on the cause of elevated calcium.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but more common in women

Body part(s) involved

Bones

Kidneys

Heart

Muscles

Nerves

Prevalence

Worldwide: 1-2% (2021)

Mimicking Conditions

Hypermagnesemia

Hyperparathyroidism

Hyperphosphatemia

Necessary health tests/imaging

Serum calcium

Erythrocyte sedimentation rate (ESR)

Immunoglobulin panel

Protein electrophoresis

Bence Jones proteins

Chest X-ray

Liver function tests (LFTs)

Abdominal ultrasound

Imaging of bones

Treatment

Drugs acting on osteoclasts: Calcitonin & Mithramycin

Drugs for cancer related hypercalcemia: Bisphosphonates, Denosumab, Pamidronate & Prednisone

Other drugs: Cinacalcet, Diuretics & Ketoconazole

Dialysis

Surgery: Parathyroidectomy

See All

Symptoms Of Hypercalcemia

The severity of the symptoms of hypercalcemia does not depend on how high the calcium levels are. They vary from person to person, and older people generally have more symptoms than younger people.

These symptoms develop slowly, irrespective of the cause. Some of the mild to moderate symptoms may include:

Loss of appetite

Nausea and vomiting

Constipation

Abdominal pain

Polydipsia (excessive thirst)

Polyuria (frequent urination)

Peptic ulcers

Pancreatitis

Osteoporosis

Osteomalacia

Arthritis

Pathological fractures

Fatigue/tiredness

Weakness

Muscle pain

Confusion and disorientation

Headaches

Difficulty to concentrate

Depression

Serious symptoms can include:

Seizure

Irregular heartbeat

Heart attack

Loss of consciousness

Coma

Did you know?

The broad signs of hypercalcemia can be categorized as "groans (gastrointestinal symptoms), bones (bone pain), stones (kidney stones), moans (fatigue and malaise), thrones (related to bowel movements) and psychic overtones (psychological problems)". If you are noticing any of the symptoms, seek advice from our healthcare professionals.

Consult Now!

Causes Of Hypercalcemia

Calcium is very important in building strong bones and teeth, muscles contraction and nerve signal transmission. Parathyroid glands secrete a hormone when there are decreased levels of calcium in the blood, which triggers:

Bones to release calcium into the bloodstream

The digestive tract to absorb more and more calcium

Kidneys to excrete less calcium and activate Vitamin D (which plays a vital role in the absorption of calcium).

Common conditions associated with hypercalcemia can be divided into two major categories- parathyroid hormone (PTH) causes and non-parathyroid hormone causes. They are as follows:

Parathyroid hormone causes of hypercalcemia

Hyperparathyroidism: It is a condition caused due to an overactive parathyroid gland and is the most common cause of hypercalcemia. It can be a result of a noncancerous (benign) tumor or enlargement of one or more of the four parathyroid glands.

Hereditary factors: A rare genetic disorder known as familial hypocalciuric hypercalcemia causes an increase of calcium in the blood because of defects in calcium receptors in the body.

Endocrine causes: Theses include diseases such as thyrotoxicosis (stimulation of cells osteoclasts by thyroid hormone), hypoadrenalism (decreased functioning of the adrenal glands located just above the kidneys, also known as Addison’s disease) and pheochromocytomas (hormone-secreting tumor that can occur in the adrenal glands).

Medications: Certain drugs such as thiazide diuretics (used to treat high blood pressure) and lithium (used to treat bipolar disorder) can increase the release of the parathyroid hormone leading to hypercalcemia.

Cancer: Lung cancer, breast cancer, kidney cancer, some blood cancers like multiple myeloma, and the spread of cancer (metastasis) to the bones can increase the risk of hypercalcemia.

Non-parathyroid hormone causes of hypercalcemia

Supplements: Excessive intake of calcium or Vitamin D supplements over a period of time can raise calcium levels in the blood above the normal range.

Immobility: Hypercalcemia can develop in people who have a condition that causes them to spend a lot of time sitting or lying down. This is due to the release of calcium into the blood from the bones that don’t bear weight.

Severe dehydration: Less fluid in blood can cause a rise in calcium concentrations leading to mild or transient hypercalcemia. However, the severity of hypercalcemia depends on the kidney function. In people with long term kidney disorders, the effect of dehydration is greater.

Other diseases: Tuberculosis and sarcoidosis, are lung diseases that can elevate levels of Vitamin D in the blood, which stimulates the digestive tract to absorb more calcium. Paget's disease has also been linked to an increase in levels of calcium.

The normal functioning of the body depends on the hormones to be released in the right quantity. If the parathyroid glands make too much or too little hormone, it disrupts this balance. Read more about hyperparathyroidism.

Click Here!

Risk Factors For Hypercalcemia

Any risk factor that puts an individual at a risk for developing hyperparathyroidism or having overactive thyroid glands is also at the risk of developing hypercalcemia.

Common risk factors of hypercalcemia include:

Women in the postmenopausal age.

Older individuals in their 50s or 60s.

Family history of hyperparathyroidism.

Past history of familial syndromes such as multiple endocrine neoplasia (diseases affecting the hormone-producing, endocrine system) type 1, type 2A or type 4, familial hypocalciuric hypercalcemia (an inherited disorder that causes abnormally high levels of calcium in the blood and low to moderate levels of calcium in the urine), hyperparathyroid-jaw tumor syndrome (a condition characterized by overactivity of the parathyroid glands).

Less common risk factors of hypercalcemia include:

Any past or current history of lithium use.

Radiation exposure to head and neck region.

Note: Hypercalcemia generally presents with mild or no symptoms in many cases and may go unnoticed. With timely preventive health check-ups, one can spot and address risk factors for certain diseases that might crop up with old age. Learn more about the need for preventive health checkups for the elderly.

Tap To Read!

Diagnosis Of Hypercalcemia

Hypercalcemia can cause a very few signs or symptoms, and the individuals may not know that they have the disorder until routine blood tests like serum calcium can help determine if the individual has hypercalcemia.

Blood tests can also show whether your parathyroid hormone level is high, indicating that you have hyperparathyroidism. If hyperparathyroidism has been excluded, then further tests will be required to determine whether the cause of hypercalcemia is associated with malignancy. In these cases, parathyroid hormone (PTH) levels will be undetectable and further tests are conducted. They include:

Erythrocyte sedimentation rate (ESR): This test indicates the presence of inflammation in the body but does not locate the cause.

Immunoglobulin panel: This test measures the levels of certain immunoglobulins or antibodies in the blood.

Protein electrophoresis: This test is done to identify some unique kind of protein in the body that is present in certain kinds of cancer.

Bence Jones proteins: This test measures the levels of the Bence Jones protein in the urine which is specifically produced by plasma cells that provide immunity to the body.

Chest X-ray: An imaging test that uses X-rays to look at the structures and organs in the chest and detect certain lung and heart problems.

Liver function tests (LFTs): Group of blood tests commonly performed to evaluate the function of the liver.

Abdominal ultrasound: This test is used to create images of organs in the abdomen including liver, gallbladder, spleen, pancreas, and kidneys.

Imaging of bones: It is a specialized radiology procedure used to examine the various bones of the skeleton

Genetic testing is gaining importance lately and is becoming a routine part of the investigation of a case of hypercalcemia where a family history is appropriate.

Prevention Of Hypercalcemia

Not all hypercalcemia can be prevented, but avoiding excess intake of calcium pills and calcium-based antacid tablets are recommended. Talk to the doctor if there is any family history of high calcium, kidney stones, or parathyroid conditions. Avoid taking dietary supplements, vitamins, or minerals without first discussing them with the doctor.

Also, changes in the calcium level in the blood can be linked to cancer. So the best way to control calcium is to treat cancer itself.

Did you know?

Cancer is not just one disease but many diseases. There are more than 100 different types of cancer.

Click To Read More!

Specialist To Visit

The primary cause of hypercalcemia is abnormal functioning of the parathyroid glands or any kind of malignancies. Hypercalcemia can also weaken the bones, create kidney stones and interfere with the functioning of the heart and brain. The doctors to visit are:

Endocrinologist

Nephrologist

Oncologist

An endocrinologist treats metabolic and hormone disorders. A nephrologist focuses on kidney diseases whereas an oncologist specializes in treatment of cancer.

If you are noticing any of the symptoms, seek advice from our world-class medical professionals.

Consult Now!

Treatment Of Hypercalcemia

In the case of mild to moderate hypercalcemia, monitoring the bones and kidneys over time to be sure they are healthy is the best option. In severe cases of hypercalcemia medications or treatment of the underlying disease, including surgery might be required.

A. Medications

The most recommended medications include:

1. Drugs acting on osteoclasts

Calcitonin: The hormone controls the levels of calcium in the blood. It is a calcitonin receptor agonist that acts by suppressing the activity of osteoclasts (bone destroying cells).

Mithramycin: This drug can block the function of osteoclasts and is often administered to patients with malignancy-associated hypercalcemia (MAH). This drug can cause severe toxicity in kidneys, liver, and bone marrow.

2. Drugs used in cancer related hypercalcemia

Bisphosphonates: It can lower calcium levels and is used to treat hypercalcemia due to cancer.

Denosumab: This drug is used in the treatment of cancer-caused hypercalcemia in patients who don't respond well to bisphosphonates.

Pamidronate: This can be given intravenously in patients with malignancies. This agent often will normalize the serum calcium level. This treatment has a rapid onset but short duration of effect and patients can develop tolerance to the calcium-lowering effect.

Prednisone: Short-term use of steroid pills such as prednisone is usually helpful in hypercalcemia caused by high levels of Vitamin D, myeloma, and lymphoma.

3. Other drugs

Cinacalcet: This drug has been approved for managing hypercalcemia and acts by controlling overactive parathyroid glands.

IV fluids and diuretics: These might be required in case of emergency to lower the calcium level so as to prevent heart rhythm problems or damage to the nervous system.

Ketoconazole: This is an antifungal drug, used in hypervitaminosis D (excessive Vitamin D in the body) to prevent toxicity and overproduction of calcium.

B. Dialysis

In severe cases of resistant, life-threatening hypercalcemia, hemodialysis (a treatment to filter wastes and water from blood) is effective in lowering serum calcium levels.

C. Surgery

In hyperparathyroidism leading to hypercalcemia, urgent parathyroidectomy (removal of affected parathyroid gland) is potentially curative. In most cases, only one of the four parathyroid glands is affected.

A special test is used to scan and pinpoint the gland or glands that aren't working properly. This procedure uses an injection of a small dose of radioactive material into the glands.

Home-care For Hypercalcemia

Mild hypercalcemia may not require any treatment. However, if the condition is more serious or severe, the doctor may prescribe medications to lower the levels of calcium along with treating the underlying cause.

Certain lifestyle modifications can help keep calcium levels balanced and bones healthy. They are:

1. Stay hydrated

Drinking water can lower blood calcium levels and prevent kidney stones.

Make sure to keep a bottle of water nearby at night.

2. Quit smoking

Smoking can increase the risk of bone loss and cancer.

In addition to improving general health, quitting smoking will reduce the risk of cancer and other health problems.

Tobacco is injurious to the health. Say no to tobacco. Try our smoking cessation product range.

Explore Now!

3. Exercise regularly

Staying active is the key to promoting good health.

Resistance training can help improve bone strength and health.

4. Follow proper medical advice

To decrease the risk of consuming too much Vitamin D or calcium supplements and developing hypercalcemia.

Use antacids that have magnesium and avoid antacids that have a lot of calcium in them.

Talk to the doctor about what medicines and herbs are safe in case of hypercalcemia.

5. Have a balanced diet

Decrease the number of dairy foods like cheese, milk, yogurt, and ice cream.

Avoid food items like okra, spinach, soya, and bread that have high levels of calcium in them.

Read the labels of food carefully and skip items that have high calcium. substances to ensure the quantity.

Every person is different and so are the nutritional requirements. There are some dietary guidelines that one should follow for a proper balanced diet. Understand how to reap benefits from your diet.

Click To Know!

If the doctor has prescribed medications to keep the calcium levels in control, take them the right way and the right quantity. Call the doctor if there are any side effects.

Complications Of Hypercalcemia

Hypercalcemia complications can range from manageable to being fatal. They include:

Osteoporosis: It is also known as bone-thinning disease as the bones continue to release calcium into the blood. This may lead to bone fractures, spinal column curvature, and loss of height.

Kidney stones: This may be due to the formation of crystals in the kidneys due to excessive calcium in the blood. These crystals can combine over time to form kidney stones. Passing a stone during urination can be extremely painful.

Kidney failure: This complication occurs in severe hypercalcemia and it can damage the kidneys, limiting their ability to cleanse the blood and eliminate fluid.

Arrhythmia: Hypercalcemia can lead to irregular heartbeat as increased calcium levels may affect the electrical impulses that regulate the heartbeat.

Nervous system problems: Hypercalcemia can lead to confusion, dementia, and coma, in severe cases.

Some of the other complications of hypercalcemia include:

Depression

Bone pain

Constipation

Pancreatitis

Gastric ulcers

Paresthesias

Syncope

Alternative Therapies For Hypercalcemia

Mild to moderate symptoms of hypercalcemia can be managed by certain lifestyle modifications and prescribed medications. However, there is a lot of research going on to reduce calcium levels through alternate medicine as well. Some of it includes:

1. Herbal therapy

Herbs are sometimes used to counter the bone loss that can occur from hyperparathyroidism, though scientific studies around it are lacking. They are generally available as standardized dried extracts like pills, capsules, tablets, teas, or tinctures/liquid extracts like alcohol extraction

Talk to the doctor before taking any herbs, in case of hypercalcemia due to hyperparathyroidism. The herbs that have shown positive results in lowering the calcium levels are:

Chaste tree (Vitex agnus castus)

Dandelion (Taraxacum officinale)

Fructus ligustri lucidi (FLL)

2. Physical therapy

A sedentary lifestyle can cause the longer bones to absorb its calcium leading to hypercalcemia. Being active and physical therapy have proven to be effective in these cases. The common uses of this therapy include:

Weight bearing help prevent osteoporosis and immobility

Prevention of fractures

Increased strength and range of motion (ROM)

Living With Hypercalcemia

The severity of hypercalcemia depends on the cause. When hypercalcemia is due to hyperparathyroidism, symptoms tend to be mild but are prolonged. However, hypercalcemia due to malignancy can have severe symptoms and poor quality of life due to aggressive treatment modalities.

The mild symptoms of hypercalcemia can be managed by following certain simple lifestyle changes like:

Stop taking calcium supplements

Avoid medications containing calcium carbonate, which are generally used to treat acid reflux

Stay active to keep the digestive system moving

Avoid long periods of inactivity and a sedentary lifestyle

Drink a lot of liquids and stay hydrated as hydration aids the body in breaking down food

Abstain from consuming large quantities of calcium-rich foods

Do not deprive the body of calcium-rich foods completely as they are required for other functional nutrients

Talk to your doctor before making any drastic changes and come up with a plan that best suits your needs

Quit smoking

Did you know?

Smoking tobacco is one of the leading and preventable causes of premature casualties around the globe. Read more about tips on how to quit smoking, and deal with challenges of quitting.

Read Now!

Frequently Asked Questions

When to consult a doctor?

Can corticosteroids cause hypercalcemia?

When and what is the right choice to take calcium supplements?

Can one have too much calcium?

How can hypercalcemia cause peptic ulcers?

What is the outlook after one is diagnosed with hypercalcemia?

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Hyperpigmentation

Also known as Discolouration and Pigmentation

Overview

Hyperpigmentation is a condition in which some patches of skin take a darker colour than the rest of the surrounding skin. It is a harmless condition which is caused due to excessive melanin, a brown pigment that is produced in the body and is responsible for normal skin tone.

Hyperpigmentation can affect any person across all races. There are different types of hyperpigmentation including melasma, post-inflammatory hyperpigmentation, and age spots. Excessive exposure to sunlight, inflammation, hormonal disturbances, reaction to certain drugs and some medical conditions are known to cause hyperpigmentation.

Though the condition is harmless, some people may prefer to treat it. This can be done by avoiding exposure to the sun, using topical creams that contain retinoids, hydroquinone, azelaic acid, and kojic acid, or undergoing cosmetic procedures such as laser therapy and chemical peels.

Key Facts

Usually seen in

Adults

Gender affected

Both men and women

Body part(s) involved

Skin

Face

Hands

Legs

Chest

Necessary health tests/imaging

Physical examination

Complete medical history

Wood lamps

Treatment

Topical creams: Kojic acid, Azelaic acid, Hydroquinone, Retinoids and Vitamin C

Chemical peels

Laser therapy

Microdermabrasion

Specialists to consult

General physician

Dermatologist

Symptoms Of Hyperpigmentation

The main symptom of hyperpigmentation is the development of darkened areas on the skin. These can occur in patches, vary in size and can develop anywhere on the body. The symptoms of the condition vary depending upon the type. The most common types of hyperpigmentation are:

1. Sunspots

Sunspots, solar lentigines or age spots are seen quite commonly. They are also called liver spots but are not related to any liver disorder. They are caused due to excessive exposure to the sun over time.

Sunspots appear as brown, black or tan spots and are spread across the face, back of the hands and skin that has been exposed to the sun for a long time.

2. Melasma

Melasma also known as chloasma is characterised by the presentation of hyperpigmented brown to greyish brown patches on the face including the cheeks, upper lip and forehead, as well as the forearms. It sometimes affects arms, neck, tummy, back or any part of skin that is exposed to sunlight.

Melasma is also called the ‘mask of pregnancy’ because it primarily affects pregnant women. It is also seen in women taking oral contraceptives. Non-pregnant women and dark-skinned men can also get affected. It is more prevalent and lasts longer in people with dark skin.

3. Post-inflammatory hyperpigmentation (PIH)

It is caused due to an injury or inflammation of the skin. It presents as patches or spots of darkened skin. It usually occurs after an inflammatory skin condition such as the presence of acne or eczema. It usually occurs on the face or neck.

Causes Of Hyperpigmentation

The most common cause of hyperpigmentation is excessive production of melanin pigment. There are different conditions or factors that can alter the production of melanin in the body that lead to hyperpigmentation such as:

1. Excessive exposure of the sun

Prolonged exposure towards the sun can cause the body to produce more melanin to protect the skin from the harmful rays of the sun. This results in patches or dark spots that are also known as sun spots or age spots. They are usually seen during middle age and increase in number with age.

There is a direct correlation between skin pigmentation seen in people with the geographical distribution of ultraviolet radiation. Dark-skinned people are mostly present in areas that receive higher amounts of UVB radiation and light-skinned people inhabit areas that are further away from the tropics.

2. Skin inflammation

People can experience the darkening of the skin after inflammation of that area. This includes inflammation caused due to acne, psoriasis, lichen planus, atopic dermatitis, and allergic contact. Post-inflammatory hyperpigmentation is more severe in cases of recurrent inflammation as compared to short-term acute inflammation. The resulting hyperpigmentation can last for months to years and can hamper a person's quality of life.

3. Melasma

Also known as 'chloasma' or the “mask of pregnancy,” occurs in pregnant women. It is a common skin problem that causes dark discoloured patchy hyperpigmentation. It typically occurs on the face and is symmetrical, with matching marks on both sides of the face.

Melasma is seen mainly in women across all age groups and races. Men can also get affected by melasma. It is more prevalent and lasts longer in people with dark skin.

The exact cause behind melasma hasn’t been determined yet but some factors are directly linked with the same. This includes an increase in estrogen levels during pregnancy or due to the usage of oral contraceptive pills. Melasma usually resolves on its own after pregnancy or when a woman stops taking birth control pills.

Some people may also have a genetic predisposition towards melasma or may suffer from conditions such as thyroid or liver disorders. UV exposure exacerbates the development of melasma.

Melasma can appear on the skin at any point in time, and your day-to-day skin care routine may not be enough to combat its appearance.

Read this to learn about how to get rid of melasma.

Read Here!

4. Reaction to certain drugs

Using medications such as tricyclic antidepressants and antimalarial drugs can cause hyperpigmentation. This can result in patches of skin to make a greyish hue. Sometimes, the chemicals present in topical treatment can cause hyperpigmentation too.

5. Addison's disease

Addison's disease is a medical condition that affects a person’s adrenal glands. The adrenal glands are located above the kidneys and produce hormones that influence every tissue and organ of the body. Addison's disease is an autoimmune disorder in which the immune system starts to attack the adrenal glands themselves. This can also result in hyperpigmentation of elbows, knees, folds of skin, lips, knuckles, and toes. Some other symptoms of Addison's disease include fatigue, muscle weakness, nausea, and vomiting.

6. Hemochromatosis

This is a medical condition that is inheritable and causes the body to retain too much iron. It can result in hyperpigmentation of the skin in which the skin starts to look more tanner or darker than usual. Other symptoms of the condition include stomach pain, joint pain, fatigue, and weight loss.

7. Acanthosis nigricans

Hyperpigmentation of intertriginous areas like the nape of the neck, and armpits is associated with insulin resistance leading to diabetes and metabolic syndrome (cluster of conditions that occur together, increasing your risk of heart disease, stroke and type 2 diabetes).

8. Linea nigra

It is the presence of a hyperpigmented line found on the abdomen during pregnancy.

9. Peutz–Jeghers syndrome

This is an autosomal dominant (passed through the families) disorder characterised by hyperpigmented macules on the lips and oral mucosa and gastrointestinal polyps.

10. Smoker's melanosis

This can be seen with the naked eye as a brown to black pigmentation of the oral tissue i.e. the gums, cheeks or palate as well as in the larynx. It is most often seen in the lower gums of tobacco users.

11. Mercury poisoning

This particularly causes darkening of the outer layer of the skin, resulting from the topical application of mercurial ointments for skin-whitening.

12. Porphyria

It is a group of liver disorders in which substances called porphyrins build up in the body, negatively affecting the skin. This causes local skin damage and resultant hyperpigmentation in the long run.

13. Metabolic causes

These include vitamin deficiencies such as Vitamin B12 and folic acid.

14. Cancer

Although not as common, in many cases of malignancy, especially related to melanoma, diffuse hyperpigmentation is seen. This is more common in patients with metastatic disease and/or those patients who present with melanoma of an unknown origin.

Risk Factors For Hyperpigmentation

Some common risk factors of hyperpigmentation include:

Prolonged exposure towards the sun

Darker skin tone that is more prone to changes in the pigmentation

Use of oral contraceptives or pregnancy seen in the cases of melasma

Certain medications that can increase the skin’s sensitivity towards sunlight

Trauma that wounds the skin such as a burn injury

Inflammation plays an important role in hyperpigmentation post-acne

Sun exposure is the most common cause for hyperpigmentation. Protect your skin by choosing the right sunscreen. Read more about tips to choose the right sunscreen.

Click Here!

Diagnosis Of Hyperpigmentation

Hyperpigmentation can be caused due to multiple factors and can be diagnosed. Some of the diagnostic tests include:

1. Physical examination

A skin specialist known as a dermatologist can determine the cause behind your hyperpigmentation. They can perform a physical exam or biopsy in which a small sample of skin is taken and sent to a lab for further investigations. Melasma can usually be identified by a doctor by just looking at the skin.

2. Complete medical history

Hyperpigmentation can be caused by certain medications and also some health conditions. A detailed medical history can help in confirming the diagnosis.

3. Woods lamp

The woods lamp is an examination in which ultraviolet light is used to show fluorescence. This device is used by a dermatologist to diagnose the different pigmentations of the skin. The exam will be conducted in a darkened room that will allow wood light to lighten the affected area for some seconds. The doctor will look for changes in colour or fluorescence. Normal skin will not show fluorescence whereas the presence of fungal, bacterial infections, or pigment disorder will.

Celebs affected

Drew Barrymore

Drew Barrymore, famous American actress has spoken about dealing with melasma.

Molly Sims

Molly Sims is a model and mother who has talked about her experience with melasma several times.

Prevention Of Hyperpigmentation

There is no sure short way to prevent hyperpigmentation. However, there are some ways through which you can reduce your risk of developing hyperpigmentation. They are:

Apply sunscreen as it protect your skin against the harmful rays of the sun. The most recommended SPF level is 50.

Cover your face with hats or caps, if you are going out in the sun.

Avoid going out when the sun is at its strongest, especially in the afternoon.

Add Vitamin C to your beauty regime.

Limit scratching or touching your skin frequently.

Why should you apply a sunscreen?

Ultraviolet radiation emanating from the sun is the primary cause of sunburn, eye damage and skin damage. Learn more about the basics of sunscreen.

Tap To Read!

Specialist To Visit

Hyperpigmentation is harmless but it can have an effect on your mental well being as well as physical wellness, if associated with another underlying condition. Doctors that can help you in reducing your hyperpigmentation or diagnosing any other health condition are:

Dermatologist

General physician

If you are noticing any of the symptoms, seek advice from our world-class medical professionals.

Consult Now!

Treatment Of Hyperpigmentation

There are various treatment modalities available to reduce and treat hyperpigmentation. They include:

1. Topical creams

Many people opt to use over-the-counter topical creams that contain ingredients that can lighten the skin. This includes creams that contain kojic acid, azelaic acid, hydroquinone, retinoids, and Vitamin C.

Topical prescription creams with hydroquinone can lighten the skin. Hydroquinone remains a workhorse of melasma and hyperpigmentation management and is often considered the topical “gold standard”. However, it is not advisable to use topical hydroquinone for a long time since it can cause the skin to darken further called ochronosis. Always consult a dermatologist before using a cream containing hydroquinone to get the right guidance on how you can use the cream.

Creams containing retinoids or kojic acid can take a couple of months to show their effect.

2. Chemical peels

An effective way of treating hyperpigmentation is chemical peels. This technique involves applying a chemical solution to the skin that leads to the area's exfoliation and peeling. The skin that regenerates in that area is smoother and less wrinkled.

Usually, chemicals such as glycolic acid, salicylic acid, and trichloroacetic acid are used for chemical peels. If you are using a topical retinoid, talk to your doctor before using an over-the-counter peel. You may need to stop retinoid use for seven days before the peel. Superficial chemical peels use alpha-hydroxy acid or other mild acids that only penetrate the outer layer of the skin and improve mild skin discoloration.

Medium strength chemical peels use glycolic or trichloroacetic acid that can penetrate the outer and middle layers of the skin. This treatment reduces age spots and moderate skin discoloration. Deep chemical peels use trichloroacetic acid or phenol. The chemical penetrates the deeper layer of the skin and can help in reducing shallow scars and age spots.

3. Dermabrasion

This medical procedure uses a wire brush or diamond wheel that can level the superficial layer of the skin. The areas that are treated with dermabrasion heal and allow new skin to regenerate. Dermabrasion foremost injures the skin and patients who opt for the procedure should be prepared for how they will look right after the treatment and during the time the skin regenerates. The patient needs to talk to their doctor and have realistic expectations from the treatment. The result of dermabrasion can take up to several weeks or months to become evident.

4. Laser resurfacing

Laser resurfacing is a popular medical procedure that uses a laser device to improve the way the skin appears to be. It is also used to treat minor flaws and remove layers of skin. Carbon dioxide or CO2 laser is the most commonly used laser that can treat minor wrinkles, scars, and other conditions. Erbium laser is used to improve superficial and deep lines on the face, hand, and chest. It causes fewer side effects than the CO2 laser. Laser toning using YAG laser and intense pulse light can be used to treat hyperpigmentation such as melasma and post-inflammatory hyperpigmentation.

Did you know?

Along with all the chemicals and various skin lightening techniques, there are a lot of options for fruit peels as well. Read more about it.

Click Here!

Home-care For Hyperpigmentation

Hyperpigmentation is not a serious condition, but it can take a toll on your mind because of the appearance. Here are a few tips that can help you with it. They are:

Always follow the instructions given by your dermatologist.

If you have been advised to apply a topical cream or use a particular face wash, do so religiously and be patient for the results to become evident.

Apply sunscreen while going out including on cloudy days.

In case you have acne or other forms of facial injury, do not poke or touch that area.

Scratching or picking at that area will increase the inflammation of that region which will lead to darkening of the skin.

Use over-the-counter products that contain spot eradicating ingredients such as arbutin and niacinamide.

It is important to carefully read the information leaflet of the medicine since applying too much of any product can lead to irritation of the skin.

You can try natural ingredients like aloe vera, green tea extract, and sandalwood to lighten the skin.

Are dark spots worrying you?

Don’t worry, having dark spots on the face isn’t a big deal. It is absolutely normal and you do not have to break your head if you have them. Read more about the ways to tackle it.

Click Here!

Complications Of Hyperpigmentation

Hyperpigmentation is the harmless darkening of skin and doesn't cause any particular complication. In case your hyperpigmentation doesn't improve within a few months, consult a doctor to rule out any underlying medical conditions.

Alternative Therapies For Hyperpigmentation

Home remedies

Hyperpigmentation can be lightened with ingredients found at home. Natural facepacks can work wonders. However, it is always better to consult with your dermatologist before using these home remedies.

1. Aloe vera

Aloe vera is a plant that contains aloesin, a compound that can lighten hyperpigmentation. The compound works by reducing the production of melanin in the skin. Applying aloe vera has been found to relieve melasma in pregnant women. You can use natural aloe vera or aloe vera gels that are available in the market.

2. Licorice (Mulethi)

This extract may reportedly lighten hyperpigmentation. Licorice extract has antioxidants and anti-inflammatory agents that can cause skin lightening.

3. Green tea

Green tea contains antioxidants and anti-inflammatory properties that can improve hyperpigmentation.

4. Turmeric (Haldi)

Regular application of turmeric which is rich in antioxidants helps in lightening the dark patches. It also reduces the occurrence of pimples that can later lead to hyperpigmentation.

5. Potato (Aloo)

Potatoes contain an enzyme called catecholase which is known to lighten skin pigmentation, dark spots and blemishes.

6. Tomato (Tamatar)

Tomato paste rich in lycopene that protects the skin against short-term and long-term effects of sun damage.

7. Milk (Dudh)

Milk, buttermilk, and even sour milk have lactic acid that helps to lighten skin discoloration.

8. Sandalwood (Chandan)

This is an age-old remedy used by all the elderly people to get the glow. Sandalwood helps to lighten hyperpigmentation spots as it contains natural skin-lightening agents.

Can hyperpigmentation be cured naturally?

There are some effective natural remedies that can help in reducing the appearance of dark spots over time. Read more about some of these useful home remedies to reduce hyperpigmentation.

Click Here!

Living With Hyperpigmentation

Hyperpigmentation of skin is harmless, however, it can affect a person's mental health and make them conscious of how they look. This can affect a person's quality of life and dishearten them. However, there are some effective ways of managing hyperpigmentation.

Avoid going out in direct sunlight and if you do so always apply a sunscreen that contains SPF 30 or above. Remember to reapply sunscreen every two hours.

Wear hats or caps that will protect you from harsh UV rays.

Use gentle, fragrance-free products that do not contain any ingredients that can exacerbate inflammation or irritation of the skin.

Avoid waxing areas that have melasma as that can cause skin inflammation.

Increase intake of foods rich in Vitamin A & antioxidants. Vegetables like spinach, carrots, lettuce, broccoli, red bell peppers & sweet potato to help reduce and prevent pigmentation.

Consume lots of citrus fruits. Vitamin C has antioxidant properties that helps in reducing damage caused by harmful UV rays and prevents dark spots.

Deficiency of Vitamin B12 is a common cause for skin pigmentation. Meeting your daily requirement can help in managing pigmentation.

Drink plenty of water to keep your skin supple and to get rid of toxins. You should be drinking at least 2-3 litres of fluids in summer.

Always consult a dermatologist for correct diagnosis of any underlying cause and proper treatment of hyperpigmentation.

Did you know?

Reasons for pigmentation may range from hereditary factors to hormonal imbalance and excessive sun exposure. Learn more about natural ways of dealing with it.

Read More!

Frequently Asked Questions

What medications can cause hyperpigmentation?

Does hyperpigmentation resolve on its own?

Is Vitamin C better than retinol for hyperpigmentation?

How does Vitamin C work for the skin?

Is hyperpigmentation a sign of a medical condition?

What is intense pulse light therapy (IPL)?

Is microdermabrasion safe?

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Hypertension (high blood pressure)

Also known as High Blood Pressure and High BP

Overview

Hypertension or high blood pressure is one of the common disorders affecting 1.13 billion people worldwide, as per 2021 WHO report. There are numerous factors that put you at risk of hypertension which include sedentary lifestyle, increased age, stress, family history, cigarette smoking, being overweight, high salt diet, etc. Moreover, certain diseases can also lead to high blood pressure such as diabetes, chronic kidney disease, and hypercholesterolemia.

The condition causes thickening of your blood vessel walls which leads to increased blood flow with high pressure. This in turn can lead to microscopic injuries to various organs of the body. Most patients have no obvious symptoms and hence, do not even know that they have hypertension. As a result, a large number of hypertension cases go undetected. However, patients can experience symptoms such as severe headache, fatigue, dizziness, chest pain, difficulty in breathing, etc.

Once diagnosed with hypertension, you need to take proper measures to keep your blood pressure under control. These steps mostly focus on strict diet control, routine exercise/workouts, weight control, active lifestyle and stress management. In some cases, use of medications along with lifestyle measures are required. If ignored, uncontrolled high blood pressure can lead to complications like heart diseases, stroke, kidney diseases and eye damage.

Key Facts

Usually seen in

Adults above 40 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Heart

Blood vessels

Prevalence

Worldwide: 1.13 billion (2021)

India: 208 million (2017)

Mimicking Conditions

Secondary Hypertension

Hyperaldosteronism

Coarctation of the aorta

Renal artery stenosis

Chronic kidney disease

Aortic valve disease

Treatment

Thiazides diurectics: Hydrochlorothiazide & Chlorthalidone

Loop diuretics: Furosemide & Torsemide

Potassium-sparing diuretics: Triamterene & Amiloride

Calcium channel blockers: Amlodipine & Nifedipine

ACE inhibitors: Captopril & Enalapril

Angiotensin II receptor blockers (ARBs): Telmisartan & Losartan

Beta-blockers: Atenolol & Metoprolol

Vasodilators: Hydralazine & Minoxidil

Aldosterone antagonist: Spironolactone

Alpha blockers: Doxazosin & Prazosin

Specialists to consult

Cardiologist

Nephrologist

Cardiac surgeon

Ophthalmologist

Neurologist

See All

Symptoms Of Hypertension

The signs and symptoms include

Headache

Dyspnea

Dizziness

Nosebleeds

Changes in vision

Chest pain

Fatigue

Swelling in the legs and feet

Abnormal heart sounds

Narrowing of the eye blood vessels

Retinal bleeding

Changes in reflexes

Hypertension is a ‘silent killer’. Most of the time, the signs and symptoms are none. Symptoms may show up in long-standing or severe hypertension.

Did you know?

Most people who think that their blood pressure is low actually have normal blood pressure. Both numbers in a blood pressure reading are important. But after age 50, the systolic reading is even more important. Isolated systolic hypertension is a condition in which the diastolic pressure is normal (less than 80 mm Hg) but systolic pressure is high (greater than or equal to 130 mm Hg). This is a common type of high blood pressure among people older than 65.

Click To Buy BP Monitor

Causes Of Hypertension

The cause for hypertension is unknown in the majority of cases. The interplay of genetic, environmental, behavioral and dietary factors is responsible for the development of hypertension. There are two types of high blood pressure which include:

1. Primary (essential) hypertension: For most adults, there's no identifiable cause of high blood pressure. This type of high blood pressure, called primary (essential) hypertension, tends to develop gradually over many years.

2. Secondary hypertension: If your high blood pressure is caused by an underlying condition, it is called secondary hypertension. Various conditions and medications can lead to secondary hypertension, including:

Obstructive sleep apnea

Kidney disease

Adrenal gland tumors

Thyroid problems

Certain defects you're born with (congenital) in blood vessels

Certain medications, such as birth control pills, cold remedies, decongestants, over-the-counter pain relievers

Certain illicit drugs such as cocaine and amphetamines

Lifestlye factors such as being overweight/obese, smoking, no exercise, etc

Types Of Hypertension

The American Heart Association has classified the blood pressure into five different ranges. These are:

1. Normal blood pressure (BP): If your blood pressure is less than 120/80 mm Hg (where systolic BP is less than 120 mm Hg and diastolic BP is less than 80 mm Hg), then your blood pressure is considered to be in the normal range. This indicates that your heart is healthy and hence, it is important to stick to your habits when it comes to diet and exercise.

2. Elevated blood pressure: This is the stage where your blood pressure readings consistently in the range of systolic BP is 120 – 129 mm Hg and diastolic BP is less than 80 mm Hg). If you suffer from elevated blood pressure there are high chances that you might develop hypertension in the future if proper steps are not taken to control your blood pressure. These steps mostly focus on strict diet control, exercise routine, weight control, active lifestyle and stress management.

3. Stage 1 hypertension: It is when your blood pressure readings are consistently 130 – 139/ 80 – 89 mm Hg (where systolic BP is 130 – 139 mm Hg and diastolic BP is 80 – 89 mm Hg). Based on your age and risk factors, your doctors might recommend diet control or prescribe medications. If you or your family have a history of heart disease or are obese, then it is likely that doctors might advise medications to prevent cardiovascular complication such as heart attack or stroke.

4. Stage 2 hypertension: This is when your blood pressure consistently ranges higher than 140/90 mm Hg (where systolic BP is 140 mm Hg or higher and diastolic BP is 90 mm Hg or higher). This is when your doctor might prescribe blood pressure medications to control hypertension along with lifestyle medications. Moreover, you might be advised to check your BP at home and keep a tab on your overall health.

5. Hypertensive crisis: This is the fifth but most severe stage of hypertension which requires urgent medical attention. In this stage, your blood pressure readings exceed 180/120 mm Hg (where systolic BP is higher than 180 mm Hg and diastolic BP is higher than 120 mm Hg). It is advised to wait for five minutes and check your readings again. If the readings are still extremely high, then contact your doctor immediately. This indicates that you might be experiencing signs of organ damage such as shortness of breath, chest pain, back pain, weakness or numbness, difficulty in speaking or changes in vision. Do not wait for the readings to come down but rush to a hospital at the earliest.

Resistant Vs refractory hypertension

Resistant hypertension is defined as blood pressure that remains above the normal range in spite of the use of 3 antihypertensive agents of different classes. You may have resistant hypertension if you are on 3 antihypertensive medications which when taken together, relieve high blood pressure (complementary mechanisms of action) but are still not able to achieve control over your high blood pressure or if you need ≥4 medications to achieve BP control.

Whereas, refractory hypertension (RfH) is an extreme phenotype of resistant hypertension (RH), being considered an uncontrolled blood pressure besides the use of 5 or more antihypertensive medications, including a long-acting thiazide diuretic and a mineralocorticoid antagonist.

Older age, obesity, chronic kidney disease and diabetes are some of the factors that increase the risk for resistant hypertension. Resistant hypertension increases the risk of myocardial infarction, stroke, kidney failure, and death by two to sixfold.

Risk Factors For Hypertension

The risk factors of hypertension are divided into:

Modifiable risk factors

These include:

Current cigarette smoking, secondhand smoking

Diabetes mellitus

Dyslipidemia/hypercholesterolemia

Overweight/obesity

Physical inactivity/low fitness

Unhealthy diet

Excessive use of alcohol

Non-modifiable risk factors

These include:

Chronic Kidney Disease (CKD)

Family history

Increased age

Low socio-economic/educational status

Globalization, urbanization

Gender (more prevalent in males)

Obstructive sleep apnea

Psychosocial stress

Diagnosis Of Hypertension

Diagnosis of hypertension is based on blood pressure measurements. According to WHO, the measurements need to be recorded for several days before a diagnosis of hypertension can be made. Two consecutive measurements at least a few minutes apart are taken and recorded twice daily (morning and evening). A standard way to measure blood pressure is to take the average of more than two measurements in separate visits.

Hypertension is generally treated with medicines when the average systolic blood pressure is 140 mmHg or higher, or when the average diastolic blood pressure is 90 mmHg or higher, taken on two or more separate days. Systolic and diastolic blood pressure of less than 120 mmHg and 80 mmHg, respectively, is considered normal.

Important note: One important thing to note is that if a person records high blood pressure at any single occasion, it does not imply that the person is hypertensive. The blood pressure readings are based on an average of more than two careful readings recorded on more than two occasions.

You will be evaluated through your medical history, physical examination, routine laboratory tests, and certain diagnostic procedures. Your doctor will identify the signs and symptoms that may be due to high blood pressure. The clinical findings may help uncover an underlying health disorder too.

Laboratory tests are done for CVD (cardiovascular disease) risk factor profiling. The tests to screen secondary causes of hypertension & include:

Basic testing:

Blood glucose test

Complete blood count

Lipid profile

Kidney function test

Serum sodium, potassium, calcium

Thyroid-stimulating hormone

Urinalysis

Electrocardiogram

Optional testing:

Echocardiogram

Uric acid

Urinary albumin to creatinine ratio

Laboratory tests are done for screening secondary causes of hypertension when the clinical indications and physical examination findings are present. Adults with resistant hypertension are also screened for secondary hypertension. Additional diagnostic tests may include complete blood count, urinalysis, urine culture, BUN, creatinine, electrolytes test, lipid profile, renal ultrasound, etc.

Celebs affected

Rajnikant

In the year 2020, Superstar Rajnikanth was admitted to a hospital due to fluctuating blood pressure. His blood pressure was on a higher side and was advised complete rest.

Oprah Winfrey

American talk show host and actress Oprah Winfrey revealed that she suffered from high blood pressure along with prediabetes. Post which she lost weight and switched to a healthier lifestyle to manage her condition.

Did you know?

High blood pressure can affect sex life in men. This is because increased blood flow with high pressure can lead to microscopic injuries to various organs of the body including the penis. Moreover, it can also lead to an inability to maintain an erection, which is known as erectile dysfunction.

Click Here To Know!

Prevention Of Hypertension

1. Go easy on yourself. De-stress!

Chronic stress is an important contributor to high blood pressure. Even occasional stress can contribute to high blood pressure if you react to stress by eating unhealthy food, drinking alcohol or smoking. Managing stress can help you prevent high blood pressure.

Give yourself time to get things done.

Learn to say no and to live within manageable limits.

Try to learn to accept things you can’t change.

Know your stress triggers and try to avoid them.

Take 15 to 20 minutes a day to sit quietly and breathe deeply.

Meditate! Whether it involves chanting, breathing, visualization, it can be an effective stress-management tool for many people.

2. Cut down your salt intake

Restricting the salt intake to less than 6gm/day can not only lower the blood pressure but is also good for the heart. To decrease sodium in your diet, consider these tips:

Read the food labels carefully and opt for foods with low sodium.

Avoid having processed foods as they have high sodium content.

Develop a taste for unsalted/low salted food.

Resist the urge to sprinkle salt over salads and cooked food.

3. Eat heart-healthy foods

Foods rich in healthy fats such as monounsaturated fats and polyunsaturated fats are good for your heart. Also, foods loaded with vitamins & minerals are important for maintaining proper blood circulation. Foods rich in fibre can aid in lowering cholesterol levels. So make sure to include foods such as nuts, green leafy vegetables, tomatoes, garlic, ginger, apples, etc in diet for better heart health.

4. Exercise regularly

People who are physically active are often able to improve heart health and prevent complications such as hypertension.

30-45 minutes of brisk walking 3-4 times a week could lower the blood pressure by 7-8 mm Hg.

You could pick any physical activity you like such as walking, running, swimming or cycling.

5. Lose those extra kilos

If you are overweight or obese, losing weight may be enough to prevent blood pressure in addition to other lifestyle conditions

Limit your calorie intake to around 1500 Kcal per day. Have a diet rich in fruits, vegetables and low-fat dairy products.

Stay hydrated. Drink around 2 liters of fluids throughout the day.

Weight loss is 99% Mental & 1% physical. Start your journey today.

Click Here!

6. Limit your tea/coffee intake

Caffeine can cause short-term spikes in blood pressure, even in people without hypertension. Limit your caffeine intake to about 2 cups of coffee per day.

7. Stay away from alcohol

Consuming more than 2 drinks a day increases the risk of hypertension in both men and women. It can also reduce the effectiveness of blood pressure medications. Restrict your alcohol intake to special occasions or weekends. And remember, moderation is the key.

8. Quit smoking

Smoking is tied to higher risk of hypertension.

Each cigarette you smoke increases your blood pressure for many minutes after you finish.

Quitting smoking helps your blood pressure return to normal.

People who quit smoking, regardless of age have a higher life expectancy.

Tobacco threatens!! Say no to tobacco now. How? Let us help.

Click Here!

Specialist To Visit

If you observe any signs and symptoms of hypertension, then it is wise to consult a doctor without fail because immediate diagnosis and treatment can improve your overall well being. Also, if you are above 40 years or age or have any risk factors of high blood pressure, then it is wise to visit a doctor at least once a year and check your blood pressure.

Doctors that can help to diagnose and treat high blood pressure include:

General physician (family doctor)

Cardiologist

Cardiothoracic vascular surgeon (CTVS)

If you have other health problems along with hypertension, then you might be recommended to specialists such as:

Nephrologist

Ophthalmologist

Neurologist

Nutritionist

Consult India’s best doctors online. Click here to book an appointment now.

Book Now!

Treatment Of Hypertension

The main aim of treatment of hypertension is to keep the blood pressure within the normal range to lower the risk of future complications. Many drugs like diuretics, calcium channel blockers (CCBs), angiotensin-converting enzyme (ACE) inhibitors, angiotensin II receptor blockers (ARBs), beta blockers, vasodilators, etc. are currently available for reducing blood pressure. More than two-thirds of hypertensive individuals are suggested two or more antihypertensive drugs, selected from different classes of drugs to treat their hypertension.

Diuretics

Calcium channel blockers (CCB)

Angiotensin-converting enzyme (ACE) inhibitors

Angiotensin II receptor blockers (ARBs)

Alpha and Beta blockers

Vasodilators

The first drugs that you may be prescribed to treat your hypertension (First-line treatment) may include thiazide diuretics, CCBs and ACEI/ARBs. If you have stage 2 hypertension but do not possess any high-risk situation then you may be prescribed two antihypertensive drugs from different classes instead of any specific drug.

1. Diuretics

Diuretics like hydrochlorothiazide eliminate excess salt and water from the body and also decrease calcium excretion. There are different types of diuretics that act at different sites of the renal tubules (small tubes) in the nephrons (functional unit of kidney). A few types of diuretics used in the treatment of hypertension are:

Thiazides like hydrochlorothiazide, chlorthalidone, etc.

Loop diuretics like furosemide, torsemide, etc.

Potassium-sparing diuretics like triamterene, amiloride, etc.

2. Calcium channel blockers

They bind to calcium channels in the blood vessels and block the entry of calcium. This causes dilatation of the blood vessels which helps decrease blood pressure. Calcium channel blockers are of two types:

Dihydropyridines such as amlodipine, nifedipine,etc.

Nondihydropyridines such as verapamil, diltiazem, etc.

3. Angiotensin-converting enzyme (ACE) inhibitors

These inhibit the angiotensin-converting enzyme which regulates salt and water retention in the body. They also lower blood pressure by relaxing the blood vessels, decreasing blood volume and increasing sodium excretion in the urine. A few examples in this class of drugs are

Fosinopril

Captopril

Enalapril

Ramipril

Lisinopril

4. Angiotensin Receptor Blockers (ARBs)

If you are unable to tolerate ACE inhibitors, ARBs are used. They block angiotensin-II (a hormone which causes your blood vessel to constrict) from binding to its receptor and antagonize its action. This helps reduce your blood pressure. Some examples in this class of drugs are

Telmisartan

Losartan

Valsartan

Irbesartan

5. Beta-blockers

If you are suffering from some serious conditions of the heart like heart failure, myocardial infarction, etc., beta-blockers are the prescribed alternatives. Some of the drugs in this class are

Atenolol

Metoprolol

Propranolol

Labetalol

6. Vasodilators

It helps to lower blood pressure by relaxing the blood vessels’ walls and decreasing their resistance. These medications are vasodilators that work directly on the vessel walls to decrease blood pressure. Examples include

Hydralazine

Minoxidil

7. Aldosterone Antagonists

Aldosterone antagonists are also considered diuretics. Examples are spironolactone and eplerenone (Inspra). These drugs block the effect of a natural chemical that can lead to salt and fluid buildup, which can contribute to high blood pressure. They may be used to treat resistant hypertension.

8. Alpha blockers

These medications reduce nerve signals to blood vessels, lowering the effects of natural chemicals that narrow blood vessels. Alpha blockers include

Doxazosin

Prazosin

Tips to keep in mind when taking blood pressure medications

You should always take blood pressure medications as prescribed.

Never skip a dose or abruptly stop taking your blood pressure medication. Suddenly stopping certain blood pressure drugs, such as beta blockers, can cause a sharp increase in blood pressure (rebound hypertension).

If you skip doses because you can't afford the medications, because you have side effects or because you simply forget to take your medications, talk to your doctor about solutions.

Don't change your treatment without your doctor's guidance.

Home-care For Hypertension

Adopting a healthy lifestyle and making small but conscious dietary changes can go a long way in controlling blood pressure. In some cases, it can even help to reduce the dose and number of medications. Here are some easy ways of keeping blood pressure in check:

Exercise regularly

Cut down on salt intake

Limit your calorie consumption

Restrict your intake of caffeine

Manage stress

Quit smoking & cut down on alcohol

You may also like to know these 6 effective ways to keep your blood pressure in check.

Click Here To Read!

Tips to measure BP at home

If you are diagnosed with High BP, then you need BP monitoring as advised by your doctor. But even if you are not diagnosed with Hypertension you should check your BP at least once a month. This is because most of the time, high blood pressure has no symptoms. And owing to the unhealthy eating habits and stressful lifestyle, you are at risk of high blood pressure. Also, if you have a family history, you should check your BP regularly.

Logging your blood pressure everyday is not a bad idea to keep a close tab on your BP levels. Here is a printable BP tracker for you to record your levels every day.

Download Now!

There are two types of kits to measure BP. The digital and the manual BP monitor.

1. When using a digital monitor

Secure your arm (any arm as you please) in the cuff from your elbow upwards.

Switch the monitor on.

Inflate the cuff by pressing the bulb with whichever hand is free. For monitors with automatic inflators, just sit back and relax.

Your cuff will start deflating, listen out for the long beep sounds. The first one will signify the systolic pressure, the second one will signify the diastolic pressure.

After your monitor has registered both readings, it will display them on the screen.

Let the cuff deflate completely and unwrap your arm.

Still not sure about how to use a digital BP monitor? No worries. Watch this video to know the right way to use it.

2. When using a manual monitor

Secure your arm (any arm as you please) in the cuff from your elbow upwards.

You will need a stethoscope. Insert the head under the lower end of the cuff just above the elbow pit so that it rests on the radial artery.

Tighten the screw on the airflow valve.

Inflate the cuff by pressing the bulb with whichever hand is free.

Once the meter shows 180 mm Hg, slightly loosen the screw of the airflow valve and let the air escape slowly.

Listen for beats in the stethoscope with eyes on the meter. Record the meter readings when you start hearing them (systolic BP) and then again once you stop hearing them completely (Diastolic BP).

To get accurate results when measuring BP at home, it is important to know the tricks and tips. Here are 10 tips to get started.

Click To Read Article

Complications Of Hypertension

Long-standing hypertension can cause harmful consequences. The thickening of the walls of the blood vessels leads to reduced blood flow to different organs of your body. Hypertension can increase the risk of developing coronary artery disease, heart failure, stroke, aortic aneurysm (bleeding from large blood vessels), nephropathy (kidney damage), retinopathy (vision loss), etc. Many people with hypertension also have other health risk factors like smoking, obesity, high cholesterol and diabetes which increase their odds of complications.

1. Coronary artery disease: The damaged blood vessels of the heart can reduce the efficiency of the heart and also increase its workload. This can cause angina (chest pain) and left ventricular hypertrophy (thickening of heart muscle wall), eventually leading to heart failure.

2. Stroke: Uncontrolled hypertension damages and weakens the small vessels in the brain causing them to rupture and leak. It can also lead to the formation of blood clots in the vessels which block the blood flow and potentially cause a stroke.

3. Dementia: Hypertension in midlife is also a major risk factor for dementia. Chronically elevated blood pressure causes thickening of the blood vessel wall, thereby narrowing the tiny blood vessels. Plaque accumulation also leads to narrowing of the larger arteries of the brain. These plaques may rupture and completely block the passage of blood within the blood vessels resulting in the death of tissue in areas of the brain responsible for memory and executive function.

3. Aortic aneurysm/dissection: Hypertension weakens the wall of the blood vessels and over time, may cause it to bulge. This forms an aneurysm (a pouch-like structure) in the blood vessel wall which can be fatal when ruptured.

4. Hypertensive nephropathy/CKD: Damaged small vessels in the kidney reduce its blood supply. This leads to reduced kidney functions and eventually to kidney failure.

5. Hypertensive retinopathy: The retina, choroid, and optic nerve of the eye are affected. Blood vessels in the retina of the eye are narrowed. This impairs the vision and leads to retinopathy and eventually blindness.

These complications can be prevented by controlling the blood pressure and the known risk factors. Reduction of blood pressure to <130/80 mmHg has been shown to reduce heart complications by 25%.

Alternative Therapies For Hypertension

According to Ayurveda, hypertension can be attributed to 2 types of causes:

Diet-related Causes (Aharaj-nidana): These include excessive salt intake (atilavana), alcohol intake (atimadyapana), and meat consumption (mansa-sewan)

Lifestyle-related Causes (Viharaj-nidana): These causes chiefly include staying awake at night (ratrijagarana), sleeping during the day (divasvapna), holding on to natural urges like urination (vegavidharana), sedentary lifestyle (avyayama), overexertion (ativyayam), stress and anxiety (manashetu)

Ayurveda herbs: Individual drugs like Gokshura, Guggulu, Gomutra (cow urine), Arjuna, Punarnava, Ashwagandha, and Triphala can be used for the treatment of hypertension.

Garlic powder in the dosage of 600-900 mg per day is a useful remedy for high blood pressure.

Arjuna bark powder when taken in the dosage of 4 gm twice daily causes significant improvement in hypertension.

Two tablets of Sarpagandha vati (250 mg) taken twice daily have shown good results in reducing blood pressure.

Having Ashwagandha powder 2 gm with milk also helps to reduce blood pressure.

Here’s more Ayurvedic herbs that are effective in regulating blood pressure and managing your condition at home.

Click To Read

Panchakarma : Procedure of full body massage (Sarvanga Abhyanga) with medicated oils followed by induced vomiting and purgative therapy (Vaman and Virechan) or medicated enema (basti) may be administered depending upon the vitiated dosha and condition of the patient.

Yoga: Meditation and other relaxing techniques can help you in stress reduction. If practiced regularly and appropriately, you can also benefit from.

Pranayama

Shavasana

Vajrasana

Makarasana

Dhanurasana

Sukhasana

Living With Hypertension

Hypertension is a lifelong disease which needs to be managed for the rest of your life. You will need to make the necessary dietary and lifestyle changes to efficiently manage your condition. Eating healthy, exercising regularly, reducing weight, limiting alcohol intake, quitting smoking, etc. can go a long way in managing the condition.

However, with lifestyle changes and medication you may feel fine, you need to prevent health complications that may arise from hypertension. Also, managing your condition may take a toll on you, both physically and emotionally.

1. Invest in a digital BP monitor and use it regularly to check your blood pressure at home. Here are tips on how to choose a blood pressure monitor. Also, get your blood pressure tested at a hospital (from an expert or a qualified professional) once a year or during your regular health check-ups at a doctor’s clinic.

2. Rush to a hospital immediately if your blood pressure exceeds 180/120 mm Hg as it is a sign of hypertensive crisis. Also, if you experience symptoms of low blood pressure such as fainting, headache, dizziness, or fatigue, then do consult your doctor.

3. Eat a healthy diet low in sodium and fats to control your blood pressure along with regular intake of medicines and timely health checkups. Also, include lots of fresh fruits and vegetables in your diet and say no to sweetened beverages and processed foods. Here is a list of foods that people with hypertension should avoid.

4. Ideally, it is advised to exercise 30 – 45 minutes at least five times a day which includes brisk walking and strenuous workouts. For older individuals, it is recommended to perform physical activities at least twice a week. This is because it not only improves your blood circulation but also helps to control your blood pressure and lowers your risk of heart disease.

5. Limit the intake of alcohol as excessive drinking can increase the risk of hypertension. Also quit smoking as it can reduce the overall risk of cardiovascular diseases, a complication of high blood pressure.

6. If stress is the cause of high blood pressure, stress management should be considered as an effective intervention. Some of the techniques that can help to calm your mind and body and relieve stress include indulging in hobbies, playing a sport, joining a swim class or dance class or performing yoga and meditation.

7. Getting help from support groups for hypertension can help you to fight your condition. It also helps you to be more aware of your condition and its associated complications. You may be able to find one (in person or online) and share your story which in turn can help you to manage hypertension.

Frequently Asked Questions

Why is hypertension called the silent killer?

Does hypertension affect only the elderly?

Can hypertension be prevented even if it runs in my family?

Is it safe to take ayurvedic/homeopathic medications along with drugs?

Can I discontinue taking medications after my blood pressure returns to normal?

Will I become addicted to hypertensive medications if I am taking multiple drugs?

I was told that taking garlic cloves on an empty stomach every day in the morning can control hypertension. Is it true?

Can I develop hypertension if I do not have any risk factors, but consume excessive amounts of common salt?

Which food items can increase my chance of developing hypertension?

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Hyperthyroidism

Also known as Overactive thyroid

Overview

Hyperthyroidism is a medical condition in which the thyroid gland releases high levels of thyroxine hormone into the body. This condition can speed up a person’s metabolism rate and cause them to experience symptoms such as rapid heartbeat, increase in appetite, weight loss, and anxiety.

Different medical conditions can lead to the development of hyperthyroidism. These conditions include grave’s disease, thyroid nodules, and inflammation of thyroid gland. This condition is more common in women rather than men.

There are various treatment options available for hyperthyroidism. If you have been diagnosed with the condition, make sure you take your anti-thyroid drugs and implement lifestyle modification as suggested by your healthcare provider. Untreated hyperthyroidism can have a detrimental effect on different body organs such as the heart and skeletal system.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Thyroid gland

Heart

Skeletal system

Skin

Eyes

Mimicking Conditions

Alzheimer’s disease

Depression

Cirrhosis

Dementia

Hypoglycemia

Necessary health tests/imaging

Blood tests: Thyroid stimulating hormone (TSH), Thyroxine Total (T4), Thyroxine total (T3), Anti thyroglobulin antibody & Thyroxine binding globulin

Imaging tests: Thyroid scan, Ultrasound & Radioactive iodine uptake test

Treatment

Radioactive iodine therapy

Antithyroid medicines: Methimazole & Propylthiouracil

Beta blockers

Surgery

Radiofrequency ablation (RFA)

Specialists to consult

General physician

Endocrinologist

Causes Of Hyperthyroidism

The thyroid gland is a small butterfly-shaped gland in the front of the neck, just below the adam's apple and above the collarbone. It is stimulated by thyroid-stimulating hormone (TSH) produced by the pituitary to produce two main hormones --T4 (thyroxine) and T3 (triiodothyronine). These hormones play a major role in maintaining important bodily functions including:

Metabolism (the process that changes the food into energy which helps the body function)

Breathing

Heart rate

Body temperature

Normally, the body is supposed to produce the right amount of TSH and thyroxine that can regulate normal functioning in a person. But sometimes, the body produces an excess of TSH or the thyroid gland starts producing extra thyroxine, leading to hyperthyroidism.

1. Primary hyperthyroidism

Primary hyperthyroidism or thyrotoxicosis is present when the disorder lies within the thyroid gland, leading it to produce large amounts of thyroxine. This can be caused due to different conditions such as:

Graves' disease: Graves’ disease, the most common cause of hyperthyroidism, is an autoimmune condition in which the immune system overproduces an antibody called thyroid-stimulating immunoglobulin (TSI). This antibody starts attacking the thyroid gland, which stimulates the thyroid to make excessive thyroid hormone. The exact cause behind Graves' disease is unknown.

Graves' disease is a genetic condition and can pass down in a family. Women are more likely to suffer from Grave's disease than men. It typically presents in people between 30 to 50 years of age.

Thyroid nodules: A thyroid nodule is a lump or growth of cells in the functioning tissue of the thyroid gland. These nodules produce more than the required hormone that leads to hyperthyroidism. Overactive thyroid nodules are usually large (an inch or more in size) and can be big enough to be felt in the neck. Mostly, these nodules are non-cancerous.

Thyroiditis: The swelling or inflammation of the thyroid gland is called thyroiditis. When the thyroid gland swells, it starts leaking excessive hormones that lead to a higher level of thyroid hormones than needed. As a result, one may develop symptoms of hyperthyroidism. Thyroiditis can occur due to infections, an immune system disorder or after the delivery of a baby, known as postpartum thyroiditis.

Hyperthyroidism from thyroiditis usually lasts for a few months. The thyroid usually recovers on its own, but sometimes, it gets damaged. This can lead to hypothyroidism or underactive thyroid.

Iodine: Iodine is a mineral that is used by the thyroid gland to produce thyroid hormones. Consuming too much iodine through diet like seaweed and seaweed-based supplements and medications like some cough syrups or heart medicine amiodarone can result in high thyroid hormone. Rarely, iodine dye or intravenous iodinated contrast used for x-ray based imaging tests can also cause hyperthyroidism.

2. Secondary hyperthyroidism

This condition is rare and arises due to increased stimulation of the thyroid gland by excessive TSH in the circulation. This can be caused due to a non cancerous pituitary tumour that overproduces TSH. The hypothalamus produces thyroid releasing hormone (TRH) that stimulates TSH. Rarely, the overproduction of TRH from the hypothalamus can cause an increase in the levels of TSH.

3. Subclinical hyperthyroidism

Subclinical hyperthyroidism causes low or undetectable levels of TSH with a normal level of thyroid hormones. It can be caused due to medical disorders such as Graves' disease, multinodular toxic goitre (enlarged thyroid gland), and thyroiditis. Medications such as glucocorticoids, amiodarone, and dopaminergic drugs can also cause subclinical hyperthyroidism.

4. Hyperthyroidism in neonates

This is a rare condition seen in neonates of mothers with Graves' disease. In rare cases, hyperthyroidism may occur in the neonates of mothers with a history of treated Graves disease, indicating a remission in their condition.

Sometimes, it is also seen in newborn babies of mothers with a normal thyroid gland function (euthyroid). An increase in maternal TSH-receptor antibodies can cause hyperthyroidism in neonates.

Symptoms Of Hyperthyroidism

Hyperthyroidism can cause several symptoms that affect your entire body. It is possible to experience more than one symptom at the same time. Some of the common symptoms of hyperthyroidism are:

Palpitations or rapid heartbeat

Irregular heartbeat (arrhythmia)

Unexplained weight loss

Increased appetite

Nervousness and irritability

Trembling in your hands and fingers

Increased frequency of bowel movements and diarrhea

Double vision

Menstrual changes

Thin skin

Sleep disorders

Intolerance towards heat

Excessive sweating

Enlarged thyroid gland leading to swelling of the neck (goitre)

Thin, brittle hair

Bulging of the eyes

Muscle weakness

Older adults may present with different symptoms that can be mistaken for depression. They are more likely to show either no symptoms or subtle ones such as loss of appetite, heat intolerance, fatigue or withdrawal from people.

Risk Factors For Hyperthyroidism

You may be at a higher risk of developing hyperthyroidism, if you:

Have a family history of thyroid disorders

Had thyroid surgery or a thyroid problem such as a goitre (swollen thyroid gland)

Are a women

Are older than 60 years

Have been pregnant or had a baby in the past 6 months

Have an underlying chronic illness such as type 1 diabetes, primary adrenal insufficiency (Addison's disease) and pernicious anemia (Vitamin B12 deficiency)

Are consuming excessive amounts of iodine-containing supplements or medicines

Have hypothyroidism that is overtreated (overdose of thyroxine medication)

Diagnosis Of Hyperthyroidism

The tests that are essential for diagnosing hyperthyroidism are:

1. Physical examination

A physical examination entails gently feeling the neck to check for the size of the thyroid gland. The healthcare provider will also examine the skin, eyes, and heart. This will help them in detecting tremors, overactive reflexes, and warm & moist skin.

2. Blood tests

Thyroid stimulating hormone (TSH): This is the most important and sensitive test for hypothyroidism. It measures how much of the thyroxine (T4) hormone the thyroid gland is being asked to make. A low TSH level indicates the presence of hyperthyroidism or an overactive thyroid. This suggests that the thyroid gland is making the excessive hormone that has caused the pituitary to stop releasing TSH into the blood. If the TSH levels are not normal, your physician might recommend an additional test to confirm the diagnosis.

Thyroxine total (T4): Most of the T4 in the blood is attached to a protein called thyroxine-binding globulin. The “bound” T4 can’t get into body cells. Only about 1%–2% of T4 in the blood is unattached (“free”) and can get into cells. The free T4 and the free T4 index are both simple blood tests that measure how much unattached T4 is in the blood and available to get into cells. A high blood level of T4 may indicate hyperthyroidism.

Thyroxine total (T3): The total T3 includes both bound and free forms circulating in the blood and can be affected by the amount of protein available in the blood to bind to them. The T3 hormone can be measured as free T3 or total T3. Triiodothyronine (T3) total test measures the total levels (both free and bound forms) of triiodothyronine (T3) hormone in the blood and is usually done as a part of the thyroid profile total test. Hyperthyroid patients typically have an elevated level of T3.

Along with these three tests, supporting tests may be required to evaluate and monitor the condition such as:

Anti thyroglobulin antibody

Thyroxine binding globulin

3. Imaging tests

The following imaging tests can be used to find the cause of hyperthyroidism.

Thyroid scan: Thyroid scan can help to evaluate the size, shape, and position of the thyroid gland. This test uses a small amount of radioactive iodine to help diagnose the cause of hyperthyroidism and check for thyroid nodules as well.

Ultrasound: Ultrasound of the thyroid is used to closely look at thyroid nodules. Thyroid nodules are solid or fluid-filled lumps that form within the thyroid gland. Ultrasound can also help the doctor to evaluate if the nodules are cancerous in nature.

Radioactive iodine uptake test: A radioactive iodine uptake test, also called a thyroid uptake test, measures how much radioactive iodine the thyroid takes up from the blood after swallowing a small amount of it. It can help check thyroid function and find the cause of hyperthyroidism.

Celebs affected

Missy Elliot

Hip-Hop star Missy Elliot was diagnosed with Graves' disease and hyperthyroidism in 2008. According to her, radiation therapy and exercises helped her to get better.

George H.W Bush

Former US president, George H.W Bush, was also diagnosed with Graves' disease. He responded well to the treatment protocols used for management of the condition.

Prevention Of Hyperthyroidism

In most cases, there are no known ways to prevent hyperthyroidism. If you have a family predisposition to Graves' disease, talk to your physician about getting regular health checkups. People at a higher risk of hyperthyroidism can make healthier lifestyle choices such as having balanced meals, exercising regularly, and avoiding smoking.

Specialist To Visit

You should visit a doctor, if you are experiencing symptoms such as unexplained weight loss, increased appetite, intolerance to heat, excessive sweating, brittle hair, nervousness, tremors, and heart palpitations. These symptoms might indicate the possibility of hyperthyroidism. You can consult the following doctors for a diagnosis:

General physician

Endocrinologist

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Treatment Of Hyperthyroidism

Hyperthyroidism can be managed through several kinds of treatment modalities. The best approach is decided on an individuals age, overall wellbeing, underlying cause, and severity of the disorder. The treatments include:

1. Radioactive iodine therapy

Radioiodine therapy is a common and effective method to treat hyperthyroidism. The patient is asked to take radioactive iodine-131 capsules or liquid through their mouth. It acts solely on the thyroid gland and slowly destroys the thyroid gland cells that are producing thyroid hormone.

However, people on radioiodine therapy end up developing hypothyroidism due to the permanent destruction of the thyroid. Hypothyroidism can be managed by taking daily thyroid hormone medications to maintain normal hormone levels.

Pregnant or breastfeeding mothers shouldn't take radioactive iodine as it can affect the baby's thyroid glands. Occasionally a person can lose sensation in their mouth after the therapy. The sensation loss may last for up to a year but returns to normal later.

2. Antithyroid medications

Antithyroid drugs are the easiest way to manage hyperthyroidism. Doctors most often recommend methimazole. Pregnant women are recommended propylthiouracil during the first three months as rarely, methimazole can harm the developing baby.

Antithyroid drugs cause the thyroid gland to produce less hormone. A patient on antithyroid medicine can expect an average treatment time of 1-2 years. In some cases, one might need to take the medicines for several years. This is the simplest treatment, but it is often not a permanent cure. These medications can temporarily ease the symptoms of patients with Graves' disease. However, they are not used for hyperthyroidism caused by thyroiditis.

Antithyroid drugs can cause side effects such as allergic reactions, reduction in the body's white blood cells, and rarely, liver failure.

3. Beta-blockers

These drugs block the effect of thyroid hormones on the body. However, it does not stop the production of hormones. They are not used alone but as an adjunct to another option to treat hyperthyroidism over the long term.

Beta blockers act by widening or relaxing the blood vessels. They can reduce symptoms like tremors, rapid heartbeat, and nervousness until other treatments start working.

A patient can feel improvement in their symptoms within hours of these medications.

4. Thyroid surgery

With the introduction of radioactive iodine therapy and antithyroid drugs, surgery for hyperthyroidism (thyroidectomy) has become less common. This surgery entails the removal of a part or most of the thyroid gland. Doctors recommend this surgery in:

Pregnant women and children who are at risk of developing side effects from antithyroid medications.

People with very large thyroid glands facing issues such as difficulty swallowing, hoarseness, and shortness of breath.

Removing a part of the thyroid gland may cause hypothyroidism after the surgery. This would require the patient to take thyroid hormone for the rest of their lives to maintain their hormone levels.

In rare cases, a patient might face complications such as paralysis of vocal cords and damage to parathyroid glands that produce calcium. Accidental removal of parathyroid glands may result in low calcium levels and require calcium replacement therapy.

5. Radiofrequency ablation (RFA)

This is a new approach to treat thyroid nodules that results in tissue necrosis and shrinkage of nodules. It's a minimally invasive treatment for benign (non-cancerous) thyroid nodules. RFA is primarily recommended for people who have not benefited from medications or surgery.

Home-care For Hyperthyroidism

If you have been prescribed antithyroid medications, take the medications on time regularly. The amount of time it takes to treat hyperthyroidism depends on the cause of the disorder. With antithyroid drugs, a person's hormone levels should drop to a manageable level within 6 to 12 weeks.

After that, your doctor might prescribe the patient with high doses of non-radioactive iodine drops that will normalise thyroid levels within seven to ten days. To avoid forgetting your medications, you can put them into labelled containers and set alarms that remind you about them.

If you have undergone thyroid surgery, then closely follow the post operation instructions given by your doctor to avoid infections. Make sure to take the prescribed thyroid hormone drugs that will help you maintain your thyroid levels.

Diet

Consuming a wholesome and balanced meal with plenty of vegetables, fruits, and lean protein sources is an important way of ensuring that you are getting the necessary nutrients. If you have lost a lot of weight due to hyperthyroidism, your doctor will put you on a diet that helps in healthy weight gain. A low-iodine diet is often recommended to people with hyperthyroidism since excessive iodine aggravates T4 production.

You should avoid eating foods with high iodine content such as saltwater fish, cheese, milk, eggs, kelp, or seaweed. If you are taking any supplements, then make sure that it doesn't contain iodine. Sodium can also contribute to swelling, which is common with Graves’ disease, so salt intake needs to be kept in check as well. Untreated hyperthyroidism can weaken the bone structure. To counteract that, eat food items rich in calcium such as tofu, fortified soy or calcium supplements.

Exercise

Regular exercise is good for your long term health and especially for people with hyperthyroidism. Mild cardiovascular exercises can relieve stress and reduce nervousness & irritability caused by hyperthyroidism. Strength training also helps in increasing bone density. However, it is important to not overdo any exercise since the heart rate and metabolic rate are already elevated at rest, in cases of untreated hyperthyroidism.

You can start with low-intensity workouts such as walking, yoga, and tai chi. Seeking out professional trainers who have experience working with patients having medical conditions can also prove helpful. Exercising can help a patient after a thyroid surgery by preventing excess weight gain and controlling their appetite.

Stress management

Hyperthyroidism increases anxiety and nervousness. Stress can aggravate hyperthyroid symptoms and make them worse. Stress management is an important part of treating hyperthyroidism, especially in patients with Graves' disease. Implementing relaxation techniques like meditating for a few minutes every day is a good way to start. Going for a walk outside to get in some fresh air can have a calming effect.

Nutritional supplements

People with hyperthyroidism can have supplements such as Vitamin D, multivitamins without iodine, probiotics, omega-3 fatty acids, Vitamin C, and L-carnitine. It is important to consult your doctor before adding any supplements to your diet.

Complications Of Hyperthyroidism

Untreated hyperthyroidism can cause several complications that affect different parts of your body leading to:

1. Heart diseases

Hyperthyroidism causes rapid or irregular heartbeat. A rapid heartbeat is caused as a result of fast metabolism caused by hyperthyroidism. The body runs faster than normal with an overactive thyroid and hence causes the sensation of a racing heart. This increases your risk of facing medical conditions such as stroke and heart failure.

2. Bone disorders

Unchecked levels of thyroid hormones can cause weakening of the skeletal system and make your bones brittle. Excessive thyroxine affects the rate of bone replacement and speeds up the pace of bone loss. The bone producing cells (osteoblasts) are unable to replace the lost bone at the required rate. This can result in osteoporosis, a condition that causes bones to become weak and fracture.

3. Eye and skin problems

Hyperthyroidism caused due to Graves' disease affects both the eyes and the skin. It can affect your eyes in several ways such as bulging eyes, vision loss, redness, swelling, double vision, and light sensitivity. Graves' disease can also cause the skin to become red and swollen. It specifically affects the feet and shin.

4. Thyrotoxic crisis (thyroid storm)

A thyroid storm is a serious complication of hyperthyroidism. It occurs due to a sudden and severe elevation in thyroid hormone levels. This is a life-threatening condition that needs immediate medical attention. The most common symptom of a thyroid storm is increased body temperature, blood pressure, heart rate, and a sudden change in mental state like confusion or lethargy.

5. Infertility and complications during pregnancy

Hyperthyroidism can cause a marked reduction in the sperm count of men, which affects their fertility. The count goes back to normal once the thyroid disorder has been treated. Women with untreated Graves' disease may have lighter or irregular periods and face difficulty in conceiving. Hyperthyroidism may also increase the risk of early-term miscarriage and premature birth.

Alternative Therapies For Hyperthyroidism

Homoeopathic drugs like lodium, natrum muriaticum, and lachesis mutus have shown effectiveness in managing hyperthyroidism.

Living With Hyperthyroidism

Being diagnosed with hyperthyroidism can cause stress and anxiety which can lead to further health complications. Patients often struggle with hair loss, nervousness, infertility, and tremors. The long-term outlook for hyperthyroidism depends on the cause behind the disorder. However, early diagnosis and treatment along with good home care can greatly improve the disease outlook.

1. Maintain a healthy weight

Increased thyroid levels accelerate the body's metabolism rate and cause unintentional weight loss. Occasionally, patients are happy with the quick weight loss, but that's not healthy. Consult your doctor to learn the healthy weight for you and consume enough calories to help you maintain that.

2. Consume the right diet

Having a balanced meal can work wonders for patients with Graves' disease. If you have faced excessive weight loss due to hyperthyroidism, increasing your food intake can overtake the increase in metabolic rate and help you gain weight.

Hyperthyroidism also leads to an increased appetite. It is important to have healthy snacks in between your meals to satiate your hunger the healthy way. Patients with hyperthyroidism should avoid having excessive sugar since the condition speeds up the rate of insulin metabolism. This increases the rate of production and absorption of glucose. This can result in insulin resistance, especially for diabetic patients.

3. Avoid smoking and secondhand smoke

Graves' eye disease can develop in patients who have Graves' disease. Smoke can worsen this eye disease, so it is essential not to smoke and to avoid secondhand smoke.

4. Practice yoga and meditation

Hyperthyroidism is notorious for its effects on mental health such as anxiety and nervousness. Additional stress from everyday situations can aggravate your thyroid symptoms. To counter that, patients with hyperthyroidism should regularly take some time off to practice calming exercises like yoga and meditation.

5. Take your medications regularly

It is vital to take your prescribed medications daily and follow your doctor's instructions. To ensure that your hormone levels stay consistent throughout the day, taking the medicines at evenly spaced intervals is important. Antithyroid medications take some time to work, so it is important to follow the prescribed medication cycle.

Frequently Asked Questions

Is Graves' disease a serious condition?

Is hyperthyroidism genetic?

How long will it take to get my thyroid levels under control?

Why am I losing weight suddenly?

Can I get hypothyroidism from my hyperthyroidism treatments?

Can hyperthyroidism cause female infertility?

Is there a permanent cure for hyperthyroidism?

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Hypocalcemia

Overview

Calcium is vital for many important bodily functions like nerve transmission, bone structure, signaling between cells, and blood coagulation. Most of the body's calcium is stored in bones, although some of it circulates in the blood. About 40% of the calcium in blood is bound to proteins in blood, mainly albumin. Protein-bound calcium acts as a reserve of calcium for the cells but has no active role in the body. Only unbound calcium influences the body’s functions. Unbound calcium has an electrical (ionic) charge, so it is also known as ionized calcium. Thus, hypocalcemia causes complications only when the level of ionized calcium is low.

Hypocalcemia or low levels of calcium occurs when a total serum calcium concentration is < 8.8 mg/dL (< 2.20 mmol/L) in the presence of normal plasma protein concentrations or a serum ionized calcium concentration < 4.7 mg/dL (< 1.17 mmol/L).

Calcium levels are regulated by hormones like a parathyroid hormone (PTH), Vitamin D, and calcitonin. Hypocalcemia is most commonly a consequence of Vitamin D inadequacy or hypoparathyroidism, or a resistance to these hormones and it has also been associated with many drugs as well.

Hypocalcemia can range from being asymptomatic in mild cases to life-threatening in acute cases. Manifestations include paresthesias, tetany, and, when severe, seizures, encephalopathy, and heart failure.

Diagnosis of hypocalcemia involves measurement of serum calcium with adjustment for serum albumin concentration. Treatment is administration of calcium, sometimes along with Vitamin D.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Bones

Nerves

Heart

Kidneys

Muscles

Prevalence

Worldwide: 0.4-33% (2022)

Mimicking Conditions

Hypomagnesemia

Hypophosphatemia

Hypoparathyroidism

Pseudohypoparathyroidism

Acute pancreatitis

Acute renal failure

Necessary health tests/imaging

Laboratory tests: Total serum calcium, Intact parathyroid hormone, Serum alkaline phosphatase & Serum Vitamin D

Imaging: Plain radiography, Computed tomography (CT) & Echocardiogram (ECG)

Treatment

Acute management of hypocalcemia: Intravenous calcium & Calcitriol

Chronic management of hypocalcemia: Calcium carbonate, Calcium citrate & Thiazide diuretics

Correcting Vitamin D inadequacy

Replacement with PTH for hypoparathyroidism

See All

Symptoms Of Hypocalcemia

Hypocalcemia that develops gradually is most likely to be asymptomatic but acute hypocalcemia can result in severe symptoms requiring hospitalization. Some of the symptoms of hypocalcemia include:

Paresthesia (burning or prickling sensation)

Tetany (involuntary muscle contractions)

Cramps

Circumoral numbness (absent or reduced sensory perception around the mouth)

Seizures

Twitching in your hands, face, and feet

Numbness

Tingling

Depression

Memory loss

Scaly skin

Changes in the nails

Rough hair texture

Delayed tooth eruption

Increased dental caries

Dysphagia (difficulty in swallowing)

Abdominal pain

Dyspnea (shortness of breath)

Wheezing

Subcapsular cataracts ( a type of cataract)

Papilledema (swelling of the optic nerve)

Often, treating hypocalcemia may relieve these symptoms immediately. If hypocalcemia is caused by another condition, there might be additional symptoms like:

Laryngospasm (spasm of the vocal cords)

Trouble remembering, learning new things, or concentrating

Electrocardiographic changes that resemble heart attack

Prolonged QT intervals on ECG

Personality disturbances

Heart failure

Heart failure can be prevented by leading a healthy life, read about tips that every cardiologist wants you to know.

Click Now!

Causes Of Hypocalcemia

The levels of calcium are controlled by Vitamin D, parathyroid hormone, calcitonin, and fibroblast growth factor-23 (FGF23).

Parathyroid hormone (PTH) enhances bone resorption and reabsorption of calcium. PTH also stimulates the conversion of Vitamin D (25 hydroxyvitamin D) to the active form (1,25-dihydroxy Vitamin D) and renal excretion of phosphate.

Vitamin D stimulates intestinal absorption of calcium, renal absorption of calcium and phosphate and also bone reabsorption.

Calcitonin, on the other hand, lowers levels of calcium by inhibiting bone resorption.

FGF23 inhibits the conversion of Vitamin D to its active form, thus reducing intestinal calcium absorption.

A number of causes that can cause hypocalcemia are divided into three broad categories:

Parathyroid hormone (PTH) deficiency

High parathyroid hormone (PTH)

Other causes

1. Parathyroid hormone (PTH) deficiency

Hypoparathyroidism or low normal serum PTH occurs as a result of decreased PTH secretion, which can be due to the following reasons:

Post-surgical: This is the most common cause of hypoparathyroidism. It can occur after removal of thyroid gland (thyroidectomy), removal of parathyroid glands (parathyroidectomy), or radical neck surgery. The resulting hypoparathyroidism is usually transient but can also be permanent with subsequent transient or permanent hypocalcemia.

In cases surgery is required for severe hyperparathyroidism with significantly elevated PTH levels, the abrupt drop in PTH levels after surgery can lead to severe hypocalcemia causing significant calcium uptake into the bones. This condition is termed ‘Hungry Bone Syndrome."

Autoimmune: Autoantibodies against the parathyroid gland are the main cause of autoimmune hypoparathyroidism eventually leading to hypocalcemia.

Abnormal development of the parathyroid gland: Some genetic aberrations can cause abnormal parathyroid gland development. This can be isolated or associated with complex hereditary syndromes like DiGeorge syndrome.

Parathyroid gland destruction: This can also be due to rare diseases of the parathyroid gland like hemochromatosis (absorption of too much iron), Wilson disease (accumulation of excess copper in the liver), or irradiation. Human immunodeficiency virus (HIV) infection is also a rare cause of symptomatic hypoparathyroidism.

2. High PTH levels

Absolute or relative Vitamin D deficiency: Vitamin D deficiency or resistance can occur because of lack of sun exposure, inadequate dietary intake, intestinal malabsorption (steatorrhea), live or kidney disease, osteomalacia and rickets.

Certain medications phenytoin, phenobarbital, and rifampin can also alter Vitamin D metabolism.

Vitamin D dependency results from the inability to convert Vitamin D to its active form or decreased responsiveness of end-organs to adequate levels of the active vitamin. This can lead to decreased calcium absorption and bone resorption. The resulting hypocalcemia leads to a compensatory increase in PTH secretion (secondary hyperparathyroidism).

Vitamin D deficiency is becoming a lifestyle problem all over the world. Learn about 6 signs and symptoms of Vitamin D deficiency.

Tap To Read!

Chronic kidney disease: Long term kidney diseases can cause severe hypocalcemia due to abnormal renal loss of calcium and decreased renal conversion of Vitamin D to its active form.

This drives PTH secretion and can cause secondary hyperparathyroidism. However, due to impaired Vitamin D metabolism and high phosphorus level, the serum calcium remains low despite the high PTH.

Pseudohypoparathyroidism (PHP): It is an uncommon group of genetic disorders characterized not by hormone deficiency but by end organ resistance to PTH. It is characterized by hypocalcemia, hyperphosphatemia, and elevated PTH concentration.

3. Other causes

Apart from the above mentioned causes, other causes that can lead to hypocalcemia include:

Acute pancreatitis: Hypocalcemia is often associated with acute pancreatitis as inflammation of pancreas leads to calcium deposition in the abdominal cavity.

Hypoproteinemia: Refers to lower-than-normal levels of protein in the body. This reduces the protein-bound fraction of serum calcium.

Magnesium depletion: This can cause relative PTH deficiency and end-organ resistance to PTH action, usually when serum magnesium concentrations are < 1.0 mg/dL [< 0.5 mmol/L] leading to lower calcium levels.

Severe sepsis or critical illness: Severe sepsis can lead to hypocalcemia through ways that are not clear. Proposed mechanisms include impaired PTH secretion, dysregulation of magnesium metabolism, and impaired calcitriol secretion. Recent reports also indicate that hypocalcemia is associated with severe Covid-19 infection.

Hyperphosphatemia: This is an uncommon cause of hypocalcemia which is mostly caused by extravascular (outside a blood or lymph vessel) deposition of calcium phosphate products.

Massive blood transfusion: Transfusion of >10 units of citrate-anticoagulated blood can cause hypocalcemia. Citrate binds with calcium leading to an acute decline in ionized calcium.

Radiocontrast agents: These contain the chelating agent ethylenediaminetetraacetate (EDTA) which can decrease the concentration of bioavailable ionized calcium while total serum calcium concentrations remain unchanged.

Pregnancy: Hypocalcemia is seen during pregnancy, mostly related to poor diet, extreme and persistent nausea, vomiting, or any underlying diseases.

Did you know?

High incidence of hypocalcemia has been seen in hospitalized patients with severe COVID-19 infection. More research is required if the serum calcium level could be used as a marker for prognosis in these cases. Few studies have also shown that patients with non-severe COVID-19 also tend to have low serum total calcium levels, implying that hypocalcemia is probably intrinsic to the disease.

Read More!

Risk Factors For Hypocalcemia

Hypocalcemia can be due to environmental or genetic factors. Some of the common risk factors in the development of hypocalcemia include:

Vitamin D deficiency

Parathyroid hormone (PTH) deficiency

Hypomagnesemia

Hypoalbuminemia

Hyperphosphatemia

Newborn babies with diabetic mothers

Family history of parathyroid disorders

Less common risk factors in the development of hypocalcemia include:

Surgical removal of parathyroid glands

Side effects of medications

Anion chelation (binding of negatively charged ions)

Pseudohypoparathyroidism

Hepatic (liver) disease

Acute pancreatitis

Increased protein binding

Critical illness

Severe sepsis

History of gastrointestinal disorders

Tumor lysis syndrome (TLS) is when a large number of cancer cells die within a short period, releasing their contents into the blood

Osteoblastic metastases (characterized by deposition of new bone, seen in certain types of cancers)

Anxiety disorders

Did you know?

Anxiety does not only affect the mind, but it can take a toll on the entire body. Being anxious often leads to increased heart rate, muscular tension, sweating, trembling and feelings of breathlessness. Read about 5 effective self-help tips to cope with anxiety.

Click Here!

Diagnosis Of Hypocalcemia

If the cause of hypocalcemia is not clinically obvious the most important investigation is to measure serum parathyroid hormone. A standard biochemical profile, a parathyroid hormone measurement, and a clinical history will usually provide the likely cause of hypocalcemia. The tests required to confirm the diagnosis include:

Laboratory tests

1. Calcium

Hypocalcemia is diagnosed by a total serum calcium concentration < 8.8 mg/dL (< 2.2 mmol/L). However, because low plasma protein can lower total, but not ionized, serum calcium, ionized calcium should be estimated based on serum albumin concentration.

2. Parathyroid hormone

In true hypocalcemia, intact parathyroid hormone concentrations should be high in case of reduced negative feedback of calcium by parathyroids or low if these glands are the cause of the problem.

A high concentration of parathyroid hormone in the presence of normal renal function suggests a deficiency of Vitamin D or calcium malabsorption.

3. Alkaline phosphatase

A raised serum alkaline phosphatase suggests osteomalacia as a result of Vitamin D deficiency. Parathyroid hormone stimulates clearance of phosphate through the kidneys, so serum phosphate should be low in non-parathyroid disease but high in parathyroid hormone deficiency.

4. Vitamin D

Vitamin D concentrations are useful in confirming Vitamin D deficiency when it presents atypically, and it should be assessed in patients with possible pseudohypoparathyroidism.

Vitamin D helps our body absorb calcium and phosphorus. Diagnosing Vitamin D deficiency is very important and it may require complete workup. Read about Vitamin D profile.

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5. Magnesium

Serum magnesium is important to estimate the normal functioning of the parathyroid gland. In hypomagnesemia, the release of parathyroid hormone is inhibited, leading to (potentially severe) hypocalcaemia. Recognition of hypomagnesemia is important because it is difficult to reverse hypocalcemia without getting back the magnesium levels to the normal range.

6. Phosphate

Low to low normal serum phosphate levels can be due to deficient actions of Vitamin D, loss of calcium in the urine, and deposition of calcium in bone. Hypocalcemia with high normal to high serum phosphate levels includes chronic renal failure and hypoparathyroidism.

Imaging

These may include:

Plain radiography: Radiographs can diagnose bone disorders like rickets or osteomalacia. It can also disclose the spread of certain tumors to the bones (eg : breast, prostate, and lungs), which can cause hypocalcemia.

Computed tomography (CT): CT scans of the head may show calcification of basal ganglia (structures linked to the thalamus of the brain).

Echocardiogram (ECG): The ECG hallmarks of hypocalcemia can be used to determine degree of hypocalcemia.

Prevention Of Hypocalcemia

The main cause of hypocalcemia is the deficiency of calcium and Vitamin D. This can be prevented by:

Eating foods rich in calcium such as dairy products

Choosing low-fat or fat-free options to reduce your risk of heart disease

Including calcium in the diet every day. The dietary need for calcium is as follows:

2,000 mg per day for men and women 51 years of age and above

2,500 mg per day for men and women 19 to 50 years of age

Adding multivitamin supplements along with the diet

Understanding the Vitamin D need by consulting the doctor

Increase your calcium intake, by adding food rich in Vitamin D to the diet. These include:

Fatty fish like salmon and tuna

Fortified orange juice

Fortified milk

Mushrooms

Eggs

Exposing oneself to enough sunlight to boost Vitamin D levels

Making certain lifestyle changes like:

Maintaining a healthy body weight

Exercising regularly

Limiting alcohol intake

Restricting tobacco use

Did you know?

You don’t have to rely on meat and poultry to meet the body’s calcium requirements. Vegetarians can get their daily calcium by adding these super foods to their diet.

Click Here To Read!

Specialist To Visit

The primary cause of hypocalcemia is the abnormal functioning of the parathyroid gland and Vitamin D deficiency. The symptoms can be mild or can be due to an underlying disorder. The doctors that can help are:

General physician

Endocrinologist

Nephrologist

An endocrinologist who treats metabolic and hormone disorders. A nephrologist focuses on kidney diseases.

Seek medical advice from our world-class professionals to diagnose and treat the symptoms of hypocalcemia.

Consult Now!

Treatment Of Hypocalcemia

The treatment and management of hypocalcemia can be divided into acute and chronic (long-term) management. They are as follows:

Acute management of hypocalcemia

Acute hypocalcemia can result in severe symptoms requiring hospitalization. The treatment consists of:

Intravenous calcium if serum calcium levels are below 1.9 mmol/L, ionized calcium levels are less than 1 mmol/L, or if patients are symptomatic.

Oral calcium supplements and calcitriol (0.25 to 1 μg/day) as needed.

Correction of magnesium deficiency or alkalosis.

Cardiac monitoring during intravenous calcium supplementation is necessary, especially for patients taking digoxin therapy. Read about 6 superfoods to keep your heart healthy.

Click Now!

Chronic management of hypocalcemia

Hypocalcemia that develops gradually is more likely to be asymptomatic, but some of the common symptoms include paresthesia (burning or prickling sensation), tetany (involuntary muscle contractions), cramps, muscle spasms, circumoral numbness (absent or reduced sensory perception around the mouth), and seizures. Its management consists of:

Calcium carbonate and calcium citrate supplements as they have the greatest proportion of elemental calcium (40% and 28% respectively) and are easily absorbed.

Calcium supplement dosages are 1 to 2 g of elemental calcium 3 times daily.

Elemental calcium supplements can be started at 500 mg to 1000 mg 3 times daily and titrated upward.

Asymptomatic electrocardiography changes usually normalize with calcium and calcitriol supplementation.

Magnesium supplementation corrects hypomagnesemia-related hypocalcemia.

Thiazide diuretics decrease urinary calcium excretion by increasing distal renal tubular calcium reabsorption.

Combining diuretics with a low-salt, low-phosphate diet, and phosphate binders is beneficial.

Serum calcium, phosphorus, and creatinine should be measured weekly to monthly during initial dose adjustments, with quarterly or twice-yearly measurements once the therapy protocol has stabilized.

Correcting Vitamin D inadequacy

If hypocalcemia is due to malabsorption of Vitamin D, physicians should treat the underlying cause (eg implementing a gluten-free diet for patients with celiac disease). It consists of:

Correcting the deficiency with ergocalciferol (Vitamin D2) or cholecalciferol (Vitamin D3).

Ergocalciferol can be given in doses of 50,000 IU weekly or twice a week with an assessment of levels 3 months later, titrating up until a normal Vitamin D level is reached.

Alternatively, 300,000 IU of ergocalciferol can be administered intramuscularly, with the first 2 injections spaced 3 months apart, followed by regular injections every 6 months.

Administrating 100,000 IU of Vitamin D3 once every 3 months is also effective in maintaining adequate Vitamin D levels.

Vitamin D analogs, particularly calcitriol or alfacalcidol, can be used.

Replacement with PTH for hypoparathyroidism

Replacement therapy with PTH is optional, as it corrects hypercalciuria (decreased amount of calcium in the urine) and potentially reduces the risk of nephrocalcinosis (too much calcium deposited in the kidneys), nephrolithiasis (mineral and salt deposition in the kidneys), and renal insufficiency. It also reduces the wide fluctuation in serum calcium.

Also, PTH reduces urinary calcium excretion that can help in the reduction of the dose of calcium and Vitamin D. PTH has also been studied and might become a valuable addition to current treatment options.

Home-care For Hypocalcemia

Calcium plays a vital role in strengthening the bones and teeth. It also helps in the proper functioning of nerves and muscles. Mild cases of hypocalcemia can be managed by adding foods rich in calcium and certain lifestyle modifications. They are as follows:

Milk or yogurt can be added to fruit smoothie

Add greens to the soups or pasta dishes

Make sure that the vegetable intake is increased in every meal

Nuts and seeds such as almonds and sesame seeds can be added to the diet

Use yogurt instead of vegetable dips

Take Vitamin D and calcium supplements

Expose the skin in natural sunlight

Choose proper clothing and sunscreen to avoid complete blockage of sunlight

Try UV lamps because when the skin is exposed to UV-B it produces its own Vitamin D

Eat fortified foods

Exercise regularly

Talk to a doctor about medications that can cause hypocalcemia and avoid them

Include egg yolks in diet

Did you know?

Eggs contain vitamins such as Vitamin A, B5, B12, B2, D, E, K, and B6 as well as minerals such as folate, phosphorus, selenium, calcium and zinc. Understand why you should have eggs every day.

Tap To Read!

Complications Of Hypocalcemia

Hypocalcemia can be asymptomatic in mild cases to presenting as an acute life-threatening crisis. It is to detect calcium regulating hormones like parathyroid hormone (PTH), Vitamin D, and calcitonin through their specific effects on the bowel, kidneys, and skeleton. The complications are as follows:

Neurological complications

Neurological complications occur due to the presence of co-morbidities and other electrolyte imbalances. They include:

Seizures: Hypocalcemia can cause seizures because low ionized calcium concentrations in the cerebrospinal fluid (CSF) can cause increased excitability in the central nervous system.

Status epilepticus: A seizure that lasts longer than 5 minutes, or having more than 1 seizure within a 5 minutes period, without returning to a normal level of consciousness between episodes.

Uremic encephalopathy: It is cerebral dysfunction due to the accumulation of toxins resulting from acute or chronic renal failure. Studies have shown that this can be a complication of hypocalcemia.

Cerebral edema: It is swelling of the brain. It is a relatively common phenomenon with numerous etiologies including hypocalcemia.

Coma: With a Glasgow coma scale (used to objectively describe the extent of impaired consciousness in all types of acute medical and trauma patients) of less than 9/15 is seen in severe cases.

Cardiac complications

Numerous case reports associate hypocalcemia with life-threatening cardiac complications such as:

Reversible heart failure: Hypocalcemia caused by hypoparathyroidism and hypomagnesemia can cause heart failure in severe cases that can be reversed.

Torsades de pointes: It is a specific type of fast heart rhythm (heart rate over 100 beats a minute) that begins in the ventricles of the heart.

Arrhythmias: When hypocalcemia is severe it can predispose to life-threatening arrhythmias. In such cases, a rapid admission to hospital and correction of electrolyte imbalance are needed.

An arrhythmia is a condition in which the heartbeat is irregular. Arrhythmia can occur along with a regular or an irregular heart rate. Read more about its signs, symptoms, causes, risk factors and treatment.

Click To Read!

Alternative Therapies For Hypocalcemia

There is no alternative treatment to hypocalcemia, but mild symptoms can be managed by adding food substances that are rich in calcium and Vitamin D. Some of them include:

1. Dairy products: Increase your intake (in moderation) of milk, cheese, cottage cheese, yogurt, and ice cream as they are rich in calcium.

2. Nuts: Seeds and nuts including almonds and sesame seeds act as vegan dietary sources of calcium.

3. Beans: In addition to being rich in fiber and protein, beans and lentils are good sources of calcium as well.

4. Broccoli: It provides a generous amount of calcium along with other minerals like beta-carotene (the precursor to Vitamin A) and Vitamins C and K1.

5. Black-eyed peas (lobia): One half-cup serving of black eyed peas contains 8 percent of the daily recommended intake of calcium.

6. Figs (anjeer): They are a good source of both calcium and potassium. These minerals can work together to improve bone density.

7. Oranges: They help in boosting the immune system and are rich in calcium and Vitamin D.

8. Salmon: Fatty fish and seafood are among the richest natural food sources of Vitamin D.

Living With Hypocalcemia

Hypocalcemia is a metabolic disorder that can be asymptomatic or cause mild symptoms. In rare cases, it can lead to a severe life threatening crisis. The treatment of hypocalcemia depends on the cause, the severity, the presence of symptoms, and how rapidly it has developed (acute or chronic).

Most cases of hypocalcemia are clinically mild and require only supportive treatment and further laboratory evaluation. Some of the tips that can help manage mild cases are:

Eating calcium-rich foods

Avoiding foods that are high in trans fat

Reducing alcohol intake

Making sure there is enough sun exposure

Not being indoors most of the times

Choosing sunscreens and clothes that does not block sun exposure completely

Adding foods that are rich in Vitamin D to the diet

Exercising regularly

Quitting smoking

Maintaining a healthy weight

Taking Vitamin D and calcium supplements

Understanding if there is an underlying cause by talking to a doctor

Frequently Asked Questions

What is the total concentration of calcium in the plasma?

Which medications can cause hypocalcemia?

What is the role of Vitamin D in hypocalcemia?

What are the recommended dietary allowances (RDAs) for Vitamin D that is used currently?

How is hypocalcemia related to pancreatitis?

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Hypoglycemia (low blood sugar)

Also known as Low blood sugar

Overview

Hypoglycemia is a medical condition that results in lower blood glucose than normal. Glucose is the primary source of energy for our body. Low blood sugar can result in various symptoms such as irregular heartbeat, pale skin, irritability, unconsciousness, tiredness, and anxiety.

Hypoglycemia can be caused by antidiabetic medications or as a side effect of medications like quinine, clarithromycin, linezolid, doxycycline, ciprofloxacin, and metronidazole. Medical conditions such as liver and kidney disorders, adrenal or pituitary gland tumour, pancreatic tumours like insulinoma are also associated with hypoglycemia.

Hypoglycemic patients need immediate attention, especially when blood sugar levels are dangerously low. This condition can be treated by getting the blood sugar back to an average level. Immediate treatment would be eating or drinking 15 to 20 grams of fast-acting carbohydrates. These can include glucose tablets, juices, honey, jelly beans, or gumdrops. In case of severe hypoglycemia, one might require glucagon injection or intravenous glucose.

Key Facts

Usually seen in

Diabetic patients on treatment

Alcoholics, especially binge drinkers

Pancreatic tumour patients (insulinoma)

Patients with serious medical conditions

Patients with prolonged diabetes

People above the age of 60

Gender affected

Both men and women

Body part(s) involved

Brain

Kidney

Liver

Mimicking Conditions

Stroke

Transient ischemic stroke (TIA)

Metabolic encephalopathy

Drug overdose

Diabetes mellitus

Glaucoma

Necessary health tests/imaging

Physical examination

Fasting blood sugar test

Random blood sugar test

Treatment

Carbohydrate-rich foods

Glucagon

Octreotide

Intravenous glucose

Specialists to consult

General physician

Endocrinologist

Symptoms Of Hypoglycemia

Low blood glucose level presents different symptoms from person to person. It tends to come quickly and can worsen if not treated in time. These symptoms include:

Mild to moderate

Anxiety

Feeling shaky or having jitters

Sweating

Hunger

Dizziness/lightheadedness

Feeling confused

Increased irritability

Unsteady heartbeat

Heart palpitations

Unable to see or speak properly

Tiredness

Prolonged hypoglycemia can affect brain functioning since the brain will stop receiving optimal glucose levels. This is a severe condition and needs immediate treatment. The symptoms include:

Loss of consciousness

Seizures

Note: If hypoglycemia is severe and prolonged, it can be life threatening.

You can also experience a drop in glucose levels during your sleep. This results in low blood sugar that lasts for several hours and can cause serious issues. Even if you don't wake up or notice these signs, low blood glucose levels can interfere with your sleeping pattern and affect your quality of life, work, and mood. Low blood sugar during sleep makes it tougher to notice the signs and symptoms of low blood glucose during the day. These symptoms include:

Feeling irritated or foggy after waking up

Sweating through your clothes or leaving your sheets damp

Crying out or having nightmares

Causes Of Hypoglycemia

Your body gets glucose from food rich in carbohydrates which are broken down by acids and enzymes into smaller pieces. In this process, glucose is absorbed from the intestine and passed into the bloodstream.

Insulin, a hormone made by the pancreas, moves glucose from the bloodstream into the cells, where it is used for energy and storage. The body should be able to maintain a constant state of blood glucose to facilitate normal functioning. After you eat, pancreatic cells release insulin to ensure that various body cells can uptake that sugar and use it optimally. The brain specifically relies on glucose to help it process information and work efficiently.

After the body uses an optimal glucose level, it stores the excess in the form of glycogen that can be used later when needed. When the blood sugar drops, the pancreas signals the liver to break down the stored glycogen and convert it into glucose. This travels through the bloodstream and replenishes the energy supply. Some conditions can disturb the blood sugar regulation and cause hypoglycemia, including:

1. Diabetes

Blood sugar is supposed to circulate in the body and supply it with constant fuel. However, in conditions like diabetes, the body fails to produce enough insulin to move glucose into the cells or the cells themselves become resistant towards insulin. In type 1 diabetes, the body cannot produce enough insulin, whereas, in type 2 diabetes, the cells become less responsive towards the hormone. This results in high glucose levels in the blood that can lead to severe damage to your kidney, nerves, eyes, and other organs. However, in diabetic patients, hypoglycemia can occur when the blood glucose levels drop to below 70 milligrams per deciliter. The causes for the same are:

To manage diabetes, patients are prescribed insulin or other medications that can effectively lower their blood sugar levels. Diabetic drugs such as sulfonylureas and meglitinides boost insulin in the body that absorbs blood glucose.

However, if a patient takes excessive insulin or other drugs, the blood sugar can drop too low and lead to hypoglycemia.

Skipping meals and exercising more than usual can also lead to the body using more glucose than usual, which can further cause hypoglycemia in diabetic patients.

A diabetic patient taking insulin during fasting is also likely to develop hypoglycemia. If you are sick, you may not eat as much as needed to combat the insulin, lowering your blood glucose further.

Drinking alcohol can also have a detrimental effect and cause hypoglycemia. Alcohol makes it more challenging for the body to maintain its blood glucose levels, especially if there has been no food intake in a while. Alcohol also prevents you from identifying the symptoms of low blood sugar, leading to severe complications.

It is essential for people diagnosed with diabetes to be educated about diabetes and accordingly balance their food intake, insulin and daily activities. Working with a doctor is the best way to prevent the occurrence of hypoglycemia.

2. Specific medications

Hypoglycemia can be a side effect of certain medications such as:

Quinine, which is used to treat malaria is a potent stimulator that leads to the release of insulin from the pancreatic beta cells. It increases the uptake of glucose by muscles and cells. Quinine also stimulates the production of glycogen that stores up glucose. This can lead to low blood glucose levels.

Antibiotics such as fluoroquinolones used to treat pneumonia and urinary tract infections also cause low blood sugar or high blood sugar.

Medications including clarithromycin, linezolid, and doxycycline are other antibiotics linked with hypoglycemia.

When diabetic patients take sulfonylureas and antimicrobials such as ciprofloxacin and metronidazole are at a high risk of developing hypoglycemia.

Children and people with kidney failure are at an increased risk of developing medication-induced low blood glucose.

Other commonly used drugs that are associated with hypoglycemia are antihypertensive medications including angiotensin converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs), beta blockers, and painkillers like indomethacin.

3. Alcohol

If a person consumes excessive alcohol every day for a few days which is coupled with less intake of food, it can lead to alcohol induced hypoglycemia.

4. Hepatitis

Hepatitis is a medical condition that causes inflammation of the liver. The liver is responsible for breaking down stored glycogen and converting it into glucose when the body needs energy. If the liver fails to produce or release ample insulin, it can be difficult for the body to maintain blood glucose levels leading to hypoglycemia. Any type of liver disease can lead to insulin resistance.

5. Adrenal or pituitary gland tumour

Disorders and tumours of the pituitary or adrenal gland can disturb the balance between the hormones that influence blood glucose levels and hence cause hypoglycemia.

6. Pancreatic tumours

Pancreatic tumours (especially insulinoma) cause the organ to release too much insulin that can cause the cells to take up excessive glucose. If the insulin levels are too high, the blood glucose level will decline and lead to hypoglycemia. This tumour continues to produce insulin even when the blood sugar level is too low. This can lead to serious side effects of hypoglycemia.

7. Kidney disorders

The kidney is responsible for excreting waste and toxins from the body. Kidney failure can affect the clearance rate of waste products and cause the build-up of medications that can lead to hypoglycemia. Diabetic patients who are on insulin should be particularly cautious after development of diabetic nephropathy as they have higher chances of development of hypoglycemia due to reduced clearance of insulin. Hypoglycemia, at times, can be the initial presentation of new onset diabetic nephropathy.

8. Critical illness

Among hospitalised patients, serious illnesses such as kidney disease, liver disease, cardiac failure and sepsis are common causes of hypoglycemia.

9. Reactive hypoglycemia

Sometimes, if you eat food that has a high sugar quantity, your body can end up producing excessive insulin to manage the extra sugar. This excessive insulin can lead to hypoglycemia and is called postprandial or reactive hypoglycemia. It can also occur in people who have had stomach bypass surgery.

Risk Factors For Hypoglycemia

You may be at a higher risk of developing hypoglycemia, if you:

Use insulin or take oral anti-diabetic drugs such as sulfonylureas

Are above 60 years of age

Have an impaired kidney or liver function

Are unaware of the symptoms of hypoglycemia

Take multiple medications that interact with each other

Suffer from any disability

Consume excess alcohol

Suffer from diabetes from a long time

Have pancreatic tumour

Suffer from eating disorders such as anorexia

Have diabetic autonomic neuropathy

Diagnosis Of Hypoglycemia

1. Blood glucose monitor (glucometer)

If you have diabetes and suspect that you have hypoglycemia, check your blood sugar level right away. Diabetic patients are usually provided with a glucometer which is a small electronic device. These devices can check your blood glucose level within a minute. To use this device, prick your finger for a small drop of blood and place it on the test strip. This test strip will be inserted in the glucometer that will evaluate your blood glucose level. If you don't have your glucometer, talk to your doctor about getting one. These glucometers are great tools that help diabetic patients balance their insulin and food intake.

If you experience repeated episodes of low blood glucose, visit your doctor to determine the reason. Your doctor can help you devise a more efficient plan to keep your diabetes in check without leading to hypoglycemia.

2. Physical examination

If you don't have diabetes but suspect that you have signs and symptoms of hypoglycemia, talk to your doctor. Your doctor will perform a physical exam.

Whipple's triad which is a collection of three criteria that can suggest the presence of a pancreatic insulinoma can also be looked into. It consists of assessing :

Fasting hypoglycemia (<50 mg/dL)

Symptoms of hypoglycemia

Immediate relief of symptoms after the administration of intravenous (IV) glucose

3. Random blood glucose test

A random blood glucose test measures the glucose level in the blood at the time of the test. The results of this test depend on the last time you ate and doesn't require fasting. For people with normal blood sugar regulation, the blood glucose level should be relatively stable at any time. But if you have a disorder that is disturbing your blood sugar level, then the random blood glucose test will help your doctor determine the cause.

4. Fasting blood glucose test

A fasting blood glucose test measures the blood glucose level present in your blood after an overnight fast. Usually, a fast of 10-12 hours is recommended before the test, and it can help diagnose diabetes, prediabetes and hypoglycemia. A fasting blood glucose level below 70 mg/dL is an indication of hypoglycemia.

Learn how to use blood glucose monitors and various tips to buy a glucometer.

Read Here!

Prevention Of Hypoglycemia

The key to preventing hypoglycemia is managing your diabetes.

Understanding the link between insulin and food will help you prevent a hypoglycemic episode.

It requires following the instructions of your healthcare provider and not skipping your meals.

Follow your doctor's orders about daily exercise and don't exceed the advised limit.

Diabetic patients should also measure their blood sugar before and after meals, exercise and before sleeping. Maintaining a log book for the same can be very handy.

In case you have a hypoglycemic event, note down what you ate before that and the amount of insulin you took, along with other details. This will help your doctor decide on a more effective plan for managing your diabetes.

If you don't have diabetes and have infrequent hypoglycemia episodes, make sure not to skip meals. Take in plenty of fruits and carbohydrate-rich foods so that your body has enough carbs to burn. In case your symptoms don't improve, talk to a doctor to rule out any medical condition.

Specialist To Visit

You should visit your doctor if you are experiencing symptoms such as jitters, anxiety, lightheadedness, confusion, brain fog, lethargy, heart palpitations, difficulty in seeing or speaking, and unconsciousness. These symptoms might indicate the possibility of hypoglycemia and should be treated right away. You can consult the following doctors for a diagnosis.

General physician

Endocrinologist

Sometimes, a patient may present with loss of consciousness which requires emergency medical care and hospitalisation and also administration of intravenous glucose to maintain glucose levels in the normal range.

Click To Consult!

Treatment Of Hypoglycemia

Hypoglycemia can be managed through various methods. The best approach is decided on an individual's age, overall wellbeing, symptoms, underlying cause, and severity of the disorder.

1. Carbohydrate-rich diet

If your blood glucose level is low, immediate treatment would be eating something rich in carbohydrates. So, keep snacks high in carbs such as glucose tablets, juices, honey, jelly beans, hard candies, gumdrops or non-diet soda, with you all the time. The American Diabetes Association suggests that the snacks should have around 15 grams of carbohydrates.

Diabetic patients can take glucose tablets that act rapidly and increase the blood sugar level. After taking a carbohydrate-rich snack, wait for 15 to 20 minutes and check your glucose level. If your blood glucose levels haven't increased, take another 15 grams of carbohydrate and repeat the procedure until the blood sugar starts to rise. Don't overeat to ensure that your blood sugar level doesn't increase too high.

2. Glucagon hormone

Glucagon is a hormone that is administered in emergencies. It raises blood sugar levels rapidly and can be life-saving for someone who is unconscious or unable to eat and drink. It is only available as prescription medicine. Glucagon comes in an emergency syringe kit (for subcutaneous or intramuscular routes) or as a nasal spray. After 15 minutes of being given glucagon, the person should be alert enough to eat. In case someone isn't alert even after 15 minutes of administering glucagon, call emergency medical care.

3. Octreotide

This somatostatin analogue can be used to suppress insulin secretion in sulfonylurea induced hypoglycemia. It raises plasma glucose concentrations only transiently and the patient should therefore be urged to eat as soon as possible to replete glycogen stores.

4. Treatment of underlying conditions

A tumour in the pancreas is treated by surgical removal of the tumour. In some cases, partial removal of the pancreas might be required.

Home-care For Hypoglycemia

Tips for diabetics

Check your blood glucose level before and after a meal.

You should also check your blood sugar before going to bed.

Follow your doctor's instructions and take your insulin as and when instructed.

Do not take extra insulin without your doctor's advice.

In case you exercise more than usual, make sure to balance out the loss of glucose by taking in the required carbohydrates.

Tips for non-diabetics

List down the food you ate, the amount you exercised, the symptoms you experienced and the time it took you for the signs to go away. These records will help your doctor diagnose your problem.

The best way of handling hypoglycemia is to determine the cause behind it.

Along with that, make sure not to skip meals and get an ample amount of carbohydrates.

Learn about the 15-15 rule and much more about prevention and emergency management of hypoglycemia.

Complications Of Hypoglycemia

Untreated hypoglycemia can affect brain functioning and lead to severe side effects.

1. Seizures

The brain needs glucose to function. Any significant change in blood sugar directly influences the signalling mechanism of the brain. This allows seizures to occur quickly. Prolonged hypoglycemia can give rise to a seizure known as a tonic-clonic seizure. This involves the entire body and leads to loss of consciousness and violent muscle contractions.

2. Diabetic coma

When the brain doesn't receive enough glucose to function properly, it can cause you to pass out and lose consciousness. A diabetic coma occurs when a person with diabetes loses consciousness. Hypoglycemia as a result of excessive insulin or not getting enough food can be critical. Passing out due to hypoglycemia is an emergency medical situation and needs attention right away.

The symptoms of diabetic coma include headache, confusion, heart palpitations, vomiting, weakness, and dizziness. If you are diabetic and at risk of developing hypoglycemia, it is advisable to talk to your loved ones and friends and teach them how to administer treatment in such cases.

Losing consciousness due to hypoglycemia means that you will be unable to eat or drink emergency glucose tablets. In such cases, injections like glucagon can be life-saving. After gaining consciousness or if there is no response to glucagon injection, call your doctor immediately.

3. Hypoglycemia unawareness

The symptoms that help alert you about hypoglycemia may be unpleasant, but they are also instrumental. These symptoms tell you to drink or eat carbohydrates that bring up your glucose levels to normal. But several people are unable to identify these symptoms. This is called hypoglycemia unawareness. It can primarily occur in people who have had repeated episodes of hypoglycemia. This results in the body adapting to the early warning signs and subsequently ignoring them after repeated episodes.

Hypoglycemia unawareness is especially dangerous since your body will stop telling you when your blood sugar level drops, and hence you won't be able to treat it. People with hypoglycemia unawareness are also less likely to wake up when their blood sugar drops at night. They need to be extra careful and check their blood sugar frequently. This step is significant when carrying out tasks that require attention such as driving. Such patients can have a continuous glucose monitor that will sound an alarm when the blood sugar drops. Hypoglycemia unawareness is reversible by as little as 2-3 weeks of scrupulous avoidance of hypoglycemia in most affected patients.

Alternative Therapies For Hypoglycemia

1. Diet

Your diet plays the most critical role in managing your blood sugar levels. Diabetic or non-diabetic, you need to have a balanced diet and not skip meals in between. If you are diabetic, keep carbohydrate-rich food in hand to avoid hypoglycemic food. Increase your soluble fibre intake and eat foods such as flax seeds and oat barns. Soluble fibre can help slow down the rate at which sugar enters the bloodstream and helps manage blood sugar throughout the date.

2. Supplements

You can address nutritional deficiencies by taking a daily multivitamin containing vitamin A, E, C and B complex. You can also take omega-3 fatty acids and alpha-lipoic acid for antioxidants. Make sure to consult your doctor before taking any supplements.

3. Mid-meal snacking

In cases of reactive hypoglycemia, the body reacts to meals with excessive sugar by releasing more insulin than required. This results in hypoglycemia. To avoid such conditions, it is advisable to cut down on eating high sugar meals. Instead, you can have small frequent meals that are balanced and rich in protein and carbohydrates.

4. Fuel during exercise

Light exercises are a great way to manage your blood sugar. In patients with diabetes, ADA recommends 150 minutes of moderate physical activity per week for at least 3 days & with no gaps longer than 2 days. Follow your doctor's advice about your daily exercise limit. If you work out more than usual, make sure to eat after your workout or have a small snack between your workout to ensure that your blood sugar stays up. If you are diabetic, it is essential to avoid overdoing your workout until you have a good handle on balancing your sugar level and insulin dosage.

Living With Hypoglycemia

Having episodes of hypoglycemia can cause stress and anxiety. Complications like losing consciousness are especially scary to go through. Diabetic patients who have repeated episodes of hypoglycemia may become scared of taking insulin in the future and try to reduce the dosage without proper medical advice. This can result in further complications that can be life-threatening. Recognising the signs of hypoglycemia and taking timely action is the best way of preventing hypoglycemic episodes.

Teach people how to help

Inform and teach the people around you such as your co-workers, friends and family, about hypoglycemia. If the people around you can identify and look out for signs of hypoglycemia, they can lend you support and alert you about the signs. It's equally vital to teach them how to administer emergency glucagon so they can avert a potentially life-threatening situation.

Plan your meals ahead

If you are on a trip or aware of a busy day ahead, make sure that you plan your meals ahead of time. Do not skip meals in between.

Carry glucose-rich snacks

Always carry a sugar candy or bar handy while travelling or place one near bed to avoid panic during a hypoglycemia episode. If you are diabetic, then carrying glucose-rich snacks that you can eat after taking insulin, can help maintain the glucose level.

Wear a medical ID

If you are prone to develop hypoglycemic episodes, your doctor may advise you to wear a medical ID to help people identify that you have diabetes. This will help quick medical administration, especially if you are not around the people who know you.

Take extra care when you are sick

Being sick might make you feel like eating less food or may not be able to keep the food down due to nausea and vomiting. Make sure to adjust your insulin level according to your food intake.

Frequently Asked Questions

What level of blood sugar is considered to be low blood sugar?

How can I check my blood glucose level regularly?

How often should I check my blood glucose level?

What is the 15-15 rule?

What is a continuous glucose monitor?

How is glucagon administered?

Can I drive if I have hypoglycemia?

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Hypothyroidism

Also known as Underactive thyroid

Overview

Hypothyroidism is a condition in which the thyroid gland does not produce sufficient quantities of thyroxine, a thyroid hormone. Due to the low levels of this hormone, the person may experience various symptoms such as fatigue, unexplained weight gain, difficulty losing weight, reduced tolerance to cold, puffiness of the face, hoarseness of voice, excessive hair fall, muscle and joint pains, fertility problems, or depression.

There are numerous conditions that can lead to a low thyroid level such as autoimmune thyroiditis, iodine deficiency, pregnancy, radiation therapy, and surgical removal of the thyroid gland. Although this condition is common in women, men can also suffer from it.

Fortunately, hypothyroidism is generally manageable with inexpensive medications after timely diagnosis. If left untreated, it may lead to complications such as obesity, goiter, infertility, and heart failure. Hence, patients especially those at high risk should keep a close watch on the symptoms of hypothyroidism.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Thyroid gland

Heart

Peripheral nerves

Joints

Reproductive system

Mimicking Conditions

Addison’s disease

Chronic fatigue syndrome

Dysmenorrhea

Polycystic ovarian disease (PCOD)

Anemia

Necessary health tests/imaging

Blood tests: Thyroid stimulating hormone (TSH), Thyroxine total - T4, Thyroxine total - T3, Anti thyroglobulin antibody & Thyroxine binding globulin

Imaging tests: Thyroid scan, Ultrasound & Radioactive iodine uptake test

Treatment

Thyroxine

Specialists to consult

General physician

Endocrinologist

Symptoms Of Hypothyroidism

Initially, hypothyroidism may not cause any symptoms. The symptoms often appear gradually and may not be noticeable in the earlier stages. There are various symptoms associated with hypothyroidism such as:

Chronic fatigue

Unexplained weight gain and difficulty losing weight

Puffiness of the face

Hoarseness of voice

Disturbances in the menstrual cycle in women

Fertility problems in women of child-bearing age

Excessive hair fall, hair may become brittle, dry, and break easily

Muscle and joint pains

Elevated blood cholesterol levels

Slower heartbeats

Constipation

Dry skin

Impaired memory

Depression

Reduced tolerance to cold

Thyroid gland enlargement (Goiter)

Hypothyroidism can also affect infants, young children, or teens, causing symptoms such as:

Stunted growth

Delayed onset of puberty

Lethargy and sleepiness

Note: Infants may be born without a thyroid gland or with a poor-functioning gland and cause specific symptoms such as constipation, difficulty breathing, protruding tongue, and jaundice.

Causes Of Hypothyroidism

There are two hormones involved in hypothyroidism --thyroid stimulating hormone (TSH) and thyroxine. TSH is a hormone secreted by the pituitary gland in the brain and its function is to stimulate the thyroid gland to produce thyroxine.

Hypothyroidism is a hormonal disorder where the thyroid gland does not produce sufficient quantities of the thyroid hormone. Hypothyroidism is clinically evaluated by the levels of TSH and free thyroxine concentrations. TSH levels are higher than than the reference range while thyroxine levels are below the reference range.

A. Clinical primary hypothyroidism

Primary hypothyroidism is caused by a problem with the thyroid gland itself. Hypothyroidism is caused when the thyroid gland does not produce sufficient quantities of the thyroid hormone or thyroxine. Multiple causes may lead to the underproduction of the thyroid hormone such as:

1. Autoimmune disease

In this, the immune system makes antibodies that attack the thyroid gland. As a result, large numbers of white blood cells, which are part of the immune system, attack the gland and damage it and cause insufficient production of thyroid hormones. The most common forms are Hashimoto’s thyroiditis (chronic lymphocytic thyroiditis) and atrophic thyroiditis.

2. Iodine deficiency

Iodine is an essential mineral required by the thyroid gland to produce thyroxine. A deficiency of iodine in the diet causes the underproduction of the thyroid hormone.

3. Pregnancy

During or post pregnancy, there may be an inflammation of the thyroid gland, which may affect the production of the thyroid hormone. This condition is known as postpartum thyroiditis. However, most women with postpartum thyroiditis regain their normal thyroid function.

4. Surgical removal of thyroid gland

In some cases, people with hyperthyroidism, thyroid nodules, small thyroid cancers, large goiter or Graves’ disease, need to have part or all of their thyroid gland removed surgically. If the whole thyroid is removed, then it can lead to hypothyroidism as no thyroid hormones are produced. However, if only a part of the gland is removed, it may be possible to make enough thyroid hormones to ensure proper functioning of the body.

5. Medications

Certain medicines such as antipsychotic drugs like lithium, antiarrhythmic drugs like amiodarone and interleukins & anti-cancer medicines, affect thyroid hormone production. Medicines used to treat hyperthyroidism can cause paradoxical hypothyroidism.

6. Radiation therapy

Ionizing radiation is commonly prescribed to people who have hyperthyroidism or cancer of the head or neck like lymphoma or leukemia. But in some cases, exposure to the ionizing radiation exposure during the treatment of certain cancers or hyperthyroidism can damage the thyroid gland and lead to hypothyroidism.

B. Central hypothyroidism

Central hypothyroidism is defined as hypothyroidism due to insufficient stimulation by TSH of an otherwise normal thyroid gland. It can be secondary hypothyroidism (pituitary) or tertiary hypothyroidism (hypothalamus) in origin.

Rarely, the hypothalamus under-secretes the thyrotropin-releasing hormone (TRH). This affects the secretion of TSH by the pituitary gland, causing hypothyroidism. This is also known as tertiary hypothyroidism.

C. Congenital hypothyroidism

Some babies are born with a thyroid gland that is not fully developed or does not function properly, which causes hypothyroidism at birth.

Risk Factors For Hypothyroidism

The following risk factors are associated with hypothyroidism.

1. Gender: Women are more likely to develop hypothyroidism than men.

2. Age: Hypothyroidism is more common among people older than 60 years.

3. Family history: The risk is high if you have a family history of hypothyroidism or other thyroid-related disorders.

4. Race: White or Asian races are more likely to develop this disorder.

5. Medical conditions: Several health problems that can increase your risk of hyperthyroidism are:

Type 1 or type 2 diabetes

Multiple sclerosis

Rheumatoid arthritis

Sjogren’s syndrome

Lupus

Celiac disease

Addison's disease

Pernicious anemia

Vitiligo

Bipolar disorder

Down syndrome

Turner syndrome

Diagnosis Of Hypothyroidism

The tests essential to confirm a diagnosis of hypothyroidism are:

A. Blood tests

Some of the common blood tests used to diagnose hypothyroidism incude thyroid stimulating hormone (TSH) test & thyroxine (T3 & T4) test.

1. Thyroid stimulating hormone (TSH)

This is the most important and sensitive test for hypothyroidism. It measures how much of the thyroxine (T4) hormone the thyroid gland is being asked to make. An abnormally high TSH means the thyroid gland is being asked to make more T4 because there isn’t enough T4 in the blood. This indicates hypothyroidism. TSH also helps the doctor to determine the right dosage of medication, both initially and over time.

2. Thyroxine total (T4)

Most of the T4 in the blood is attached to a protein called thyroxine-binding globulin. The “bound” T4 can’t get into body cells. Only about 1%–2% of T4 in the blood is unattached (“free”) and can get into cells. The free T4 and the free T4 index are both simple blood tests that measure how much unattached T4 is in the blood and available to get into cells. In hypothyroidism, the thyroxine levels are lower than normal.

3. Thyroxine Total (T3)

The total T3 includes both bound and free forms circulating in the blood and can be affected by the amount of protein available in the blood to bind to them. The T3 hormone can be measured as free T3 or total T3. Triiodothyronine (T3) total test measures the total levels (both free and bound forms) of triiodothyronine (T3) hormone in the blood and is usually done as a part of the thyroid profile total test. Its levels may be normal or low in hypothyroidism.

Along with these three tests, supporting tests may be required to evaluate and monitor the condition such as:

Anti thyroglobulin antibody

Thyroxine binding globulin

Also, all newborn babies are routinely screened for thyroid hormone deficiency to rule out congenital hypothyroidism.

B. Imaging tests

The following imaging tests can be used to find the cause of hypothyroidism:

1. Thyroid scan

Thyroid scan can help to evaluate the size, shape, and position of the thyroid gland. This test uses a small amount of radioactive iodine to help diagnose the cause of hypothyroidism and check for thyroid nodules as well.

2. Ultrasound

Ultrasound of the thyroid is used to closely look at thyroid nodules. Thyroid nodules are solid or fluid-filled lumps that form within the thyroid gland. Ultrasound can also help the doctor to evaluate if the nodules are cancerous in nature.

3. Radioactive iodine uptake test

A radioactive iodine uptake test also called a thyroid uptake test, measures how much radioactive iodine the thyroid takes up from the blood after swallowing a small amount of it. It can help check thyroid function and find the cause of hypothyroidism.

Read more about thyroid function tests.

Click Here!

Celebs affected

Gigi Hadid

American supermodel Gigi Hadid has Hashimoto’s thyroiditis. She has been able to manage her condition with medications.

Gina Rodriguez

Golden Globe Award winning actress Gina Rodriguez was diagnosed with hypothyroidism at the age of 19 and has coped with symptoms such as weight gain and tiredness.

Prevention Of Hypothyroidism

There is no specific way to prevent hypothyroidism. The best way to prevent complications of the disease or having the symptoms impact your life in a serious way is to watch for signs of hypothyroidism. Those who are at a higher risk for hypothyroidism must be more watchful of their symptoms. If you experience any of the symptoms, it is best to consult your doctor. Hypothyroidism is quite manageable if diagnosed and treated early.

Specialist To Visit

You must visit a doctor, if you have symptoms such as weight gain, hairfall, enlarged thyroid gland, swelling of the face and the limbs, weakness, fatigue, poor concentration, decreased libido, and difficulty getting pregnant. All these are possible symptoms of hypothyroidism. If you suspect hypothyroidism, you may consult with:

General physician

Endocrinologist

Women may need to consult obstetrician and gynecologistother, in case of specific symptoms such as hair fall, weight gain, fatigue & difficulty in getting pregnant.

Consult India's best doctor here with a single click.

Consult Now!

Treatment Of Hypothyroidism

Hypothyroidism is treated by prescribing a synthetic version of the thyroxine hormone. The prescribed medicine must be taken every day in the morning or as prescribed by the physician. Certain medications such as iron and calcium supplements or aluminum hydroxide, which is found in some antacids, may interfere with the absorption of thyroxine.

The dosage may need to be adjusted based on the close monitoring of the TSH and thyroxine levels. The dosage of the thyroid medicine is decided by the doctor depending upon the age, cause of hypothyroidism, other concomitant health conditions or any other medications being taken by the patient. For example, the elderly population is started on a lower dose whereas a higher dose may be needed, if gastrointestinal diseases like celiac disease hamper the absorption of the medicine.

The only dangers of thyroxine are caused by taking too little or too much of the medicine. If you take too little, your hypothyroidism will continue. If you take too much, you’ll develop the symptoms of hyperthyroidism—an overactive thyroid gland. The most common symptoms of too much thyroid hormone are fatigue, inability to sleep, greater appetite, nervousness, intolerance to heat, shortness of breath, and a racing heart. Patients who have hyperthyroidism symptoms during thyroxine replacement therapy, should have their TSH levels tested. If it is low, indicating too much thyroid hormone, their dose needs to be lowered.

Did you know?

If you have hypothyroidism and are on too much replacement therapy (levothyroxine) to treat the condition, then this may result in bone loss (osteoporosis) and atrial fibrillation. To prevent this, the thyroxine replacement (levothyroxine) must be carefully monitored to ensure thyroid levels do not become too high. Consult your doctor for the right treatment.

Click To Consult!

Home-care For Hypothyroidism

If you have hypothyroidism, you will be prescribed a synthetic version of the thyroid hormone to combat the deficiency. Here are a few tips to help you take the medicines & improve your symptoms.

It is important to take the tablet daily, preferably first thing in the morning, for as long as advised by your doctor.

You can take the tablet preferably with water and on an empty stomach.

Maintain a gap of at least 4 hours between the thyroid medicine and other medicines such as calcium or iron supplements.

To keep track of your pills, you may store them in an airtight labeled box which has labels for each day of the week. This would help you keep a track of your doses and whether you have missed any.

Diet tips

Taking a balanced diet that fulfills the body’s requirements of iodine may help hypothyroidism caused by iodine deficiency. Consume iodine-fortified table salt as it is a good way of including iodine in your diet. Shellfish, lean proteins & whole grains are good sources of iodine.

However, in case of Hashimoto’s disease or other types of autoimmune thyroid diseases, patients may be sensitive to side effects of iodine. Eating foods that have large amounts of iodine may actually cause or worsen hypothyroidism. Taking iodine supplements might also have the same effect. Hence, in such cases, it is important to consult a doctor about which foods to limit or avoid and whether one can take iodine supplements or other medications like cough syrups which might contain iodine.

Eat a low fat diet and include foods rich in calcium and Vitamin D such as milk and milk products & oily fish. Add leaner proteins such as chicken breast or fish.

Avoid certain vegetables like cabbage, broccoli or cauliflower as these are known to interfere with the functioning of the thyroid gland.

Limit soy food products like tofu, vegan cheese and meat products, soy milk, soybeans, and soy sauce. Soy is known to hinder the absorption of thyroid hormone. Hence, avoid eating or drinking soy-based foods for at least four hours before and after taking the medication.

Like soy, fiber can also interfere with hormone absorption. Since fiber is vital for the body do not avoid it completely. Instead, avoid taking the medication within several hours of eating high fiber foods.

Incorporating a few diet-related changes can help you manage your condition better as well as lead a healthy life. Here are a few diet tips for people with hypothyroidism that can help control the condition.

Click To Read!

Exercise and yoga

Daily exercise and yoga can help boost the body’s metabolic rate and ease the symptoms of hypothyroidism. Regular exercise may also help battle complications of hypothyroidism including obesity, and heart-related issues. You can also engage in light exercise programs to boost your metabolism and help with the symptoms of hypothyroidism.

Some yoga asanas which are helpful in thyroid issues are:

Sarvangasana

Halasana

Setubandhasana

Sirsasana

Note: Please perform these asanas under expert supervision only.

Akshar, founder & chairman, Akshar yoga suggests some yoga asanas for hypothyroidism with their benefits and steps to do the asanas.

Read To Know!

Complications Of Hypothyroidism

Hypothyroidism can cause many health complications such as:

1. Goiter

Constant stimulation of the thyroid gland to produce more hormones may cause the gland to swell and become larger. This is known as goiter. It appears as a cosmetic deformity in the neck and may also cause trouble while breathing or swallowing.

2. Obesity

Even with a reduced appetite, people with hypothyroidism tend to put on weight and find it difficult to lose weight because of a slower basal metabolic rate. This predisposes them to obesity.

3. Cardiac problems

Hypothyroidism is associated with an increased risk of heart diseases or heart failure. It elevates the levels of low-density lipoprotein (LDL) which is bad for heart health.

4. Infertility

In women, hypothyroidism can interfere with the normal cycle of production of eggs or the ovulation process and cause challenges when trying to conceive. In men, an underactive thyroid is known to cause abnormal sperm morphology and erectile dysfunction.

5. Peripheral neuropathy

Long term hypothyroidism can damage the peripheral nerves which carry information from the brain and spinal cord to the rest of the body. This causes pain, tingling, or numbness in the extremities.

6. Myxedema

This is a rare and serious complication which happens when the thyroid levels in the body are extremely low. The patient may become lethargic, drowsy, and in severe forms may slip into a coma known as myxedema coma, which can be life-threatening.

7. Balance problems

Hypothyroidism can also present with balance problems especially in older women.

8. Joint pain

Low levels of thyroid hormone can cause joint and muscle pain, as well as tendonitis which is inflammation of a tendon, the thick fibrous cords that attach muscle to bone.

9. Mental health issues

Hypothyroidism can cause slow mental functioning as well as memory or concentration lapses. Depression may also occur in hypothyroidism and may become more severe with time.

10. Birth defects

Women with untreated thyroid disease are more likely to give birth to babies with higher risk of birth defects. These children are also likely to have intellectual and developmental problems. Infants with congenital hypothyroidism, which is not treated timely, are at risk of both physical and mental development.

Read more about the complications caused by hypothyroidism.

Click To Read!

Alternative Therapies for Hypothyroidism

Ayurveda

Ayurvedic preparations of triphala, guggulu, and punarnavadi have been found to be helpful in treating hypothyroidism.

Homeopathy

Homeopathy preparations, such as calcarea carbonica, are found to be effective in the treatment of hypothyroidism.

Living With Hypothyroidism

A diagnosis of hypothyroidism may often be a cause of anxiety for the patient as it comes with multiple health symptoms. Patients often struggle with obesity and have poor energy levels. They have heart problems such as increased cholesterol levels and heart failure. Women of reproductive age may also face problems in conceiving a child due to hypothyroidism. Hypothyroidism is also known to cause chronic depression. All this may affect patients' quality of life. Fortunately, hypothyroidism is generally manageable with inexpensive medications. If your thyroid hormone levels are low, a simple treatment along with the following tips could greatly improve your quality of life.

1. Lose weight

If you have low thyroid levels, you may have decreased metabolic rate and a higher body mass index (BMI), which can put you at risk of obesity. And if you are overweight, you may need more thyroid hormone to carry out the regular functions.

A low-calorie diet can help you to lose weight and in extreme cases, weight loss surgery can also help. Talk to your doctor about the options available to lose weight and how it can improve your thyroid function and disease control.

2. Eat a balanced diet

A healthy diet can help you to deal with certain symptoms of hypothyroidism such as lethargy, fatigue, and tiredness. Eating well also lowers your risk of developing other health complications due to the impaired thyroid gland.

Eat foods rich in selenium, omega-3 fatty acids, calcium, magnesium, and vitamins E and B6. Load up your intake of fresh fruits and vegetables, whole grains, and lean meat and stay away from processed foods.

It is time to reconsider what goes on to your plate. Here’s more about the foods to avoid, if you have hypothyroidism.

Click To Read!

3. Exercise without fail

As hypothyroidism makes you feel tired and low on energy, it is important to ensure you stay physically active. This can not only improve your metabolism but can also improve your overall health right from aiding in weight loss to helping you manage your condition.

You can start slow by walking in the morning and evening or playing a sport. Swimming or riding a cycle is not a bad idea as it can help you to move and stay active. You can even consider yoga as it involves stretching and twisting of the muscles which can stimulate the thyroid gland and also help you to maintain a healthy metabolism.

4. Take medications regularly

Strictly follow your doctor’s advice about taking these medications regularly and on time. Do take your medicines daily at almost the same time to ensure a consistent level of hormones in the blood throughout the day.

The best time to take thyroid medications is early in the morning. But, do not take it with tea or coffee as you need to maintain a gap of at least 30 minutes between food items and this medicine. It is wise to keep a reminder to take medicines to avoid skipping medications.

Also read, some common mistakes that you might be making while taking medications for hypothyroidism.

Click To Read!

5. Manage stress

When you are stressed, there are numerous hormonal changes that happen in the body. These changes not only increase the resistance of thyroid receptor cells to thyroid hormones but also weaken your immunity. So, there is no two-way when it comes to managing stress and hypothyroidism.

Certain measures that can help you de-stress include indulging in a hobby, meditation, joining a dance or art class, gardening, planning a mini-vacation, spending time with friends and family, etc.

Pregnancy and hypothyroidism

Hypothyroidism is very common during pregnancy and can pose a significant threat to the health of both mother and the baby. With hypothyroidism, the mother may be at an increased risk of miscarriages, hypertension, anemia, muscle pain, etc. Whereas, the baby may have a possibility of cognitive and developmental impairments.

Women with hypothyroidism need an increased dosage of the thyroid medicine for the duration of their pregnancy and they must consult their doctor regarding the same as soon as pregnancy is confirmed. It is also essential to undergo routine monitoring tests for the levels of TSH and thyroxine to optimize the treatment dosages.

Here’s more on the wider range of implications, symptoms, and measures that need to be taken for hypothyroidism during pregnancy.

Click Here To Read!

Frequently Asked Questions

What diet should I take if I have hypothyroidism?

Is hypothyroidism a hereditary disease?

Why am I not losing weight even after exercising?

How long do I need to take the thyroid supplements?

What will happen if I do not take the prescribed medication for hypothyroidism?

How can I lose weight fast with hypothyroidism?

Can hypothyroidism go away completely?

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Hair loss

Also known as hair fall, baldness, alopecia.

Overview

Generally, people shed around 50 to 100 single hair per day. Hair shedding is a natural process in which some hair sheds while new hair start to grow in. Hair loss or alopecia occurs when this balance is disrupted and more hair begin to fall than the new hair growing.

Hair loss affects men, women, and sometimes even children. One may notice hair loss in the form of hair thinning, receding hairline, part widening, and bald patches. Age, genetics, nutritional deficiencies, hormonal imbalances, certain diseases and medications could be some of the causes of hair fall. However stress, tight hairstyles, chemical hair treatments and overuse of styling products, are also known to trigger hair fall.

Hair loss does not have any harmful physical effects as such, but its psychological impact cannot be denied. For most people, their hair is inherently connected to their confidence. If their hair looks good, they feel good about themselves. But if they start losing hair, their self esteem begins to dwindle. In such a case, one can try one or many treatment options available for dealing with hair loss.

Home remedies and oral hair supplements are usually the first line of action for hair loss. However, it is always advisable to visit a dermatologist or trichologist to get a proper diagnosis and treatment. Various treatment options include topical agents like Minoxidil, injections, oral treatments, Platelet rich plasma (PRP) therapy and hair transplantation.

Key Facts

Usually seen in

Adults above 30 years of age.

Children below 18 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Hair

Scalp

Necessary health tests/imaging

Blood tests: thyroid profile & vitamin profile

Pull test

Light microscopic examination

Scalp biopsy

Treatment

Oral supplements for nutritional deficiencies: Vitamin B12 (Cobalamin), Vitamin B7 (Biotin), Zinc & Iron

Minoxidil

Finasteride

Topical corticosteroids or steroid injections

Platelet rich plasma (PRP) therapy

Hair transplantation: Follicular Unit Transplantation or FUT, Follicular Unit Extraction or FUE

Laser treatment

Specialists to consult

General physician

Dermatologists

Trichologists

Causes Of Hair Loss

Before knowing about the causes of hair loss, let’s know about the hair growth and hair loss cycle.

Ideally, each hair follicle goes through three phases:

1. Anagen phase is the active phase of hair growth that usually lasts for about two to six years. Around 85-90% of the hair on the scalp is in this stage at a given point in time.

2. Catagen phase is the transitional phase that lasts a few weeks (2-3 weeks). Only 1% of hair is in this stage.

3. Telogen phase is the end phase of hair growth, which is the resting phase. Around 13% of our hair is in this stage.

At the end of the telogen phase, hair follicles are shed, which is replaced by new hair and the cycle continues. However, the hair growth cycle can be influenced by an individual’s age, diseases, hair care routine, and diet.

Common causes of hair loss include:

Age: With age, it is common to notice some amount of hair fall. Men and women both notice receding hairline as well as thinning of hair.

Genetics: Hereditary causes are the most common cause of hair loss all over the world and both men and women are affected. It is also known as androgenic alopecia, male-pattern baldness and female-pattern baldness. It appears as a receding hairline and bald spots in men and thinning hair along the crown and a widening part in women.

Childbirth and other stressors: If you have recently given birth, or have had a chronic illness it can lead to hair fall. Stress or any kind of traumatic event may also trigger hair loss.

Ongoing treatment/medications: Certain undergoing treatment such as treatment for cancer, arthritis, depression, heart problems, gout and high blood pressure can trigger hair fall within a few days or weeks of starting the radiation or chemotherapy.

Tight hairstyles: Tight hairstyles such as braids can lead to hair fall over time. This is permanent hair loss and is known as traction alopecia.

Scalp infections: A scalp infection, which appears as scaly and inflamed results in hair loss.

Hormonal imbalance: Certain women experience hair loss due to hormonal imbalances in conditions such as PCOS (polycystic ovarian syndrome). Birth control pills, which are hormonal preparations, can also trigger hair fall.

Nutritional deficiencies: If your diet lacks protein, zinc, biotin, iron or any other essential nutrient then you may notice hair fall and thinning of hair.

Disease: Diseases such as hyperthyroidism, hypothyroidism, diabetes, lupus and STI’s (sexually transmitted infections) can lead to hair fall as well as bald patches on the eyebrows, lashes, and other parts of the body.

Pulling your own hair: Also known as Trichotillomania, it is the habit of pulling one’s own hair that may lead to permanent hair loss over time.

Symptoms Of Hair Loss

Signs and symptoms of hair loss can present in many ways as the following:

Gradual loss or thinning of hair on top of head.

Receding hairline(frontal fibrosing alopecia). If the hairline starts looking higher than the usual position.

Widening partition. If someone parts their hair, they might notice the part getting wider over time.

Circular or bald patches. Some people develop circular or bald patches on their scalp, beard or eyebrows.

Loosening of hair. Clumps of hair might come out while combing or washing hair.

Thinner ponytail.

Scalp starts getting visible through the hair.

Full-body hair loss. Some health conditions and treatments such as chemotherapy for cancer, can cause loss of hair from all over the body.

Hair loss can be gradual or rapid. The symptoms for gradual hair loss include hair thinning, widening of part, receding hairline. The symptoms for rapid hair loss include clumps of hair in comb or drain, a bald patch that appeared recently and severe hair fall.

Note: Gradual hair loss is more common and tends to affect everybody at least once in their lifetime. The signs of gradual hair loss are subtle and may take a long time before you even notice your hair fall!

Apart from the obvious signs of hair fall, some other symptoms may also be present with your hair fall.

Intense itching and redness in the scalp: This could occur due to an underlying infection in the scalp.

Scaly bald patches, often with sores: It can be a sign of fungal infection like ringworm or due to a chronic disease like psoriasis.

Burning and tingling on the scalp: Some people who have alopecia areata experience might experience burning and stinging prior to sudden hair loss.

Pus-filled sores on the scalp: Some conditions such as folliculitis can cause pus-filled blisters on the scalp resulting in temporary hair loss.

Types Of Hair Loss

Hair loss, also known as alopecia, is broadly classified into cicatricial alopecia and non-cicatricial alopecia. In non-cicatricial alopecia, hair loss is not permanent whereas in cicatricial alopecia, scars occur along with hair fall and destroy the hair follicle resulting in permanent hair loss. A few types of hair loss are discussed below:

1. Non-cicatricial or Non-scarring alopecia

Androgenic alopecia: Androgenic alopecia is also called hereditary hair loss. In men, it is known as male pattern baldness which is characterised by gradual loss of hair above the temples and thinning at the top of the head, usually creating a shape of ‘M’. In women, it is known as the female pattern baldness and results in thinning all over the scalp or widening of the part.

Alopecia areata: It is an autoimmune disorder in which the body starts to attack its own hair follicles. This is hair loss that can affect every part of the body, including the scalp, face, trunk, and extremities. When it affects only a portion of the body, it is called alopecia areata. When it affects an entire site it is called alopecia totalis. When it involves the whole body, it is called alopecia universalis which is mostly associated with conditions like vitiligo and thyroid disorders.

Anagen effluvium: In this, diffuse and rapid hair loss occurs, which is mainly caused by the effect of radiation and chemotherapy. Hair usually grow back after completion of the treatment.

Telogen effluvium: It is a type of sudden diffuse hair fall that is mostly seen after some stressful event, period of emotional shock , illnesses or taking certain medications. It can also occur due to hormonal fluctuations that happen in pregnancy, childbirth, starting or stopping hormonal birth control pills or menopause.

Traction alopecia: This type of alopecia results from too much pressure on the hair, mostly because of tight braids, ponytails, or buns.

Trichotillomania: In this type of impulse control disorder, a person pulls his/her own hair subconsciously. This leads to irregular bald patches and uneven hair length. It mostly occurs in children or adolescents. In children, it is more like a habit that will eventually resolve on its own, but in adolescents, psychiatric help might be required.

2. Cicatricial alopecia or scarring alopecia

Cicatricial alopecia is a broad umbrella encompassing uncommon inflammatory hair loss disorders that result in scarring patches of hair loss with absence of hair follicles. Causes of hair follicle destruction include fungal infections, chemicals such as hair relaxers, and inflammatory disorders which include discoid lupus erythematosus, lichen planopilaris, dissecting cellulitis, tufted folliculitis, folliculitis decalvans, alopecia mucinosa, alopecia neoplastica, central centrifugal cicatricial alopecia, and acne keloidalis.

I have recovered from COVID-19. Why am I facing hair loss?

While most people think they are suffering from hair loss after recovering from COVID-19, it is actually hair shedding. It is called Telogen Effluvium and usually occurs around 3 months after a stressful event. A fever or illness like COVID-19 can force more hair to enter the shedding (telogen) phase of the hair growth life cycle at the same time. Most people see that their hair starts looking normal and stops shedding after 6 to 9 months.

Read More About COVID-19!

Risk Factors For Hair Loss

There are many risk factors for developing hair loss. Some of these risk factors can be avoided, while others cannot. The following are some of the risk factors:

Hereditary: If you have a family history of hair loss, then there is a good chance that you will experience it also. Hereditary hair loss can affect both men and women.

Stress: A person who is frequently experiencing stress can be a risk factor for hair loss. Stress of all kinds can cause a negative effect on the body. It can cause the hair to stop growing.

Hormonal changes: Hormonal changes that happen in pregnancy, childbirth, starting or stopping hormonal birth control pills or menopause can also increase the risk of hair loss.

Medications: Certain medications may lead to hair loss. If you begin to experience hair loss after the beginning of a medication, talk to your doctor to check if this is a side effect of your medication.

Chemotherapy: During the treatment for cancer, there is a good chance of losing hair. The hair will begin to grow back after the series of chemotherapy treatments is done.

Significant weight loss

Medical conditions such as hypothyroidism, hyperthyroidism, diabetes, lupus and STDs

Does initial hair fall lead to hair loss in the long run?

Read To Know!

Diagnosis Of Hair Loss

Diagnosis for hair loss includes a detailed history, physical examination with a focused evaluation of the hair and scalp. Other diagnostic measures include a fungal screening of the scalp, hair pull, and tug test, and light microscopy, and/or trichoscopy.

1. Pull test: In this test, also known as traction test, 20-60 hair strands are grasped between your thumb and index and middle finger, held from the hair shaft firmly, and tugged away from the scalp. If the hair shedding is more than 10% of the total hair grasped then it is called a ‘positive pull test’ & indicates active hair shedding.

2. Light microscopic examination: The hair that is collected by the pull tests is then examined under the microscope for fractures, irregularities, coiling, and other hair shaft disorders.

3. Scalp biopsy: Scalp biopsies are done in cases of cicatricial hair loss and undiagnosed cases of non-cicatricial alopecia.

4. Blood tests: Your doctor might ask you to get a thyroid profile done as low levels of thyroid hormone tend to cause hair loss. Also, sometimes doctors may recommend blood tests to check the level of various nutrients as deficiencies of these can lead to hair loss. The following are usually tested:

Iron: Iron deficiency in pre-menopausal women is one the major causes of hair loss. Iron contributes to hemoglobin production, which helps in delivering nutrients and oxygen to hair follicles. When iron is not present in adequate amounts the hair won’t grow, causing progressively thinner hair.

Zinc: Zinc deficiency can also impact hair growth and cause hair thinning.

Biotin: Also known as Vitamin B7, it stimulates keratin production in hair and can increase follicle growth. Biotin deficiency can hence lead to hair loss.

Celebs affected

Anupam Kher

Anupam Kher is one of the few Bollywood actors who have embraced and flaunted their baldness.

Javed Jaffrey

Javed Jaffrey started wearing a hairpiece years ago and has been spotted several times wearing different wig styles.

Matthew McConaughey

This American actor with a huge fan following shocked everyone when he started showing the symptoms of male pattern baldness.

Jon Cryer

The American actor and television director actually confessed to wearing wigs to hide his baldness during public appearances.

Prevention Of Hail Loss

If you are already experiencing hair loss, then making a few changes in your hair care routine and following these simple tips can help alleviate the problem. These are:

Limit the use of hair styling products and tools such as hot rollers, curling irons, hot oil treatments, etc as it can cause hair breakage and lead to hair fall.

Say no to tight hairstyles and avoid unnecessary twisting, rubbing, or pulling your hair. Don’t rub wet hair with a dry towel but wrap a towel to soak water and allow it to dry naturally.

Avoid combing aggressively as it can cause split ends and hair breakage. Instead, use a wide-toothed comb.

Apply oil regularly as it can prevent dirt and toxins from entering the follicle. Also gently massage the scalp as it can promote blood circulation in the scalp area.

Eat a diet rich in essential nutrients such as vitamins, minerals, and antioxidants especially iron, biotin, zinc along with proteins, fats, and carbohydrates to prevent hair damage.

Do not follow crash diets as rigorous dieting can impair the supply of nutrients to the hair follicles.

Quit smoking as smoking can cause premature aging of the hair cells which can make the follicles brittle and thin, causing the hair follicles to break easily.

Manage your stress as it can lead to hormonal imbalance in the body with hair loss.

Do consult a trichologist or a dermatologist to know the exact cause of the hair fall and get proper treatment. Do not self-medicate like the use of supplements or hair care products for hair growth.

Save your hair this monsoon by following some simple steps.

Read More!

Specialist To Visit

Hair loss could be due to an underlying health problem such as Nutritional deficiencies, PCOS, Thyroid disorders and Anemia, etc. So it is always advisable to discuss your issue of hair loss with your General Physician. The following specialists can also help you in diagnosing and treating hair loss:

Dermatologist

Trichologists

Take professional advice and discuss hair related issues.

Consult Now!

Treatment Of Hair Loss

There are many treatment options for hair loss right from the use of medications to hair transplantation. These are:

A. Medications

1. Oral supplements

Vitamin B12 (Cobalamin): This vitamin is responsible for the production of red blood cells, which deliver oxygen and essential nutrients to all parts of your body, including hair follicles.

Vitamin B7 (Biotin): This vitamin is known to stimulate keratin production in hair and can increase the rate of follicle growth. Supplements of Vitamin B12 are beneficial for regrowing hair in people with its deficiency.

Zinc: Zinc is an essential mineral that’s involved in several biological processes within your body. It plays a key role in making proteins in your hair and other cells.

Iron: The best way to treat hair loss with ferritin is to increase your iron levels. Hair loss as a result of low iron is not permanent and it can be treated with supplements and foods rich in iron.

2. Minoxidil

It is an over-the-counter medication that is FDA approved for use in both men and women. Administered topically, the 5 % concentration is used to treat male pattern baldness whereas 2% is only approved for female pattern baldness treatment. It stops the thinning of hair and is known to stimulate hair growth.

3. Finasteride

It is also an FDA-approved drug for the medical management of hair loss but only in men. It is a prescription drug that is commonly used to treat an enlarged prostate, but a higher dose is used to treat hair fall. It stops the production of the hormone 5-dihydrotestosterone (DHT), excess of which is known to cause hair loss.

4. Topical corticosteroids or steroid injections

These are steroids that help to stop inflammation and treat hair loss. This usually comes in the form of topical cream or injection that needs to be injected into the scalp to promote hair growth. These injections are usually given every 4 to 8 weeks as needed. Talk to your dermatologist to know about it.

B. Platelet rich plasma (PRP) therapy

PRP is a process in which the patient's own blood is processed and injected into different points in the scalp. PRP, which is rich in growth factors helps in hair growth. The following steps are followed:

Step 1 - The blood is drawn usually from the arm and processed in a centrifuge (a machine that spins and separates fluids of different densities).

Step 2 - After about 10 minutes in the centrifuge, the blood separates into three layers:

platelet-poor plasma

platelet-rich plasma

red blood cells

Step 3 - The scalp is locally anesthetized. The platelet-rich plasma is drawn up into a syringe and injected into areas of the scalp that require more hair growth.

C. Hair transplantation

During a hair transplant procedure, a dermatologist or cosmetic surgeon removes hair from a part of the head that has hair and transplants it to a bald spot. Possible risks include bleeding, bruising, swelling and infection. Follicular unit extraction (FUE) and follicular unit transplantation (FUT) are the two most common techniques for hair transplants. Talk to your dermatologist to know which procedure best suits your condition.

1. Follicular Unit Transplantation or FUT

FUT is the older of the two methods and uses strips of skin with hair on them from your scalp itself to be transplanted in a bald spot. The scarring left behind on the donor site is covered up with new hair. This technique requires much aftercare and is quite a hassle to go through.

2. Follicular Unit Extraction or FUE

It is a newer technique and is sufficiently advanced in the technology it uses to get the result. In this method, incisions are made around every follicle unit, which is then transplanted to the balding area. This method leads to very little scarring, and the recovery process takes a lot less time compared to FUT.

D. Laser treatment

There is numerous laser equipment available in the market which claims to stimulate hair growth and treat hair fall. These include brushes, combs, and other electronic devices, however, the efficiency and safety of these devices are not known.

Do hair serums and lotions stimulate hair growth?

Earlier, the hair serums and lotions used to polish the surface of the hair and make them shiny but over time Hair Serums/Lotions have now transformed from being just cosmetic to being more therapeutic, thus helping prevent hair loss. Hair growth serums have been proven to treat people suffering from Telogen effluvium (is a form of hair loss characterized by hair thinning or an increase in hair shedding). They are recommended along with Minoxidil or Finasteride to complement primary treatment. If you are keen to know more, read the article.

Click Here Now!

Home- care For Hair Loss

1. Onion (pyaaz) juice

Onions contain sulfur, which is needed for the production of amino acids, proteins, and collagen, which in turn are needed for hair growth and prevent hair loss. Applying onion juice on the scalp is known to increase blood supply to hair follicles and thus, prevent hair fall due to hair thinning and promote hair growth.

2. Eggs

Eating eggs can be beneficial for hair growth and prevent hair loss because eggs are loaded with nutrients like biotin, Vitamin A, Vitamin E, and folate, which are proved to aid in hair growth and prevent hair loss caused due to nutritional deficiency.

3. Aloe vera

This traditional home remedy is known to soothe the scalp, condition dry hair, and reduce dandruff along with nourishing the hair follicles and improve overall hair health when rubbed over the scalp and length of the hair.

4. Coconut (nariyal) oil

Coconut oil improves hair health and luster. This is because it contains lauric acid, which penetrates easily into the hair shaft and thus, reduces protein loss from both damaged and undamaged hair when used as a pre and post-wash treatment.

5. Fenugreek (methi) seeds

Fenugreek seeds contain phytoestrogens (plant hormones) which were believed to enhance hair growth.

6. Bhringraj

Eclipta alba (bhringraj) is one of the most popular and widely used traditional home remedies for hair fall. Methanolic extract of E.alba in water can promote hair growth by increasing the anagen-phase (the active growth phase of hair follicles).

7. Tea tree oil

Tea tree oil is one of the very few essential oils which are known to prevent hair fall and promote hair growth. It is due to its powerful cleaning, antimicrobial and anti-inflammatory properties. When applied topically it can improve the absorption of nutrients by the follicles and thus, enhance hair growth.

Complications Of Hair Loss

Hair loss or alopecia does not have any harmful physical effects as such but the psychological impact of hair loss cannot be denied. Anxiety and depression are some of the psychological consequences of alopecia that affect both genders. Interestingly, high levels of stress and anxiety further accentuate hair fall. Failure of treatment or its ineffectiveness also contributes to psychological conditions.

Alternative Therapies Of Hair Loss

1. Aromatherapy

A compound in sandalwood, rosemary, and thyme oils is used to boost hair growth. Rubbing one or more of these oils into your scalp for at least 2 minutes every night can promote hair growth.

2. Acupuncture

Acupuncture is known to reduce hair loss and promote hair regrowth for patients with hair loss by improving cerebral blood circulation. However more scientific research and backing is required to prove the same.

3. Microneedling

Microneedling can help in stimulating and inducing stem cells in the hair follicles that lead to hair growth. It might also improve the absorption of products used to treat hair loss, like minoxidil, platelet rich plasma and topical steroids.

Living With Hair Loss

Living with hair loss can be challenging. For most people, their hair is inherently connected to their self-image. If their hair looks good, they feel good about themselves. But if they start losing hair, their confidence begins to suffer. Some people also experience the feeling of looking or getting old. If you start noticing thinning hair, you don’t have to just smile and bear it. Go ahead and try one or many treatment options for dealing with your hair loss. In case the treatment options for the hair loss deem ineffective you can go for other options such as:

Try wearing scarves or bandanas

Wearing a silk or cotton scarf around the head or knotting a bandana can be a stylish option while also masking any hair thinning. Just make sure to choose fabrics that are very soft, so that they don't irritate the scalp.

Explore hair extensions or a wig

If you are losing hair, you can consider adding hair extensions. If you’ve lost all your hair as a result of alopecia or chemotherapy, a wig might be a better way to cover your head occasionally or on a regular basis.

Try wearing hats

Hats can be a good option as well when you’re dealing with hair loss. You can also combine this with other solutions like, you could wear a wig to work and wear a hat on your holidays.

Consider counseling

While some people may feel just fine about their appearance after losing hair, some might feel under confident and depressed, and no scarf or hat can fix it. In such a case, don't be apprehensive to consult a counselor or therapist. Sometimes sharing your feelings can help you deal with them better.

Join a support group

It might be good to talk to someone who is going through exactly the same feelings as yours. Join a group or you can also interact online, if you prefer to interact with people from the comfort of your own home.

Embrace baldness

This approach is not for everyone but some people find the courage to embrace their baldness. Rather than covering it up, they feel free or liberated to flaunt it to the world.

Frequently Asked Questions

What causes hair fall?

How much hair fall is normal?

Is it possible to regrow my hair?

Which foods promote hair growth?

Which vitamins are good for hair growth?

What are the natural remedies for hair growth?

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Hand, Foot, and Mouth Disease

Also known as HFMD, HFM disease, enteroviral vesicular stomatitis and coxsackievirus infection

Overview

Does your child have fever, mouth ulcers/sores along with rashes on the hand and feet or he/she is reluctant to eat even his/her favorite food? Well, this can be due to a viral infection called the hand, foot, and mouth disease(HFMD) which is very common in children under 5 years of age. It is most commonly seen during summer and autumn seasons.

HFMD is highly contagious that can spread through direct contact with the skin, nasal and oral secretions of infected individuals, or by fecal contamination. The illness usually starts with a high grade fever that is followed by painful mouth ulcers. The characteristic non-itchy rashes on the hands and feet start appearing at last.

HFMD is generally a mild and self-limited illness that runs its course. Treatment is mostly directed toward the relief of symptoms.

Key Facts

Usually seen in

Children under 10 years of age

Gender affected

Both men and women

Body part(s) involved

Hand

Foot

Mouth

Mimicking Conditions

Enteroviruses

Erythema multiforme

Herpangina

Herpes simplex

Herpes zoster

Kawasaki disease

Toxic epidermal necrolysis(TEN)

Viral pharyngitis

Necessary health tests/imaging

Physical examination

Biopsy

Serological testing

Polymerase chain reaction

Treatment

Paracetamol

Ibuprofen

Fluid therapy

Anti-viral: Ribavirin, Quinacrine & Amantadine

Specialists to consult

General physician

Pediatrician

Infectious disease specialist

Symptoms Of Hand, Foot, and Mouth Disease

Hand, foot, and mouth disease (HFMD) is mostly a childhood illness though it can affect adults also. The symptoms are usually the same in children and adults. But, the disease can be worse in infants and children due to their inability to express their symptoms.

The disease is mild, resembling a common cold in the initial days of infection. In most cases, symptoms last for 7-10 days.

As the name suggests, symptoms appear on the hand, foot and mouth in the form of sores, blisters and rashes. The typical symptoms of HFMD can be broadly classified as:

Fever and flu-like symptoms

These symptoms start appearing after 3 to 5 days of catching the virus. The symptoms include:

High fever

Sore throat

Tiredness

Loss of appetite

Mouth ulcers

Children suffering from HFMD usually develop mouth sores after a few days of infection. Ulcers appear in the mouth and tongue which gradually progress into painful blisters. This makes swallowing difficult which can be identified by the following signs in children:

Not eating even his/her favorite food

Drooling (drooping saliva from mouth more than usual)

Crying while eating

Interest only in having cold fluids

Skin rashes

A child having HFMD gets rashes on the skin which look like slightly raised red spots. The spots can also look pink or darker skin depending upon the skin tone.

The most common sites of rashes are hands and feet, although they can also appear on the buttocks, legs, and arms.

In most of the cases, rashes do not cause itching. Sometimes, rashes develop into blisters which are filled with fluid containing viruses.

Other symptoms

A child with HFMD might also experience

Muscles aches

Irritability

Pain in abdomen

Diarrhea

Headache

Runny nose

Peeling of the skin

Tenderness or pain while touching the palms of the hands and soles of the feet

Vomiting

Here are some important things to remember when your child has one or multiple episodes of vomiting.

Read To Know

Signs of dehydration

The child suffering from HFMD can be dehydrated due to inability to drink anything which can be noticed as:

Dry mouth

Lack of tears

Sunken eyes

Dark urine

Decrease in the frequency of urination

No wet diapers for 4-6 hours (infants and toddlers)

Did you know?

The skin of newborns, unlike adults, is thin and has less hair and sweat glands. They are exposed to numerous germs, mechanical trauma and weather changes. Because of which, there is an increased risk of skin problems.Here’s all about common skin problems commonly seen in kids and what parents can do about it.

Tap To Read

Causes Of Hand, Foot, and Mouth Disease

HFMD is a viral infection that is caused by enterovirus family which includes mainly three viruses:

Coxsackievirus A16: It is the most common cause of HFMD.

Coxsackievirus A6: It is associated with the severe form of infection.

Enterovirus 71 (EV-A71): It is rarely found but is associated with severe diseases such as encephalitis

Transmission

The disease is highly contagious and can spread from one person to another through infected saliva, nasal secretions, fluid from blisters, and feces.

Usually, the chances of spreading the infection are high during the first 5 days of onset of symptoms. However, in some cases, infection can be spread even in the absence of symptoms or a little later due to the presence of virus in the stool for 4 to 8 weeks.

Anyone can get the disease by:

Contact with respiratory secretions during coughing or sneezing

Making close contact with the infected person such as during kissing, hugging, etc.

Touching an infected person

Sharing contaminated objects with the infected person

Touching an infected person’s feces such as during changing diapers

Touching the contaminated objects and surfaces such as doorknobs and toys

Note: In rare cases, the virus of HFMD can also be transmitted by swallowing water in swimming pools. This can happen, if the water is contaminated with feces of the infected person.

Risk Factors For Hand, Foot, and Mouth Disease

Age

HFMD majorly affects infants and young children. Children less than 5 years are more prone to be infected by HFMD.

Gender

Some studies suggest that males are at higher risk of catching HFMD infection.

Poor hygiene

Since viruses that cause HFMD can live on surfaces and objects for some time, inadequate cleanliness increases the risk of HFMD.

High frequency of social contacts

Children who are regularly exposed to crowded places had greater risk of contracting the disease. These include school going children, children who play in the parks, children at the child-care center etc.

Sharing toys with other children

The toys can be contaminated by sharing with other children. This increases the risk of HFMD.

Residence in rural areas

Some studies suggest that children living in rural areas are more likely to catch HFMD infection due to more exposure to people.

Improper hand washing

The people who do not have a habit of washing their hands especially before meals and after using the toilet are at high risk of HFMD.

Note: HFMD is mild and self limiting. However, in some cases patients can develop severe neurological complications.

The risk factors that predisposes the person to severe HFMD include:

Infection in children of age less than 3 years

Fever or more than 3 days

Body temperature greater than 39.0°C

Vomiting

Increase neutrophil count

Respiratory rate greater than 24/minute

Trembling of limbs

Dyspnea (difficulty in breathing)

Rashes on hips

Lethargy

Convulsions

EV71 infection

Low birth weight

Did you know?

By just rubbing the soap between your palms and washing it off does not mean that you practice hand hygiene. Germs tend to hide under fingernails and in the pockets between fingers, so you should scrub these areas vigorously every time you wash your hands. Here are the common mistakes you make while washing hands.

Click To Know

Diagnosis Of Hand,Foot, and Mouth Disease

The diagnosis of hand, foot, and mouth disease is usually simple. In the majority of cases, the diagnosis is made through examining the appearance of rashes, mouth ulcers, and blisters. The patient’s age and other clinical symptoms are also considered before confirming the infection. In some cases, samples of throat and feces are also examined.

Other tests that are rarely used include:

Biopsy: In this, the tissue taken from the vesicles of blisters is examined through light microscopy. It is done to differentiate hand, foot, and mouth disease from varicella zoster virus and herpes simplex virus.

Serological testing: Generally, this test is performed to confirm any viral infection through detecting antibodies. But, this test is not sensitive to make a diagnosis of HFMD virus. However, the test is used to monitor recovery through checking IgG levels.

Polymerase chain reaction: It is used to confirm the diagnosis of coxsackievirus.

Did you know?

Unlike other viral infections that are more prevalent in the winter season, HFMD is most commonly seen in summers. This is because the family of enteroviruses are known to develop during summertime. Here are 4 basic things to keep in mind to ensure safety for your child during summers.

Know Now

Specialist To Visit

Although HFMD is usually a mild disease, any symptom should not be ignored as it can lead to several complications.

Consult the doctor if your child:

Has symptoms which are not improving even after 7 days

Is dehydrated due to inability to drink normally

Has pus around the sores

Finds it very difficult to wake up

Is not eating anything

Is always feeling irritated

Has a very high fever

Here are the things that can be done, if your child gets a fever.

Read To Know!

You can consult the following doctors for proper diagnosis:

General physician

Pediatrician

Infectious disease specialist

Consult India’s best doctors online with a single click.

Consult Now

Prevention Of Hand, Foot, and Mouth Disease

There is no vaccine for hand, foot, and mouth disease but it can be easily prevented by following some basic steps which include:

Hand washing

Since, HFMD is a contagious disease that can spread through touching, hand washing serves the best protection. Hands should be washed often with soap and water and children should be educated about the importance of hand hygiene.

In case, soap and water are not available such as during traveling, alcohol based sanitizer can be used. Make sure to wash hands after:

Changing diapers

Using the toilet

Touching nose

Coughing and sneezing

Taking care of sick people

Cleaning and disinfection

The virus causing HFMD can live on surfaces for some time. It is advised to clean frequently touched surfaces and objects regularly such as toys, doorknobs, sippers, etc. Make sure to wash the soiled bedding and clothes with hot soap water.

Avoid touching eyes, nose and mouth

The infection can spread by touching eyes, nose, and mouth with contaminated hands. To reduce this, avoid touching eyes, nose, and mouth with unwashed hands.

Avoid close contact with infected person

The disease can spread through close contact with the infected person especially during kissing, hugging, etc.

Avoid sharing of articles

Since the virus can live on objects for a few days, avoid sharing toys, towels, or household items such as cups and utensils of your kid with anyone. The regular cleaning of the shared toys and books should be practiced in childcare centers.

Stay off school or nursery

The spread of infection can be prevented by keeping kids home for a few days, especially if they have symptoms such as fever, blisters, or mouth ulcers.

Use tissues

Try not to cough or sneeze in the open air, always use tissue while doing the same. Make sure to dispose of the used tissues immediately to reduce the risk of infection.

Note: Breastfeeding does not impact the incidence of hand-foot-and-mouth disease. Mothers do not need to stop breastfeeding to prevent transmission of disease.

Treatment Of Hand, Foot, and Mouth Disease

There is no specific treatment for HFMD and children usually recover within 7 to 10 days on their own. As HFMD is a viral disease, antibiotics are not effective in curing the infection. The measures are taken to reduce symptoms and to prevent dehydration.

There are various studies that are going on to develop antiviral treatment against enterovirus 71 induced hand, foot, and mouth disease because of its neurological complications.

The following treatment regimen is used to treat HFMD:

Over-the-counter (OTC) medications such as paracetamol and ibuprofen are used to treat fever and pain caused by mouth sores.

The child does not want to have much fluids due to painful sores so proper hydration of the child should be maintained by making him/her to drink enough fluids.

A mixture of liquid ibuprofen and diphenhydramine can be used to gargle to reduce the pain caused by the ulcers.

Ribavirin, quinacrine, and amantadine are the off-label antiviral medications that are used in severe cases of enterovirus 71.

As per some studies, an antiviral drug, acyclovir showed the reduction in fever and skin changes within 24 hours of administration.

In case of severe dehydration and neurological or cardiopulmonary complications, hospitalization is required.

Note: Aspirin is not recommended in children since it is linked with a life threatning disorder called Reye’s syndrome which is a rare and potentially fatal pediatric illness. The syndrome causes serious liver and brain damage. The disease typically presents as vomiting and confusion which can even lead to coma and death.

Tips to soothe sore throat

Throat lozenges and sprays that do not contain benzocaine can be used for children over 4 years of age.

Liquid antacid can be used for rinsing after meals.

Garling with a mixture of warm water and salt is very effective in children over 6 years of age who are able to gargle without swallowing.

Home-care For Hand, Foot, and Mouth Disease

Although the disease is mild and usually goes away on its own, the symptoms such as painful mouth sores make it very difficult for the child to eat and drink. This makes the child even more irritable and fussy.

The parents of the sick child should understand that the child will not be able to eat much for at least 7 to 10 days. It is advised that parents should shift the child from solid to soft liquids.

The following measures may help in faster recovery of the child:

Diet

Foods to include- The child should be encouraged to have fluids such as water, milk, coconut water to prevent dehydration. The cold and soft foods such as ice cream, yogurt, smoothies, shakes, mashed potatoes, oatmeal, eggs, and popsicles should be included in the diet as it will help in numbing the area. This will not only serve as a welcome treat for kids but also soothes the ulcers.

Foods to avoid- The acidic food items (citrus juices, lemonade, sodas and tomato sauces) can irritate the mouth sores and hence should be avoided. It is recommended to avoid hot drinks and spicy foods as they can aggravate the pain caused by mouth sores.

Cleaning of blisters

The blisters that usually appear on hands and feet should be kept clean through regular washing with soap and water. In case, the blisters rupture, they should be cleaned with an antibiotic ointment to prevent any infection.

Avoidance of self medication

There are various OTC medications that can harm infants and young children. Avoid giving any medication without the paeditrician’s consent to your child.

Education

The child should be taught not to touch the rash and mouth ulcers and to sneeze or cough into a tissue or on his/her sleeve. Education of hand hygiene is equally important.

Staying at home

The day care centers and schools of the child should be informed that he/she is diagnosed with the HFMD. It is important to inform staff and parents so that they can watch symptoms in other children. The child should be kept at home until the full recovery of mouth sores and open blisters.

Breastfeeding

If your child is under one year old, continue to give either breastmilk, formula, or both.

You won’t have milk immediately after delivery

Don’t worry if you didn’t start milking immediately after delivery. It usually takes 3-4 days for a normal flow of milk to start if you are a first-time mum. If your milk supply doesn’t start by day three (or longer) then it is better to speak to a lactation consultant or your doctor. Know more such interesting facts about breastfeeding.

Read To Know

Complications Of Hand, Foot, and Mouth Disease

The disease is acute with mild symptoms. Most of the patients of HFMD recover within a few weeks and the infection rarely recurs or persists. The complications from hand, foot, and mouth disease are rare and include:

Dehydration

It is the most common complication associated with HFMD. Children often get dehydrated due to difficulty in swallowing as a result of painful mouth ulcers. Hence, it has to be made sure to maintain optimum hydration.

Here are some basic tips that can be done, if you are feeling dehydrated.

Click Now

Persistent stomatitis

It refers to the inflammation of the mucous membrane of the mouth. It is often associated with painful ulcers that limit intake of food.

Aseptic (viral) meningitis

It refers to the inflammation of the layers of the brain due to viral infection. It is more common with enterovirus 71 infection. It is often characterized by fever, headache, stiff neck, or back pain.

Fingernail and toenail loss

In very severe cases, people may start losing fingernail or toenail which is usually noticed after 2 months of having an infection. The nail usually grows back on its own.

In severe cases of infection, HFMD can also cause:

Widespread rash

Enteritis (Infection of the gut)

Pneumonia

Myocarditis (inflammation of the muscle of the heart)

Pulmonary edema (accumulation of fluids in the lungs)

Cerebral ataxia (sudden, uncoordinated muscle movement due to injury to the brain)

Encephalitis (inflammation of the brain)

Guillain-Barre syndrome (a rare disorder in which your body's immune system attacks your nerves)

Intracranial hypertension (build-up of pressure around the brain)

Paralysis

Hand, Foot, and Mouth Disease in Pregnancy

Although there is no potential risk to the baby and mother, the medical history of the patient can affect the situation. Pregnant women should contact the doctor as in rare cases, HFMD can lead to misscarriage during the first trimester due to persistent high temperature.

Note: HFMD can affect adults also. But, most infected adults do not seem to show any symptoms, they are, however, still contagious and can spread the virus to another person.

Alternative Therapies For Hand, Foot, and Mouth Disease

Home remedies

1. Coconut water: Coconut water acts as a coolant and contains vitamins, minerals, electrolytes and antioxidants. It prevents dehydration and also helps in reducing the mouth pain.

2. Oil pulling: It is an old method of maintaining good oral hygiene and involves swishing any oil such as sesame or coconut in the mouth for 5 to 10 minutes. It helps in soothing the mouth sores.

3. Cod liver oil: It serves as a very good remedy for HFMD due to its antimicrobial and immune-boosting properties. It can be given in the form of capsules available in the market or by mixing it in oil or yogurt.

4. Echinacea: It is a herb that is known to reduce fever, cold, and infections. It can be prepared by boiling its leaves in water and adding honey to it.

5. Lavender oil: It is known for its antiviral properties. It also has a calming and relaxing effect which aids in sleep. A few drops of this oil in the bath water help your child to sleep better.

6. Liquorice root: Liquorice root can help to soothe blisters by forming a thin layer of mucous inside the throat and esophagus. It can be taken in the form of tea prepared by boiling some liquorice roots in water.

7. Ginger: Ginger is also one of the effective home remedies as it has antiviral properties. It can be prepared by boiling chopped ginger in water. Make sure to cool it before giving it to your child.

8.Coconut oil: Coconut oil can be applied on the rashes and blisters for a soothing and healing effect.

9. Neem: It has antimicrobial properties and is mostly used topically to treat viral infections. Neem oil can be applied on the rashes. It can also be used with coconut oil and lavender oil.

10. Aloe-vera: The gel of aloe vera can be applied on the rashes and blisters for soothing relief.

Frequently Asked Questions

Why is there a rise in Hand, foot, and mouth disease this year (2022)?

Are Hand, foot, and mouth disease and foot and mouth disease (FMD) same?

How is hand, foot and mouth disease different from chickenpox?

Can adults catch hand, foot, and mouth disease from their children?

How long should a child with hand, foot, and mouth disease stay out of daycare/school?

What are the stages of HFMD?

Can HFMD happen twice?

Is HFMD itchy?

How long is HFMD contagious?

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Headache

Overview

We all have headaches every now and then. Most of us usually tend to ignore them until they start interfering with our daily activities. Although, headache is a symptom itself, the other symptoms of headache are not just restricted to dull or sharp pain in the forehead region, but differ depending on the type of headache. There can be a lot of reasons you might be having a headache such as sinus infections, colds, stress, dehydration, vision problems, hormonal issues, migraine, head injury, and central nervous system (CNS) infections.

The actual cause of headache can be diagnosed with methods like CT scan, MRI, or certain blood tests. Your doctor will start the medication depending on the cause, type, and severity of your headaches. However, it is also important to bring some lifestyle changes such as proper diet, sleep, and relaxation techniques, if you suffer from recurrent headaches.

Key Facts

Usually seen in

Adults between 20 to 40 years of age

Gender affected

Both men and women

Body part(s) involved

Brain

Eyes

Neck

Blood vessels

Nerves

Prevalence

Worldwide: 50% (2016)

Mimicking Conditions

Acute sinusitis

Otitis media or externa

Hydrocephalus

Temporomandibular joint syndrome

Wisdom tooth impaction

Dental cavities

Cervical and paraspinal radiculopathies

Medication overuse headache

Brain malignancy

Viral infection

Vascular malformations

Pituitary tumors

Necessary health tests/imaging

Magnetic resonance imaging (MRI)

Positron emission tomography (PET scan)

Erythrocyte sedimentation rate (ESR)

Treatment

Oral analgesics: Ibuprofen & Paracetamol

Antiemetics: Domperidone

Combination analgesics

Triptans: Sumatriptan

Ditans: Lasmiditan

Single pulse transcranial magnetic stimulation (STMS)

Vagal nerve stimulation (VNS)

Behavioral therapy

Physical therapy

See All

Symptoms Of Headache

The symptoms of headache are not just restricted to dull or sharp pain in the forehead region but differ depending on the type of headache. Some of the common symptoms associated with different headaches are:

Dull pain around the forehead, neck, and back region. These symptoms are more common in tension-type headaches.

Severe and throbbing pain usually on one or both sides of the head, along with pain in the eye, temple, or back of the head. Sensitivity to light, sound, and aura is common in migraine types of headaches.

Constant pain that occurs in the sinus regions such as the bridge of the nose or the cheeks along with the feeling of fullness in the sinus is common in sinus headaches.

Types of headaches

There are more than 150 types of headaches. Headaches can be broadly classified as primary and secondary.

A. Primary headaches

A primary headache means the headache itself is the main medical problem, and not a symptom of an underlying illness. A primary headache is thought to be caused by overactivity of or problems with pain-sensitive structures in your head. The most common types by a very long way are tension headaches and migraines. Here is a rundown on some of the primary headaches:

1. Tension headaches

It is the most common type of headache.This headache presents as mild to moderate pressure or tightness on both sides of the head, where the patient complains as if a tight band or rope has been tied on the head. Sometimes, the pain might feel spreading into or from the neck. Pain is not throbbing in nature.

Some tension headaches are triggered by exhaustion, stress, or disorders involving the muscles or joints of the neck or jaw. They can be troublesome and tiring, but they usually do not disturb sleep. Most people can continue working with a tension headache. However, the headache might worsen during activities like climbing up stairs or bending over.

2. Migraine

Migraine pain is an intense pulsing from deep within the head. This pain can last for days. The headache significantly limits the ability to carry out daily chores. Migraine is throbbing and is usually one-sided.

Although a migraine can start without any warning, it is often set off by a trigger. The triggers may vary from person to person. The most common ones are fatigue, stress, lack of sleep, bright flickering lights, loud noises and dietary triggers like red wine, chocolate, aged cheese or an increase or decrease in caffeine. Nausea and vomiting also usually occur along with headache. Migraine is often life-long, and characterized by recurring attacks.

3. Cluster headaches

Cluster headaches are relatively uncommon but a severe type of primary headache. It presents like a brief but severe burning, throbbing or constant headache. This headache gets its name because the pain tends to come in clusters, with one to eight headaches a day for one to three months every year or two, often at the same time of year. They disappear completely or go into remission in between for months to years, only to reoccur later.

Patients often describe them as unbearable which greatly interferes with their normal routine. Cluster headaches occur around or behind one eye or on one side of the face at a time. Sometimes, swelling, redness, flushing, sweating, nasal congestion, and eye tearing can also occur on the side that is affected by the headache.

4. New daily persistent headaches

New daily persistent headaches usually start suddenly in a person who does not have a past history of headaches. They persist on a daily basis and can last for more than three months. The pain is moderate to severe and can mimic chronic tension-type headache or chronic migraine.

5. Exertional headaches

Exertion headaches happen soon after periods of intense physical activity. Weight lifting, running, rowing, tennis, swimming, and sexual intercourse are common triggers for an exertion headache. It is thought that these activities cause increased blood flow to the head, which can lead to a throbbing headache on both sides of your head. This type of headache usually resolves within a few minutes or several hours.

B. Secondary headaches

Secondary headaches are caused by an underlying medical condition. Examples of secondary headache causes include:

1. Sinus headaches

Sinus headaches are the result of sinusitis or sinus infection, which causes congestion and inflammation in the sinuses which are air-filled spaces in the skull. The pain from these headaches is deep and constant in nature and often focused around the cheekbones, the bridge of the nose or forehead.

2. Hormone headaches

Women commonly experience headaches that are linked to hormonal fluctuations. Menstruation, birth control pills, hormone replacement therapies, and pregnancy can affect the estrogen levels, which can cause a headache. When headache occurs two days before periods or in the first 3 days after it starts, they are known as menstrual migraines.

3. Hypertension headaches

High blood pressure can cause you to have a headache. This kind of headache signals an emergency. This occurs when your blood pressure becomes dangerously high. You may also experience changes in vision, numbness or tingling, nosebleeds, chest pain, or shortness of breath.

4. Post-traumatic headaches

Post-traumatic headaches can develop after any type of head injury. These headaches feel like migraine or tension-type headaches, and usually, last up to 6 to 12 months after your injury occurs. They can become chronic in some cases.

5. Medication overuse headaches

Medication overuse headache (medication induced headache) or rebound headache is caused by long term and regular intake of painkillers usually taken to get relief from headache. This headache usually occurs every day and early morning and improves with painkillers but returns as the effect of medication wears off. Medication overuse headaches usually stop on cessation of painkillers. It is difficult in the short term, but doctors can help recover from medication overuse headaches for a long term relief.

Some secondary headaches are not very common but their recognition is extremely important as timely treatment can be life-saving and can help avoid serious repercussions. They may occur due to one or more of the following reasons:

Idiopathic intracranial hypertension

Subarachnoid hemorrhage

Giant-cell arteritis

Cerebral venous thrombosis

Intracranial tumors

Infections such as meningitis or encephalitis

Did you know?

Having a headache caused due to changes in weather or experiencing a throbbing pain on one side of the head would most probably indicate a migraine headache. If you are still confused about how to know if a headache is a migraine headache or a tension headache, then here is a detailed explanation about how a migraine headache is different from a tension headache.

Click To Know!

Causes Of Headache

Headache usually occurs when the muscles of the head and neck region tighten. This may occur in different types of headaches such as tension headaches and migraines.

There are various causes and triggers of different types of headaches:

1. Tension headache

A tension headache can be caused by overuse of alcohol, caffeine, or caffeine withdrawal. It can also occur due to fluctuating hormones in women, straining of the eyes, or any injury to the head or neck. Poor posture can also trigger tension-type headaches.

2. Cluster headache

The exact cause of cluster headaches is unknown. However, genetic and environmental factors can cause cluster headaches in some individuals. A cluster headache can be triggered by factors such as overuse of alcohol, smoking, high altitude, and overexertion.

3. Migraine headache

Migraine refers to a neurological condition where headache may be associated with other symptoms such as aura. The exact cause of migraine is not known, but some studies show that migraine is caused by serotonin along with pathways that cause narrowing of blood vessels and reduced blood flow, followed by widening of these arteries. Migraines can be triggered by certain environmental conditions like cold weather, processed foods, bright light, and sound.

4. Sinus headache

Sinus headaches are caused by sinusitis, which is the infection or inflammation of the sinus cavities. This can be triggered by change in weather or allergies.

5. Other causes

Apart from the above mentioned causes, some other causes of headache can be serious and potentially life-threatening such as:

Head or brain injury

Hypoglycemia (low blood sugar)

Intracranial bleeding (bleeding inside the skull)

Brain aneurysm

Brain tumor

Concussion

Meningitis

Stroke

Temporal arteritis

Trigeminal neuralgia

Risk Factors Of Headaches

You are at risk of headaches, if you:

Are under a lot of stress

Uncorrected nearsightedness or farsightedness (also known as visual aberrations/disorders)

Uncontrolled hypertension

Are sleeping irregularly or are lacking proper sleep

Are fatigued

Have hormonal changes (estrogen levels for women)

Take some prescription medications such as nitroglycerin & estrogen

Have suddenly stopped taking caffeinated beverages

Poor posture can also cause frequent headaches

Slouching causes pressure to build up in the neck and shoulder muscles, which in turn affects the head muscles and leads to a headache. Always ensure your screen is at your eye level and avoid bending too low when using a phone to text. Moreover, looking at a screen for maximum time in a day can strain the eyes, triggering a headache. Limit your screen time for overall health. Here’s more surprising causes of headache.

Click To Know!

Diagnosis Of Headache

Headache is not a disease in itself but is a condition arising due to various underlying pathologies. Evaluation of a headache usually begins with taking your medical history and performing some basic tests such as:

Complete blood count (CBC): CBC test is carried out to look out for an infection that could be causing your headaches.

Erthrocyte sedimentation ratio (ESR): ESR test or erythrocyte sedimentation rate is done, if giant cell arteritis (GCA), which is an inflammatory disease of large blood vessels, as well as other systemic disorders, are suspected.

Computed tomography (CT) scan: CT scan may also be chosen in some cases of headaches. However, due to the radiation, MRI is the preferred option.

Magnetic resonance imaging (MRI): MRI is often used to identify any structural abnormalities in the brain.

Cerebrospinal fluid study: Lumbar puncture (LP) and cerebrospinal fluid test may be advised in patients who have headache along with fever, meningeal signs, focal neurological deficits, or suspicion of intracranial hypertension.

Celebs affected

Sunil Shetty

Bollywood actor Sunil Shetty suffered from migraine for almost one and a half years. Yoga helped him immensely to get rid of the migraine completely.

Salman Khan

In 2011, Bollywood superstar Salman Khan revealed that he was suffering from trigeminal neuralgia, a rare facial nerve disorder, which causes extreme pain in the face and head.

Serena Williams

Tennis star Serena Williams is open about struggling with migraines and how the invisible pain has affected her life and career. She has dealt with them with a lot of courage and right treatment protocols.

Hugh Jackman

Hollywood celebrity Hugh Jackman, who is well known for his role in the X-Men movie series had revealed that he missed an important moment of his life due to migraine. This was when Prime Minister Tony Blair came backstage to meet the cast but Jackman could not meet him.

Prevention Of Headache

To prevent the occurence of headaches, one must identify the triggers and try to avoid them.

1. Steer clear of stress

Stress can cause muscle tightening in the neck & shoulder region. This can lead to tension headaches. Such a headache feels like a tight band. It usually begins in the neck and back and works its way up to the head. Stress is also known to trigger a migraine headache. Therefore, it is advised to stay away from stress to prevent headaches.

2. Stay away from foods that trigger headaches

Eating certain foods often triggers a migraine headache. Migraines are usually triggered by foods such as bananas, cheese, chocolate, citrus fruits, and dairy products. Knowing which foods trigger your headache and staying away from them is the best bet to keep headaches away.

3. Limit your alcohol intake

Alcohol is a common cause of headaches such as a migraine headache or a cluster headache. Limit your alcohol intake to prevent headaches.

4. Environment

Headaches such as cluster headache migraine can be triggered by factors, such as smoke, humidity, bright light, intense scents, or cold weather. Thus, it is advised to protect yourself from environmental triggers that could aggravate your headache.

5. Be aware of caffeine withdrawal

If you normally consume caffeine in coffee or tea, stopping this intake abruptly can trigger a migraine. This is due to the constriction of blood vessels without caffeine, which is the main reason for the pain associated with migraines. Thus, you must not abruptly cut down your caffeine intake; if you are prone to headaches.

6. Do not cut down on your sleep

A lack of sleep is associated with migraines and tension headaches.

Specialist To Visit

You should go to a doctor if:

You get headaches too often or for a long period of time (chronic headache)

Your headaches are severe

Your headache fails to subside with home care

Your headache interferes with normal activities

You get sudden headache that worsens in no time

Your headaches are triggered by exertion, coughing, bending, or strenuous activity.

If you need to take a pain reliever every day or almost every day for your headaches.

You have headache following a head injury

Do consult a doctor, if you have other signs and symptoms along with headache such as:

Fever and stiff neck

Seizures, confusion or blackouts

Weakness or numbness

Difficulty in vision

Sudden onset headache

Vomiting that precedes a headache

Continous worsening of a headache

Headache that disturbs sleep/routine activities

The treatment of your headache depends on what is causing it. While an occasional headache does not require medical help other than over-the-counter medicines and self care, severe and recurrent headaches require medical attention. You will be advised to get a physical or other examination done to find the actual cause of your headache. There are various specialists who can treat your headaches such as:

General physician

Neurologist

ENT specialist

Ophthalmologist

Did you know?

A headache could be a sign of an underlying condition that could range from a migraine to a brain tumor. Hence, it is wise to consult your doctor right away if it comes on suddenly or if it happens more frequently to rule out any disease.

Consult Now!

Treatment Of Headache

There are are various treatment approaches to headache such as:

1. Oral analgesics: Analgesics such as ibuprofen and paracetamol are generally the first line treatment for headaches. Oral analgesics such as non-steroidal anti-inflammatory drugs (NSAIDS) are prescribed generally for cluster headaches and tension headaches.

2. Antiemetics: Antiemetics such as domperidone may also be prescribed in migraine, where headache is accompanied with nausea & vomiting.

3. Combination analgesics: In some cases of severe headache, analgesics are given adjuvantly with caffeine, barbiturates, and opiates. This therapy is usually short & can only be taken under medical supervision.

4. Triptans: Triptans such as sumatriptan give long-term relief from migraine headaches. These medicines not only treat migraine but are used as preventive therapy for migraine headaches.

5. Ditans: Lasmiditan is a newer drug used in the patients with chronic migraine. Its action is similar to triptans but the effect is more specific to the CNS.

6. Single pulse transcranial magnetic stimulation (STMS) & vagal nerve stimulation (VNS): These procedures are usually recommended for patients who are non-responsive to conventional therapy. These are newer treatment modalities approved by the FDA & used with varying success in the treatment of migraine attacks in adults. In this, electromagnetic probes are placed externally over the head which helps to regulate the neural pathways in the brain to relieve headache.

7. Behavioral therapy: Behavioral therapy such as cognitive behavioral therapy, relaxation techniques such as meditation helps in reducing the muscle tension, which is common in tension headache.

8. Physical therapy: Physical therapy for headache includes improving posture, hot and cold packs, exercise programs, and electrical stimulation.

Note: If your headache is due to migraine, then medicines to prevent migraine are recommended. These include beta-blockers like propranolol, antidepressants like amitriptyline, antiepileptics like topiramate, calcium channel blockers like flunarizine and CGRP antagonists. Here’s more about migraine and its treatment.

Click To Read!

Home-care For Headache

Headaches can be annoying and can disrupt your daily functioning. Here are some self-care tips that can help you get relief from headaches.

Don’t forget the basics

If you are prone to headaches then you should be extra careful about taking your meals on time, taking proper sleep, and staying away from foods that aggravate your headaches.

Relaxation techniques to your rescue

Relaxation techniques such as deep breathing, yoga, and meditation can help you greatly in not only relieving your headaches but preventing them as well. Tension headaches can be relieved easily with hot or cold packs over the shoulders and neck. You can also go for some stretching exercises to get relief from headaches.

Try acupressure

Acupressure is an ancient science that could help in relieving headaches, especially if it is tension headaches. In this type of headache, acupressure points are pressed, which helps in releasing tension and promotes the proper circulation of blood.

Go natural

It has been found that certain herbs such as butterbur & peppermint oil can help in relieving headaches. Apart from the herbs, certain minerals and vitamins such as magnesium, coenzyme Q10, and Vitamin B12 can help in getting relief from your annoying headaches.

Here’s more quick fixes for migraine and ways to get rid of pain!

Complications Of Headache

Headaches are common and may occur every now and then. However, ignoring headaches can sometimes do more harm than good as it may be a result of some underlying pathology. Headaches should not be ignored for long. Not only do they start affecting normal functioning and hamper your productivity but also may lead to complications such as severe neurologic disability. Therefore, it is important that secondary causes of headaches are found out and the underlying pathology is rightly managed.

Here are some of the conditions where headaches should not be ignored. These include:

Headaches that are unusually severe in intensity

Headaches that develop after the age of 50

A drastic change in the headache pattern

Headaches that increase with movement or coughing & sneezing

Headaches that worsen with time

Headaches that are accompanied with changes in personality or functioning

Headaches that are followed by fever, confusion, stiffness in joints, decreased alertness, or memory

Headaches that are associated with neurological symptoms such as visual disturbances, slurring of speech, weakness, or seizures

Headaches that are accompanied by a painful red eye

Headaches in which there is pain and tenderness near the temple region

Headaches that start occurring after a head injury

Headaches that affect your daily functioning

Headaches in patients who have impaired immune systems such as cancer patients

Alternative Therapies For Headache

Though there are various treatment options available for headaches, they fail to be efficacious in certain patients or pose certain side effects. Thus, many patients seek complementary and alternative medication for headaches, such as:

1. Chiropractic treatment

Chiropractic treatment is considered useful for migraines. In this, spinal manipulation and interventions including massage are recommended for management of patients suffering from episodic or chronic migraine. Low-load craniocervical mobilization may be helpful in the management of patients with episodic or chronic tension-type headaches in the long run. For cervicogenic headache, spinal manipulation is the choice of chiropractic treatment.

2. Homeopathy

Some homeopathic remedies may have beneficial effects in patients suffering from chronic tension type headaches.

3. Home remedies

While you might find it easier to pop a pill every time you get a headache, trying a few effective remedies can prove to be a winner in relieving headache without side effects of medications. Here are some simple and effective natural remedies to get rid of headache instantly:

Ginger tea

Warm lemon water or tea

Black pepper soup or rasam

Cinnamon paste

Steam inhalation with essential oils

Here’s detailed information on how to use these home remedies to relieve headache.

Click To Know!

Acupressure

Acupressure is an ancient science that could help in relieving headaches, especially if it is tension headaches. In this type of headache, acupressure points are pressed, which helps in releasing tension and promotes the proper circulation of blood.

Psychological treatment

Behavioral therapy such as cognitive behavioral therapy (CBT) & relaxation techniques such as meditation help in reducing the muscle tension, which is common in tension headaches.

Living With Headache

Headache caused due to stress or tension seems to get better with lifestyle remedies and medication. However, if you suffer from migraine headaches, it is important to keep a tab on its triggers and get medical help to prevent them. To prevent a headache, it is important to know the cause and treat it. Here are a few tips for people who experience headache on a regular basis:

1. Keep a headache calendar as it helps you to keep a tab on what you ate or what you did that might have possibly triggered a headache.

2. Stick to a regular sleep schedule as sleep hygiene habits and maintaining circadian rhythm can go a long way in giving respite from headaches. Go to bed early and get up early, almost at the same time every day, including weekends. Avoid daytime napping and stimulants like tea, coffee or alcohol close to bedtime. Turn off all electronic devices at least an hour before going to bed. Try to keep the room temperature cool and include vitamins like melatonin and magnesium (after consultation with your doctor) for a better and sound sleep.

3. Try herbal drinks such as ginger tea or lemon tea which are packed with antioxidants and reduce inflammation, thereby relieving headaches.

4. Stay away from the common triggers of headache such as alcohol, caffeine, skipping meals, eating cheese, or eating too little.

5. Try relaxation techniques such as meditation, acupressure, and yoga as these can help you to manage stress and relieve headache-induced by stress.

6. Do not always pop a painkiller as the right medicine for headache depends on the type of headache, how often you get them and how severe it is.

7. Consult a doctor if you have other signs and symptoms along with a headache. These may include fever and stiff neck, seizures, confusion or blackouts, difficulty in vision, weakness, or numbness.

Headache can be due to stress or it can be due to an underlying symptom of brain tumor. It is not always possible to know the type of headache based on the symptoms you experience. This is when your doctor might advise investigations like CT-scan or imaging techniques to know the root cause of it and treat the condition. Hence, do consult your doctor, if you have frequent headaches and not self-medicate always.

Frequently Asked Questions

Are headaches hereditary?

What is a thunderclap headache?

How can I treat a headache that spreads to behind the eyes?

How to get relief from a headache in winter?

What to do if a headache is accompanied with lightheadedness?

What to do if a headache is causing sleeplessness?

When to see a doctor for your headache?

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Head lice

Also known as Pediculus humanus capitis

Overview

Head lice are tiny insects that live as parasites in the hair of the scalp. They are tiny, six legged wingless insects that exclusively feed on human blood. As normally believed, lice infestation is not a sign of being dirty or sick and there are no long-term health problems associated with it. The major concern of getting lice is the constant irritation and scratching of the head and also the fear of spreading it to others.

Although lice are commonly found in school going kids, it can also affect adults. One can choose to manage lice by finding them manually with hands or trying products which are available to tackle them. Choose a one that fits your needs from the options available such as soaps, creams, shampoos, combing and medicines (doctors may prescribe pills in some cases). Dealing with head lice can be frustrating, but be patient. Follow the treatments and prevention tips religiously as advised by your doctor for lice free hair.

Key Facts

Usually seen in

Common in children between 3 to 12 years of age

Gender affected

Both males and females but more common in females

Body part(s) involved

Scalp

Hair

Mimicking Conditions

Dandruff

Seborrhea

Superficial fungal infection

Eczema

Folliculitis

Scabies

Impetigo

Treatment

Pyrethrin

Permethrin

Benzyl alcohol lotion 5%

Ivermectin lotion 0.5%

Malathion lotion 0.5%

Spinosad 0.9% topical suspension

Lindane shampoo 1%

Specialists to consult

General physician

Pediatrician

Dermatologist

Causes

A head louse (plural is lice) is a tan or grayish, tiny six-legged insect about the size of a flax seed. It clings to the scalp and hair and feeds on human blood.

The lice eggs or nits hatch into nymphs, which become full grown lice. Adult lice mate in order to produce more nits. The three stages of life cycle are explained in detail:

Lice Eggs or Nits

Nits are firmly attached to the hair shaft by a glue-like sticky substance produced by a female louse. They are usually yellow or white in color, oval in shape and 2-3 mm in length. Nits take about six to nine days to hatch. They are not easily visible and are often confused with dandruff.

Nymphs

A nit hatches into a small louse called a nymph. The nymphs require human blood for survival and mature into adults in about seven to ten days after hatching.

Adult lice

Adults have a life of about one month. The female lays 6 to 10 eggs a day and are usually larger than males. If the louse falls off a person, and does not get human blood, it dies within a day or two.

Symptoms Of Head Lice

In most cases, head lice are not immediately noticed after infestation. The eggs laid by head lice are called nits. It is when you experience intense itching on the head and appearance of nits, does it indicate head lice. Some of the common signs and symptoms of head lice are:

Itching or the urge to scratch

Tingling or a crawling sensation like feeling of something moving in the hair

Difficulty in sleeping due to itching as lice are active at night

Red sores on the head, neck, and shoulders (caused by scratching)

Swollen lymph nodes

Head lice and their eggs are most frequently seen by looking closely near the hair root. They are most commonly found behind the ears and upper part of the back of the neck. Rarely, they may be seen on the eyelashes, eyebrows, or beard.

Risk Factors for Head Lice

While most people think head lice are caused due to unclean hair and scalp, this is not true. Having head-lice is not a sign of poor personal hygiene or an unclean living environment. Head lice don't carry bacterial or viral infections. They feed on blood and can affect almost anyone.

However, girls are known to be more at risk than boys to get infected because they tend to have more head to head contact as compared to boys. Also, girls with long, thick and curly hair may find it hard to fight lice infestation as it makes it difficult to find the parasites in their hair.

Head lice cannot jump or fly. They can only crawl. Hence, transmission from one person to another usually happens by direct head-to-head contact. It is often seen within a family or among children who have close contact at schools, play groups etc.

Indirect transmission is not very common, but one may be at risk of getting head lice while sharing items like:

Combs

Hats or scarves

Towels

Helmets

Bedding

Hair brushes or Hair accessories

Headphones

Clothes

Diagnosis Of Head Lice

As head lice are around 2- 3 mm long and have the ability to hold tight onto the hair strands and crawl along, it makes it difficult to find them in your hair. The only way to find them is through combing and manual examination.

1. Thorough combing (using a fine-tooth comb) of wet hair, especially at the back of the head where lice are commonly found, may help in finding lice.

2. Manual examination of the hair may show nits fixed to the base of hair shafts. They can look like dandruff or dirt. Pull the little speck with your fingers. While dandruff and dirt can be removed, nit usually remains stuck. It can be tough to find a nymph or adult louse as they move very fast.

Prevention Of Head Lice

The first and foremost tip you need to keep in the mind is the fact that there is no effective method to prevent head lice. But there are ways to stop the spread of head lice from one person to another. So if anyone in your family suffers from head lice, here are a few tips that you must follow.

Wash clothes, bedding, and towels in hot water and dry them on the hottest setting.

Opt for dry cleaning if you can’t wash these items at home.

You can use a vacuum to clean furniture, carpet, and car seats.

Things that cannot be washed such as soft toys and pillows should be put into a plastic bag and sealed for at least two weeks.

Do not share a bed with a person infested with lice as there is a high possibility of lice getting transferred through direct head to head contact.

Do not use the combs, brushes and hair care products used by a person who has head lice.

It is wise to throw away or sterilize and use for the future.

Do not send your child to school if he/she has head lice.

Specialist To Visit

If you experience severe itching and scratching due to head lice infestation or if you find it difficult to sleep at night, then it is wise to consult a doctor and get it treated immediately. For this you can either visit a:

General Physician

Pediatrician

Dermatologist

Treatment Of Head Lice

Once lice have settled on your scalp, they don’t go away on their own again. In most cases, treatment is aimed at killing the parasites by suffocating them.

Some of the common Over-the-counter treatment options for head lice include:

1. Pyrethrin

It is an over-the-counter medicine that contains naturally occurring pyrethroid extracts. It can kill only live lice and not nits (unhatched eggs). This is why a second treatment after 9 to 10 days of first treatment is recommended to kill the newly hatched lice and prevent them from producing new eggs. It is approved for use in kids above 2 years and older.

2. Permethrin

It is a synthetically available form of the naturally occurring pyrethrin extracts. Permethrin lotion 1% is an FDA-approved product for the treatment of head lice. It is safe and effective when used as per the doctor’s advice. Just like pyrethrin, it kills live lice but not unhatched eggs, so a second dose is recommended after 9 to 10 days to be effective against head lice.

Some of the common prescription medications for head lice include:

1. Benzyl alcohol lotion, 5%

An FDA-approved product for head lice treatment, it is found to be safe and effective when used as per doctor’s direction. It kills lice but not unhatched eggs, so a second treatment after 7 days of the first is recommended.

2. Ivermectin lotion, 0.5%

This formulation prevents newly hatched lice from surviving. It is known to be effective when applied on dry hair without nit combing. It can be applied once to dry hair and then rinsed with water after 10 minutes. Ivermectin is also available as a tablet. It can be taken if other topical treatments fail to eliminate lice.

3. Malathion lotion, 0.5%

It is known to kill lice and also kills some eggs. A second treatment after 7-9 days of the first is advised to make it more effective in action. It is recommended for use in kids above 6 years and older. As this lotion is flammable, it is not advisable to not use electrical devices such as hair dryers after applying this lotion or when the hair is wet.

4. Spinosad 0.9% topical suspension

It kills both live lice and unhatched eggs, hence retreatment is not required. Nit combing is also not required. It is approved for the treatment of children above 6 months and older.

5. Lindane shampoo 1%

It is usually recommended for use as a second-line treatment only as overuse or misuse of this drug can cause toxic side-effects on the brain and nervous system. It is not advised for treatment in people with HIV, seizure disorder, pregnant women, breastfeeding women, and those with skin sores. Also, retreatment is strictly not recommended.

Home-care For Head Lice

Here are some tips to deal with head lice at home:

Wet combing is usually preferred to remove lice from hair for young children. Use a regular brush or comb to remove tangles from wet hair before using a special comb.

Use a special fine-toothed comb to carefully comb out nits and lice from hair. Pull the comb through the hair from roots to ends. Comb the entire head at least twice.

The nits (lice eggs) mature in 5-7 days so it is important to comb every day for about 2 weeks to ensure you get rid of all the lice.

You can get a prescription for kids if combing doesn’t work and the infestation is severe.

Beware of using natural remedies like olive oil or butter and toxic substances such as kerosene to get rid of head lice as these might cause more harm than good.

Complications Of Head Lice

Head lice if left ignored can lead to severe itching and scratching of the head. If a person scratches an itchy scalp from a head-lice infestation, it is possible for the skin to break and develop an infection. In the worst case scenario, you might need to visit a dermatologist to get a secondary bacterial infection of the skin treated due to head lice.

Alternative Therapies for Head Lice

A number of household products are commonly used for the treatment of head lice. But do not use natural remedies such as olive oil, butter, petroleum jelly and mayonnaise to get rid of head lice. It is believed that these remedies work by suffocating the lice but do no good as lice are difficult to suffocate.

Avoid using toxic compounds like gasoline and kerosene to get a risk of lice. There is no research evidence on the same. Moreover, it can lead to serious injury.

Living With Head Lice

Head lice can be very annoying, but they are not dangerous and they don't spread any disease. Neither are they a sign of poor hygiene. They need blood for survival which is not dependent on hygiene of the head or surroundings. They can be managed by various treatment options and various other measures like:

1. Do not use combs, hair brushes, hats, bedding, towels, or clothing of a person affected with head lice.

3. The lice and eggs can be removed to some extent with the help of a very fine toothed comb on wet hair.

4. Medication includes pediculicides (medicines which kill lice) with ovicidal effect (which kill nits or unhatched eggs) which is the most important treatment.

5. To prevent reinfestation, nits are killed by using hot air (slightly cooler than a hair dryer) for 30 minutes.

6. Wash all clothes, beddings, and combs in hot water with detergent.

7. Repeat treatment after 7 to 10 days.

Frequently Asked Questions

Do head lice live on pillows?

Do head lice go away on their own?

Can you feel lice crawling?

Can a hair dryer kill lice?

Can head lice survive on carpet and furniture?

Do I need to wash pillows after I have lice?

How long can you have lice before noticing?

Can vinegar kill head lice?

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Heart attack

Also known as Myocardial Infarction and MI

Overview

Myocardial infarction, commonly known as heart attack, occurs when blood flow to a part of the heart stops, causing damage to the heart muscle.

The heart muscles need oxygen to survive. When the blood supply carrying the oxygen to the heart muscles is blocked due to the buildup of plaque (fatty substances) within the arteries, it leads to damage of the muscles. If the blood flow to the heart is not restored quickly it can cause permanent damage to the muscles, leading to a heart attack.

Myocardial infarction is one of the leading causes of mortality worldwide. The symptoms of a heart attack include chest pain, discomfort in the back, sweating, nausea, vomiting, shortness of breath. In case of a suspected heart attack, the person should be given aspirin and rushed to a hospital immediately. One should not wait for symptoms to settle. The earlier the person is rushed to the hospital, the better are the chances of survival.

A heart attack can be treated with medications and in some cases, surgery might be required. The chances of a second heart attack can be prevented with simple lifestyle modifications, regular check-ups and medications.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women

Body part(s) involved

Heart

Blood vessels

Mimicking Conditions

Aortic dissection

Pericarditis

Acute gastritis

Acute cholecystitis

Asthma

Esophagitis

Myocarditis

Pneumothorax

Pulmonary embolism

Angina pectoris

Non-ST segment elevation myocardial infarction (NSTEMI)

ST-segment elevation myocardial infarction (STEMI)

Pulmonary embolism

Necessary health tests/imaging

Lipid Profile Test

C-reactive protein (CRP) test

Cardiac troponins (I and T)

Creatine kinase (CK)

Creatine kinase-MB (CKMB)

Myoglobin

Electrocardiogram (EKG / ECG)

Holter monitoring or ambulatory ECG or ambulatory EKG

Echocardiogram (Echo)

Stress test

Carotid ultrasound

Tilt table tests

MRI of the heart

Coronary angiography

Cardiac CT Scan

Cardiac catheterization

Radionuclide ventriculography or radionuclide angiography (MUGA Scan)

Transesophageal echocardiography (TEE)

Positron emission tomography (PET) scan

Single photon emission computed tomography (SPECT)

Myocardial perfusion imaging (MPI) test

Treatment

Thrombolytic drugs: Streptokinase, Alteplase & Urokinase

Anticoagulants: Apixaban, Dabigatran & Heparin

Antiplatelet agent: Aspirin, Clopidogrel & Prasugrel

Angiotensin-converting enzyme (ACE) inhibitors: Fosinopril, Captopril & Enalapril

Angiotensin receptor blockers: Telmisartan, Losartan & Valsartan

Beta blockers: Atenolol, Metoprolol & Propranolol

Combined alpha and beta blockers: Carvedilol & Labetalol

Statins (cholesterol lowering agents): Atorvastatin, Lovastatin & Rosuvastatin

Diuretics: Hydrochlorothiazide, Chlorthalidone & Furosemide

Vasodilators: Hydralazine & Minoxidil

Surgery: Percutaneous coronary intervention, Bypass surgery & Atherectomy

Implantable medical devices: Pacemaker, Implantable cardiac defibrillator (ICDs) & Ventricular assist devices (VADs)

Other surgeries: Cardiomyoplasty & Heart transplant

Specialists to consult

Cardiologist

Thoracic surgeon

Cardiologist

Cardiac surgeon

Interventional Cardiologist

Vascular surgeon

See All

Symptoms Of Heart Attack

Most people don’t know they have heart disease until they have chest pain (angina) or a heart attack. Angina (chest pain) is one of the warning signs of a heart attack which can occur hours, days or weeks before an attack and hence, should not be ignored. However, not all heart attacks begin with a sudden crushing chest pain as we might have heard about. In fact, the symptoms of a heart attack vary from person to person. The other common symptoms of a heart attack include:

Discomfort or pain in the left shoulders, arms, neck, jaw, or back

Shortness of breath

Sweating

Nausea

Lightheadedness

Abnormal heartbeat

Vomiting

Unusual tiredness

If you or anyone experiences chest pain/discomfort or other symptoms of a heart attack rush to a hospital immediately. Consult a doctor even if you feel a mild pain or discomfort in the chest as it might indicate that your heart is in trouble and need help.

How to differentiate between chest pain due to gastric pain and heart attack? To know this, watch a video by our expert.

Causes Of Heart Attack

A heart attack happens when there is a sudden and complete or partial blockage of the artery that supplies blood to the heart. Mostly, coronary artery disease is the underlying cause of a heart attack in which the coronary artery (the blood vessel that supplies blood to the heart) is blocked. The longer the blockage is left untreated, the more is the damage to the heart muscle. If the blood flow is not restored on time, it can lead to permanent damage of the heart muscle. Some of the common causes of a heart attack or myocardial infarction include:

Coronary artery disease

Coronary artery embolism

Atherosclerosis

Hypoxia (low level of oxygen in the body)

Drug abuse

Cocaine-induced ischemia

Why are people suffering from a heart attack at a young age? Cardiologist answers.

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Risk Factors For Heart Attack

Age and family history are one of the key non-modifiable factors which can increase the risk of heart attack. However, there are certain modifiable causes of heart attack which can help you prevent and lower your risk of heart attack if known.

Some of the modifiable risk factors of a heart attack are:

1. High blood pressure

High blood pressure puts excess strain on the blood vessels which over time causes constriction of the blood vessels. This impacts the blood flow to the heart and increases the risk of heart attacks. The damage increases further due to the buildup of fat, cholesterol and other substances in the coronary arteries.

2. Diabetes

If your blood glucose levels are not under control, it can cause inflammation of these blood vessels, which further affects the blood flow through these vessels. As the blood flow becomes sluggish, over time it can damage the heart muscle and increase the risk of a heart attack.

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3. Cholesterol

If excess cholesterol gets deposited in the arteries that supply blood to the heart, it is a cause of concern. This overtime can block the blood flow to the heart either partially or completely, which in turn, causes a heart attack.Get your cholesterol level checked with a single click.

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4. Smoking

When you smoke, you inhale various harmful chemicals present in cigarettes. These toxins can cause inflammation of the blood vessels, which in turn triggers the accumulation of various substances in the blood such as cholesterol, and calcium. These substances get deposited in the blood vessels, which can block the blood flow to the heart and cause a heart attack.

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5. Excessive alcohol

When you drink in excess, it causes dehydration which in turn impacts the blood flow to the heart and other organs. Moreover, alcohol can also lead to inflammation in the blood vessels, which in the long run can cause the deposition of cholesterol and calcium in the blood which makes you prone to a heart attack.

6. Stress

Chronic stress causes secretion of cortisol, which can significantly impact the hormonal balance in the body and lead to excess production of cholesterol which in turn may cause a heart attack.

7. Lack of exercise

People who lead a sedentary lifestyle not only become overweight and obese but are also at high risk of lifestyle diseases such as diabetes and hypertension, which are known risk factors of a heart attack.

Diagnosis Of Heart Attack

If you experience pain in the chest or discomfort, then your doctor might advise some blood and imaging tests to determine the underlying cause.

A. Lab tests

Some of the commonly advised lab tests include:

1. Lipid Profile Test

This is a group of blood tests that detects the levels of different types of lipids in the blood. Lipids are fatty substances that play an important role in a number of body functions. Apart from being structural components of the cells, lipids also act as a source and mode of storage of energy for the body.

It typically measures the levels of total cholesterol, High Density Lipoprotein (HDL) cholesterol, Low Density Lipoprotein (LDL) cholesterol, and triglycerides. Other results that may be reported include Very-Low-Density Lipoprotein (VLDL) cholesterol, non-HDL cholesterol, and total cholesterol to HDL cholesterol ratio.

2. C-reactive protein (CRP) test

C-reactive Protein (CRP) is a protein secreted by the liver in response to inflammation caused by injury, infection, or otherwise. The C-reactive protein (Quantitative) test measures the levels of C-reactive protein in blood to determine the presence of inflammation or infection and to monitor treatment.

3. Cardiac troponins (I and T)

Troponins are proteins which are found in the heart muscles and skeletal muscle fibres. These are known to help regulate muscular contraction. This test helps measure the level of cardiac-specific troponin in the blood thereby helping in the diagnosis of any heart injury or damage.

4. Creatine kinase (CK)

Also known as Total CK, Creatine Phosphokinase, and CPK test, this test is done to detect and monitor damage to muscle. It is also done to diagnose conditions which are associated with muscle damage and to detect any possible case of heart attack.

A more specific test known as Creatine Kinase-MB (CKMB) is also recommended.This test measures the enzyme Creatine Kinase (CK) MB, which is mainly found in cells of heart muscles, in blood. It is also found in skeletal muscles but in a lesser amount.

5. Myoglobin

This assay is useful for assessing muscle damage from any cause. Elevated myoglobin levels are seen in cases of acute muscle injury, resuscitation, myopathies, shock & strenuous body activity.

B. Imaging & other tests

In addition to the blood work, some of the other tests that can help in the diagnosis of myocardial infarction or a blockage in the heart include:

1. Electrocardiogram (EKG / ECG): This resting 12 lead ECG test is the first-line diagnostic tool for the diagnosis of acute coronary syndrome (ACS). It should be obtained within 10 minutes of the patient’s arrival in the emergency department. Acute MI is often associated with dynamic changes in the ECG waveform. Serial ECG monitoring can provide important clues to the diagnosis if the initial EKG is non-diagnostic at initial presentation.

2. Holter monitoring or ambulatory ECG or ambulatory EKG: A holter monitor is a small, wearable device that keeps track of your heart rhythm. This monitoring is used to diagnose intermittent cardiac arrhythmias.

3. Echocardiography: A cardiac echo is used to identify abnormalities in the heart's structure and function.

4. Stress test:This test involves measuring the performance of the heart while undergoing exercise of gradually increasing intensity on a treadmill.

5. Carotid ultrasound: A carotid ultrasound is an important test that can detect narrowing, or stenosis of the carotid arteries. Carotid artery stenosis is a major risk factor for stroke.

6. Tilt table test: The tilt table test (also called a passive head-up tilt test or head upright tilt test) records your blood pressure, heart rhythm and heart rate on a beat-by-beat basis

7. MRI of the heart: A heart MRI (magnetic resonance imaging) uses magnets and radio waves to create an image of your heart and nearby blood vessels.

8. Cardiac CT: The Computed Tomography (CT) Scan of heart is an imaging test which is used to create a detailed three dimensional image of the heart and coronary blood vessels and helps to assess the condition of the blood vessels and understand blood flow through them and help to diagnose various heart diseases.

9. Coronary angiography: A coronary angiogram is a procedure that uses X-ray imaging to check the heart's blood vessels.

10. Cardiac catheterization: Cardiac catheterization (cardiac cath or heart cath) is a procedure to examine the working of the heart. A thin, hollow tube called a catheter is inserted into a large blood vessel that leads to your heart to find out the origin of disease of the heart muscle, valves or coronary (heart) arteries.

11. Radionuclide ventriculography or radionuclide angiography (MUGA Scan): A radionuclide angiogram is a test used to gather images of the heart throughout its pumping cycle it is also referred to as a MUGA scan (multigated acquisition scan) or blood pool scan.

12. Transesophageal echocardiography (TEE): TEE is a test that produces pictures of the heart. TEE uses high-frequency sound waves (ultrasound) to make detailed pictures of your heart and the arteries surrounding it.

C. Nuclear heart scans

Similar to angiography, these scans use a radioactive dye injected into your blood. What sets them apart from an angiogram is that they use computer-enhanced methods like computed tomography (CT) or positron emission tomography (PET) scans.

1. Positron emission tomography (PET) scan: This test uses radioactive dyes to produce pictures of the heart. PET scans differentiate between healthy and damaged heart muscles.

2. Single photon emission computed tomography (SPECT): A SPECT scan uses radioactive tracers that are injected into blood to produce pictures of the heart to check how well blood is flowing to the heart.

3. Myocardial perfusion imaging (MPI) test: This test shows how well blood flows through your heart muscle. It also helps to show areas of the heart muscle that aren’t getting enough blood.

Celebs affected

Rema D’Souza

In 2021, Bollywood choreographer and director, Remo D’souza was rushed to a hospital in Mumbai after he suffered a heart attack. The 46-year-old is known to be on his road to recovery now.

Raj Kaushal

Filmmaker and producer Raj Kaushal succumbed to heart attack in 2021. He is survived by his wife Mandira Bedi and two kids.

Kapil Dev

Former captain of the Indian cricket team, Kapil Dev, suffered a heart attack in 2020. He was immediately rushed to a hospital after he complained about chest pain. He later underwent angioplasty surgery.

Larry King

The late American TV host, Larry King, suffered a heart attack in 1987, which he attributed to his smoking. He stated in an interview that he smoked from 16 years to 54 years and finally quit smoking after he had a heart attack. He has never smoked since then.

Prevention Of Heart Attack

1. Do not ignore symptoms of heart disease

The most common symptom is a chest pain (angina) which originates in the center of the chest area, behind the breastbone, is typical of a heart attack. Moreover, a chest pain which occurs after walking some distance which was not experienced initially can also indicate a heart attack. Other common symptoms include shortness of breath, sweating, and pain or discomfort in the jaw, arms, and shoulder. So if you are experiencing any of these symptoms, it is recommended to immediately go to a hospital or consult a doctor at the earliest.

2. Go for regular health check-ups

Diabetes, high blood pressure, and high cholesterol level are one of the key factors that put you at risk of heart disease. This is the reason why every person who suffers from high blood glucose level, high blood pressure and high cholesterol level should get a regular health check-up done every year. It goes without saying that the frequency to get a health check-up increases as you age and for people with a family history of heart disease.

Ideally, it is better to get a heart checkup done once you cross 45 years of age, but with increasing incidence in young people (above 30 years), even young adults should get a health check-up every year without fail.

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3. Do not self medicate

Popping a painkiller is one of the most common ways to treat pain at home. However, using these medicines more often than not is not a good idea as it might lead to health complications and side-effects. Studies have reported that long-term opioid therapy can increase your risk of cardiovascular diseases, especially myocardial infarction.

Self-medication without consulting your doctor is not at all recommended as it might lead to harmful side-effects. Your doctor will weigh the pros and cons of the medication based on your overall health and condition. So think twice before you blindly take any medication without informing your doctor as it might affect you later. It is not advised to consult a chemist or self-medicate for any heart disease.

4. Maintain a good relationship with your family doctor

One of the key reasons why most patients fail to consult a doctor and search the internet for information pertaining to their condition is the lack of a good relationship between their family doctor. Most people do not feel comfortable to ask their doctor about problems that affect them on a day to day basis, which according to them are silly things. Even to know why a particular medication is recommended to them, they will go online but not ask their doctor because it is a silly reason to ask. This is not right. Be open to your family physician and discuss your health in detail, who will guide you in the right direction.

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5. Exercise is the key to keep your heart healthy

Most of us have a very tight schedule which makes it difficult to spend the time exercising. Although people are turning out to be health conscious and hitting the gym to burn calories and stay fit, it becomes difficult to exercise regularly. But if you are at risk of heart disease or are planning to keep your heart healthy, ensure you lead an active lifestyle. This doesn’t include exercising day in and out but ensuring you workout daily or at least walk every day is enough. You can walk for 30 – 45 minutes for five days a week or walk 10,000 steps a day to stay healthy.

6. Diet for healthy heart

A healthy diet rich in vitamins, minerals, proteins, fiber, and fats can help you keep your heart healthy.

Whole grains: Whole grains, vegetables, and fruits are considered to be one of the great natural sources of fiber. They contain soluble fibrous phytosterols which not only decreases the absorption of fat and sugar in the small intestine but also helps to lower the level of triglycerides in the blood. Good sources of soluble fiber are oats, barley, legumes, and psyllium husks.

Fruits: Fruits and vegetables contain high levels of antioxidants that protect the circulating cholesterol from oxidation which can cause free radical generation. These free radicals can negatively affect the overall health and increase the level of cholesterol in the blood, thereby offering an overall protective effect for the heart. Eat more vegetables like cauliflower, broccoli, and celery as well as potatoes with skin.

Fish: According to the American Heart Association, eating two servings of fatty fish per week is good for the heart. Include fatty fish rich in omega-3 fats such as salmon, herring, sardines, mackerel and tuna in the diet to improve your triglyceride levels and keep cholesterol in control.

Garlic: Garlic not only lowered triglyceride levels but it also reduced total cholesterol levels. Moreover, it also helps to regulate glucose homeostasis and insulin secretion aiding to keep your blood glucose levels in check along with triglycerides.

Nuts: Nuts are undoubtedly one of the best sources of fiber, omega-3 fatty acids, and unsaturated fats, all of which are heart-healthy nutrients. As these are obtained from trees, they are rich in plant fats, sterols, and nutrients which are good for overall health.

If you have already suffered a heart attack or have undergone heart surgery, it goes without saying that strict diet control is needed. Here is a sample Indian diet chart for heart patients by an expert nutritionist.

Click To Read!

Specialist To Visit

The symptoms of heart attack should never be ignored. The signs and symptoms that indicate urgent medical attention include:

Chest discomfort (lasts few minutes or goes away and comes back)

Discomfort in arms/neck/back/jaw/stomach

Shortness of breath

Sweating

Feeling nauseated/lightheadedness

If you experience any signs and symptoms of a heart attack, it is best to consult a doctor immediately. Although a general physician (Family Doctor) is the first choice, you can also get in touch with specialists such as a:

Cardiologist

Cardiac surgeon

Interventional cardiologist

Thoracic surgeon

Vascular surgeon

Other specialists that can also be consulted (if you have a pre-existing or chronic illness) include:

Nutritionist

Diabetologist

Treatment Of Heart Attack

Depending on the condition and the extent of the block, your doctor might advise medications or recommend surgery.

A. Medications

Heart attack treatment involves a variety of drugs. Your doctor will recommend the best combination of heart attack medications for your situation. Some of the common drugs include:

1. Thrombolytic drugs

Thrombolytic or clot-busting medications are intravenous (IV) medications that cause blood clots to break down and dissolve. These medications are usually used only within the first 12 hours after a heart attack. Examples of this class of drugs include:

Streptokinase

Alteplase

Urokinase

2. Anticoagulants

Anticoagulants, commonly known as blood thinners, are chemical substances that prevent or reduce coagulation of blood, prolonging the clotting time. Examples of this class of drugs include:

Apixaban

Dabigatran

Heparin

Rivaroxaban

Warfarin

3. Antiplatelet agent

Antiplatelet agents are medicines that reduce the ability of platelets to stick together (called platelet aggregation) and inhibit the formation of blood clots. These are also known as platelet agglutination inhibitors or platelet aggregation inhibitors. Drugs that belong to this class are:

Aspirin

Clopidogrel

Prasugrel

Ticagrelor

4. Angiotensin-converting enzyme (ACE) inhibitors

These inhibit the angiotensin-converting enzyme which regulates salt and water retention in the body. They also lower blood pressure by relaxing the blood vessels, decreasing blood volume and increasing sodium excretion in the urine. ACE inhibitors are recommended in patients with systolic left ventricular dysfunction, or heart failure, hypertension, or diabetes. A few examples in this class of drugs are:

Fosinopril

Captopril

Enalapril

Ramipril

Lisinopril

Benazepril

5. Angiotensin receptor blockers

If you are unable to tolerate ACE inhibitors, ARBs are used. They block angiotensin-II (a hormone which causes your blood vessel to constrict) from binding to its receptor and antagonize its action. This helps reduce your blood pressure. Some examples in this class of drugs are:

Telmisartan

Losartan

Valsartan

Irbesartan

Fimasartan

Olmesartan

6. Beta blockers

Beta-blockers are recommended in patients with LVEF (left ventricular ejection fraction) less than 40% if no other contraindications are present. Examples of some of the drugs in this class are:

Atenolol

Metoprolol

Propranolol

Oxprenolol

Labetalol

7. Combined alpha and beta blockers

This type of heart disease medication helps lower blood pressure. It does this by slowing your heart rate and reducing nerve impulses that tell vessels to tighten. Examples of combined alpha- and beta-blockers include

Carvedilol

Labetalol

8. Calcium channel blockers

They bind to calcium channels in the blood vessels and block the entry of calcium. This causes dilatation of the blood vessels which helps decrease blood pressure. Some of the commonly used calcium channel blockers include

Amlodipine

Nifedipine

Clevidipine

Verapamil

Diltiazem

9. Statins (cholesterol lowering agents)

It works by reducing the amount of “bad” cholesterol (LDL) and raising the amount of “good” cholesterol (HDL) in your blood. Statins block the enzyme in the liver that is responsible for making cholesterol. Lowering the amount of cholesterol reduces the chances of heart diseases and helps you remain healthier for longer. Some of the commonly prescribed cholesterol lowering medications include:

Atorvastatin

Lovastatin

Rosuvastatin

10. Diuretics

Diuretics like hydrochlorothiazide eliminate excess salt and water from the body and also decrease calcium excretion. There are different types of diuretics that act at different sites of the renal tubules (small tubes) in the nephrons (functional unit of kidney). A few types of diuretics used in the treatment of hypertension are

Hydrochlorothiazide

Chlorthalidone

Furosemide

Triamterene

Amiloride

11. Vasodilators

It helps to lower blood pressure by widening the blood vessels and decreasing their resistance thereby helping the blood to pass through more easily. Hydralazine and minoxidil are vasodilators that work directly on the vessel walls to decrease blood pressure. Nitroglycerin which is used to relieve chest pain is a powerful vasodilator.

B. Surgery

1. Percutaneous coronary intervention

Also known as coronary angioplasty, it is a nonsurgical procedure that improves blood flow to your heart. This procedure uses a catheter-based device inserted into a major blood vessel (usually one near your upper thigh).

Once the catheter is inserted into the blood vessel through a small incision, the technician threads it up to the blocked artery on your heart. Once it reaches the location of the blockage, the technician will inflate a small balloon on the end of the device to widen the blood vessel and clear the blockage. Angioplasty is often combined with the placement of a small wire mesh tube called a stent. The stent helps prop the artery open, decreasing its chance of narrowing again. Most stents are coated with medication to help keep the artery open (drug-eluting stents).

2. Bypass surgery

In this, a surgeon takes a section of healthy blood vessels, often from inside the chest wall or from the lower leg, and attaches the ends above and below the blocked artery so that blood flow is redirected around the narrowed part of the diseased artery. With a new pathway, blood flow to the heart muscle improves. Patients who have severe blockages of their coronary arteries undergo coronary artery bypass grafting. This surgery is often called open-heart surgery, bypass surgery or CAB. This is useful in treating blocked heart arteries by creating new passages for blood to flow to your heart muscle.

3. Atherectomy

It is similar to angioplasty except that the catheter has a rotating shaver on its tip to cut away plaque from the artery. Once the catheter is inserted into the blood vessel through a small incision, the provider threads it up to the blocked artery on your heart. Once it reaches the location of the blockage, the provider will inflate a small balloon on the end of the device to widen the blood vessel and clear the blockage.

4. Implantable medical devices

These include pacemaker and implantable cardioverter defibrillator (ICD) which help to control the heart rhythm and ventricular assist devices which support the heart and blood circulation.

Pacemaker: It is a small battery-operated device which helps your heart to beat in a regular pattern.

Implantable cardiac defibrillator (ICDs): It is a small battery-powered device placed in your chest to detect and stop abnormal heartbeats. This device delivers electric shocks inside the heart to restore a normal heart rhythm.

Ventricular assist devices (VADs): This is also known as a mechanical circulatory support device, which is an implantable mechanical pump that helps pump blood from the lower chambers of your heart (the ventricles) to the rest of your body.

5. Other surgeries

Cardiomyoplasty: An experimental procedure in which healthy skeletal muscles are taken from a patient’s back or abdomen and wrapped around the heart to provide support for the failing heart.

Radiofrequency ablation: A catheter with an electrode at its tip is guided through the veins to the heart muscle to carefully create tiny scars in the heart to block abnormal electrical signals and correct heart arrhythmias.

Transmyocardial revascularization (TMR): A laser is used to create a series of channels from the outside of the heart into the heart’s pumping chamber.

Heart transplant: In this procedure a diseased heart is removed and replaced with a donated healthy human heart.

Home Care For Heart Attack

Do’s and Don’ts when you suspect a heart attack

What should you do when you suspect that you or anyone in your family is having a heart attack? The first thing to do is seek medical help immediately. In the absence of medical aid, the following tips may help you:

1. Know the symptoms

At times, chest pain is absent in certain cases of a heart attack, known as a ‘Silent Heart Attack’.

In this case, pay attention to the associated symptoms that you feel such as long deep breathing, dizziness, nausea, anxiety or a panic attack.

You might be able to identify a heart attack just because of the vague discomfort that you are going through at that moment.

2. Act fast

Most attacks are not very rapid and give us enough time to act. Therefore, it is necessary to have complete knowledge about a heart attack and ability to act quickly.

People often confuse a heart attack with other diseases like indigestion, flu or panic attack.

However, if you are not sure of what exactly is happening to you, it is best to seek help immediately.

3. Know which medicine to take

Pop in an aspirin if you feel you are having a heart attack. Most people feel better after chewing a tablet of aspirin at the beginning of a heart attack.

However, aspirin may be harmful to some. Hence, please ask your physician in advance the most appropriate medicine for you in case of a heart attack.

4. Seek immediate help

Shout for help immediately. Do not feel shy or scared to make someone call for medical assistance immediately.

If immediate help cannot be attained, then ask for someone, like a person next to you or a relative/friend, to take you to the nearest hospital.

During this time, any kind of activity will cause more harm to the already damaged heart muscles. Stop whatever you are doing and just sit or lie down calmly and ask to be taken to a hospital.

Do not travel alone or drive on your own to a clinic/hospital.

In addition to taking medications as recommended by your doctor, there are few things you need to take into consideration to keep your heart healthy. These include:

1. Incorporate more fiber in your diet

Include foods such as whole wheat grains or cereals, peas, pulses, fruits such as oranges, pears, melons and vegetables such as carrots and broccoli. There is more fiber in a single fruit than a glass of fruit juice which is made using 3 – 4 whole fruits.

2. Limit fruits especially if you are diabetic

Choose whole fruits and vegetables to up your intake of fiber and other nutrients. But, fruit should be limited, especially for people who are diabetic. Incorporate berries, oranges, sweet limes, apple and pear which contain less sugar and more fiber.

3. Salads are a must in every meal

Vegetables are a great source of nutrients and including raw vegetables in the form of salad is a healthy idea. One big bowl of salad that contains vegetables and sprouts is mandatory for a complete meal. Sprouts are rich in proteins and fiber so two servings per day is a must.

4. Add fenugreek (methi) seeds to your food

It is a rich source of soluble fiber and contains active compounds which reduce cholesterol and are good for the heart. Moreover, if you suffer from diabetes along with heart problems, incorporating methi in the form of raw seeds in curries, dal or curd can keep the heart healthy.

5. Restrict intake of salt

For healthy individuals, the daily recommended dose of salt is 5-6 gm per day. But if you have a history of heart disease or have undergone heart surgery, then the daily intake of salt should not exceed 2 gm, which is about half a teaspoon.

6. Choose cooking oils wisely

Opt for the ones that contain high amounts of essential fatty acids such as monounsaturated fatty acids (MUFA) and polyunsaturated fatty acids (PUFA). Most of the oils available in the market such as groundnut oil, sunflower oil, safflower oil, mustard oil, sesame oil, rice bran oil, etc. are good for the heart. However, instead of using one type of cooking oil, use different oils every month for added benefits.

7. Keep a tab on the amount of cooking oil

Whichever cooking oil you are using, it is important to keep a tab on the amount. Ensure that it should not be more than 15 ml per day, which is about three teaspoons of oil. You can also incorporate ghee along with cooking oils but make sure it should not exceed the daily limit of 15 ml. For example, instead of three teaspoons of oil, you can include one teaspoon of ghee and two teaspoons of oil per day.

8. Follow portion control

Whatever you eat, spread it across the entire day and eat in limited amounts. Eating three full course meals can add pressure on the stomach and other organs of the body including the heart. It is wise to have six small meals per day or have two meals with breaks such as breakfast, mid-morning snack, mid-afternoon snack, and evening snack. Moreover, dinner should be light and easy-to-digest food. Avoid heavy foods and gas-forming foods such as beans, cauliflower, etc at dinner time.

9. Nuts are good for the heart

They are the best and rich source of omega-3 fatty acids, which is an essential fatty acid that plays a key role in maintaining your heart health. It helps to maintain blood pressure, lower triglyceride level, reduce cholesterol, lower the risk of inflammation and prevent heart disease. Almonds are rich in mono-unsaturated fatty acids (MUFA) and walnuts in poly-unsaturated fatty acids (PUFA), both of which are good for the heart.

10. Snack wisely

Include light foods such as boiled corn, puffed rice (kurmura) or bhel, sprouts chaat, vegetable chaat or boiled corn chaat. Packaged foods are a strict no-no for heart patients. Freshly cooked homemade food is your best bet. Fruits should be eaten as a mid-morning snack. Avoid fruits after lunch and dinner.

Is it angina, heartburn or heart attack? know the difference!

Click To Read!

Complications Of Heart Attack

If left ignored or unattended, myocardial infarction can cause severe damage to the heart. Some of the health complications that may result due to a heart attack include:

Angina

Arrhythmias

Cardiogenic shock

Cardiac failure

Cardiac rupture

Myocardial dysfunction

Peripheral embolism

Pericarditis

Pericardial effusion

Alternative Therapies Of Heart Attack

There are no studies which highlight the significance of ayurveda or homeopathy remedies for heart attack. However, there are few lifestyle modifications and yoga asanas which are known to improve your heart health.

Yoga asanas for healthy heart

Cardio and weight training work to revive up your heart rate and build muscle mass. However, yoga, as a complementary practice, can assist in preventing or managing heart disease. A combination of adequate weight training, aerobics and yoga can work wonders in improving heart health

Yoga asanas that can help maintain your heart health include

Padangusthasana (big toe pose): Known to be a good pose to stretch all the muscles in the body, this asana stimulates the abdominal organs and heart and also slows down the heart rate.

Janu sirsasana A: This asana stretches the entire back of the body. As the heart is brought close to gravity, the heart rate becomes slower and calmer. It is also known to calm the mind and relax all the major organs of the body.

Utthita hastapadasana (extended hands and feet pose): This pose focuses on breathing and posture and also helps calm the mind. It helps in lowering the heart rate, promoting blood circulation and improving the all-round functioning of the heart.

Setu bandha sarvangasana (Bridge Pose): This pose facilitates deep breathing, deeply opens up the chest and improves blood flow to the chest region. It also improves blood circulation to the heart region and helps control blood pressure.

Living With Heart Attack

On an average, about a fourth of heart attack victims who survived the first year are likely to experience another within the next four to six years.

Some of the easy, yet suggestively consistent, steps to prevent a second heart attack and lead a lifestyle are:

1. Follow healthy and a balanced diet routine

Simple dietary modifications like less intake of cholesterol-rich foods, especially trans fat and saturated fat, added sugars, salt and caffeine that can harm the general well being of a person. Instead, an increased intake of fresh fruits, vegetables, legumes, and beans can be beneficial. Also, it is good to supplement the diet with Omega-3 fatty acids that are helpful for the metabolism.

Want a personalized diet plan? Get in touch with our expert.

Consult A Nutritionist!

2. Daily exercise and walk

Regular and mild exercising routine boosts up the body metabolism, maintains a healthy heart and boosts the general mood of a person.

3. Quit smoking and drinking

Smoking is known to cause heavy damage to the normal rhythm of the heart and its arteries. Cutting down on smoking reduces the risk of a second heart attack by about 50%.

Drinking, on the other hand, poses no threat when done in permissible limits. However, beyond the recommended dose, alcohol may raise the blood pressure; thereby increasing the chances of a heart attack.

4. Regular and routine health checkups

It is good to stick to the suggested medications by the practitioner after the first incidence of heart attack. Also, following timely checks and follow-ups are equally important. Do not stop or alter the medications without your doctor’s advice.

5. Lead a healthy psychosocial life

Socialize, discuss your problems with concerned persons, get adequate sleep, consult professionals in case of need, limit emotional involvement with anyone, and join a laughter club. All these activities will help you lead a stress-free happy life.

Frequently Asked Questions

What is the difference between cardiac arrest, heart failure and myocardial infarction?

What is a silent heart attack?

Is there a difference between a heart attack and a myocardial infarction?

What are the first signs of a heart attack in a woman?

Is it gas or a heart attack?

When to go to a doctor for chest pain?

What does an angina attack feel like?

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Heart failure

Also known as Congestive heart failure and CHF

Overview

The first thought that comes to your mind when you hear about “heart failure” is that the heart is no longer working and you can’t do anything about it. But this is not true. In reality, heart failure is a condition in which the heart fails to pump blood to the body as efficiently as it should.

To put it technically, heart failure is a complex condition that impairs the ability of the lower chambers of the heart (called ventricles) to eject blood due to an underlying structural or functional heart problem. The condition develops over time as the heart muscles become weaker or stiffer, which ultimately affects the pumping capacity of the heart.

While the risk of suffering from heart failure increases with age, there are certain factors that can put you at risk even at a young age. These include having a high BMI (body mass index), unhealthy choices such as smoking, sedentary lifestyle, consuming a diet high in saturated and trans fats as well as diseases that damage your heart.

There are various treatment options that can help in heart failure and many people with heart failure live active lives. Medications for heart failure aim to manage the symptoms, improve the quality of life as well as increase the lifespan. In some cases, medical devices, surgery or heart transplant are recommended to help the heart function better.

Key Facts

Usually seen in

Individuals above 65 years of age

Gender affected

Both men and women but common in men

Body part(s) involved

Heart

Mimicking Conditions

Acute kidney injury

Acute respiratory distress syndrome (ARDS)

Bacterial pneumonia

Cirrhosis

Community-acquired pneumonia (CAP)

Emphysema

Interstitial (nonidiopathic) pulmonary fibrosis

Myocardial infarction

Nephrotic syndrome

Pneumothorax imaging

Pulmonary embolism (PE)

Respiratory failure

Venous insufficiency

Viral pneumonia

Necessary health tests/imaging

Blood tests: NT-pro B-type Natriuretic Peptide (BNP) & Electrolytes (sodium & potassium)

Chest X-ray

Electrocardiography (ECG or EKG)

Echocardiography (Echo)

Multigated acquisition scan (MUGA scan)

Treadmill test (TMT) or exercise stress test

Treatment

Diuretics: Hydrochlorothiazide & Chlorthalidone

Beta-blockers: Atenolol & Metoprolol

Aldosterone antagonist: Spironolactone & Eplerenone

Angiotensin II receptor blockers (ARBs): Telmisartan & Losartan

ACE inhibitors: Captopril & Enalapril

Other drugs: Sacubitril+Valsartan, Ivabradine, Isosorbide Dinitrate + Hydralazine & Dapagliflozin

Surgery: Heart transplantation, Angioplasty, Coronary artery bypass & Valve replacement

Devices: Implantable cardiac defibrillator (ICDs) & Cardiac resynchronization therapy

Specialists to consult

Cardiologist

Cardiac surgeon

Symptoms Of Heart Failure

Before knowing about the symptoms of heart failure, it is important to know what happens in heart failure.

What happens in heart failure?

The heart, which is just the size of your fist, serves the action of continuously pumping blood over the body. The heart has four chamber -- two upper chambers called atria and two lower chambers called ventricles. For the heart to function properly, the four chambers must beat in an organized way.

But in some cases, the heart cannot pump blood with enough force to reach the rest of the organs, or the heart may not get filled with enough blood to meet the demands of other organs. Since the heart ‘fails’ to meet the body's needs for blood and oxygen, the condition is termed as heart failure.

Heart failure can affect the right or the left side of the heart, or even both sides. However, it usually affects the left side first.

Right-side heart failure: It occurs if the heart is not able to pump adequate blood to the lungs for oxygenation.

Left-side heart failure: It occurs if adequate oxygen-rich blood cannot be pumped by heart to the rest of the organs.

Signs and symptoms to watch out for!

The symptoms of heart failure may start suddenly or progress gradually over weeks or months. The most common symptoms of heart failure and their reasons are listed below:

Breathlessness: In left-sided heart failure, inefficient pumping of blood causes extra fluid to collect in your lungs, causing rapid and shallow breathing.

Persistent cough and wheezing: The fluid build-up in lungs can also make you cough and wake up at night. The persistent cough may be accompanied by white or blood-tinged mucus.

Tiredness or fatigue: Since the heart is incapacitated to pump enough blood, the body diverts blood away from less vital organs, particularly muscles in the limbs leading to tiredness.

Swelling of feet, ankles and legs: In right-sided heart failure, fluid may back up into the abdomen, legs and feet, causing swelling.

In addition to the above-listed symptoms, other symptoms that can occur in patients with heart failure are:

Loss of appetite

Increased heart rate

Dizziness

Confusion

In systolic heart failure (also called heart failure with reduced ejection fraction), the left ventricle can't contract vigorously, indicating a pumping problem. In heart failure with preserved ejection fraction, the left ventricle can't relax or fill fully, indicating a filling defect.

Types Of Heart Failure

There are four stages of heart failure based on severity:

Symptom-free (asymptomatic) heart failure: There are no symptoms, but certain tests can detect that the heart isn't performing as well as it should.

Mild heart failure: Strenuous exercises like walking up the stairs causes symptoms like extreme tiredness or shortness of breath. However, mild activity doesn't cause any symptoms.

Moderate heart failure: Even everyday activities and light physical exercise like walking on a level surface can cause symptoms.

Severe heart failure: Symptoms occur at rest or during even the minor physical activity. You can only lie down if your upper body is elevated. Some people with severe heart failure are bedridden.

Your heart along with the blood vessels that feed it is one big muscular structure. So, when this structure starts to fail, you can get signs and symptoms anywhere in the body. Here are seven surprising clues that your heart needs a check.

Click To Know!

Causes Of Heart Failure

Most people who develop heart failure have (or had) another heart condition first. The most common conditions that can lead to heart failure are:

Coronary artery disease: It causes build-up of plaque (fatty deposits) in the arteries that supply blood to your heart muscle leading to narrowing of the blood vessels.

Heart attack (myocardial infarction): It reduces/blocks blood flow to the heart muscle and impacts the heart’s ability to pump blood.

Cardiomyopathy (heart muscle disease): These diseases of the heart muscle may lead to left ventricle dysfunction and damage the heart muscles and change the structure of your heart making it harder for your heart to pump blood.

Valvular heart disease (disease of heart valves): Rheumatic fever may permanently damage the heart valves leading to heart failure.

Hypertension (high blood pressure): When the blood pressure is high, your heart has to pump harder than normal to maintain blood circulation.

Atrial fibrillation (AF): It refers to the irregular and rapid beating of the heart. It is both a cause and consequence of heart failure.

Untreated congenital heart defects: Although rare, it is a condition in which the heart and its chambers may not be formed correctly at birth.

Anemia: Anemia can worsen cardiac function and add further stress to the heart, which may lead to heart failure.

Infections: Infections activates the body’s immune response, generating inflammation that causes rupture and blockages that lead to heart failure.

Heart failure should not be confused with a heart attack

Heart attack comes on suddenly and may happen without any warning. However, heart failure occurs more gradually. You might even have it for years before you notice any symptoms.

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Risk Factors For Heart Failure

You can know your risk of having heart failure by taking a look at the following modifiable and non-modifiable risk factors.

Non-modifiable factors

Age: By the time you get older, diseases you may have been suffering from for many years like coronary artery disease, diabetes & hypertension might have damaged your heart, increasing the risk of heart failure.

Gender: Women are at a higher risk of heart failure if they have hypertension, while men are greatly impacted if they have coronary artery disease.

Race/ethnicity: Race/ethnicity can be a risk factor for heart failure. Heart failure strikes young in black-skinned people, particularly men, and people of Hispanic (Spanish) origin.

Genetic predisposition: Growing numbers of Indians are being afflicted and genetic predisposition is one of the reasons. Indians have high levels of lipoprotein (a), a type of cholesterol, which is reported to accentuate the risk associated with other risk factors of heart failure.

Modifiable factors

Some of the conditions that can up your risk of heart failure (but can be managed) include:

Heart disease

Diabetes mellitus

Sleep apnea

Obesity

Lifestyle factors such as smoking

Diagnosis Of Heart Failure

To diagnose heart failure, your doctor will take a careful medical history, review your symptoms and perform a physical examination. Your doctor will also check for the presence of risk factors such as high blood pressure, coronary artery disease or diabetes. You may have to undergo the following tests to diagnose heart failure:

Blood tests: Some of the common blood tests that can help determine heart failure and its impact on other organs include:

Electrolytes (sodium, potassium)

Blood glucose

Serum creatinine

Albumin

BUN (blood urea nitrogen)

Estimated glomerular filtration rate (eGFR)

Thyroid-stimulating hormone (TSH)

NT-pro B-type natriuretic peptide (BNP)

Chest X-ray: It shows accumulation of fluid in the lungs & and enlargement of heart in patients with heart failure.

Electrocardiography (ECG or EKG): This test records the electrical activity in the heart by using sensors that are connected with wires to an electrocardiograph monitor. It is an important diagnostic method for determining heart failure associated with conditions like myocardial infarction, atrial fibrillation, abnormalities in heart rhythm, or acute ischemia.

Echocardiography (Echo): An echocardiogram is an ultrasound, which is used to determine volume of the blood in the heart, mass, and valve functioning of the heart.

Multigated acquisition scan (MUGA scan): This is a non-invasive diagnostic test that shows how well the lower chambers of your heart (ventricles) are pumping blood. During this test a small amount of a radioactive tracer or dye is injected into a vein. A special gamma camera detects the radiation released by the tracer to create video of the beating heart.

Ejection fraction (EF): It is a measurement of the blood pumped out of the heart each time it contracts. EF can be measured using an echocardiogram, multigated acquisition scan, nuclear medicine scan, magnetic resonance imaging (MRI) or during a cardiac catheterization. According to the American Heart Association, the normal ejection fraction is about 50% to 75%.

Treadmill test (TMT) or exercise stress test: This test shows how the heart works during physical activity. The test involves walking on a treadmill or stationary bike at different levels of difficulty while your heart rate, breathing and blood pressure are recorded. If someone cannot exercise, a drug may be used to mimic the effect of exercise on the heart.

Celebs affected

Elizabeth Taylor

The legendary American actress was diagnosed with congestive heart failure. She was able to manage her condition for years with treatment options.

Prevention Of Heart Failure

Prevention of diseases that damage the heart is the best way to keep heart failure at bay. If you suffer from any of the conditions that cause heart failure, then prompt, optimal management of the condition is important. Recognizing and avoiding all the factors that may lead to or contribute to heart failure can help prevent the development of the condition. The following pointers can help you understand the preventive measures to avoid or delay heart failure.

1. Consume diet that promotes heart health

Prefer eating fruits and vegetables, low-fat dairy products, lean protein such as chicken without the skin, and healthy fats like olive oil, walnuts, avocados and fish like tuna and salmon.

Limit saturated fats, trans fats, and cholesterol in your diet.

Limit salt (sodium) in your diet as excess salt can cause fluid retention and put strain on your heart. It also elevates your blood pressure.

Limiting sugar in your diet can lower your blood sugar level which can prevent or control diabetes.

Modern day diets are sometimes not sufficient to fulfill the needs of the body. To augment the health of your heart, take dietary supplements containing conenzyme Q10 (CoQ10), L-carnitine, crataegus (hawthorne), magnesium, and fish oil.

2. Exercise and stay active

Exercising can help to improve your general wellbeing and heart function by maintaining a healthy weight, blood pressure, blood cholesterol, and blood sugar levels. Adults should aim at 2 hours and 30 minutes of moderate-intensity exercise like brisk walking or bicycling every week. Children and adolescents should have 1 hour of physical activity every day. One should also avoid sitting for more than 2 hours at a stretch in a day.

3. Lose weight if you’re overweight or obese

Lose weight to attain body mass index (BMI) between 18.5 and 24.9. Pay more attention to losing abdominal or belly fat as it can increase the risk of heart disease more than fat on other parts of the body.

4. Do not smoke and if you do, quit smoking at the earliest

Consult your doctor for advice on ways to stop smoking. Smoking can damage your arteries that can cause heart failure. Also try to stay away from secondhand smoke.

5. Limit alcohol intake

Do not drink too much alcohol, which can raise your blood pressure. Men should consume no more than 2 drinks per day, and women no more than 1 drink per day. And in case you already have heart failure, alcohol can make it worse.

6. Treat another type of heart disease or related condition

Other heart problems, like heart attacks, increase the risk of heart failure. Hence, treatment and adherence to prescribed medications for high blood pressure can make a big difference.

7. Manage your stress as it can elevate your blood pressure

Mind-body practices such as Tai Chi, yoga, Qi Gong, and meditation can help in managing stress and thereby preventing heart diseases that lead to heart failure.

8. Have good quality sleep

Make lifestyle changes to get sound sleep, like going to bed and getting up at the same time every night, and keeping electronics out of the bedroom. Sleep problems like sleep apnea can increase the risk of heart failure. If you suffer from it, get treatment at the earliest.

9. Get your annual flu vaccination

The flu shot helps to prevent lung infections which can worsen the symptoms of heart failure.

For patients at risk of developing heart failure, screening for natriuretic peptide biomarkers and early intervention may prevent the condition.

To help you prevent heart disease and lead a healthy life, here are a few tips that every cardiologist wants you to know.

Read To Know!

Specialist To Visit

If you experience any symptoms of heart failure, do not take them lightly. It is best to consult a doctor who will evaluate the underlying cause of these problems and also assess the functioning of your heart. In addition to a general physician, specialists who can help to diagnose and treat heart failure include:

Cardiologist

Cardiac surgeon

We all know that a heart specialist is an expert who specializes in diagnosing, treating and preventing heart-related illness and complications. However, not all cardiologists or heart specialists are the same. Here’s more on the types of heart specialists and who you should consult for various heart problems.

Click To Know!

Treatment Of Heart Failure

The risk of heart failure can definitely be lowered by home-based lifestyle modifications like diet and exercise, but once you have been diagnosed with heart failure, it may become necessary to take certain medications or go for surgery.

A. Medications

People suffering from heart failure may need multiple medications for their condition. These medications are beneficial in treating and preventing heart failure. Whereas some of the medications help in improving sodium excretion, exercise tolerance, and cardiac function. The medicines that are commonly used in congestive heart failure are:

1. Diuretics: Also known as water pills, these drugs work by removing extra water and certain electrolytes from the body. This increases the amount of urine produced and aids in controlling hypertension and treating heart failure. Examples of drugs that belong to this class include:

Furosemide

Chlorthalidone

Hydrochlorothiazide

2. Angiotensin-converting enzyme (ACE) inhibitors: They work by dilating or widening blood vessels. This makes the blood flow more freely and the heart is able to pump blood more efficiently. Examples include:

Captopril

Ramipril

Enalapril

Lisinopril

3. Beta-blockers: Beta-blockers slow down the heart rate and make it easier for the heart to pump blood around the body. This lowers blood pressure and prevents a heart attack. They also widen the blood vessels in the body for better blood flow. Some of the common drugs include:

Propranolol

Metoprolol

Atenolol

4. Aldosterone antagonists: Aldosterone antagonists work by inhibiting the effects of aldosterone, a hormone that causes retention of sodium and water, leading to increased blood volume, and a subsequent increase in blood pressure. These drugs lower blood pressure and reduce fluid around the heart by removing the extra water and electrolytes from the body without loss of potassium. Some of the common examples include:

Spironolactone

Eplerenone

5. Angiotensin II receptor blockers (ARBs): This class of drugs relaxes blood vessels by blocking the action of Angiotensin, a chemical that narrows the blood vessels. These drugs lower the blood pressure, allowing the blood to flow more freely to different organs and the heart to pump more efficiently. Examples of the common medicines in this category are:

Telmisartan

Losartan

Olmesartan

6. Other drugs: Additionally, other drugs that can be used to treat heart failure include:

Sacubitril + valsartan belongs to a class of angiotensin receptor neprilysin inhibitors (ARNI). This combination treats heart failure by relaxing the blood vessels and making it easier for your heart to pump blood throughout your body. In addition, it also helps the body retain less water.

Ivabradine reduces the heart rate and lowers the workload on the heart and hence the oxygen requirement. As a result, the pumping action of the heart remains fully efficient.

Isosorbide dinitrate + hydralazine is a combination drug. Isosorbide dinitrate relaxes the blood vessels and decreases the oxygen demand of the heart. Hydralazine acts as an antioxidant and lessens tolerance to isosorbide dinitrate, thereby preserving its capacity to relax blood vessels. Together, they improve symptoms of heart failure.

Dapagliflozin is a drug commonly used to treat diabetes mellitus but recently this medicine has been found to be effective in patients with heart failure as well. It works by removing excess sugar from the body through urine. It is also known to reduce cardiovascular events and deaths due to heart failure.

B. Surgery

Some of the commonly recommended surgical treatment options for people with heart failure are:

Angioplasty: Angioplasty is the procedure for opening up the blocked blood vessels that can restrict the blood supply to the heart muscle (a major cause of heart failure).

Coronary artery bypass: The procedure of coronary bypass redirects a blood supply around a blocked artery.

Valve replacement: A defective or diseased valve can be a major cause of heart failure. In valve replacement, a faulty heart valve is replaced by an artificial mechanical valve.

Heart transplantation: A heart transplant is needed if the heart muscle function continues to deteriorate despite treatment. People with end-stage heart failure and those with congenital heart disease require heart transplantation.

C. Devices

Based on the cause & severity of your condition your doctor can recommend certain surgical devices to improve your heart condition.

Implantable cardiac defibrillator (ICDs): It is a small battery-powered device placed in your chest to detect and stop abnormal heartbeats. This device delivers electrical signals inside the heart to restore a normal heart rhythm.

Cardiac resynchronization therapy (Biventricular Pacing): It is a treatment for heart failure in people whose ventricles don't contract at the same time.

Ventricular assist devices (VADs): This is also known as a mechanical circulatory support device, which is an implantable mechanical pump that helps pump blood from the lower chambers of your heart (the ventricles) to the rest of your body. A VAD is used in people who have heart failure or temporarily by patients waiting for a heart transplant or heart recovery from injury.

Home-care For Heart Failure

The following simple changes in your lifestyle can be a major contributing factor in alleviating the symptoms of heart failure:

Stay physically active: Supervised moderate exercise is an integral part of a healthy heart regimen. It also helps in maintaining a healthy weight as obesity is a known factor that worsens heart failure. You can consult your doctor on which exercise to do in case you are at risk of heart failure.

Eat a heart-friendly diet: Foods that are good for your heart include green leafy vegetables, fruits, nuts, whole grains & low-fat dairy products. Try to limit the consumption of trans fat, saturated fats, cholesterol, red meat, and sugary foods.

Keep stress at bay: Stress can increase your blood pressure, hence it is important to manage it effectively. For stress-relieving, you can try yoga and meditation or deep breathing exercises.

Find out how yoga can keep your heart healthy.

Click Here

Limit the amount of fluid you drink: Do not drink more than 1.5 litres or 6 cups of fluid every day. Fluids include water, juice, soup, tea, coffee, and even some fruits like watermelons. You can also maintain a fluid balance chart to record how much fluids you are drinking.

Weigh yourself daily: Weigh yourself every day to monitor any signs of fluid retention in the body. Note your weight at the same time every day in the morning after using the washroom. Make sure not to eat anything before weighing yourself. Also, try to use the same weighing scale every day. Consult your doctor in case of any sudden increase of 2 kgs in 2 days.

Monitor yourself daily for symptoms of fluid retention: Keep a check on symptoms like increased shortness of breath or swelling in ankles which indicate fluid retention.

Limit your alcohol intake: Drinking excessive alcohol can increase the levels of certain fats known as triglycerides in your blood. These tend to clog the arteries and increase the risk of heart failure. Thus, it is important to keep your alcohol intake moderate.

Quit smoking: Smoking is known to increase heart rate and blood pressure, so it is important to quit smoking in order to improve the symptoms of heart failure.

Explore our smoking cessation range to help you quit smoking.

Check Now!

Did you know?

After a year you quit smoking, your risk of coronary heart disease reduces by 50% as compared to that of a smoker. Moreover, your circulation improves within 2-12 weeks. Here's more on how quitting smoking can improve your heart health.

Read To Know!

Complications Of Heart Failure

Some of the common health complications of heart failure include:

1. Arrhythmia or abnormal heart rhythm

Abnormal heart rhythm conditions such as atrial fibrillation, ventricular arrhythmias (ventricular tachycardia, ventricular fibrillation), and bradyarrhythmias are quite common in people suffering from heart failure. Atrial fibrillation is present in about one-third (range 10-50%) of patients with chronic heart failure and may represent either a cause or a consequence of heart failure.

2. Heart valve complications

The four valves of the heart open and close to keep blood flowing in the right direction. As the heart damage gets worse, the heart has to work harder to pump out blood. This can cause the heart to get enlarged, causing the valves to get damaged.

3. Thromboembolism

An irregular heartbeat can cause blood to pool which might lead to the formation of blood clots. These clots can cause a stroke, peripheral embolism, deep venous thrombosis, or pulmonary embolism.

4. Respiratory complications

Pulmonary congestion, respiratory muscle weakness, and pulmonary hypertension (rare) are also seen with heart failure.

5. Kidney damage or failure

Heart failure can reduce the blood flow to the kidneys. If left untreated, kidneys are not able to remove enough waste from the blood, eventually leading to kidney damage. Kidney damage can further worsen heart failure. As damaged kidneys are not able to remove water from the blood, it leads to an elevation in blood pressure, straining the heart even more.

6. Anemia

Kidneys make a protein called erythropoietin, which helps in the synthesis of new red blood cells. Kidney damage from heart failure prevents the body from making enough erythropoietin thereby causing anemia.

7. Liver damage

Heart failure reduces blood supply to the liver. Fluid buildup puts too much pressure on the portal vein that brings blood to the liver. This can lead to scarring and liver damage.

8. Weight and muscle loss

Heart failure can lead to extreme loss of weight and muscle mass.

Living With Heart Failure

Here are a few ways how people suffering from heart failure can improve their quality of life and lead a healthy life.

Be physically active: There are special heart exercise programs for people with heart failure, with a focus on individually adjusted training to build up their stamina and muscles. These programs can improve physical fitness and overall health.

Keep a watch on your fluid intake and weight: Limit your fluid intake to 1.5 litres or 6 cups of fluid everyday. You can also record or chart the amount of fluid consumption. Also keep a check on your weight everyday to monitor any signs of fluid retention in the body. Note your weight in the morning after using the washroom. Make sure not to eat anything before weighing yourself. Also, try to use the same weighing scale every day. Consult your doctor in case of any sudden increase of 2 kgs in 2 days.

Learn about factors affecting the heart health: Patients need to be educated on the importance of maintaining a healthy body weight, discontinuation of smoking, controlling blood pressure and ensuring normoglycemia. Get in touch with experts as heart failure is a serious disorder that is best managed by an interprofessional team. For example, dietitians can help educate the patient on the importance of a low salt diet and limiting fluid intake. Healthcare professionals can advise the patient on the importance of exercise, avoiding stress, and ensuring follow-up with the cardiologist.

Track and manage your symptoms: Patients with heart failure present with a variety of symptoms, most of which are non-specific. The common symptoms of congestive heart failure include fatigue, dyspnoea, swollen ankles, and exercise intolerance, or symptoms that relate to the underlying cause. So if you experience any symptoms of heart failure or worsening of the symptoms, then do report to your doctor. Also, keep a tab of your symptoms to understand how your condition is faring with time.

Coordinate with your doctor: The way in which heart failure continues to develop over time varies from person to person, depending on things like what is causing it and whether they have other medical conditions. In some people, the symptoms can be kept under control for many years. But sometimes the heart becomes weaker after a short amount of time. Keep in regular touch with your doctor.

Follow a proper medication regimen: It is a good idea to develop a medication regimen together with your doctor, to avoid interactions between different drugs. Non-prescription medications should be included too. For instance, non-prescription painkillers like diclofenac and ibuprofen aren’t suitable for people who have heart failure because they add to the burden on the kidneys.

Get vaccinated: Flu and pneumonia pose a greater danger to people who have heart failure (or any heart condition) than to healthy people. Ask your doctor about getting a yearly influenza (flu) vaccine and a one-time pneumococcal vaccine. Pneumonia is a lung infection that keeps your body from using oxygen as efficiently as it should. Your heart has to work harder to pump oxygenated blood through the body. If you have heart failure, you should avoid putting this extra stress on your heart.

Frequently Asked Questions

At what age does heart failure occur?

Is heart failure more common in men than women?

Should I limit my fluid and salt intake?

Can I exercise if I have heart failure?

How can I stop the need to get up in the night to go to the toilet?

How can I improve my breathlessness at night?

Can I have sex if I have heart failure?

How many glasses of water are recommended in heart failure? Will it not cause dehydration if I drink less fluids?

If a child has heart failure will it make the child prone to high blood pressure?

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Hepatitis A

Overview

Hepatitis A is a contagious viral infection that is transmitted through the ingestion of food or water that is contaminated by human waste containing hepatitis A or close personal contact with an infected person.

Hepatitis A is an acute, short-term illness that mainly targets the liver and causes symptoms like nausea, vomiting, fatigue, abdominal pain, poor appetite, fever, joint pain, itching, jaundice, dark yellow urine and grey or clay-colored stools.

Vaccination is key for long-term protection against the virus. Thorough handwashing, practising safe sex, and minimizing close personal contact with infected individuals reduce the risk of transmission of Hepatitis A.

There is no specific treatment for hepatitis A, as most cases resolve independently over 4-6 weeks. Supportive care, such as rest, hydration, and a healthy diet, is recommended. Alcohol and certain medications that can harm the liver should be avoided.

Resolution of Hepatitis A infection results in cure and a life-long immunity to Hepatitis A. One can still get other types of viral hepatitis though.

Key Facts

Usually seen in

Adults

Gender affected

Both men and women

Body part(s) involved

Liver

Prevalence

Worldwide: 1.5 million

Mimicking Conditions

Alcoholic hepatitis

Other Viral hepatitis (B, C, D, E)

Autoimmune hepatitis

Necessary health tests/imaging

Medical history and physical examination

Blood tests: IgG, IgM, LFT

RT-PCR test

Treatment

Rest

Adequate hydration

Proper nutrition

Regular monitoring

See All

Symptoms Of Hepatitis A

Hepatitis A is an acute, short-term viral infection that causes liver inflammation and damage.

The symptoms of hepatitis A can vary from mild to severe and usually appear about two to six weeks after exposure to the virus. The majority of adults have symptoms while children seldom show any symptoms. Symptoms of hepatitis A may include the following:

Nausea

Vomiting

Fatigue

Malaise

Abdominal pain

Poor appetite

Fever

Itching

Joint pain

Dark yellow urine

Gray or clay-colored stools

Jaundice

In mild cases, the infection may last about 4 to 6 weeks with more severe infections lasting about 6 months.

Unlike hepatitis B and C, hepatitis A does not cause chronic liver disease. However, very rarely it can cause acute liver failure, which can be fatal.

Is Hepatitis A contagious?

Yes. An infected person is most contagious (able to spread the virus to others) during the 2 weeks, even before the appearance of any symptoms. One may continue to be contagious for up to 3 weeks after developing symptoms.

Causes Of Hepatitis A

The hepatitis A virus (HAV) usually spreads through the oral-fecal route i.e. through direct or indirect contact with an infected person’s stool.

Here are some common ways in which hepatitis A can be spread:

1. Consuming contaminated water or food

This virus is usually transmitted by consuming water, liquids or food contaminated with feces that contains the virus. This can occur in some of the following ways:

Drinking water from sources such as unprotected wells, boreholes, and standpipes contaminated by feces during transportation or supply

Food, drinks, and ice made from contaminated water

Cooking and eating in utensils washed in contaminated water

Raw fruit and vegetables that are irrigated with water containing human waste or rinsed with contaminated water

Seafood especially crustaceans and shellfish grown in contaminated water

2. Poor hand hygiene

If someone infected with hepatitis A doesn't wash their hands properly after using the bathroom, they can contaminate objects, surfaces, or food they touch. This can spread the virus to others who touch their mouth after touching the contaminated objects.

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2. Close personal contact with an infected person

Close, personal contact with an infected individual, such as through sexual contact (oral-anal sex), care for someone who is unwell, or sharing needles and drugs with others, can spread Hepatitis A. Infected people who use needles can spread the virus by sharing them or not disposing of them properly.

Hepatitis A is very contagious, and people can spread the infection even before they become ill.

3. Getting tattoos and body piercings from unregulated settings

Needlestick or instrument-related exposure to blood is more likely in unregulated settings. To minimize the risk of infection, it is advisable to get tattoos or body piercings done in regulated establishments.

Did you know?

You cannot get hepatitis A from casual contact like sitting near or touching an infected person. Additionally, a baby cannot get infected with hepatitis A via breast milk.

Risk Factors For Hepatitis A

Anyone who has not been vaccinated or previously infected can get infected with the hepatitis A virus. The following individuals may be at a higher risk:

International travellers or individuals travelling to or living in regions with high hepatitis A prevalence.

Close personal contact or sex with an infected individual

Men who have sex with men (MSM)

Individuals using illicit drugs

Live with or take care on an infected individual

Live with or take care for a child recently adopted from a country where hepatitis A is common

Kids and teachers working in childcare centers or institutions

People experiencing homelessness or unstable housing

Individuals with chronic liver disease, including hepatitis B and hepatitis C

Those infected with HIV

Personnel who work with primates

Diagnosis Of Hepatitis A

Hepatitis A is typically diagnosed through a combination of medical history, physical examination, and laboratory tests.

Here are some common diagnostic methods used for hepatitis A:

1. Medical history and physical examination

Your doctor will ask you about your symptoms, recent travel and activities, and any potential exposure to the hepatitis A virus (HAV). They may also conduct a physical examination to assess your liver and overall health.

2. Blood tests

Blood tests are used to detect specific antibodies or viral components associated with hepatitis A. These tests include:

a. Hepatitis A IgM antibody test: The body makes IgM antibodies after the first exposure to hepatitis A. They stay in the blood for about 3 to 6 months. This is a primary test that detects IgM antibodies produced in response to the hepatitis A virus.

b. Hepatitis A IgG antibody test: This test checks for IgG antibodies, which indicate prior infection or vaccination against hepatitis A. It can help determine if you have had a past infection or have received vaccination.

c. Liver function tests: These tests measure the levels of certain enzymes and proteins in the blood that can indicate liver damage or inflammation. Elevated levels of liver enzymes, such as alanine transaminase (ALT) and aspartate transaminase (AST), may suggest hepatitis A infection.

3. Reverse transcriptase polymerase chain reaction (RT-PCR) RT-PCR test

This is an additional test to detect the hepatitis A virus RNA and may require specialized laboratory facilities.

Unsure of where to go for these tests? We are prepared to assist you.

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Prevention Of Hepatitis A

To prevent the spread of hepatitis A infection, it is essential to follow these measures:

1. Get Vaccinated

The hepatitis A vaccine is highly effective in preventing the infection. It is recommended for

Children aged 12 to 23 months

Older children who have not received the vaccine

Travellers to areas with high hepatitis A prevalence

Men who have sex with men

Individuals with occupational risk exposure

Pregnant women at risk of severe hepatitis A

People with clotting factor disorders or chronic liver disease

Those who use illegal drugs

Homeless or those people

Note: Standard adult dosing recommends the administration of two doses of the vaccine 6 to 12 months apart.

2. Maintain optimum hand hygiene

The spread of Hepatitis A can be prevented by following basic hand hygiene. It is advised to thoroughly wash the hands with soap and water:

After using the washroom

Before, during and after preparing food

Before and after eating food

Before and after feeding your children

After changing your child’s diaper or washing their stools

After taking care of someone suffering from cholera

It is also important to avoid touching your face, mouth, or eyes with unwashed hands.

3. Ensure safe drinking water

Drink only filtered or boiled water

Use filtered or boiled water to prepare food, brush teeth, and make ice

Avoid using water bottles without a seal

Store water in a clean and covered container

4. Cook and consume food vigilantly

Prepare food in filtered or boiled water

Wash fruits and vegetables with filtered or boiled water

Consume fruits and raw vegetables after peeling

Cook food thoroughly especially seafood such as shellfish which has the maximum chance of contamination.

5. Maintain cleanliness

Clean kitchen surfaces and utensils thoroughly with soap and water

Use kitchen utensils and surfaces to cook food after drying

Wash clothes 30 meters away from drinking water sources

Disinfect any stool-contaminated surfaces with household bleach

6. Improve Sanitation at the community level

Improving sanitation and sewage systems at a community level can help prevent the contamination of water sources and reduce the transmission of hepatitis A.

6. Practice safe sex

Hepatitis A can be transmitted through sexual contact, particularly anal-oral contact.

To reduce the risk:

Practice safe sex by using barrier methods, such as condoms, during sexual activity.

Limit the number of sexual partners and choose partners who have been vaccinated or are known to be free of hepatitis A infection.

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7. Avoid the reuse of needles

Sharing contaminated needles is a major risk factor of Hepatitis transmission. This includes needles used for tattoos and body piercings as well. It is advisable to get tattoos or body piercings done by regulated establishments.

How to prevent Hepatitis A if one comes in close contact with an infected person?

1. Get Post-exposure prophylaxis

If you have been in close contact with someone who has hepatitis A, your doctor may recommend post-exposure prophylaxis (PEP). PEP involves receiving a vaccine or immune globulin injection to prevent infection or reduce the severity of the illness.

2. Isolate yourself

To prevent transmission of the virus to others, it's advisable to limit contact with others until you are no longer contagious. Follow the recommendations of your doctor regarding isolation duration.

Does Hepatitis A vaccine provide protection against other forms of hepatitis?

No, the hepatitis A vaccine is specifically designed to protect against the hepatitis A virus and does not offer protection against other types of hepatitis, including hepatitis B or hepatitis C. Each form of hepatitis requires its own specific vaccine, so it is important to receive the appropriate vaccinations for comprehensive protection against all types of hepatitis. Want to know more about the ABC of hepatitis?

Click Here

Doctor To Visit

A general physician can investigate the causes of liver problems and refer patients for evaluation to the following specialists:

Gastroenterologist

Hepatologist

Gastroenterologists can diagnose and monitor Hepatitis A infection, assess liver function, and provide appropriate treatment options to manage symptoms and complications associated with the disease.

Hepatologists, who specialize in liver diseases, can offer comprehensive management of Hepatitis A, including the evaluation of liver damage, initiation of antiviral therapies if necessary, and long-term monitoring to ensure optimal liver health and recovery.

Here are some situations in which you should seek medical advice:

If you develop symptoms such as fatigue, loss of appetite, abdominal pain, jaundice etc. or if the symptoms get worse.

If you have been in close contact with someone who has hepatitis A

If you have a doubt that you’ve been exposed to hepatitis A.

If you are unsure about your vaccination status or need guidance on getting vaccinated to prevent hepatitis A.

If you have underlying liver disease or a weakened immune system

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Treatment Of Hepatitis A

The treatment for hepatitis A typically focuses on supportive care, as the infection usually resolves on its own without specific medical intervention. The body's immune system clears the virus over time, usually within a few weeks to months. During this period, supportive care is recommended to relieve symptoms and promote recovery.

Various supportive measures include:

Rest: Getting plenty of rest helps the body recover and conserve energy.

Fluids: Maintaining adequate hydration is important. Drinking water and electrolyte-rich fluids like oral rehydration solutions, coconut water can prevent dehydration, especially if there is vomiting or diarrhea. It is important to avoid alcohol during this time, as it can cause further liver damage.

Nutrition: Consuming a healthy, well- balanced wholesome diet supports liver function and overall recovery. Avoid any packaged, processed and junk food.

Read about the food items that must be included in the diet for a healthy liver

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Take medications with caution: Acetaminophen, paracetamol and medications against vomiting should be avoided. Medications that are metabolized by the liver should be approached cautiously, as the liver's function may be impaired.

Regular monitoring of liver function: Regular monitoring of liver function through blood tests may be recommended to ensure proper recovery.

Note: Rarely (less than 5% of cases), liver failure can occur from hepatitis A. Immediate hospitalization and referral to a transplant center is critical for cases of HAV-associated fulminant liver failure.

Did you know?

Resolution of Hepatitis A infection results in cure and a life-long immunity to Hepatitis A. You can still get other types of viral hepatitis though.

Home-care For Hepatitis A

The following herbal remedies have been traditionally used to improve liver’s health and function. However, it's important to take your doctor’s consent before initiating any of these herbal remedies for the management of Hepatitis A:

1. Turmeric (Haldi): Turmeric contains a compound called curcumin, which has anti-inflammatory and antioxidant properties. It also aids in the removal of toxins from the body.

Turmeric can be cooked with meals, or taken alone, or consumed as turmeric tablets and liquid extract.

2. Hellebore (Kutaki): It is considered a potent liver tonic in Ayurveda. It has a profound cleansing influence on both the liver and promotes liver function.

It can be taken in powder, tablet or capsule form.

3. Jamun (Indian blackberry): Jamun possesses antioxidant and anti-inflammatory properties that are helpful in reducing liver inflammation.

You can consume jamun as a fruit, fresh juice, powder, capsule or tablet form.

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4. Kalmegh: As per studies, the use of Kalmegh helped cure 80% of people with infectious hepatitis. The patients who took Kalmegh in the form of a decoction experienced a noticeable decrease in liver enzymes.

5. Ginger (Adrak): With its culinary versatility, ginger root is not only a flavorful ingredient but also a medicinal remedy for liver disease.

It possesses anti-inflammatory properties, safeguards against cellular damage, and provides potential support for liver health.

It can be added while cooking food or consumed in the form of a tablet, capsule.

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6. Triphala: Triphala is a powerful mixture that aids in regulating metabolism and promoting healthy bowel movements and liver function.

Triphala churna can be taken before bedtime to enhance overall wellness. It can be consumed as Triphala juice before having food.

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7. Amla (Indian gooseberry): Amla is rich in antioxidants and is believed to have liver-protective properties.

It can be consumed as fresh fruit. It also comes in different forms such as powder, tablet, capsule or candy.

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8. Green tea: It is loaded with antioxidants and its antiviral effects aid in fighting viral hepatitis.

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9. Milk thistle (doodh patra): It is A Mediterranean herb that acts as a potent liver cleanser. It aids in regenerating liver cells, minimizing damage, and eliminating toxins processed by the liver from the body.

It can be taken in the form of a tablet, capsule or powdered form as recommended by the doctor.

Check out our extensive liver-care range.

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Complications Of Hepatitis A

Hepatitis A (HAV) is a viral infection that primarily affects the liver. While most cases of hepatitis A resolve on their own without causing long-term complications, in some instances, it can lead to complications such as:

1. Prolonged Cholestasis

Hepatitis A causes liver inflammation, which can disrupt bile flow and lead to disruption of bile flow for an extended period. This buildup of bile in the liver can cause jaundice, dark urine, pale stools, and itching.

2. Relapsing hepatitis

The symptoms of Hepatitis A induced liver inflammation such as jaundice can reoccur periodically. However they are not chronic or long term.

3. Autoimmune hepatitis

Sometimes, hepatitis A can cause the immune system to mistakenly attack healthy liver cells, leading to autoimmune hepatitis. This condition involves chronic inflammation and can eventually lead to liver damage, scarring, cirrhosis, and liver failure.

4. Acute liver failure

Hepatitis A may cause liver failure in rare cases. It is more likely to occur in adults over the age of 50, those who are immunocompromised or have other liver illnesses.

5. Acute renal failure

Hepatitis A, although primarily affecting the liver, can cause acute renal failure in rare cases. This condition occurs when the kidneys suddenly lose their ability to filter waste and regulate fluids, potentially leading to toxin buildup and imbalances.

Alternative Therapies For Hepatitis A

Here are some complementary and alternative therapies that can augment the conventional treatment and support overall well-being during the recovery phase of hepatitis A:

1. Acupuncture: It is a traditional Chinese medicine practice that can provide relief for chronic pain, such as low-back pain, neck pain, and knee pain, which are commonly experienced by individuals with hepatitis A.

2. Meditation: It is a mindfulness practice that can boost overall immunity and faster recovery.

3. Tai chi: It appears to help improve balance and stability. Additionally, tai chi can alleviate back pain and knee pain, common symptoms experienced by those with hepatitis A.

4. Yoga: It is an ancient practice that combines physical postures, breathing exercises, and meditation, can be beneficial for individuals with hepatitis A. Yoga helps relieve stress, supports healthy habits, and improves mental and emotional well-being.

5. Relaxation techniques: Deep breathing exercises help individuals relax, reduce stress, and promote a sense of calmness. Guided imagery also helps create positive mental images to reduce anxiety and induce relaxation. These techniques can be used as self-care strategies to alleviate symptoms and enhance overall well-being in individuals with hepatitis A.

Living With Hepatitis A

Hepatitis A viral infection is typically a self-limiting disease that resolves on its own without causing long-term complications, it can still have an impact on a person's quality of life during the acute phase.

Here are some ways in which hepatitis A can affect the quality of life and strategies to cope with them:

1. Physical symptoms

Hepatitis A can cause physical symptoms like fatigue, nausea, abdominal pain, jaundice, loss of appetite, and muscle aches. These symptoms can disrupt daily activities and lower energy levels.

Coping strategies include getting enough rest, eating well, staying hydrated, and following your doctor's recommendations, which may include medications to relieve specific symptoms.

2. Emotional impact

Hepatitis A can cause emotional distress, including anxiety and worry about the disease's impact on personal and professional life.

Seeking support from friends, family, or mental health professionals can provide emotional support and help manage anxiety and stress.

3. Social isolation

Hepatitis A may cause social isolation due to the need to avoid spreading the infection.

While it is necessary to limit close contact with others, you can stay connected through phone calls, video chats, and social media.

Communicate your situation to close contacts to maintain social interactions and prevent misunderstandings.

4. Impact on work and school

Hepatitis A may necessitate time off from work or school, impacting productivity, finances, and education. Communicate with employers or school administrators, who may provide accommodations or flexible arrangements to manage workload and makeup missed studies.

Frequently Asked Questions

How soon after exposure to Hepatitis A will symptoms appear?

When should a child receive the Hepatitis A Vaccination?

How are hepatitis A, B and C different from each other?

Are there any side effects of a Hepatitis A vaccine reaction?

What should you do if you miss the vaccination?

If I Have Had Hepatitis A in the Past, Can I Get It Again?

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Hernia

Also known as Breach, Fissure, Fracture, Schism, Burst, Cleavage, Cleft, and Crack

Overview

A hernia occurs when an internal organ or other body part protrudes through the wall of muscle or tissue that normally contains it. Most hernias occur within the cavity in the stomach, between the chest and the hips.

Hernias can be caused due to weakness or strain on the muscles or a combination of both. Generally, hernias can be felt or seen as bulges and don't cause many symptoms. But, any physical activity that causes strain, can lead to pain, burning, a feeling of pressure, or a pulling sensation. The prevalence of hernias is generally based on the type which is based on the location.

The major risk factors for a hernia include physical strain, weight lifting, obesity, and pregnancy. While, it may not be a life-threatening disorder but hernia can cause severe complications if taken lightly

While surgery is the only option to treat hernias, the symptoms can be managed or prevented by not straining yourself along with certain lifestyle modifications like making sure you are not constipated, taking care of your injuries, and not lifting heavy weights.

Key Facts

Usually seen in

Adults above the age of 60 years.

Gender affected

Both men and women, but more common in men.

Body part(s) involved

Stomach

Groin

Belly button

Diaphragm

Leg

Prevalence

India: About 25 out of 100 men and 2 out of 100 women (2016)

Mimicking Conditions

Lymphadenopathy,

Lymphoma

Metastatic neoplasm,

Hydrocele

Epididymitis

Testicular torsion

Abscess, hematoma

Femoral artery aneurysm

Undescended testicle

Necessary health tests/imaging

Imaging techniques: Ultrasound, Computed tomography (CT), and Magnetic resonance imaging (MRI)

Treatment

Surgery: Laparoscopic surgery, Open procedures, and Reconstructive surgery.

See All

Types of Hernia

Hernia is the bulging of internal organs and based on the location it can be of different types. Some of the most common types include:

Inguinal hernia

This type of hernia is seen when fatty tissue or a part of your bowel pokes through the top part of your inner thigh (groin). It is most commonly seen in older men and can occur due to strain on the stomach.

Hiatus hernia

This occurs when part of the stomach pushes up into your chest through an opening in the thin sheet of muscle that separates the chest from the stomach (diaphragm). It usually just presents as heartburn or acidity and can occur as a result of the diaphragm becoming weak with age or pressure.

Femoral hernia

These are not very common and occur due to the same reason as inguinal hernia or protrusion of fat tissue into the groin. These are more commonly seen in women as a result of pressure on the stomach.

Umbilical hernia

This is seen near the belly button when the fat tissue pokes through it. It is commonly seen in babies if the opening in the stomach from where the umbilical cord passes through does not seal properly after birth.

Other types

These may include the following:

Incisional hernia: This is a very common complication of surgeries where tissue pokes

through a surgical wound in the stomach that has not fully healed.

Diaphragmatic hernia: It is a type of hiatus hernia where organs from the stomach

move into the chest through an opening in the diaphragm. This can also affect babies if

their diaphragm does not develop properly in the womb.

Epigastric hernia: This is seen as a lump in the midline between your belly button and breastbone which can cause pain.

Muscle hernia: This type of hernia occurs as a result of a sports injury where part of a

muscle pokes through the stomach or leg.

Spigelian hernia: It occurs when part of your bowel pokes the stomach at the side,

below your belly button.

Listen to our expert to learn more about hernia.

Symptoms Of Hernia

A hernia in the stomach or groin can produce a noticeable lump or bulge that can be pushed back in and laughing, crying, coughing, straining during a bowel movement, or physical activity may make the lump reappear.

Hernia, in most cases, is felt or seen as bulges and do not cause symptoms. However, it can lead to pain, burning, a feeling of pressure, or a pulling sensation, especially during physical strain.

Some other hernia symptoms include:

Swelling or bulge in the groin or the scrotum

Pain at the site of the bulge that increases while lifting

Dull aching pain around the bulge

Increase in the bulge size over time

Bloating

Bowel obstruction

In case of hiatus hernia, there may not be bulges on the outside of the body, instead, the symptoms may include:

Chest pain

Indigestion

Difficulty in swallowing

Frequent ringing food back up in the mouth

Heartburn

Suffering from heartburn?

Understand what medications to take to tackle this problem.

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Causes Of Hernia

Hernia can develop quickly or over a period of time by a combination of muscle weakness and strain.

Research shows that there are numerous risk factors that can cause a hernia.

Risk Factors For Hernia

There are a lot of risk factors that can increase your chances of developing a hernia. They include:

Congenital conditions

Birth defects in which there is a hole in the diaphragm can increase the risk of the peaking of the bowel, stomach, or even the liver can move into the chest cavity. This gap can form in the womb during the development of the fetus.

Family history of hernias

Studies suggests that patients with a family history have their primary hernias as well as their recurrence at a younger age than patients without a family history.

Age

Inguinal hernia is more frequent in individuals of older age than young adults because of loss of strength of the stomach wall and conditions which increase the pressure on the stomach.

Sex

Men are much more likely to get inguinal hernias than women, because of the location of the inguinal canal. Abdominal wall and umbilical hernias are also more common in pregnant women.

Pregnancy

The intra-abdominal pressure is usually high in pregnancy, increasing the chances of herniation or its recurrence. The incidence of umbilical hernia among pregnancies accounts for 0.08%.

Know the top 5 tips that every pregnant woman should be aware of.

Click Here

Injury or surgery

Incisional hernias happen when the surgical cut in the stomach wall doesn't close properly after surgery.

Lifting weights

Strenuous sports and physical activity, particularly weight-lifting, can lead to an inguinal hernia due to excessive strain on the muscles.

Note: Strenuous sports can also cause a condition known as sports hernia, which has similar symptoms but is not actually a hernia.

Premature birth or a low birth weight

Infants who are born prematurely are at an increased risk of having an inguinal hernia. Also, those with very low birth weight have a 3 times greater risk of requiring an emergency procedure than heavier infants.

Chronic cough

Repetitive cough over a long period of time increases the pressure and strain on the stomach walls leading to a hernia.

Constipation

It can increase straining during bowel movements leading to the emergence of abdominal hernia.

Learn the reason behind constipation and how to manage it.

Ascites

This is a condition in which there is fluid buildup in the stomach. Studies show that ascites can be a major etiologic factor as umbilical hernias occur almost exclusively in patients with persistent ascites who undergo surgery for liver cirrhosis.

Obesity

It adds to the risk of developing recurrent hernias as being obese or overweight increases the strain and pressure on the muscles of the stomach and makes them weaker and more prone to developing hernias.

Read more about 5 common causes of obesity that you should know.

Tap Here

Lung diseases

The risk factor for hernias also includes chronic lung infections, collagen disorders, and cystic fibrosis. For a diaphragmatic hernia, weakness of the diaphragmatic muscles can be the cause.

Smoking

Smoking weakens the connective tissue. Studies have shown that smoking is a known risk factor for the development of a hernia and it can also increase the risk of recurrence.

Want to quit smoking?

Try our extensive range of smoking cessation products that can help you get rid of this deadly habit.

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Diagnosis Of Hernia

Diagnosing hernia can be easy and mainly consists of a physical examination in which your doctor will first take a look while you are standing, by asking you to tense your stomach muscles and cough. Then you may be asked to lie down and the doctor will feel how big the hernia sac is and see whether it can be pushed back into the abdomen. A stethoscope can aid to assess bowel sounds in the hernia sac. Other to diagnose a hernia may include:

Imaging techniques

A more definitive diagnosis of a hidden hernia requires imaging as part of the workup to confirm the clinical suspicion and this may include:

Ultrasound: Groin pain from a hidden hernia can be a difficult clinical diagnosis, however, studies demonstrate that it is easier to detect by ultrasound.

Computed tomography (CT): Pelvic CT scan may be helpful in the diagnosis of inguinal hernia.

Magnetic resonance imaging (MRI): MRI has been shown to have a sensitivity of up to 94.5% in diagnosing inguinal hernias.

Book your tests now.

Click Here

Celebs affected

Amitabh Bacchan

Megastar Amitabh Bachchan developed multiple hernia in his lower abdomen which caused him severe pain. He tweeted "So the doctors have been after me for surgery, well two actually on either side of the abdomen and I have been avoiding it because of my busy schedule. But I shall have to take care of it now."

Dwayne Johnson

Also known as “The Rock”, during the shooting of a movie he injured himself and the painful accident tore his abdomen wall, for which he had to undergo emergency hernia surgery.

Specialist To Visit

Hernias occur in different body parts, and each type requires a different specialist to diagnose and treat different types of hernias.

Some of the doctors that you can consult include:

General physician

Urologist

Gastroenterologist

General surgeon

A urologist is a doctor who specializes in the study or treatment of the function and disorders of the urinary system. A gastroenterologist is a medical practitioner qualified to diagnose and treat disorders of the stomach and intestines.

When to see a doctor?

You should see a doctor immediately if you have a hernia and you develop any of the following symptoms:

Sudden and severe pain

Difficulty pooping or farting

Nausea and vomiting

The bump turns red, purple, or darker

Hernia becomes firm or tender, or cannot be pushed back in.

If you notice any of these symptoms, don’t hesitate and seek advice from our trusted team of doctors.

Consult Now

Prevention Of Hernia

Preventing a hernia can be tricky, here are a few things to keep in mind that can reduce the pressure on your abdomen, thus preventing your chances of landing up with a hernia:

Maintain an ideal body weight

Being overweight can put stress and pressure on your stomach with the extra fat. Shedding some extra kilos will help to greatly reduce your risk of developing a hernia.

Add fiber to your diet

Fiber-rich, low-acidic foods like apples, pears, carrots, sweet potatoes, and leafy greens are good dietary choices when you have a hernia as they help you prevent constipation, thus preventing hernia.

Read more about 5 foods that are loaded with fiber and can also help you lose weight.

Learn More

Do not lift heavy objects

Be careful and use the correct form when lifting weights or heavy objects. Don’t over-exert yourself.

Take care of your wounds

Avoid any activities that put pressure on your wounds, and always use any gel to promote wound healing. Also, limit sexual activity until your wound has healed completely.

Note: Do not get pregnant within six months of any surgery as it can lead to an umbilical hernia.

Treat your cough

Heavy coughing puts stress on your stomach, which may cause a hernia. Call your doctor if your cough doesn't go away after a few weeks.

Check out our range of cold and cough products that can help you relieve the symptoms.

Browse Now

Say no to smoking

Smoking is a known risk factor and can also lead to persistent cough, increasing your chances of developing a hernia.

Learn about 5 ways your body reacts when you stop smoking.

Read Now

Treatment Of Hernia

Hernia repairs are very common, while surgery is the only treatment that can repair hernias, watchful waiting is also an option for people who do not have complications or symptoms with their hernias. Surgical options include:

Mesh for hernia repair

Surgical mesh is a medical device that is used to provide additional support to weakened or damaged tissue. Mesh is often used to help strengthen the hernia and reduce the risk of recurrence.

Laparoscopic surgery

Laparoscopy is a type of surgical procedure that allows a surgeon to access the inside of the stomach and pelvis without having to make large incisions in the skin. This is a minimally invasive procedure that uses multiple small incisions no more than 1 centimeter in length to access the hernia. A mesh may or may not be required to do the repair

Open procedures

This is a type of surgery that uses a single incision to open the abdomen and access the hernia, after which the hernia is repaired using mesh. Open procedures are ideally suited for patients with large or multiple hernias. The open repair can be done with or without surgical mesh.

Reconstructive surgery

Abdominal wall reconstruction repairs defects in the walls of the stomach while reducing tension and providing structural support.

Note: Your doctor may give you medications for the pain and in most cases, the pain will lessen during the first week so that drugs are no longer needed.

Read more about types of painkillers and when they should be taken.

Click Here

Home care For Hernia

If you are diagnosed with a hernia, you can try these home remedies that can help you manage the symptoms:

Castor oil (Arandi ka tel): This oil helps to inhibit inflammation inside the stomach and promote proper digestion.

Aloe vera juice: Aloe vera has anti-inflammatory properties with soothing effects and consuming the juice before meals can be beneficial for easing out some of the symptoms of hernia.

Ginger (Adrak): Studies suggest that ginger can be useful in treating various gastric ailments like constipation, bloating, indigestion, nausea, and vomiting.

Black pepper (kali mirch): Black pepper is more than just an added flavor. It stimulates healing and can also suppress acid reflux which can help to cure the swollen region of a hernia.

Buttermilk (Chhachh): It is loaded with good bacteria and is considered a safe option for people with hiatal hernia as it can reduce acids in the stomach.

Want to know the amazing health benefits of buttermilk?

Read This

Turmeric (Haldi): It contains an active ingredient called curcumin and is believed to make the muscles stiffer, that may prevent the formation of hernia.

Complications Of Hernia

If the contents of the hernia get entrapped in the weak point in the stomach wall, the contents can block the bowel, leading to the following complications:

Severe or sudden

Nausea, and vomiting

Peritonitis (inflammation of the tissue that covers the lining of the stomach)

Intestinal strangulation (if the trapped section of the intestines does not get enough blood).

Did you know?

The impact of the COVID-19 pandemic led to a marked reduction in the number of elective hernia repairs, which led to complications due to the delay in the treatment.

Read More On COVID-19

Alternative Therapies For Hernia

The only treatment for a hernia is surgery, but there are certain alternative therapies that have shown promising results to alleviate the symptoms of hernia. They include:

Yoga

Studies show that yoga therapy with selected asanas is effective in the treatment of reversible inguinal hernias. It is important that you choose the right yoga poses to relieve the pressure on your stomach, strengthen the muscles of the stomach and close up the inguinal canal.

Know the 6 benefits of Yoga that even doctors swear by.

Read Now

Acupuncture

This has been shown to be an effective treatment for several health issues, including hiatal hernia. Studies demonstrate that anesthesia through acupuncture is a feasible anesthetic option as it reduces the amount of local anesthetic required, thus decreasing the complications. It is effective in pain relief and inhibiting gastrointestinal upset leading to a rapid postoperative recovery, which is usually complication free.

Traditional Chinese medicine (TMC)

Traditional Chinese medicine is effectively treating hernia as it uses herbs that clear away heat and toxic materials, promote qi circulation to relieve pain, diminish swelling and remove stasis, and has a good curative effect.

Living With Hernia

Large, clearly visible hernias are very unpleasant and can be quite distressing, while a hernia cannot heal itself, it can almost always be treated effectively with surgery. But, the good news is that most hernias can be repaired with minimally invasive surgery which has a low complication rate and most patients are able to get back to their normal routine quickly. Certain tips to keep in mind if you have been diagnosed with a hernia:

Be active, the right way

Being physically active in certain ways has been shown to help prevent hernias, but other types of exercise can put too much pressure on your abdomen. Beneficial exercises may include:

Cycling: Light cycling may be considered safe for people with smaller hernias and may also strengthen your muscles.

Walking: Walking is one of the most beneficial and simple exercises to perform and comes with many health benefits.

Swimming: Swimming can relieve a lot of pressure, strain, and pain.

Note: Any type of exercise that involves very high levels of exertion can also increase your hernia risk. Speak with your doctor and find out whether these exercises are appropriate for you.

Read about 5 amazing health benefits of swimming.

Click Now

Eat fiber-rich foods and in smaller quantities

Incorporating high-fiber foods into your diet can prevent constipation and strain during bowel movements. Also, smaller meals can be effective for decreasing the symptoms associated with hernias based on the fact that the less pressure you put on your stomach internally, the easier it is for you to digest your food.

Foods that may help in this area include:

Fruits

Vegetables

Whole grains

Nuts and seeds

Dried beans and peas

Note: Laxatives, like mineral oil, milk of magnesia (magnesium hydroxide), or MiraLAX (polyethylene glycol) can also help with constipation.

Explore our wide range of products that can help you if you have constipation.

Shop Now

Stay hydrated

It is important to maintain optimum hydration if you have a hiatal hernia. Drinking water outside meal times can help in diluting the digestive juices and aid in proper digestion, preventing constipation.

Avoid heavy lifting

If you have to lift a heavy object, bend down with your knees instead of your waist. Make your legs rather than your torso do most of the lifting effort. And if an object is too heavy for you to lift comfortably, know your limits and don’t do it.

Use ice packs

An ice pack on the hernia will act as a quick inflammation reliever when your hernia is causing too much discomfort. Always cover the ice with a soft cloth and do not leave it on for long periods.

Check if your prostate is enlarged

An enlarged prostate can increase pressure on the stomach by causing strain during urination. Most men develop an enlarged prostate as they age. Avoid straining during bowel movements or while urinating to decrease your chances of a hernia.

Enlargement of the prostate gland can be diagnosed by prostate-specific antigen. To know if you have this condition,

Book Your Test Now

Frequently Asked Questions

Is it always necessary to get surgery for hernia repair?

What are the risks of hernia repair surgery?

When is a mesh required for a hernia repair?

Will I have pain after surgery?

Can I exercise before and after a hernia repair?

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Herpes Simplex Virus Infections

Also known as Herpes, Herpes simplex, Oral herpes (Cold sores, fever blisters, Herpes labialis, Herpes gingivostomatitis) & Genital herpes (Herpes genitalis)

Overview

Herpes simplex virus infections, commonly known as herpes, is a viral infection caused by the herpes simplex virus (HSV). The term herpes is derived from the Greek word “to creep or crawl” in reference to the spreading nature of herpetic skin lesions in the form of small, painful blisters which usually turn into open sores. It affects a majority of the population one or more times during their lifetime but most people have asymptomatic herpes infection and only some develop symptoms.

There are two main types of HSV – HSV type 1 (HSV-1) and HSV type 2 (HSV-2). HSV-1 usually causes oral herpes which mainly affects the mouth and the surrounding areas whereas HSV-2 mostly causes genital herpes which mainly affects the genitals.

The virus can spread by close contact, sexual intercouse as well as from mother to baby during birth is the mother is infected. It is seen that women are known to be at a higher risk of suffering from HSV infections as compared to men.

Diagnosis of HSV infection is usually made by examination of skin blisters. Detection of Herpes simplex virus antibodies can also aid in diagnosis. Most herpetic infections resolve themselves without any treatment. Treatment, if required, typically consists of antivirals that can help in the management of herpes flare ups and prevent recurrence of the infection.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women but more common in women

Body part(s) involved

Skin

Mouth

Genitals

Prevalence

Worldwide (HSV-1 infection): 3.7 billion (2020)

Worldwide (HSV2 infection): 491 million (2020)

Mimicking Conditions

Syphilis

Chancroid

Lymphogranuloma venereum

Granuloma inguinale

Crohn disease

Behcet syndrome

Fixed drug eruptions

Psoriasis

Sexual trauma

Necessary health tests/imaging

Herpes Simplex Virus 1 & 2, IgM

Herpes Simplex Virus 1 & 2, IgG

Treatment

Acyclovir

Ganciclovir

Famciclovir

Valacyclovir

See All

Causes Of Herpes Simplex Virus Infections

Herpes simplex virus (HSV) infections are common viral infections caused by the Herpes simplex virus. While most people have asymptomatic HSV, which means you do not show any signs or symptoms, when infected, some may experience sporadic episodes of small, fluid-filled blisters or sores.

HSV can spread through close contact with the infected person. Ideally, the herpes simplex virus is transmitted when a person touches the sore. However, even a person who doesn’t have any sores can spread the virus. This is seen in most cases and the condition is known as asymptomatic viral shedding.

Once infected, the virus enters the cells and begins its replication. The virus also travels to the nerve cells where it stays in an inactive (dormant) state. This means that although the virus is present in the body, it neither replicates nor shows any symptoms. However, the virus can be suddenly activated at a later stage causing recurrence of the infection. These recurrences are often triggered by :

Stress or anxiety

Any infection, injury or febrile illness

Hormonal changes such as during menstruation

Exposure to extreme cold or hot conditions

Types Of Herpes Simplex Virus Infections

Herpes simplex is caused by either of the two types of herpes simplex virus (HSV), members of the herpesvirales family of double-stranded DNA viruses, such as:

1. HSV-1

HSV-1 majorly causes oral herpes also known as cold sores or fever blisters. It is a highly contagious infection occurring in and around the mouth. It is a very common infection and is usually acquired during childhood. Transmission is by oral-to-oral contact through saliva, which means it can spread through kissing or sharing objects such as toothbrushes, lipsticks or utensils.

However, it is also possible for HSV-1 to be transmitted through oral-genital contact causing infection in or around the genital area (genital herpes).

2. HSV-2

This type of HSV is mostly sexually transmitted through contact with genital surfaces, skin, sores or fluids of someone infected with the virus. It causes genital herpes or herpes genitalis which involves the genital or anal area.

Risk Factors Of Herpes Simplex Virus Infections

The following risk factors increase the susceptibility to herpes virus simplex infections:

Gender: It is seen that women are more prone to HSV infection as compared to men.

Close contact with an infected person: The virus can spread through prolonged skin-to-skin contact, kissing as well as sharing items such as brushes, cups, or towels.

Multiple sexual partners: Having multiple sexual partners can increase the risk of herpes infection as there are increased chances of coming in contact with a person who already has herpes or is an asymptomatic carrier.

Unprotected sexual contact: HSV-2 is mostly sexually transmitted through vaginal, anal or oral sex. People who don’t use safety measures like condoms or dental dams are at a higher risk of contracting herpes.

Low immunity: People who have low immunity or suffer from immunocompromised conditions such as human immunodeficiency virus (HIV) infection, autoimmune diseases, cancer, or immunoglobulin A (Ig A) deficiency are at a high risk. Also, if you are on immunosuppressive drugs such as chemotherapy or steroids or underwent organ transplant the risk is higher.

Did you know?

Herpes infections are most contagious when symptoms are present but can still be transmitted to others in the absence of symptoms. People who already have HSV-1 infection are not at risk of getting it again, but they are still at risk of acquiring herpes simplex virus type 2 (HSV-2) genital infection. Consult your doctor to know more.

Consult Now!

Symptoms Of Herpes Simplex Virus Infections

Herpes simplex virus infection is asymptomatic most of the time, however, in some cases the following signs and symptoms may be noticed.

1. Burning, itching, or tingling: If you have herpes, your skin may itch or burn for a few days before the appearance of blisters.

2. Sores: Painful fluid-filled blisters or sores may appear. These sores usually appear 2-20 days after a person has come in close contact with an infected person. They may form a crust prior to healing. The location of sores differ according to the type of HSV infection:

In the case of oral herpes (HSV-1) blisters usually appear on and around the lips (herpes labialis). Oral infection involves the inside of cheeks, tongue, gums and roof of the mouth (herpetic gingivostomatitis).

Genital herpes (HSV-2) sores mostly appear on genital organs like the vagina, vulva, labia and cervix in women and penis and testicles in man. In some cases, buttocks, anal region and inner thighs are also involved.

3. Flu-like symptoms: You may observe typical flu-like symptoms such as fever, sore throat, swollen lymph nodes in the neck (oral herpes) or groin (genital herpes), and muscle aches.

4. Urinary problems: People, mostly women, suffering from genital herpes may feel a burning sensation while urinating or trouble urinating.

5. Herpes keratitis: Sometimes the herpes simplex virus may spread to one or both eyes, where you may feel sensitivity to light, discharge from the eyes, pain, and a gritty feeling in the eye.

Note: Herpes can occur in other areas such as fingers (known as herpetic whitlow) and brain (known as herpes encephalitis).

Diagnosis Of Herpes Simplex Virus Infections

During an outbreak, a doctor or clinician can diagnose HSV infections by examining the sores or blisters. They might also ask about other symptoms, including flu-like symptoms and early signs, like tingling or burning.

To confirm the diagnosis, a swab or fluid sample may be taken from the sores or blisters and sent to a laboratory for culture or PCR testing.

When sores have healed or are not present, blood tests to check for HSV-1 and HSV-2 antibodies, a marker to show if one has been exposed to the virus, are recommended. These include:

Herpes simplex virus 1 & 2, IgM

Herpes simplex virus 1 & 2, IgG

While the blood test doesn’t show an active infection especially in the absence of open sores or lesions, it informs about exposure to herpes virus in the past. In case of first infection, the test will most likely be negative as there wouldn't have been enough time for the body to develop antibodies. In such cases, the HSV-1and HSV-2 antibody test may be repeated in eight to 12 weeks.

Prevention Of Herpes Simplex Virus Infections

To prevent contracting or spreading of HSV-1 infection or oral herpes:

Do not share your personal items such as towels & brushes with anyone.

Avoid sharing your drinks.

Do not let anyone come in close contact with you or touch your sore in case of an active infection.

Avoid triggers such as stress, sunlight, extreme cold weather, which can lead to recurrence of the infection.

To prevent contracting and spreading HSV-2 infection or genital herpes:

Practice safe sex. The consistent and correct use of barrier contraceptives like condoms can reduce the risk of an infection even if your partner is asymptomatic. Condoms can also protect from other sexually transmitted diseases. Use of condoms or dental dam while giving or receving oral sex is also equally important.

Avoid intercourse as soon as either partner suspects or is diagnosed with HSV infection.

Get an antibody test to know if you have herpes or any other sexually transmitted disease, which you may transmit to your partner.

Take antiviral medication as advised by your doctor. This reduces the chances of other people contracting the disease.

Did you know?

Unlike other common forms of contraception like oral contraceptive pills or coitus interruptus (withdrawal or pull-out method), condoms offer protection against sexually transmitted diseases (STDs). According to the Centre for Disease Control and Prevention (CDC), consistent and correct use of a condom can reduce the risk of STDs such as chlamydia, gonorrhea, trichomoniasis, etc and human immunodeficiency virus (HIV) transmission.

Click To Know More!

Specialist To Visit

You should visit your doctor if you have:

Small blisters that turn into red sores upon bursting around your mouth, genital, anal or thigh region.

Itching, tingling, or burning around your genitals

Burning sensation while urinating

Unusual discharge from the vagina or penis

You can consult specialists such as:

General physician

Dermatologist

Infectious disease specialist

Gynecologist

Consult India’s best doctors online with a single click.

Consult Now!

Treatment Of Herpes Simplex Virus Infections

Once you have the herpes virus, it stays in your body for the rest of your life. Herpes sores usually improve on their own in a week or two without medical treatment. But in case of severe or frequent outbreaks, a doctor can prescribe antiviral medications for the suppression of infection, manage the symptoms and prevent its recurrence. Your doctor might recommend an antiviral cream or ointment to relieve the symptoms such as burning, itching, or tingling. In some cases, antiviral oral medicines or injections are also given.

Some of the antiviral medicine used to treat both HSV-1 and HSV-2 infection are:

Acyclovir

Ganciclovir

Famciclovir

Valacyclovir

Click here to know more about the medicines for herpes simplex virus infections.

Click Now!

Home-care For Herpes Simplex Virus Infections

There are few things you can do at home to help manage herpes sores.

1. To relieve pain and discomfort

For painful blisters and sores, you can apply medicine such as benzocaine and L-lysine.

You can also put ice on the blisters to reduce pain and itching.

Keep away from triggers such as stress and getting a sunburn to prevent future outbreaks.

2. To prevent the spread of HSV infection

Prevent the spread of this virus to other parts of your body by:

Washing your hands after touching a blister or open sores

Not applying ointment with your fingertips to the open sores but making use of a cotton tip applicator.

3. To prevent the spread to an uninfected person

If you have sores or symptoms of herpes simplex virus avoid having sex with your partner

People with active symptoms of oral herpes should avoid oral contact with others and sharing objects that have contact with saliva such as utensils.

Even if you do not have any symptoms, you must use a latex condom to lower the risk of spreading the virus.

If you are pregnant and your partner has herpes, you must inform your doctor. You may need to take medicine towards the end of your pregnancy in order to prevent passing the virus to your newborn.

Complications Of Herpes Simplex Virus Infections

1. Finger or thumb infection

Also known as herpetic whitlow, in this infection your finger or thumb may become red or swollen before the appearance of blisters. This is usually accompanied by burning pain.

2. Esophagus infection

Herpes esophagitis is a viral infection of the esophagus that may be very painful and interfere with swallowing. It is usually seen in immunocompromised patients, post chemotherapy & HIV patients.

3. Eye infection

Herpes if left untreated may cause herpes keratitis. It leads to redness in one or both eyes, swollen eyelids, conjunctivitis with opacity and superficial ulceration of the cornea, pain in the periorbital region or impaired vision.

4. Other sexually transmitted infections

Genital herpes can increase the risk of transmitting or contracting other sexually transmitted infections including HIV.

5. Bladder complications

In some cases, genital herpes can cause inflammation of the urethra which is the tube that carries urine from the bladder to outside. The swelling can close the urethra for many days requiring the insertion of a catheter to drain the bladder.

6. Rectal inflammation (proctitis)

Genital herpes can also lead to inflammation of the lining of the rectum.

7. Nervous system involvement

Cranial or facial nerves can get infected by HSV, resulting in temporary paralysis of the affected muscles. Rarely, in Maurice syndrome, neuralgic pain may precede each recurrence of herpes by 1 or 2 days. On rare occasions, if herpes is left untreated it can lead to meningitis or encephalitis which is the inflammation of the membranes and cerebrospinal fluid surrounding the brain and spinal cord.

8. Eczema herpeticum

In patients with a history of atopic dermatitis or Darier disease, herpes simplex may result in a widespread disease called eczema herpeticum. Numerous blisters can erupt on the face or body along with swollen lymph glands and fever.

9. Erythema multiforme

A single or recurrent episodes of erythema multiforme can occur rarely with HSV infection. The rash of erythema multiforme presents as symmetrical plaques on hands, arms, feet and legs. It is marked by target lesions which sometimes have central sores.

Did you know?

Neonatal herpes simplex, though rare, can occur when an infant is exposed to HSV (HSV-1 or HSV-2) in the genital tract during delivery. It is a life threatening condition which may result in brain damage and blindness in the newborn. To know more, consult a doctor.

Click To Consult Now!

Alternative Therapies For Herpes Simplex Infections

Some home remedies might help in alleviating the symptoms associated with sores and blisters. Do consult your doctor before trying any of them.

1. Tea tree oil

Tea tree oil is a great remedy for plenty of health issues. To heal the herpes sores outbreak, the oil must be diluted with a carrier oil before using it on a cold sore or genital herpes.

2. Aloe vera

Aloe vera has wound-accelerating and soothing properties. Aloe vera gel extracted from the plant can be directly applied to the body without being diluted. It is helpful in getting rid of itching and redness caused by sores.

3. Echinacea

Echinacea is a medicinal plant having anti-viral properties. It is known for enhancing the immune system and easing the symptoms of this viral infection. All parts of the Echinacea plant, namely flowers, leaves, and roots can be used for healing herpes.

4. Lemon balm

Lemon balm is one of the most effective herbal remedies that may cure and reduce the risk of transmission of herpes. It has flavonoids, phenolic acid, and rosmarinic acid, which helps in healing the sores or blisters.

5. Baking soda

Baking soda is an effective treatment for getting rid of herpes fast. It provides relief from the itchy and painful sores.

6. Epsom salt

Bathing in epsom salt water is a great remedy for soothing the itching and pain in herpes. This remedy makes the sores dry, thereby reducing itching.

7. Oregano oil

Oregano oil has anti-viral properties that can help alleviate the symptoms of the herpes simplex virus and help in the speedy recovery of herpes blisters.

8. Ice pack

The simplest method to get some relief from herpetic lesions, specifically for genital herpes is application of ice. However, it should be kept in mind that long exposure to ice on the genital parts can damage the tissues.

Living With Herpes Simplex Infections

Herpes can be managed well with medications and other preventive measures. It usually doesn't cause any serious troubles in healthy adults. However, there are a few things that should be kept in mind if you or your partner are living with herpes infection.

If you or your partner have an active herpes infection do not indulge in any form of sexual activity.

It is advised to use condoms while having sexual intercourse. However remember, condoms only protect against genital exposure to the virus, however they fail to protect against skin-to-skin contact with open sores.

In case of genital herpes avoid touching the affected areas during an outbreak, and wash your hands frequently to avoid transferring the infection to other parts of the body.

Herpes, like other sexually transmitted diseases, comes with some social stigma and can also have an impact on sexual relationships. If you're feeling distressed about your condition, it is advised to talk with your doctor, therapist, or counselor.

Frequently Asked Questions

Am I at a high risk of getting herpes?

Can herpes be cured?

How long do herpes sores last?

Can I conceive if I have herpes?

How to reduce herpes flare-ups?

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Indigestion

Also known as Dyspepsia, Abdominal Discomfort, Stomach Upset

Overview

A sensation of pain or discomfort in the upper abdominal region accompanied by a feeling of fullness, bloating, and flatulence is known as indigestion or dyspepsia. Some of the common causes of indigestion include sedentary lifestyle, eating habits, certain medications, and some gastrointestinal illnesses like GERD.

In most cases, indigestion can be controlled by making simple lifestyle changes such as taking a physical activity, balanced healthy diet and consuming alcohol and carbonated beverages in moderation. If lifestyle measures fail to improve the condition, then the use of over-the-counter (OTC) medications like antacids are suggested to improve indigestion. Prescription drugs like prokinetics and antibiotics may also be advised to treat the underlying cause of indigestion.

If indigestion becomes a chronic problem and/or is accompanied by other symptoms such as diarrhea, vomiting, blood in the stools, severe abdominal pain, or chest pain, it is essential to seek prompt medical care.

Key Facts

Usually seen in

Adults above 25 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Stomach

Large intestine

Small intestine

Oesophagus

Prevalence

Worldwide: 10 - 30% (2018)

Mimicking Conditions

Esophagitis

Gastritis

GERD

Esophageal Spasm

Gastrointestinal Malignancy

Necessary health tests/imaging

X-Ray Abdomen

USG Abdomen

Dual Phase CT Abdomen

Barium Meal Follow Through

Barium Swallow

Complete Hemogram

Lipid Profile Plus

Liver Function Test

Stool Examination R/M

Treatment

Probiotics

Digestive enzymes

Antacids

Prokinetic agents

Mesalazine formulations

Tegaserod

Antibiotics for treatment of H.pylori infection- Amoxicillin, Clarithromycin ,Tetracycline

Tricyclic antidepressants

See All

Symptoms Of Indigestion

Indigestion refers to a sensation of pain or discomfort in the upper abdominal region. It is not a disease in itself but instead presents as a group of symptoms seen in certain gastrointestinal diseases.

You may be suffering from indigestion if you have the following symptoms -

Feeling full too soon while eating meals

A sensation of bloating in the abdomen

Abdominal cramps

Pain along the sides of the stomach

Burning sensation in the stomach or upper abdomen

Hyperacidity

Nausea and vomiting

Growling or grinding sounds in the stomach

Acidic taste in the mouth

Burping or belching up stomach contents

Flatulence

Seek medical attention in the following conditions:

Unintentional weight loss or loss of appetite

Repeated vomiting or vomiting with blood

Black, tarry stools

Trouble swallowing that gets progressively worse

Fatigue or weakness, which may indicate anemia

Causes Of Indigestion

Many factors can cause Indigestion such as -

Lifestyle and dietary factors

Consuming excess alcohol, caffeinated beverages, and carbonated beverages irritate the stomach and cause indigestion.

Eating larger meals that are fried, spicy, or salty also causes stomach upset.

Eating stale and undercooked food.

Excessive smoking also irritates the stomach and causes indigestion

Leading a sedentary lifestyle

Overeating or eating too quickly

Being stressed or overly anxious most of the time

Gastrointestinal diseases

Many gastrointestinal diseases cause an upset stomach, such as -

GERD (gastroesophageal reflux disease): It causes the contents of the stomach to hurl back into the esophagus and cause symptoms like heartburn and dyspepsia (indigestion).

Gastroparesis: It is a condition in which the stomach is not able to empty itself due to affected motility of the stomach. This leads to the sensation of fullness and bloating.

Irritable bowel syndrome: It is a condition that affects the absorption of food from the intestines and can cause indigestion.

Celiac disease: In this condition, the body abnormally reacts to gluten, a protein found in grains such as wheat and barley.

Malabsorption syndrome: It is a condition in which the small intestine is not able to absorb nutrients from the food and body.

Gastrointestinal infections: It can cause acute inflammation in the gastrointestinal tract, known as gastritis or gastroenteritis. These may be caused by a variety of microorganisms.

Chronic pancreatitis: It can often cause bloating, flatulence, and indigestion.

Gastric cancers: They are a rare condition but could be a probable cause of indigestion.

Medications

Certain medications like NSAID painkillers, antibiotics like fluoroquinolones tetracycline, iron and potassium supplements, cardiovascular drugs like digitalis, etc., can irritate the gastric lining and cause hyperacidity, bloating, or indigestion.

Functional dyspepsia

This type of indigestion with no apparent cause is chronic and can last for more than 6 months. It is not associated with stool irregularities either.

Other conditions

Sometimes indigestion is caused by other conditions such as:

Gallstones

Constipation

Reduced blood flow in the intestine (intestinal ischemia)

Diabetes

Thyroid disease

Pregnancy

Risk Factors For Indigestion

Indigestion is a very common condition that affects people of all ages and sex. The incidence of indigestion is found to be higher among

Smokers

Alcoholics

Frequent use of NSAIDs/painkillers

Individuals who have suffered from H. Pylori infection

Diagnosis Of Indigestion

A single episode of indigestion is not a cause for concern and requires no further evaluation. However, if indigestion is recurrent, accompanied by other troublesome symptoms, and interferes with the person’s daily life and activities, lab investigations and imaging studies may be needed to establish the cause of indigestion.

Laboratory tests

Laboratory tests play a limited role in the evaluation of indigestion. Complete hemogram, Lipid profile plus, and liver function test may give an insight into the general health of the patients. Breath test and stool examination R/M may be performed to check for the presence of Helicobacter pylori (H. pylori), the bacterium associated with peptic ulcers and also to find out any disease association, which can cause indigestion.

Imaging studies

X-Ray abdomen - helps visualize the internal organs of the abdomen and looks for the presence of obstruction or as part barium swallow testing.

USG Abdomen, Dual Phase CT Abdomen - to visualize the internal organs of the abdomen in greater detail and diagnose any abnormalities

Barium Meal Follow Through, Barium Swallow - for this study, the patient is made to swallow a drink that has barium in it, followed by taking x-rays of the digestive tract. This helps identify any abnormalities of the esophagus, stomach, or intestines.

A gastric emptying scan helps check the time taken by food particles to pass from the stomach to the intestines and can help identify reduced gastric motility.

Endoscopy, Colonoscopy - these are invasive tests in which a probe is inserted via the mouth (endoscopy) or the rectum (colonoscopy) to visualize the inner structures of the digestive tract in real-time.

Celebs affected

Bill Clinton

Former US president Bill Clinton has revealed that he was suffering from acid reflux during his stay in the White House

Prevention Of Indigestion

Although indigestion is a very common occurrence, certain lifestyle modifications can help prevent the condition as follows: .

Eat fresh, home-cooked food, which is simple and easy to digest. Avoid eating fried and spicy food.

Eat smaller portions throughout the day rather than consuming large meals at once.

Limit the consumption of aerated beverages and caffeinated beverages.

Quit smoking and consumption of alcohol.

Avoid taking medications, such as NSAID painkillers, antibiotics, etc., for a longer duration than prescribed.

Perform light exercises, such as walking, after consuming heavy meals to help with the digestion process.

Drink plenty of water and fluids throughout the day.

Do not consume foods that cause allergies.

Indigestion is often neglected by many people as they consider it as a common issue which does not require much attention. That may be right to some extent as an occasional episode of indigestion is mostly harmless and can be fixed easily by simple home remedies. Here are some: Indian remedies to treat indigestion naturally.

Specialist To Visit

You must visit a doctor if indigestion becomes a chronic problem and/or is accompanied by one or more of the following symptoms:

Diarrhea

Vomiting

Blood in the stools

Change in the color or frequency of stools

Unexplained weight loss

Severe abdominal pain

Chest pain

In order to diagnose and treat the symptoms of indigestion, you need to visit:

General physician

Gastroenterologist

Treatment Of Indigestion

The treatment of indigestion aims to provide relief from symptoms and treat the underlying cause.

Symptomatic relief

Digestive enzymes and probiotics help relieve the symptoms of indigestion and improve the body’s digestive system.

OTC preparations for gas, acidity and indigestion help provide immediate symptom relief.

Treatment of underlying cause

If symptoms of gas are due to an underlying cause, it is necessary to treat the causative condition to provide complete relief.

Mesalazine formulations are used to treat Crohn’s Disease and ulcerative colitis.

Proton pump inhibitors (PPIs) like pantoprazole and omeprazole and H2 receptor blockers like famotidine and ranitidine can reduce stomach acid and may be recommended if you experience heartburn along with indigestion.

Antacids and prokinetic agents are used to treat gastroesophageal disease (GERD) and peptic ulcers.

Tegaserod preparations are useful in constipation and reduced movement of food from the mouth which leads to symptoms of indigestion.

Antibiotics like amoxicillin, clarithromycin & tetracycline are used to treat infections like H. Pylori.

Tricyclic antidepressants are used to treat functional dyspepsia, a condition where the cause of dyspepsia is not apparent.

Home Care For Indigestion

Most often, symptoms of indigestion, such as abdominal pain, flatulence, or bloating can be managed at home with simple home remedies and lifestyle changes. Here is a list of things to follow in order to reduce indigestion-related problems:

Take OTC preparations to help with faster relief of symptoms.

Perform mild exercise, such as walking, as it helps with digestion and reduces bloating.

Gently massage the abdomen to reduce abdominal cramps and bloating.

Modify your diet by increasing the consumption of fiber-rich foods, such as fresh fruits and vegetables. Also, reduce the intake of fatty, spicy foods that are prime cause of indigestion.

Limit the consumption of alcohol, aerated, and caffeinated beverages.

Modify or reduce the use of medications, such as NSAIDs or painkillers.

Ginger, yoghurt, and papaya can fight indigestion

You can prevent indigestion from worsening if you avoid foods such as caffeine, high-fat diets, alcohol, and spicy foods. On the other hand, including certain foods in your diet like ginger, papaya, and yoghurt can help you to improve digestion and fight indigestion. Here is a list of few other foods you must include in the diet to fight digestive problems

Read To Know More!

Complications Of Indigestion

Indigestion does not cause any major complications on its own. The underlying disease, however, may worsen and cause health complications like:

Ulceration and bleeding in the gastrointestinal tract due to worsening of GERD and peptic ulcer disease

Malnutrition due to the inability of the body to absorb nutrients

Increased risk of gastrointestinal cancers

Intestinal obstruction

Alternative Therapies Of Indigestion

Apart from prescription medications and OTC preparations, there are alternative therapies that may help provide relief from chronic indigestion, such as -

Diet modifications

Diet rich in fresh fruits and vegetables can help benefit in relieving the symptoms of indigestion. Along with that, limiting the consumption of spicy foods, fatty foods, and foods that cause allergies helps improve the overall health of the digestive system. It is advisable to eat smaller portions throughout the day instead of eating larger meals all at one go. Also, to prevent indigestion, it is recommended to have a minimum gap of 2 hours between dinner and sleep time. Early dinner, followed by a short distance walk can aid digestion and also help you sleep better.

Exercise and yoga

Light exercises can help reduce abdominal discomfort, provide relief from symptoms, and improve digestion. You can do walking, simple whole body movements, light stretching, and Yoga Asanas. Paschimottanasana, Supta Baddha Konasana, Vajrasana, Pawanmuktasana are some yoga asanas suggested for digestive health.

Massage therapy

Gentle abdominal massage may help ease abdominal cramps and provide relief from constipation. You can massage your abdomen gently in circular movements, while lying down. Be careful not to exert heavy pressure as it may cause harm to the internal organs.

Ayurveda

Ayurveda suggests that indigestion or Ajirna Rog is caused when food is consumed without self-restraint. Bio cleansing therapies like Shodhana Chikitsa and Shamana Chikitsa help manage indigestion.

Natural herbs and spices, such as cinnamon (dalchini), carom (ajwain) seeds, cumin (jeera) seeds, ginger (adrak), asafoetida (hing), fenugreek (methi), etc., help build a strong digestive system and provide relief from flatulence and belching. You can use these herbs and spices in your meal preparations or even consume small quantities directly. Taking a pinch of asafoetida or carom seeds after a heavy meal or sucking on a piece of ginger candy or cinnamon stick can improve digestion. Medicinal preparations like Lahsunadi Vati and Hingavastaka Churna also help reduce indigestion.

Amla juice is good for indigestion

Amla juice not only helps in indigestion but also acts as an effective remedy in relieving acidity and heartburn. Take 15-20ml of amla juice and add equal amounts of water. Drink this amla juice every morning on an empty stomach for a healthy gut. Click here for more ayurvedic remedies for indigestion.

Click Here!

Living With Indigestion

Chronic indigestion may impose a lot of dietary restrictions for a patient. The person may not be able to enjoy or occasionally binge on fast foods or snacks. They may need to completely avoid eating food items if they suffer from any allergies such as lactose intolerance.

Chronic indigestion may also cause problems such malnutrition as the patient may avoid eating meals. An acute episode of indigestion may leave the patient extremely weak and fatigued. If suffering from severe symptoms of indigestion such as prolonged nausea, excessive vomiting or diarrhoea, severe stomach cramping, etc., medical care must be sought promptly.

Additionally, here are a few tips which can help people with functional dyspepsia:

Your busy schedule rarely gives you a chance to relish your meals, making you eat fast and swallow without chewing thoroughly. Make sure to eat slowly and chew your food properly.

Always have your dinner 3 hours prior to bedtime.

Ensure you take a small walk before climbing to bed.

Drink 1-2 liters of water throughout the day. This will dilute the acid in your tummy and help in better digestion.

Include a lot of fresh fruits and vegetables in your diet.

Get your daily dose of sleep because lack of sleep is also a key risk factor for stomach problems such as indigestion.

Frequently Asked Questions

Which foods can cause indigestion?

What is the difference between indigestion and acidity?

Is indigestion a serious illness?

What should I do if I have indigestion?

Can food allergies lead to indigestion?

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Inflammation within blood vessels (Vasculitis)

Also known as Angiitis, Arteritis, Inflammation within blood vessels, and inflammation in arteries

Overview

Vasculitis is a group of conditions where the body's immune system causes inflammation and narrowing of blood vessels, including arteries, veins, and capillaries. This can lead to damage to the vessels and interfere with the flow of blood throughout the body.

Vasculitis can cause mild to life-threatening symptoms. The exact cause for vasculitis is unclear; however, smoking, substance abuse, unhealthy habits, chronic infections, and genetics can increase the likelihood of developing it. Based on the size of the affected blood vessels, vasculitis can result in diverse symptoms and is classified into 20 disorders. It is vital to determine the type and position of the affected blood vessels and organs before treating it.

Maintaining a healthy lifestyle with exercise, a balanced diet, and symptom management can help minimize complications and enhance the quality of life. Treatment usually involves medication to control inflammation and prevent future episodes. Surgery may be required in severe cases.

Key Facts

Usually seen in

All age groups

Gender affected

Both men and women

Body part(s) involved

Blood vessels of the entire body

Mimicking Conditions

Endocarditis

Histoplasmosis (fungal infection)

Gonococcal arthritis

Antiphospholipid syndrome

Thrombotic thrombocytopenic purpura

Atrial myxoma

Lymphoma

Necessary health tests/imaging

Blood tests: Erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), Antineutrophil cytoplasmic antibodies (ANCA), Complement levels, and IgE levels.

Urine dipstick

Imaging tests: X-ray, Angiography, Ultrasound scan, EKG, EMG, CT scan, and MRI.

Molecular imaging: Positron emission tomography: and PET scan.

Biopsy

Treatment

1. Medications

Non-steroidal anti-inflammatory drugs (NSAIDs): Aspirin

Immunomodulators: Azathioprine and Cyclosporine

Corticosteroids: Prednisolone, & Methylprednisolone

Antimalarial drugs: Hydroxychloroquine

Neutrophil-chemotaxis inhibitors: Dapsone and colchicine

Antiviral drugs: Interferon α, Ribavirin, Vidarabine, and/or lamivudine

Disease-modifying antirheumatic drugs: Rituximab, Cyclophosphamide, Azathioprine, & Methotrexate.

Intravenous immunoglobulin G

2. Surgery

Plasmapheresis and Bypass surgery.

Specialists to consult

General Physician

Rheumatologists

Neurologists

Ophthalmologists

Cardiologists

Nephrologists

Pulmonologists

Dermatologists

Symptoms Of Vasculitis

Vasculitis can affect blood vessels in different ways. Palpable purpura, which appears as small raised bruises, is a critical sign of small-vessel vasculitis, but other skin lesions may also occur. Vasculitis can cause a range of symptoms in various parts of the body that include:

Red or purple spots, on the skin

Itching, lumps, or sores

Headaches

Fatigue

Fever

Loss of weight

Abdominal pain

Pain and numbness in hands and feet

Diarrhea

Ulcers in the stomach

Bleeding in stools

Muscle weakness

Confusion, and difficulty focusing

Dizziness

Ringing in the ears or hearing loss

Chronic sinus congestion

Bleeding from nose

Eyes may be red, and itchy

Vision problems

Difficulty breathing

Coughing up blood

High blood pressure

Arrhythmia (irregular heartbeat)

Angina (chest pain)

Fluid retention or failure of kidneys

Note: In serious cases, vasculitis can block blood vessels, so blood can’t flow through them, or they can bulge (aneurysm) and possibly burst .

These symptoms not only take a toll on the body, but can affect the mind as well. Make your mental health a priority with our widest range of mental wellness products to meet your needs.

Check them out

Types Of Vasculitis

Vasculitis can be differentiated based on the size of the blood vessels affected, falling into one of three general categories. They include:

Large vessel vasculitis

It affects the body’s large arteries, including the aorta (which transports oxygen-rich blood from your heart to the rest of your body). Following are the types of large vessel vasculitis:

1. Giant cell arteries (temporal arteries): It is generally found in adults older than age 50. It affects upper body parts including the head, temples, and neck.

2. Takayasu arteritis: This type of vasculitis affects the large artery and may cause inflammation, narrowing, or blockage of the arteries or weaken the lining of artery walls that may rupture or burst.

Medium vessel vasculitis

This category belongs to medium blood vessels. The following are the types of medium vessel vasculitis:

1. Kawasaki disease (KD): It is common in young children (under the age of 5). Inflammation in multiple arteries and veins of the body is seen. It affects lymph nodes, mucous membranes, and skin. It can lead to severe health problems such as heart damage, if not diagnosed and treated properly.

2. Polyarteritis nodosa: It affects multiple blood vessels in different parts of the body, including the skin, heart, kidneys, muscles, and intestines.

Small vessel vasculitis

As the name suggests, this type is characterized by inflammation and blockage of small arteries. Different types of small vessel vasculitis include:

1. Microscopic polyangiitis (MPA): It causes inflammation of small blood vessels along with inflammation in the kidneys, lungs, and nerves, but also involves the skin and joints.

2. Granulomatosis with polyangiitis (GPA): It is a rare condition that causes inflammation in small blood vessels, and it's more common in older individuals.

3. Eosinophilic granulomatosis with polyangiitis (EGPA): It is an extremely rare form of vasculitis that causes inflammation in small blood vessels, leading to restricted blood flow and potential organ damage if not treated. It primarily affects the respiratory system and is linked with asthma.

4. Immunoglobulin A (IgA): It is a type of vasculitis that can occur in people of all ages, but is more common in young children. It is caused by the accumulation of immunoglobulin A (an antibody) in small blood vessels. This leads to inflammation and bleeding and can affect various parts of the body such as the skin, joints, kidneys, or intestines.

5. Hypocomplementemic urticarial vasculitis (HUV): It is an uncommon type of vasculitis that causes inflammation of small blood vessels that are linked to antibodies. It can lead to kidney damage and other health issues such as arthritis, lung problems, and eye inflammation.

Others

1. Behcet’s disease: This condition affects blood vessels of all sizes and including skin, kidney, heart, brain, and spinal cord. More common during the second and third decades of life.

2. Buerger disease: This is inflammation of small and medium-sized blood vessels. It causes a tightening, or a blockage, of the blood vessels in your feet and hands.

Causes Of Vasculitis

The exact cause of vasculitis is not yet known. However, it is believed that vasculitis happens when the immune system mistakenly attacks blood vessel cells as if they were foreign objects. This makes it an autoimmune disease. Certain types of vasculitis may be linked to a person's genetics as well.

Risk Factors For Vasculitis

Vasculitis is a rare autoimmune disease that can affect anyone. Some of the risk factors associated with vasculitis are:

1. Family history

Vasculitis runs in families, and the most common types include:

Behçet’s disease

IgA vasculitis

Kawasaki disease

2. Lifestyle choices

Smoking can increase your risk of Buerger's disease, especially if you're a man younger than 45. Using drugs such as cocaine also raises your risk of developing vasculitis.

It’s never too late to quit smoking.

Try our widest range of smoking cessation products available to help you get rid of this deadly habit successfully.

Explore here

3. Medications

The risk of vasculitis increases if you take certain medicines like hydralazine, levamisole, propylthiouracil, and tumor necrosis factor inhibitors (used to treat some immune diseases).

4. Medical conditions

Disorders that can increase your chances of getting vasculitis include:

Autoimmune disorders: People with disorders in which their immune systems start attacking their body parts by mistake may be at higher risk of vasculitis. These disorders include lupus, Sjogren's syndrome, rheumatoid arthritis, and scleroderma.

Cancer: Such as lymphomas can increase the risk of vasculitis. Studies suggest that cutaneous vasculitis is a manifestation of cancer.

Infections: Having hepatitis B or C infections can increase your risk of vasculitis. Also, bacterial infections like gonorrhea may be associated with small-vessel vasculitis.

5. Sex

Depending on the type, the prevalence among men and women can change. For example:

Buerger’s disease: It is most common in men

Giant cell arteritis: It affects women 4 times more often than men

Microscopic polyangiitis: It affects men slightly more often than women.

6. Race

Ethnicity can also increase your risk of vasculitis like:

Behçet’s disease: Common in the Mediterranean, the Middle East, Central Asia, China, and Japan.

Giant cell arteritis: Common in Scandinavia and Minnesota.

Kawasaki disease: Common among Japanese children.

Did you know?

Systemic vasculitis can increase your complications if you are infected with the COVID-19 virus. Keep your guard up with our coronavirus prevention range here.

Stock up

Diagnosis Of Vasculitis

Diagnosing vasculitis can be tricky as there are several types and the symptoms can overlap with those of other conditions. Your doctor will ask questions regarding your health and recent medication. They will also do a physical exam and various tests to determine the type of vasculitis or rule out other conditions that look like it. Diagnostic approaches includes:

Blood tests

Antibodies and certain types of blood cells can be signs of vasculitis. These blood tests include:

Erythrocyte sedimentation rate (ESR) test: These tests can help determine whether inflammation is present or not.

C-reactive protein (CRP) test: It is done to check chronic disease or severe infection. A higher CRP value can indicate a sign of acute inflammation in the body.

Antineutrophil cytoplasmic antibodies (ANCA): This blood test helps to determine whether ANCA is present in your bloodstream to check for any autoimmune activity.

Complement levels: This test is done to determine bacterial or viral infection as the cause of vasculitis.

IgE levels: The IgE is an antibody, that the immune system produces to identify and eliminate harmful microorganisms.

Hepatitis panel: It is a blood test used to determine if a person has been infected with hepatitis A, B, or C viruses.

Antiglomerular basement membrane (GBM) antibodies: This test is done to check for any kidney damage as a result of viral infection.

Antinuclear antibody (ANA): This helps to detect if there are autoimmune diseases.

Antiphospholipid antibodies (APL): This blood test indicates the occurrence of Antiphospholipid syndrome (APS), which is an autoimmune disorder that causes abnormal blood clotting due to antibodies.

HIV test: To rule out HIV infections in individuals presenting with symptoms of vasculitis.

Urine dipstick and microscopic tests

A urine dipstick involves dipping a specially treated paper strip into a sample of your urine. These will help to detect the presence of blood and protein in the urine, which are the first signs of small vessel vasculitis in the kidneys (inflamed kidney).

Imaging tests

These tests can help evaluate and confirm which blood vessels and organs are affected. They include:

X-ray

Angiography

Ultrasound scan

Electrocardiogram (EKG)

Electromyography (EMG)

Computed tomography (CT) scan

Magnetic resonance imaging (MRI) scan

Biopsy

It is a minor surgical procedure in which a small piece of tissue is removed from the affected area of your body. Your doctor then examines this sample of tissue under a microscope for certain signs of vasculitis. This procedure is helpful in evaluating the types of small vessel vasculitis and medium vessel vasculitis.

Molecular imaging

This is a growing area of research that visualizes, characterizes, and quantifies the processes taken in the body. This is a newer advancement in the imaging of vasculitis that includes:

Positron emission tomography: This test measures the function by looking at blood flow, metabolism, neurotransmitters, and drugs.

PET scan: This test is used in the diagnosis of large vessel vasculitis.

Not sure where to get all the lab tests done?

Well, look no further. Book your lab tests from the comfort of your home.

Get tests here

Celebs affected

Ashton Kutcher

The renowned Hollywood actor was diagnosed with vasculitis. Recently, he tweeted about the condition and his recovery.

Specialist To Visit

Detecting vasculitis early is crucial for receiving effective treatment and avoiding further complications. A general physician may identify symptoms and conduct a physical exam, but specialists are needed to diagnose and treat specific organ involvement that includes:

Rheumatologists

Neurologists

Ophthalmologists

Cardiologists

Nephrologists

Pulmonologists

Dermatologists

A rheumatologist is a doctor who specializes in treating inflammatory diseases such as arthritis as well as other issues like tendon and muscle injuries. Doctors who specialize in specific areas include neurologists for brain and nerve disorders, ophthalmologists for eye problems; nephrologists for kidney conditions; pulmonologists for respiratory illnesses; and dermatologists for skin, hair, and nail problems.

Consult our professional doctors to get the right diagnosis and treatment.

Talk to an expert

Prevention Of Vasculitis

Vasculitis is an autoimmune disorder that cannot be prevented, but lifestyle changes and identifying the cause can reduce the risk and prevent flare-ups. They include:

1. Quit smoking and tobacco

Tobacco use increases the likelihood of developing vasculitis by disrupting the immune system but quitting smoking can be a highly effective way to protect yourself from this condition.

Want motivation to quit smoking? Learn how your body reacts when you stop smoking.

Read this

2. Stay clear of drugs

Vasculitis is one of the common side effects of using illegal drugs. Refraining from such activities can lessen your chances to some extent.

3. Lose some weight

Obesity can worsen the disease's progression. Engaging in low-intensity exercises for 20-30 minutes, such as walking, swimming, and yoga, can help with weight management and improve blood flow.

A variety of factors can cause obesity. Learn more about the root causes of obesity and ways to combat them.

Read this

4. Take vitamins and supplements

Supplements containing Vitamin D, Vitamin C, and antioxidants can reduce the risk of vasculitis.

Explore our widest range of vitamin and mineral supplements to take care of all your requirements.

Browse here

5. Choose a healthy diet

Eating foods with antioxidants can help fight infections. Increase your intake of foods high in vitamins and fiber, such as fruits, vegetables, nuts, seeds, whole grains, lean proteins, low-fat dairy products, and limited amounts of saturated fat. Switching to a healthy diet can prevent illnesses and minimize damage to the body.

Want to know how to get maximum nutrition from your diet?

Watch this video to learn

Treatment Of Vasculitis

The treatment of vasculitis depends on the type, location, and severity of the condition. The main objective is to decrease inflammation in the affected area and control any underlying factors that may be causing it. It includes:

Medicines

Medications are prescribed depending on the intensity of the symptoms and the progression of

the disease. They include

Non-steroidal anti-inflammatory drugs (NSAIDs): IgA vasculitis is typically treated

conservatively with NSAIDs like aspirin.

Immunomodulators: These are commonly used to sustain disease remission in the

treatment of ANCA-associated vasculitis. The drugs used are:

Azathioprine

Cyclosporine

Corticosteroids: Corticosteroids are used as first-line treatment, and they have

anti-inflammatory properties. The drugs used are:

Prednisolone

Methylprednisolone

Disease-modifying antirheumatic drugs (DMARDs): These are recommended only if

corticosteroids don't work well or show major side effects. They include:

Rituximab

Cyclophosphamide

Azathioprine

Methotrexate

Antimalarial drugs: Hydroxychloroquine, has been successful in treating

hypocomplementemic urticarial vasculitis (huv) but not other types of small vessel

vasculitis.

Neutrophil-chemotaxis inhibitors: These are used in the initial treatments for Behçet's

disease and similar disorders without systemic involvement. They include:

Dapsone

Colchicine

Antiviral drugs: These are important in treating virus-associated cases of vasculitis. Most commonly used ones are:

Interferon α

Ribavirin

Vidarabine

Lamivudine

Dual endothelin receptor antagonists: These block the action of a chemical called endothelin that can reduce blood flow.

Interleukin antagonists: These reduce swelling by blocking a protein in the body that causes the swelling.

Phosphodiesterase inhibitors: These drugs increase blood flow by blocking the action of a particular enzyme in the body.

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Intravenous immunoglobulin G (IVIgG)

IVIgG is the preferred treatment for Kawasaki disease, as it helps prevent the development of aneurysms and improves various symptoms.

Note: The medicines used in the treatment of vasculitis often have to be taken for a long time and can have side effects. It is important to talk to your doctor about your medicines and their side effects.

Surgery

Vasculitis can sometimes cause an abnormal bulging of blood vessels called an aneurysm, which can be treated with surgery to prevent bursting. In more severe cases, surgery may be needed to repair damaged blood vessels and organs or even transplant organs. Surgical procedures include:

Plasmapheresis: It is done to reduce plasma antibody levels by removing and replacing blood plasma (liquid portion of blood).

Bypass surgery: This may be helpful in restoring blood flow in certain areas affected by Buerger's disease.

Maintenance of remission

Corticosteroids are tapered to zero or to the lowest dose that can maintain remission. IV rituximab may also be used to maintain remission, but the optimal dosage and infusion interval have not been clearly established. Individuals with frequent relapses may need to take immunosuppressants indefinitely.

Home-care Of Vasculitis

Home remedies that can help alleviate the symptoms of vasculitis and its types include:

Turmeric (Haldi): Studies suggest that turmeric, also known as curcumin, is helpful in managing autoimmune conditions due to its anti-inflammatory properties.

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Akarkara: Akarkara root or extract is generally used to manage pain and inflammation due to its antioxidant property.

Garlic (Lahsun): It can be beneficial in the management of urticarial vasculitis due to its anti-inflammatory effect.

Ashwagandha: It has antibacterial properties, which help fight and prevent infections.

Holy basil (Tulsi): It has anti-inflammatory and anti-bacterial properties which can be beneficial for individuals with vasculitis.

Explore tulsi products here

Apple cider vinegar: It can decrease digestive symptoms associated with vasculitis.

Check out our exclusive range of apple cider vinegar products.

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Complications Of Vasculitis

If vasculitis goes undiagnosed for a long time, it can lead to serious complications. They include:

Infections: Some of the prescribed medicines which are used to treat vasculitis may weaken your immune system. This can make you more prone to infections.

Blood clots and aneurysms: Vasculitis can lead to blood clots usually obstructing the blood flow. It can also cause a blood vessel to weaken and can develop an aneurysm.

Vision loss or blindness: This is a complication of untreated giant cell arteritis.

Stroke: The inflamed vessel wall can block oxygen flow to the brain. It can lead to loss of brain function and ultimately strokes.

Organ damage: Some types of vasculitis can be severe, causing damage to major organs such as inflammation of the kidneys, heart, lungs, and other organs.

Did you know that?

Vasculitis is a potential complication of COVID-19, with certain types such as leukocytoclastic (LCV), IgA, and Kawasaki disease.

Learn more about COVID-19

Alternative Therapies For Vasculitis

Complementary therapies along with comprehensive treatment can benefit individuals with vasculitis to manage their symptoms. These therapies include:

1. Compression therapy

Studies suggest compression therapy by short stretch bandages in vasculitic ulcers can be quite useful to improve the healing time, relieve the burning sensation and pain, due to the reduction of inflammation of blood vessels.

Check out our extensive range of healthcare devices to get your compression support.

Buy them here

2. Chinese herbal medicine

Studies have analyzed Chinese herbal medicine (CHM) for the treatment of vasculitis. These studies suggest that CHM can be given to ease and reduce inflammation of the blood vessels. It shows excellent results in the treatment of children with Kawasaki disease.

3. Acupuncture

It uses needles to lower the levels of chemicals that cause inflammation in the body. It can help reduce pain and is beneficial for individuals with giant cell vasculitis.

4. Homeopathy

This therapy can be effective in treating vasculitis as it targets the root cause of the disease, which is an abnormal immune system. Selecting the appropriate constitutional homeopathic remedy, can boost the immune system and alleviate vasculitis symptoms without any adverse effects. However, it is crucial to seek medical advice before considering any alternative treatment.

5. Yoga and meditation

Practicing yoga and meditation can increase energy and reduce chronic fatigue. These techniques involve deep breathing and positive visualization, which can reduce stress and anxiety and improve immune function by relaxing the body and mind. They also promote positive thinking and mental strength, which are important for fighting serious illnesses.

Want to understand more benefits of yoga?

Read this

Living With Vasculitis

Vasculitis can greatly affect a person's life and relationships, and can also impact their ability to work. Doctors focus on preventing organ damage and side effects but it's important to remember that it's still possible to have a happy life with vasculitis. A few points that can help include:

1. Give importance to follow-up care

If you experience any new symptoms or other changes in your health, report to your doctor immediately. Regular health checkups and visits can help to monitor any side effects from the given medicine to treat vasculitis.

2. Get your vaccinations

Routine vaccinations protect you from infectious diseases such as pneumonia, flu, etc. It can help prevent problems and complications that can result from vasculitis treatment.

3. Plan a safe pregnancy

If you had vasculitis as a child and plan to become pregnant, inform your healthcare provider. Also, vasculitis increases the risk of high blood pressure during pregnancy, so blood pressure should be closely monitored. Do not stop taking medication without consulting your doctor.

4. Exercise regularly

Try to exercise more often as it will help you to prevent fatigue and tiredness. It even helps to reduce high blood pressure, regulates blood flow, and prevents other health complications which can be associated with vasculitis.

5. Maintaining a strong support system

Living with vasculitis can get tiring and difficult and it is vital to seek support from loved ones and connect with support groups for those with vasculitis, which can be recommended by a doctor.

6. Try to avoid flares-ups

Following the advice of your doctor and adopting a healthy lifestyle can help you with flare-ups and prevent relapse.

Frequently Asked Questions

Is vasculitis curable?

Will my children or other family members get vasculitis?

Is vasculitis serious?

Is chemotherapy used to treat vasculitis?

Can long-term use of steroids to treat vasculitis cause health issues?

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Influenza (flu)

Also known as Flu

Overview

Influenza, most commonly referred to as the “flu” is a contagious viral infection caused primarily by the influenza virus A or B. It generally affects the nose, throat, bronchi, and lungs (i.e. upper respiratory organs) but other organs such as the heart, brain, and muscles can also get affected in severe cases.

The occurrence of influenza is worldwide showing pandemic, epidemic, or seasonal patterns. Epidemics of flu happen annually during autumn and winter in temperate areas and produce significant mortality and morbidity each year.

The virus is transmitted from person to person with respiratory droplets produced when the patient coughs or sneezes within close contact (<1 m). Individuals usually recover after a few days, but influenza can give rise to complications, especially in high-risk groups like pregnant women, individuals with an underlying immunodeficiency state, adults older than 65 years of age, children below 5 years, and individuals with chronic diseases like asthma, heart and kidney conditions.

The symptoms of flu include high fever, body ache, headache, severe malaise, dry cough, sore throat, and runny nose. It should be differentiated from the common cold by clinical presentations. Flu also shares some of its symptoms with COVID -19 infection. One cannot tell the difference between flu and COVID-19 just by looking at the symptoms, hence, testing is needed to confirm the diagnosis. Testing is also important as it can determine if someone is suffering from both flu and COVID-19 at the same time.

Treatment of flu involves relieving the symptoms and in some cases, the use of antiviral drugs is also required. Though the annual influenza vaccine isn't 100% effective, it's still the best defense against the flu.

Key Facts

Usually seen in

Children under 59 months and individuals above 65 years of age.

Gender affected

Both men and women

Body part(s) involved

Nose

Throat

Lungs

Prevalence

India: 81.4% (2012)

Mimicking Conditions

Pneumonia

Common cold

Strep throat

COVID-19

Bronchitis

Respiratory syncytial virus

Necessary health tests/imaging

Molecular assay (rapid)

Rapid influenza diagnostic Test (RIDT)

Immunofluorescence assay (direct and indirect)

Rapid cell culture (shell vials; cell mixtures)

Treatment

Neuraminidase inhibitors (i.e. oseltamivir) and corticosteroids

See All

Symptoms Of Influenza

Each person may experience symptoms in a different manner. Though influenza is a respiratory disease, it can affect the entire body. Sometimes individuals may have trouble figuring out whether they have a common cold or the flu.

There are differences between them like the symptoms of a cold usually come on more slowly and are less severe than symptoms of the flu. Colds rarely cause a fever or headaches. In the case of influenza people usually become very sick with most, or all, of the following symptoms:

Cough that becomes severe gradually

Extreme exhaustion or tiredness

Severe muscle aches and pains

Runny or stuffy nose

Occasional sneezing

Fatigue for several weeks

Headache

Loss of appetite

High fever with chills

Sore throat

Vomiting and diarrhea (more common in children)

Pale face with watery and red eyes

Fever and body aches usually last for 3 to 5 days, but cough and fatigue may last for 2 weeks or more. Know the difference between common cold and flu.

Click To Know!

Similarities and differences between influenza and common cold

Influenza (flu) and the common cold are both contagious respiratory tract illnesses, but they are caused by different viruses. They have a lot of similarities and it becomes difficult to distinguish between them. Some of the most common similarities and differences include:

1. Symptoms

Similarity: The symptoms of cold and flu are very similar at the onset with runny nose, headache, fatigue and difficulty in breathing.

Difference: Cold symptoms are usually milder than the symptoms of flu and it generally does not result in serious health problems.

2. Cause

Similarity: Both cold and influenza are caused by viruses.

Difference: Flu is caused by influenza viruses only, whereas the common cold can be caused by a number of other viruses, including rhinoviruses, parainfluenza, and seasonal coronaviruses.

3. Incubation period

Similarity: Both the diseases are highly contagious and have an incubation period (the period between exposure to an infection and the appearance of the first symptoms) of minimum 1 day before the individual starts experiencing symptoms.

Difference: The exact incubation period for influenza is 1-4 days and 1-7 days for cold.

4. Duration of illness

Similarity: Influenza and common cold cause respiratory tract illness ranging from 4 days to two weeks.

Difference: A cold's duration (how long it lasts) is about 7 to 10 days; however, depending upon the viral strain, it can last up to two weeks. The flu's duration varies from about 5 days to two weeks depending upon the severity of the infection.

5. Risk factors

Similarity: Both have similar risk factors i.e. younger children, old people, pregnant women and immunocompromised individuals are at a higher risk.

Difference: Individuals who do not receive the yearly flu vaccine are more likely to risk getting infected with a flu virus but there is no vaccination to prevent against common cold.

It is important to know the difference between common cold and influenza (flu). Do not ignore the symptoms or take them lightly. Read more about how to know when your cold is more than a cold?

Click Now!

Similarities and differences between influenza (flu) and COVID-19

Influenza (flu) and COVID-19 are both contagious respiratory infections of the respiratory system but are caused by different viruses. COVID-19 is caused by an infection with a coronavirus (first identified in 2019). And influenza is caused by infection with a flu virus (influenza viruses). These two infections have caused havoc in the world. Let us look at some of the common similarities and differences between them:

1. Duration of illness

Similarity: It takes 1 or more days before an infected person starts experiencing the symptoms of illness.

Difference: COVID -19 may take a longer duration for the symptoms to start whereas in the case of flu the symptoms begin between 1-4 days.

2. Duration of the spread of the virus

Similarity: It is possible to spread the virus for at least 1 day before experiencing any symptoms.

Difference: If a person has COVID-19, they could be contagious for a longer time than if they have flu (7 days).

3. Mode of the spread

Similarity: Both COVID-19 and flu can spread from person to person between people who are in close contact with one another i.e within about 6 feet through droplets from sneezing, coughing, or talking.

Difference: Though the virus that causes COVID-19 and flu viruses are thought to spread in similar ways, COVID-19 is generally more contagious than flu viruses.

4. Individuals at risk

Similarity: Both COVID-19 and flu illness can result in severe illness and complications in older adults, individuals with certain underlying medical conditions, and pregnant women.

Difference: COVID-19 seems to cause more serious illnesses in some people resulting in hospitalization and death can occur even in healthy people.

5. Complications

Similarity: Respiratory complications occur in patients infected with influenza or COVID -19.

Difference: Most people who get flu will recover on their own in a few days to two weeks whereas COVID -19 complications can happen even after the recovery (long covid syndrome).

COVID- 19 is here to stay, but we need to adapt to it and get accustomed to the “new normal”. Read more about the FAQs on COVID- 19.

Click Here!

Causes Of Influenza

Influenza viruses belong to the family of viruses called “Orthomyxoviridae”, an RNA-type virus. Viruses have spherical or filamentous shapes with an envelope, containing glycoproteins and a single-stranded RNA gene. The 2 most important glycoproteins over the outer layer of the flu virus are hemagglutinin (H, or HA) and neuraminidase (N, or NA). Both of them have important roles in the spread of the disease.

The influenza viruses are divided into 3 main types i.e A, B, and C. Most of the epidemics (a widespread occurrence of an infectious disease in a community at a particular time) and outbreaks of flu are caused most commonly by types A and B, with type C being generally responsible for sporadic mild upper respiratory symptoms.

Type A influenza virus

For influenza type A, at least 16 highly variable hemagglutinins( a glycoprotein which causes red blood cells to clump together- H1 to H16) and 9 distinct NAs (N1 to N9) have been recognized so far. With the aid of these different antigens, the influenza type A virus is further subdivided into subtypes on the basis of variable combination patterns of their own specific H or N proteins, for example H1N1 or H3N2.

Type B influenza virus

The influenza B virus has a similar viral structure to type A, but, due to the fixed antigenic characters of HA and NA, there are no subtypes in this virus. Still, since the 1970s, some small antigenic variability has been reported in this virus. Also, studies have shown that this virus has started to diverge into 2 antigenically distinguishable lineages.

Risk Factors For Influenza

Influenza vaccination is the primary method for preventing influenza and reducing the risk of severe outcomes. However, groups of individuals who are at high risk include:

Adults above the age of 65 years

Children below 5 years (especially< 2 years)

Pregnant women (2nd or 3rd trimester of pregnancy up to 2 weeks postpartum)

Residents of nursing homes and other long-term care facilities

Individuals with certain chronic medical conditions like

Chronic pulmonary diseases

Cardiovascular conditions

Diabetes mellitus

Kidney disorders

Liver diseases

Blood disorders

Metabolic disorders

Cognitive dysfunction

Neuromuscular disorders

Stroke

Seizure disorders

Immunocompromised patients

Current or past use of tobacco

Obese individuals with BMI > 40

Children and adolescents receiving aspirin or salicylate-containing medications might be at risk for developing Reye syndrome (a rare but serious condition that causes swelling in the liver and brain) with influenza virus infection.

Did you know?

Asthma and influenza (flu) are two common conditions of the respiratory tract that affect millions of people worldwide. Learn more on how flu affects people with asthma and what you should do to prevent health complications.

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Diagnosis Of Influenza

Influenza virus testing is not required to make a clinical diagnosis of influenza in outpatients with suspected influenza, particularly when seasonal influenza A and B viruses are circulating in the local community.

Influenza testing is recommended for all patients requiring hospitalization with suspected influenza, including those admitted to the ICU during influenza season with acute respiratory illness and community-acquired pneumonia, without a clear alternative diagnosis. Also, all individuals requiring critical care outside of influenza season should be tested for influenza if there is a possible link to an individual with recent influenza, such as travel to areas with influenza activity or exposure to an institutional influenza outbreak.

However, during periods of low influenza activity and outside of epidemics situations, the infection of other respiratory viruses e.g. parainfluenza, rhinovirus, respiratory syncytial virus,and adenovirus can also present with similar symptoms which makes the clinical differentiation of influenza from other viruses difficult.

Several kinds of influenza diagnostic tests are available in clinical settings with variable sensitivities and specificities. They include:

Rapid influenza diagnostic Test (RIDT)

Rapid influenza diagnostic tests (RIDTs) are the most common tests used in clinical settings. RIDTs work by detecting the parts of the virus (antigens) that stimulate an immune response. These tests can provide results within approximately 10-15 minutes but may not be as accurate as other flu tests as their reliability depends largely on the conditions under which they are used. Therefore, one could still have influenza, even though your rapid test result is negative.

Rapid molecular assay

Rapid molecular assays are a new type of molecular influenza diagnostic test to detect influenza viral RNA or nucleic acids in upper respiratory tract specimens in approximately 15-30 minutes. They are more accurate than RIDTs.

In addition to RIDTs and rapid molecular assays, there are more accurate tests available that have to be performed in specialized laboratories. Results may take one to several hours. Proper collection, storage and transport of respiratory specimens is the essential first step for laboratory detection of influenza virus infections. Sample collection requires the healthcare provider to swipe the inside of your nose or the back of your throat with a swab and then send the swab for testing. The tests are discussed below:

Reverse transcription polymerase chain reaction (RT-PCR)

Reverse Transcription-Polymerase Chain Reaction (RT-PCR) can identify the presence of influenza viral RNA in respiratory specimens with very high sensitivity and specificity.

Immunofluorescence assay (direct and indirect)

Immunofluorescence assays are antigen detection assays that generally require use of a fluorescent microscope to produce results in approximately 2-4 hours with moderate sensitivity and high specificity. Both direct (DFA) and indirect fluorescent antibody (IFA) staining assays are available to detect influenza A and B viral antigens in respiratory tract specimens. Subtyping or further identification of influenza A viruses is not possible by immunofluorescence assays.

Viral culture (shell vials; cell mixtures)

Viral or rapid cell culture results do not yield timely results to inform clinical management. Shell-vial tissue culture results may take 1-3 days, while traditional tissue-cell viral culture results may take 3-10 days. However, viral culture allows for extensive antigenic and genetic characterization of influenza viruses. The collection of some respiratory samples for viral culture is essential for surveillance and antigenic characterization of new seasonal influenza A and B virus strains that may need to be included in next year’s influenza vaccine.

Serologic testing

Serological testing for influenza is not recommended for clinical decision-making. Although offered by some commercial laboratories, serological testing results for antibodies to influenza A or B viruses on a single serum specimen cannot be reliably interpreted. Proper serological testing for diagnosis of influenza requires paired acute and convalescent sera collected 2-3 weeks apart, with reliable testing at a limited number of public health or research laboratories to assess a 4-fold or greater rise in influenza virus strain-specific antibodies. Therefore, serological testing for influenza does not provide timely results to help with clinical decisions-making and is not recommended except for research and public health investigations.

H1N1 is a subtype of influenza and is commonly known as swine flu. Read about H1N1 qualitative RT-PCR.

Click To Read!

Celebs affected

Walt Disney

The wonderful world of Disney,” was not so magical when Walt was afflicted with the influenza virus. Assigned first to a training facility on the south side of Chicago, Disney came down with the flu. He returned home to be nursed back to health by his mother before rejoining the Corps in December.

David Lyod George

In September 1918, the Prime Minister of the United Kingdom encountered the influenza pandemic in Manchester, England, the city of his birth. He survived, and was widely hailed as the man who won the war.

Prevention Of Influenza

Influenza is commonly seen during seasonal changes and affects almost all age groups. It can be prevented to a certain extent through the following:

Vaccination

The best way to prevent influenza is to receive an influenza vaccination every year as stated by the Centers for Disease Control and Prevention (CDC). Anyone above the age 6 months and older should get vaccinated annually. The best time to get the flu vaccine is in the early fall months ie. August to October. It takes about 3 weeks for the vaccine to wield its protective benefits.

Flu vaccines can vary in how well they work, but even in cases when flu vaccination does not prevent infection completely, it can reduce the severity and duration of disease and prevent serious complications especially in elderly patients.

Vaccination is especially important for people at high risk of influenza complications, and for people who live with or care for the people at high risk. WHO recommends annual vaccination for the following groups of people:

Health-care workers

Pregnant women at any stage of pregnancy

Children between 6 months to 5 years of age

Elderly individuals above 65 years of age

Individuals diagnosed with chronic medical conditions

Although the flu vaccine is safe, it is contraindicated or not advised in case someone is:

Allergic to eggs

Allergic to a previous dose of any influenza vaccine

Suffering from a fever. It is advisable to get the vaccine shot after recovering from illness.

Having history of Guillain-Barré syndrome, a severely paralyzing condition, after getting the flu vaccine

Nasal flu vaccine which is administered through the nose is also available for prevention of flu. However, it is not advised in the following:

Children and adolescents who are taking aspirin or any type of salicylate-containing medications.

Children who are 2 to 4 years of age who have been diagnosed with asthma or have a history of wheezing.

Immunocompromised patients.

Caregivers or close contacts of severely immunosuppressed patients.

Pregnant women.

Patients who have received antiviral drugs to treat the flu within the past 48 hours.

Note: Pre-exposure or post-exposure prophylaxis with antivirals is possible but depends on several factors e.g. individual factors, type of exposure, and risk associated with the exposure. Learn more about inactivated influenza vaccines.

Click Now!

Chemoprophylaxis strategy

Available antiviral drugs play an important role for patients who have not been immunized or who are nonresponsive to vaccines. Oseltamivir and zanamivir are the recommended drugs for the prevention of influenza based on their established efficacy and low rates of resistance in comparison to adamantanes that include the oral medications amantadine and rimantadine that block the M2 ion channel on influenza A viruses. Some indications for chemoprophylaxis include:

Influenza prophylaxis should be given during influenza outbreaks in long-term care centers in the elderly regardless of prior influenza vaccinations

To be given in unvaccinated individuals at high risk of influenza complications who have been exposed to an individual with influenza infections within the previous 48 hours

For vaccinated persons at high risk of influenza complications who have had close contact with an individual with influenza within the previous 48 hours when there is a poor match between the vaccine and circulating viruses in a given year

The United States’ ACIP recommends that antiviral chemoprophylaxis be considered in pregnant women and in women up to 2 weeks postpartum who have close contact with suspected or confirmed influenza A-infected individuals. Zanamivir may be the drug of choice for prophylaxis due to its limited systemic absorption

General measures

Apart from vaccination and antiviral treatment, the public health management includes maintaining personal protection through:

Washing hands regularly with proper drying of the hands

Covering mouth and nose when coughing or sneezing, using tissues and disposing of them correctly

Self-isolating at an early stage of those feeling unwell, feverish and having other symptoms of influenza

Avoiding close contact with sick people

Avoiding touching one’s eyes, nose or mouth.

Kids, pregnant women, diabetics, elderly people and those with a weak immune system are at a high risk of suffering from this viral infection. Hence, it is wise to follow preventive measures to protect from seasonal flu rather than get it treated after acquiring the infection.Read about 7 tips to prevent seasonal flu.

Click Here!

Specialist To Visit

Most people who have the flu (influenza) have a mild illness and can be managed at home. However if any individual has fever above 100 F (38 C), cough or sore throat might need medical interventions from:

General physician

Pediatrician

If you are facing such an issue, seek advice from our professionals.

Consult Now!

Treatment Of Influenza

Influenza also known as flu causes mild illness generally and the treatment depends on the condition of the patient, that includes:

Patients with uncomplicated seasonal influenza

Patients that are not from a high risk group should be managed with symptomatic treatment. If they are symptomatic it is best to stay home in order to minimize the risk of infecting others in the community. Treatment mainly focuses on relieving symptoms of influenza such as fever, cough, cold or sore throat. Patients should monitor themselves to detect if their condition deteriorates and seek medical attention.

Patients that are known to be in a group at high risk for developing severe or complicated illness should be treated with antivirals in addition to symptomatic treatment as soon as possible.

Patients with severe or progressive clinical illness

Patients associated with suspected or confirmed influenza virus infection like clinical syndromes of pneumonia, sepsis or exacerbation of chronic underlying diseases, should be treated with antiviral drugs as soon as possible. These drugs may shorten the illness and help prevent serious complications. The drugs are discussed as follows:

Oseltamivir phosphate (Tamiflu): This is an oral prescription drug used to treat influenza in patients who are two weeks of age and older. It is also approved to prevent flu in patients who are one year of age and older. Important points regarding this drug are:

This drug should be prescribed as soon as possible (ideally, within 48 hours following symptom onset) to maximize therapeutic benefits.

Administration of the drug should also be considered in patients presenting later in the course of illness.

Treatment is recommended for a minimum of 5 days, but can be extended until there is satisfactory clinical improvement.

Potential side effects include nausea, vomiting, nosebleeds, headaches and tiredness.

Zanamivir (Relenza): This drug is approved to treat flu in patients seven years and older, and to prevent flu in patients who are five and older. This product is inhaled through a device similar to an asthma inhaler. It is not recommended for people who have certain chronic respiratory illnesses like asthma or COPD. Common side effects of the drug include headache, nausea, diarrhea, nose irritation and vomiting.

Peramivir (Rapivab): Peramivir is approved to treat influenza in patients 2 years and older. This drug is injected into the vein (intravenously) by a healthcare provider. A common side effect of this drug is diarrhea.

Baloxavir (Xofluza): This drug is approved to treat flu in people 12 years old and older. Common side effects include diarrhea, bronchitis, nausea and headache.

Antiviral drugs: Antiviral drugs like amantadine and rimantadine (Flumadine) are older antiviral drugs which are approved to treat influenza, but most circulating strains of influenza have become resistant to them. Hence, they are no longer recommended.

Corticosteroids: These should not be used routinely, unless indicated for other reasons (eg: asthma and other specific conditions); as it has been associated with prolonged viral clearance, immunosuppression leading to bacterial or fungal superinfection.

Corticosteroids are powerful anti-inflammatory drugs which are used to provide symptomatic relief from inflammation, swelling, redness, and itching. Read about do’s and don'ts you need to know about corticosteroids.

Click Here!

Home-care For Influenza

Influenza or flu is caused by a virus. While it causes mild sickness it can also cause symptoms like stuffy nose, sore throat and fever. Here are some homecare tips that can help soothe flu symptoms and may also shorten the duration of the flu. They are:

Drink a lot of liquids to be well hydrated and keep the throat, nose and mouth moist

Increase your fluid intake in the form of coconut water, fresh fruit juices, broths, herbal teas, and soups.

Get adequate rest to fight the fatigue and malaise

Uptake the mineral intake. Use zinc and Vitamin C to boost the immunity

Do rigorous salt water gargles to relieve symptoms of sore throat

Take lozenges, these will provide soothing effect to the throat

Eat a well balanced diet and get all the nutrition. Food items to include are:

Eggs

Dairy products

Cereals

Green leafy vegetables

Fresh fruits

Dry fruits

Apply essential oils directly on the chest, throat and nose as they have antiviral and antibacterial properties, and do not ingest them. Some of the beneficial essential oils are:

Cinnamon oil

Peppermint oil

Eucalyptus oil

Geranium oil

Lemon oil

Thyme oil

Oregano oil

Do steam inhalation in case of stuffy nose as the vapors from the steam can help loosen the loose mucus congestion, relieve swelling in the nose and lungs and help to soothe a dry cough, irritated nose, and chest tightness.

Use a humidifier to add humidity in your home and workplace that might help reduce flu viruses in the air.

Avoid certain foods in case of diarrhea and vomiting. These food items include:

Caffeine

Meats

Spicy foods

Fied foods

Fatty foods

Alcohol

Apply vapor rub and keep yourself warm.

Blow the nose in the right way i.e. press a finger over one nostril while blowing gently to clear the other.

Most people are prone to common cold during winters, however, it is possible to catch a cold all around the year. Hence, it is important to follow a few tips that can reduce the risk of catching a cold. Read about 5 Simple tips to prevent the common cold.

Tap Now!

Complications Of Influenza

Influenza is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and sometimes the lungs. It generally causes mild to moderate symptoms, but in certain cases can lead to complications that include:

Pneumonia

The most important and common complication of influenza is pneumonia that may happen as a continuation of the acute influenza syndrome when caused by the influenza virus (primary pneumonia) or as a mixed viral and bacterial infection after a gap of a few days (secondary pneumonia).

Primary influenza viral pneumonia

The illness occurs after the typical course of flu with a rapid progression of fever, shortness of breath, cough, cyanosis (low blood oxygen), and difficulty breathing. It happens predominantly among individuals with cardiovascular or underlying pulmonary diseases such as asthma.

The most severe cases progress rapidly to acute respiratory distress syndrome (when fluid builds up in the tiny, elastic air sacs (alveoli) in the lungs) along with involvement of multiple lobes. These patients usually present with progressive dyspnea (shortness of breath) and severe hypoxemia (when enough oxygen is not available to maintain the self regulating mechanism in the body) 2 to 5 days after the onset of typical influenza symptoms. Hypoxemia increases rapidly and causes respiratory failure, requiring intubation and mechanical ventilation, maybe after only 1 day of hospitalization.

Secondary bacterial pneumonia

Recently, community–acquired methicillin-resistant Staphylococcus aureus was determined as the causative agent for secondary bacterial pneumonia after seasonal influenza,but another very common etiologic bacterium is Streptococcus pneumonia. The patients have a classic influenza disease, followed by an improvement period lasting for maximum 2 weeks.The recurrence of the symptoms such as fever, productive cough, and dyspnea and findings of new consolidations in chest imaging can be found in involved patients. Accordingly, a biphasic pattern of signs and symptoms in influenza-labeled patients should be considered as secondary superimposed bacterial pneumonia.

Non-pulmonary complications

In addition to its respiratory effects, the virus can exert effects on other body systems such as the musculoskeletal, cardiac, and neurologic systems. Some of the extrapulmonary symptoms include:

Myocarditis (inflammation of heart muscle)

Pericarditis (inflammation of saclike covering of the heart)

Stroke

Encephalopathy (brain damage due to virus, bacteria, or toxins)

Mild myositis (weak, painful or aching muscles)

Myoglobinuria (excessive protein called myoglobin in urine)

Other rare complications such as

Guillain–Barré syndrome (a rare disorder in which your body's immune system attacks your nerves. Weakness and tingling in your extremities)

Acute liver failure

Reye syndrome

Did you know?

According to the World Health Organization (WHO), globally, on an average, around 3-5 million people suffer from the flu every year. Furthermore, the flu causes around 2,90,000 – 6,50,000 deaths every year. Read about 5 ways to stay “SAFE” this flu season.

Click Now!

Alternative Therapies For Influenza

Influenza is contagious and can cause mild to severe illness. Alternative therapy along with medications that can help in fighting the flu and relieve the symptoms include:

Natural therapy

There are a dozen things to do while the individual has the flu, but the age-old natural remedies can never go wrong. Here is a list of natural ingredients that can help:

1. Garlic (Lahsun)

Garlic provides many health benefits like enhancing the immune function and decreasing the severity of flu.

2. Ginger (Adrak)

Ginger is widely used in herbal medicine and as a well known home remedy to beat nausea. Adding ginger to the tea can soothe the throat as well.

3. Herbal tea

An herbal tea may help your body fight off the flu virus. A hot herbal drink is also soothing to the throat and sinuses.

4. Honey (Shahad)

There are numerous benefits of honey-like antibacterial properties, stimulating the immune system, relieving seasonal allergy, and helping in suppressing cough in children.

5. Turmeric (Haldi)

It helps the body to naturally cleanse the respiratory tract, and helps fight the infection and relieves direct impact of cold and flu due to its anti-inflammatory properties.

6. Spices

Certain spices, such as pepper and horseradish, can help break up congestion and help breathe better.

7. Yogurt (Dahi)

Yogurt with live cultures not only can help soothe a sore throat but can also boost the immune system.

Living With Influenza

People with flu are most contagious in the first 3-4 days after their illness begins. Some otherwise healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick. Here are a few tips to follow during the sickness to prevent the spread and as well as get better:

Maintain personal hygiene

Always cover nose and mouth while sneezing

Maintain social distancing

Wash the hands regularly

Rest well

Have adequate fluids

Take steam inhalations 2-3 times a day

Stay warm and cozy

Avoid cold items

Drink hot soups and broths

Apply vapor rubs or essential oils on the nose, throat and chest.

Eat well balanced and nutritious meals.

Every person is different and so are the nutritional requirements. Read about some dietary guidelines that you should follow for a proper balanced diet.

Click To Read!

Frequently Asked Questions

What is the vaccine for influenza?

Are seasonal influenza (flu) vaccines safe?

How long does influenza last?

When is the best time to get flu vaccination?

Is the BRAT diet recommended for influenza?

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Insomnia

Also known as: Sleeplessness, Sleep deprivation, Lack of sleep and Trouble sleeping

Overview

In simple terms, insomnia is characterized by dissatisfaction with sleep quantity or quality. It is associated with difficulty falling asleep, frequent nighttime awakenings with difficulty returning to sleep and waking up earlier in the morning than desired.

The immediate effects of insomnia include poor performance, daytime sleepiness, and fatigue, while the long term complications include poor immunity, indigestion, forgetfulness, risk of heart diseases, anxiety, depression, vision disturbances and even premature mortality.

Hence, timely management of insomnia is of utmost importance. Acute or short term insomnia will often go away on its own following home-based interventions. However, chronic or long term insomnia may require making changes in sleep habits, taking prescribed medications, doing relaxation exercises, and treating the underlying condition that is causing insomnia.

Key Facts

Usually seen in

Adults above 65 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Brain

Mimicking Conditions

Sleep apnea

Obstructive sleep apnea (OSA)

Depression

Restless legs syndrome

Jet lag disorder

Post traumatic stress disorder (PTSD)

Anxiety disorder

Bipolar disorder

Alcoholism

Hyperthyroidism

Chronic obstructive pulmonary disorder (COPD)

Necessary health tests/imaging

Polysomnography

Blood tests

Imaging tests like MRI and CT scan

Sleep record tests

Wrist actigraphy

Sleep quality tests

Treatment

Cognitive behavioral therapy (CBT)

Benzodiazepines: Alprazolam, Lorazepam & Clonazepam

Barbiturates: Phenobarbitone & Thiopentone sodium

(Z) drugs: Zolpidem, Zopiclone & Zaleplon

Heterocyclic antidepressants: Trazodone & Amitriptyline

Melatonin receptor agonists: Ramelton & Agomelatine

Orexin pathway Inhibitors: Suvorexant

Specialists to consult

Sleep specialist

Neurologist

Psychiatrist

Psychologist

Symptoms Of Insomnia

The symptoms of insomnia include:

Difficulty falling asleep

Difficulty staying asleep

Getting up too early

Problems in day to day functioning due to insufficient sleep

Problems with concentration and memory

Tiredness and sleepiness during day time

Problems with work, family, and social life

Irritability, grumpiness, mood swings, and anxiety

Increased errors or accidents

Causes Of Insomnia

To know the causes, it is important to understand the basics of sleep. Several structures within the brain are involved with sleep mechanisms. Two internal biological mechanisms – circadian rhythm and homeostasis – work together to regulate when you are awake and asleep. One of the key hormones responsible for maintenance of the sleep wake cycle is melatonin, which is secreted by the pineal gland in our body.

Circadian rhythms

Circadian rhythm influences many functions from daily fluctuations in wakefulness to body temperature, metabolism, and release of hormones. It controls the cause of being sleepy at night and the tendency to wake in the morning without an alarm. The body’s biological clock, which is based on a roughly 24-hour day, controls most circadian rhythms. Circadian rhythms synchronize with environmental cues (light and temperature) about the actual time of day, but they continue even in the absence of cues as they are not driven by the environment.

Sleep-wake homeostasis

It keeps track of your need for sleep. The homeostatic sleep drive reminds the body to sleep after a certain time and regulates sleep intensity. This sleep drive gets stronger every hour you are awake and causes you to sleep longer and more deeply after a period of sleep deprivation.

Factors that influence your sleep-wake needs include medical conditions, medications, stress, sleep environment, and what you eat and drink.

Types Of Insomnia

The type of insomnia one experiences has a lot to do with the underlying causes of insomnia.

Acute or short-term insomnia

It is having problems with sleep only for a brief period of time. This could be due to:

Stress caused by a painful event in life such as loss of job, death of a loved one, and divorce

Worry before an exam

Anxiety before an interview

Pain or uneasiness due to an illness

Travel that causes jet lag

Unfamiliar surroundings like sleeping in a hotel or a new home

Uncomfortable bed

Disturbances due to noise and light

Occupational night shifts

Chronic or long-term insomnia

It happens when you have trouble falling asleep for at least 3 days in a week for 3 consecutive months. It may occur due to:

Stress

Parkinson's disease

Alzheimer's disease

Depression

Mania or bipolar disorder

Post traumatic disorder

Drug abuse

Alcohol intake

Heavy smoking

Obstructive sleep apnea

Poor sleep habits

Medical conditions like asthma & heart failure

Myth: Snoring during sleep is quite normal

Fact: Snoring could be a sign of an underlying condition known as obstructive sleep apnea and is associated with several medical problems such as cardiovascular diseases and diabetes. This usually means that something is affecting your breathing during sleep. Snoring can occur in kids as well as adults. Here are more myths and facts about sleep.

Click Here To Read!

Risk Factors For Insomnia

Almost everyone might have experienced difficulty in sleeping at one point in their life. However, your risk of suffering insomnia is high, if you:

Are a woman due to hormonal changes during periods and pregnancy

Are above 60 years of age as with age changes in sleep patterns occur

Have a chronic health condition which can impact your physical as well as mental health

Are taking certain medications such as steroids, decongestants, and antihypertensives which risk of sleeping problems as a side-effect

Are stressed due to family matters, job pressure or any other triggers of stress

Have an irregular lifestyle pattern such as night shifts, poor sleep environment, exercising or use of devices close to bedtime

Excessive use of stimulants like coffee or tea especially during the evening or close to bed can can interfere with your sleep schedule

Alcohol consumption may help you fall asleep, but when consumed in excess, it prevents deeper stages of sleep and often causes awakening in the middle of the night and hence deteriorates the sleep quality

Diagnosis Of Insomnia

The diagnosis of insomnia includes taking an extensive history of the patient that includes questions on:

Duration of sleep during night time

Daytime napping, if any

Frequency of having difficulty in sleeping

Medical condition, if any

Any stressful event in the recent past

A doctor may conduct a few tests such as:

1. Blood tests

Tests for thyroid disorders, anemia (low hemoglobin), and uremia (high uric acid levels) are recommended to rule out any underlying health problems.

2. Imaging tests

These are recommended to know if there are any problems with the brain or nerve problems that may be responsible for problems with sleep. Imaging tests such as CT and MRI scan are advised, in some cases.

3. Sleep record tests (sleep log)

Sleep record over a period of 2 weeks to know the time at which a patient falls asleep, the duration of sleep in the daytime as well as night time. The patient may be asked to record these in a diary.

4. Wrist actigraphy

It is to detect movements during sleep. A device called actigraphy is worn on the wrist during sleeping. It records body movements and can help distinguish wakefulness from sleep.

5. Sleep quality tests

These tests are done to measure the quality of sleep such as the insomnia severity index or Pittsburgh sleep quality index.

6. Polysomnography

Polysomnography is done, if the cause of your insomnia isn't clear or you have signs of another sleep disorder such as sleep apnea or restless legs syndrome. It is used to record a set of parameters like brain waves, heart rate, breathing, oxygen levels, and eye and leg movements during sleep. You may need to spend a night at a sleep center for this test.

Celebs affected

Shahid Kapoor

Bollywood actor Shahid Kapoor spoke about being an insomniac during a promotional activity of his film Shaandar in 2015.

George Clooney

In 2012 during an interview, American actor and filmmaker George Clooney, had revealed that he routinely had a tough time getting asleep.

Prevention Of Insomnia

To prevent insomnia, you need to have a good night’s sleep. Here are a few simple and effective habits that you can adapt to ensure that you get a sound sleep.

Maintain a sleep schedule and follow sleep hygiene guidelines. This includes sleeping and waking up at the same time everyday.

Get early morning sunlight. Spending 15-30 minutes in sunlight keeps the body’s biological clock in order.

Stay active during the day as a sedentary lifestyle can hamper a good night's sleep.

Limit daytime naps.

Mind what you eat by avoiding large meals and beverages before bedtime.

Switch off the television set and computers two hours prior to sleep time. The light from the screen interferes with the sleep cycle.

Discourage use of tablets and smartphones on bed as the blue light from these gadgets interferes with the release of melatonin or the sleep hormone.

Avoid intake of caffeine, nicotine, and alcohol before sleeping.

Create a relaxing pre-bedtime ritual such as taking a warm bath, reading or listening to soft music.

Sleeping in complete darkness can help you to get rid of night lights and any other light coming from outside. This helps in secreting melatonin and promoting sound sleep.

Read about daytime habits that can prevent insomnia and improve your sleep!

Click Here!

Specialist To Visit

If you face any difficulty in falling asleep at night or if you have been suffering from any chronic health problem that is affecting your sleep patterns, then it is wise to consult a doctor at the earliest.

Although, your general physician is the first doctor you may need to consult to know the cause of insomnia, other specialists who can help in the diagnosis and treatment of insomnia and its related health complications are:

Sleep specialist

Neurologist

Psychiatrist

Psychologist

Consult India’s best doctors online.

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Treatment Of Insomnia

Treatment of insomnia includes making changes in sleep habits, taking medicines, doing relaxation exercises, and treating the underlying condition that causes insomnia.

1. Cognitive behavioral therapy

Cognitive behavioral therapy for insomnia (CBT-I) can help you control or eliminate negative thoughts and actions that keep you awake and is generally recommended as the first line of treatment for people with insomnia. Typically, CBT-I is equally or more effective than sleep medications.

The cognitive part of CBT-I teaches you to recognize and change beliefs that affect your ability to sleep while the behavioral part of CBT-I helps you develop good sleep habits and avoid behaviors that keep you from sleeping well.

2. Medications

1. Benzodiazepines

It inhibits the reticular activating system (RAS) center, also known as awakening center, thereby inducing sleep. Benzodiazepines carry a risk of addiction and abuse, especially in patients with history of alcohol or sedative abuse, so medical supervision is advisable. Some of the common examples of this class of drugs include:

Alprazolam

Lorazepam

Clonazepam

2. Barbiturates

These drugs act on the GABA receptor thereby aiding in sleep. It causes long term changes thereby ensuring that the effect of the drug lasts for a long time. Examples include:

Thiopentone sodium

Methohexitone

Phenobarbitone

3. (Z) Drugs

These drugs are basically newer drugs of benzodiazepine agonist class, however they are relatively more specific as these act on alpha 1 subunit of GABA-A receptor. These are recommended for early phase insomnia, late phase insomnia and middle of night awakening problems. The medications that belong to this group include:

Zolpidem

Zopiclone

Zaleplon

4. Heterocyclic antidepressants

These are the most commonly prescribed alternatives to benzodiazepine receptor agonists due to their lack of abuse potential and lower cost. The common examples include:

Trazodone

Amitriptyline

5. Melatonin receptor agonists

As the name suggests, these drugs act on the melatonin receptor to include sleep. These drugs are mostly recommended for people with sleep cycle disorder (people who sleep at any time other than the actual sleeping time), shift workers, and insomnia due to jet lag. Some of the common drugs include:

Ramelton

Agomelatine

6. Orexin pathway inhibitors

These drugs inhibit the chemical orexin, which is known to keep the RAS center active. Suvorexant is a commonly used drug that belongs to this class.

7. Antihistamines

Antihistamines such as diphenhydramine are the primary active ingredients in the most over-the-counter sleep aids. Some of the side effects include dry mouth and constipation.

Do’s and Don’ts when using sleeping pills

Never mix sleeping pills with alcohol or other sedative drugs.

Always consult your doctor prior to taking any sleeping pill as most of these medicines have abuse potential.

Don’t take a second dose in the middle of the night.

Start with the lowest recommended dose.

Avoid frequent use of sleeping pills to avoid dependency and lower its side-effects.

Never drive a car or operate machinery after taking a sleeping pill.

Carefully read the package insert for any potential side effects and drug interactions.

Note: Medications for insomnia may increase the risk of injurious falls and confusion in elderly. Hence, they should be taken cautiously in the lowest effective dose and under strict medical supervision.

Home-care For Insomnia

Your need for sleep and your sleep patterns change as you age but this varies significantly across individuals of the same age. There is no magic “number of sleep hours” that works for everybody of the same age.

Babies initially sleep as much as 16 to 18 hours per day, which may boost growth and development (especially of the brain).

School-aged children and teens on an average need about 9.5 hours of sleep per night.

Most adults need 7-9 hours of sleep a night but after age 60, nighttime sleep tends to be shorter, lighter, and interrupted by multiple awakenings.

Poor sleep habits are one of the common causes of insomnia. Here are 8 effective ways to improve your child's sleeping habits.

Click To Read More!

Complications Of Insomnia

Sleep problems are associated with short and long-term effects on health and well-being. The immediate effects include poor performance, daytime sleepiness, and fatigue. The long term complications caused due to sleep deprivation include premature mortality, cardiovascular disease, hypertension, obesity, diabetes, impaired glucose tolerance, and psychiatric disorders such as anxiety and depression.

Some of the common effects of sleep deprivation include:

1. Accidents

Fatal road accidents are caused due to sleepiness or driver fatigue.

2. Heart disease

Insomnia and obstructive sleep apnoea have also been linked to higher rates of hypertension. Moreover, sleep loss can affect inflammatory markers, which in turn can increase the risk of heart disease. Studies have shown that inflammatory responses are increased in people with obstructive sleep apnoea.

3. Obesity

The role of obesity and sleep loss is bidirectional. The prevalence of obstructive sleep apnoea is over double among the obese. It is reported that 3–5% of the overall proportion of obesity in adults could be attributable to short sleep.

4. Diabetes

Sleep restriction and poor quality of sleep are linked to increased risk of diabetes. Lack of sleep is linked to glucose dysregulation and an increase in hunger and appetite via hormonal imbalance. It causes down-regulation of the satiety hormone, leptin, and up-regulation of the appetite-stimulating hormone, ghrelin.

5. Stress & anxiety

Lack of sleep can lead to mental disorders such as stress and anxiety. However, depression is also one of the most prevalent of the conditions associated with troubled sleep. Poor sleep can up the levels of stress hormones and in the long run, can affect mental health. Insomnia can negatively affect work performance, impair decision-making, damage relationships and decline overall quality of life.

6. Poor performance

A direct way that sleep and school or job performance are connected is through effects on mental functioning. Some known problems associated with lack of sleep include decreased attention. The ability to concentrate is vital to learning and academic achievement but insufficient sleep reduces attention and focus.

Here are a few tips that will help you get a goodnight’s sleep and avoid complications of insomnia.

Check Here!

Alternative Therapies For Insomnia

If you are one of those who has problems falling asleep, read on to know about some of the best foods to have before you hit the bed.

1. Cherries

Cherries contain melatonin, which is a sleep-regulating hormone. A study shows that drinking 200 ml tart cherry juice twice a day helps in increasing sleep quality and duration. This is an excellent remedy for people suffering from insomnia. Drink a glass of cherry juice before going to bed. You can add some water, if you do not like its taste.

2. Kiwis

Kiwis have high levels of antioxidants and serotonin, a hormone that aids in sleep. As low levels of serotonin can lead to insomnia, munching two kiwis an hour before sleep can help you to sleep better.

3. Walnuts (Akhrot)

Like cherries, walnuts are also a source of melatonin. Eating a handful of walnuts will help you sail through the night. Since nuts are high in calories, just having 20-30 gms of it would be sufficient.

4. Banana (Kela)

They are a rich source of potassium and magnesium which acts as muscle relaxing agents. In addition, they contain amino acid tryptophan which the body converts to serotonin. Plus, they are a source of carbohydrates which will make you feel sleepy as well.

5. Leafy green vegetables

Leafy green vegetables such as turnip green and spinach have calcium which is used by the brain to produce sleep-inducing hormone melatonin. Try a leafy vegetable salad for dinner.

6. Almond butter

Almond butter is a source of magnesium, low levels of which are related to insomnia. Munch a whole grain toast coated with almond butter as a pre-sleep snack.

7. Sleep-inducing teas

Teas like chamomile (babunah ke phul) tea, passion flower tea, magnolia bark tea, peppermint (pudina) tea, and lavender tea can promote good sleep.

However, remember not to eat too much just before trying to sleep. Scheduling your dinner time in the evenings may help you sleep better. Doing regular light exercise can help you get a good sleep. Try yoga, meditation or breathing exercises to relax.

Supplements for insomnia

There are many dietary and herbal supplements available in the market that are known for their sleep-promoting effects. As these supplements can interfere with other medications and vitamin supplements, it is best to talk to your doctor before taking them. The two common supplements for insomnia are:

Melatonin: It is a hormone that helps to regulate the sleep-wake cycle and is known to be effective for people who are night owls (who go to bed and wake up late). It is available as an over-the-counter (OTC) supplement.

Valerian: It is a herbal supplement which is known to have mild sedative (sleep-inducing) effects. There are a wide range of valerian supplements available. Pick the one that best suits your needs.

Did you know?

Sleeping on the stomach can cause serious damage to the muscles of the neck and spine. Here's more about the worst and the best sleeping positions to help you sleep better.

Click Here!

Living With Insomnia

Insomnia can cause difficulty in falling asleep or can wake you up in the middle of the night. Here are a few tips to deal with these issues and improve your condition.

A. What to do when you have difficulty falling asleep

1. Maintain a sleep diary

A sleep diary can pinpoint day and nighttime habits that may contribute to your problems at night. Your sleep diary should include:

What time you went to bed and woke up.

Total sleep hours and perceived quality of your sleep.

A record of time you spent awake and what you did ( for example: got up, had a glass of milk, and meditate).

Type and amount of food, liquids, caffeine, or alcohol you consumed before bed, and time of consumption.

Your feelings and moods before bed (happiness, sadness, stress and anxiety).

Any drugs or medications taken including dose and time of consumption.

2. Create a better sleep environment

A quiet, comfortable sleep environment and a relaxing bedtime routine can make a big difference in improving the quality of your sleep.

Make sure your bedroom is quiet, dark, and cool and also invest in proper mattress, foam toppers, and pillows.

Try using a sound machine or earplugs to mask outside noise and use blackout curtains or an eye mask to block out light.

Keep your window open for proper ventilation and to keep the room cool

Stick to a regular sleep schedule such as going to bed and getting up at the same time every day, including weekends.

Turn off all screens at least an hour before bed as electronic devices emit a blue light that disrupts your body’s production of melatonin and combats sleepiness.

Avoid stimulating activity and stressful situations before bedtime such as checking messages on social media, discussions or arguments, or catching up on work.

Avoid naps during the day as it can make it more difficult to sleep at night. However, power naps of 30 minutes when tired, especially in the afternoon, can be of great help.

3. Avoid certain things before going to bed

These include:

Drinking too many liquids or alcohol just before bed.

Big evening meals and spicy or acidic foods that can promote acidity or uneasiness while sleeping.

Drinking caffeinated beverages at least six hours before bedtime.

4. Say NO to negative thoughts and worries

The more trouble you have with sleep, the more it starts to invade your thoughts. These self-destructing thoughts can further fuel insomnia. For example, instead of thinking "I’m never going to be able to sleep well. It’s out of my control, "think of a self promoting comeback like, "insomnia can be cured and if I stop worrying so much and focus on positive solutions, I can beat it."

5. Make your bed your buddy

Use the bedroom only for sleeping (and sex) but not for work, watch TV or scroll through your phone at night.

Do not hang wall clocks in the bedroom as watching the time tick as you count sheep in bed can further make you anxious about getting tired the next day, adding fuel to your worries.

Instead of tossing and turning in bed, leave the bedroom, and do something relaxing like taking a stroll on your balcony or drinking a cup of herbal tea.

B) What to do if you wake up in the middle of the night

Many people with insomnia are able to fall asleep at bedtime, but then wake up in the middle of the night. And once they wake up, they find it difficult to go back to sleep, often lying awake for hours. If this is your problem, then here are a few tips that can help you!

1. Do not stress too much

As stressing over not being able to fall asleep at night can further activate your brain and elevate stress levels making you stay awake at night. Instead, taking deep breaths or closing your eyes and concentrating on your breathing can help to ease stress and induce sleep. Ways to do abdominal breathing:

Close your eyes

Take deep, slow breaths

Make sure each breath is deeper than the last

Breathe in through your nose and out through your mouth

2. Try relaxation techniques

If you find it hard to fall back to sleep, try a relaxation technique such as visualization or meditation on your bed. This can help you to rejuvenate your mind and body and may help you sleep. Steps for mindfulness meditation:

Sit or lie quietly

Focus on your natural breathing

Allow thoughts and emotions to come and go without judgment

As you do so, always focus on your breath and body

3. Say yes to simple exercises

Simple exercises such as rubbing your ears or rolling your eyes can help promote calmness and relaxation, thereby helping you to sleep better.

4. Get out of your bedroom

If you have been lying on your bed for more than 30 minutes, then get out of your bedroom and try reading a book or drinking herbal teas. Do not watch TV or check your phone.

5. Postpone your worries for the next day

Whether you feel anxious about something or have an idea for your presentation, then make a note of it on paper and go back to sleep. Leave your ideas or worries for the next day and get a good night’s sleep.

Frequently Asked Questions

What is the main cause of insomnia?

Will insomnia go away?

What is sleep anxiety?

Is insomnia a mental illness?

Why can't I sleep even though I'm tired?

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Iron deficiency anemia

Also known as Greensickness and Chlorosis

Overview

Iron deficiency anemia, as the name suggests, is a type of anemia in which there is not enough iron present in the blood. It is the most common cause of anemia worldwide. As iron is needed for the production of hemoglobin, the molecule in your blood that carries oxygen, lack of this mineral is related to decreased oxygen delivery to the entire body. This can lead to symptoms such as pale or yellow skin, shortness of breath, chest pain, rapid heartbeat, unexplained weakness, and brittle nails or hair loss.

Iron deficiency anemia is very common, especially among women, which include menstruating women, pregnant women and breastfeeding women. It is also quite common in people who have undergone major surgery or physical trauma, people with peptic ulcer disease, vegetarians and not eating a diet rich in iron.

The condition is diagnosed by blood tests that include complete blood tests (CBC), low hemoglobin (Hg) and hematocrit (Hct), low ferritin, low serum iron, and low iron saturation. Iron deficiency can be treated by taking medicinal iron in the form of multivitamins until the deficiency is corrected.

In severe cases of iron deficiency anemia, red blood cell transfusions may be given that are actively bleeding or have symptoms such as chest pain, shortness of breath, or weakness. Transfusions are only a temporary cure to replace deficient red blood cells and will not completely correct the iron deficiency.

Key Facts

Usually seen in

Adults between 20 to 35 years of age

Pregnant women

Lactating women

Gender affected

Both men and women but more common in women

Body part(s) involved

Red blood cells

Blood

Mimicking Conditions

Chronic fatigue syndrome

Thrombotic thrombocytopenic purpura

Plummer vinson syndrome

Lead poisoning

Hookworm infestation

Thalassemia minor

Sideroblastic anemia

Anemia of chronic disease

Necessary health tests/imaging

Complete blood count (CBC)

Hemoglobin count

Serum Iron (Fe)

Total iron-binding capacity (TIBC) Peripheral smear

Ferritin test

Vitamin B12 test

Upper and lower endoscopy

Fecal occult blood test (FOBT)

Treatment

Iron-rich diet

Iron supplements: Ferrous ascorbate with folic acid

Intravenous iron infusion: Iron sucrose, Iron dextran & Ferric gluconate

Blood transfusion

Specialists to consult

General physician

Hematologist

Symptoms Of Iron Deficiency Anemia

Iron deficiency anemia can range from mild to severe. People with mild or moderate iron-deficiency anemia may not show any signs or symptoms. But, as the anemia generally worsens the condition becomes more severe.

A few symptoms of iron-deficiency anemia are:

Unexplained fatigue or lack of energy

Pale yellow skin

Shortness of breath or chest pain

Rapid heartbeat

Generalized weakness

Brittle nails

Hair loss

Sore or swollen tongue

Tingling or crawling feeling in the legs

Dysphagia (difficulty in swallowing) due to formation of esophageal webs (Plummer–Vinson syndrome)

Brittle nails

Irritability

Pica (desire to eat peculiar substances such as dirt or ice)

Headache

Enlarged spleen

Did you know?

Anemia is the most common nutritional disorder across the world. It is known to affect an estimated 2.36 billion individuals worldwide with a high prevalence in women and children. Read more about symptoms of anemia that you might be ignoring.

Click To Read!

Causes Of Iron Deficiency Anemia

The main causes of iron deficiency anemia include:

Diet low in iron

Iron is obtained from foods in our diet; however, only 1 mg of iron is absorbed for every 10 to 20 mg of iron ingested. Examples of iron-rich foods include meat, eggs, leafy green vegetables, and iron-fortified foods. If a person is unable to obtain a balanced iron-rich diet, he/she may suffer from some degree of iron-deficiency anemia.

Loss of blood

Blood contains iron within red blood cells. So if a person loses blood, he or she will lose some iron. Iron deficiency is very common, especially among women having heavy periods as blood is lost during menstruation. Slowly, chronic blood loss within the body such as from a peptic ulcer, a hiatus hernia, a colon polyp, or colorectal cancer can also cause iron-deficiency anemia. It can also be due to conditions like hemorrhoids, gastritis (inflammation of the stomach), and cancer.

Inability to absorb iron

Iron from food is absorbed into the bloodstream in the small intestine. An intestinal disorder such as celiac disease, which affects the intestine's ability to absorb nutrients from digested food, can lead to iron-deficiency anemia, if a part of the small intestine has been bypassed or removed surgically. In other cases, children drink more than 16 to 24 ounces a day of cow's milk (the milk contains little iron, but it can also decrease absorption of iron and irritate the intestinal lining causing chronic blood loss).

Pregnancy

An increased iron requirement and increased red blood cell production are required when the body is going through changes, during pregnancy iron deficiency anemia occurs in many pregnant women because iron stores need to serve their increased blood volume as well as be a source of hemoglobin for the developing fetus.

Endometriosis

If you have endometriosis, you may have heavy blood loss during menstrual periods. You may not even know you have endometriosis because it occurs hidden in the abdominal or pelvic area outside of the uterus.

Parasitic disease

The leading cause of iron-deficiency anemia worldwide is a parasitic disease known as helminthiasis caused by infestation with parasitic worms (helminths); specifically, hookworms.

Destruction of red blood cells (haemolysis)

Inherited conditions such as sickle cell anemia and thalassemia; stressors such as infections, drugs, snake or spider venom; or certain foods can cause destruction of RBCs. Intravascular hemolysis is a condition in which red blood cells break down in the bloodstream, releasing iron that is then lost in the urine. This sometimes occurs in people who engage in vigorous exercise, particularly jogging. This condition can also be seen in other conditions including damaged heart valves or rare disorders such as thrombotic thrombocytopenic purpura (TTP) or diffuse intravascular hemolysis (DIC).

Gastrointestinal tract abnormalities

Blood loss from the gastrointestinal tract due to gastritis (inflammation of the stomach), esophagitis (inflammation of the esophagus), ulcers in the stomach or bowel, hemorrhoids, angiodysplasia, infections such as diverticulitis, or tumors in the esophagus, stomach, small bowel, or colon.

Increased demand by the body

Chronic kidney disease (CKD) patients receiving I/V erythropoietin therapy have increased iron demand. Similarly, iron demand is increased during rapid growth in infancy and adolescence.

Genetics

Some conditions — like celiac disease — that can make it difficult to absorb enough iron are passed down through families. There are also genetic conditions or mutations that can add to the problem. One of these is the TMRPSS6 mutation. This mutation causes your body to make too much hepcidin. Hepcidin is a hormone that can block your intestine from absorbing iron.

Other genetic conditions such as Von Willebrand disease and hemophilia may contribute to anemia by causing abnormal bleeding.

Anemia is a common health problem in children. Here's more about iron deficiency anemia in children.

Click Here!

Risk Factors For Iron Deficiency Anemia

Iron deficiency is very common, especially among women and in people who have a diet that is low in iron.

Menstruating women, particularly if menstrual periods are heavy

People who have undergone major surgery

Vegetarians, vegans, and other people whose diets do not include iron-rich foods

Pregnant or breastfeeding women or those who have recently given birth

Athletes, especially young females, are at risk for iron deficiency

Frequent blood donation

Kidney transplant recipients

Bariatric surgery (procedure of the digestive system to promote weight-loss in people with severe obesity) patients

Did you know?

According to the National Family Health Survey (NFHS-4) for the years 2015-16, iron deficiency in India is rampant. It was reported that around 55.9% of children in the age group of six months to less than a year are anemic. Most cases of low hemoglobin count can be treated with simple lifestyle changes like eating a healthy and balanced diet and regular exercise. Read about tips to increase hemoglobin count.

Tap Here!

Diagnosis Of Iron Deficiency Anemia

1. Physical examination and medical history

Iron-deficiency anemia may be suspected from general findings on a complete medical history and physical examination, such as complaints of getting tired easily, abnormal paleness or yellow-colored skin, or a fast heartbeat (tachycardia). Checking the medical and genetic background of the suspected person.

A thorough medical history is important to the diagnosis of iron deficiency anemia. The history can help to differentiate common causes of the condition such as menstruation in women or the presence of blood in the stool. Travel history to areas in which hookworms and whipworms are endemic may also be helpful in guiding certain stool tests for parasites or their eggs.

2. Lab tests

Complete blood count (CBC): A CBC test measures many blood-related issues. It measures the red blood cells (RBC) count, white blood cells (WBC), hemoglobin, hematocrit, and platelets. A low RBC count may be a sign of iron deficiency anemia.

Hemoglobin count: Iron-deficiency anemia is usually discovered during a medical examination through a blood test that measures the amount of hemoglobin (number of red blood cells) present.

Serum iron (Fe): It is a laboratory test that measures the amount of circulating iron that is bound majorly to transferrin and serum ferritin. The main aim of the iron-serum test is to examine the iron present in the blood. Low levels of serum iron may indicate iron deficiency.

Total iron-binding capacity (TIBC): A TIBC test measures the blood's ability to attach itself to iron and transport it around the body. If TIBC levels are high, it may indicate low iron in the blood due to iron deficiency anemia.

Peripheral smear: Examination of blood smear under a microscope can help detect iron deficiency anemia. While examining, the RBCs may appear smaller and paler than usual.

Ferritin test: Ferritin is an iron-containing protein in the blood. Measuring the amount of ferritin in the blood helps in understanding the iron reserve in the blood. Low levels of ferritin in the blood can be indicative of iron deficiency.

Red cell protoporphyrin levels: Protoporphyrin is an intermediate in the pathway in the production of hemoglobin. Under conditions in which production of hemoglobin is impaired, protoporphyrin (an organic compound that plays an important role in living organisms as a precursor to heme) accumulates within the red cell. Normal values are <30 µg/dL and in iron deficiency >100 µg/dL.

Hemoglobin electrophoresis and measurement of hemoglobin A 2 and fetal hemoglobin - to rule out thalassemia.

Sometimes, it is difficult to diagnose the cause of iron deficiency, or your doctor may be concerned that there is a problem other than iron deficiency causing the anemia. In patients such as men, postmenopausal women, or younger women with severe anemia, the doctor may recommend additional testing. These tests may include the following:

Upper and lower endoscopy: This test is done to look for abnormalities in the gastrointestinal tract which looks to the stomach, esophagus, and colon. These tests may help rule out a source of blood loss.

Fecal occult blood test (FOBT): This test may be useful in identifying patients with iron deficiency anemia who may have gastrointestinal lesions. Occult gastrointestinal bleeding usually is discovered when fecal occult blood test results are positive.

Urine routine: Urine-containing blood can be due to some internal bleeding and can be a cause of anemia.

Bone marrow aspiration and biopsy: This test is done in very few cases, this test helps diagnose a few types of cancers like leukemia, myeloma, and the diagnosis of anemia. The procedure involves taking a small amount of bone marrow fluid or solid bone marrow tissue (called a core biopsy), to be examined for the number, size, and maturity of blood cells or some abnormal cells.

Here’s more about the hemoglobin test & what the results mean.

Celebs affected

Selena Gomez

In 2011, Selena Gomez was taken to the hospital where she was found to be malnourished, exhausted, and had an iron deficiency anemia. She is doing well now.

Angelina Jolie

American actress, filmmaker, and humanitarian. Angelina Jolie became very sick in 2010 when she adopted a Vegan lifestyle. Though green leafy vegetables are known for their iron, they are not enough to provide the nourishment her body needs.

Prevention Of Iron Deficiency Anemia

When caused by inadequate iron intake and blood loss due to menstruation, iron-deficiency anemia can be prevented by eating a diet high in iron-rich foods. For infants, breast milk or iron-fortified infant formula can be given. Some of the foods rich in iron include:

Greens leafy vegetables such as spinach

Non-vegetarian food such as lamb, pork, chicken, and beef

Iron-fortified dry and instant cereals

Seafood such as clams, sardines, shrimp, and oysters

Raisins and other dried fruits

Did you know?

There is a link between iron and Vitamin C. Iron absorption is significantly increased by the presence of Vitamin C, also known as ascorbic acid. Both iron and Vitamin C work together within the body and a major role is played by them in the synthesis of red blood cells. Iron is an important component of hemoglobin, it is found in red blood cells. Read more about Vitamin C rich foods that are easily available and are cost effective.

Check Out Now!

Specialist To Visit

Sometimes, it is difficult to diagnose the cause of iron deficiency, a general practitioner may be concerned that there is a problem other than iron deficiency causing the anemia. These may include genetic blood disorders including thalassemias in which red blood cells appear small and pale, hemoglobinopathies such as sickle cell disease, and other blood disorders. When the cause of the anemia is not clear, your doctor may refer you to a hematologist, for consultation and further evaluation.

General physician

Hematologist

Hematologist specializes in blood disorders including iron deficiency anemia and helps in managing your iron deficiency as well as any underlying causes.

If you or anyone in your family are facing such issues, seek medical help immediately.

Consult Now!

Treatment Of Iron Deficiency Anemia

Treatment guidelines from the American College of Physicians (ACP) for adult patients with anemia and iron deficiency include the following:

Patients hospitalized with coronary heart disease, with the hemoglobin levels as low as lowered to 7-8 g/dL , red blood cell transfusion strategy is recommended.

Agents that stimulate red cell production are not recommended for patients with mild to moderate anemia and either congestive heart failure or coronary heart disease.

Specific treatment for iron-deficiency anemia will be determined by your doctor based on the following:

Medical history, genetic history, and age

Cause of the anemia

Extent of anemia

The treatments consist of the following:

1. Iron-rich diet

Eating a diet with iron-rich foods can help treat iron-deficiency anemia. Good sources of iron include the following:

Meat such as beef, pork, or lamb, and organ meats such as liver

Leafy green members of the cabbage family including broccoli, kale, and turnip

Iron-enriched pasta, grains, rice, and cereals

Legumes including beans, peas, pinto beans, and black-eyed peas

Poultry such as chicken, duck, and turkey

2. Iron supplements

These can be taken over several months to increase iron levels in the blood. The amount of iron needed to treat patients with iron deficiency is higher than the amount found in multivitamin supplements. Most people with iron deficiency need 150-200 mg per day of elemental iron (2 to 5 mg of iron per kilogram of body weight per day).

The purpose of oral iron supplementation is to treat your symptoms by increasing the levels of iron and hemoglobin in the body. Examples include folic acid, methylcobalamin, carbonyl iron, ferrous fumarate, ferrous sulfate, and gluconate. It is recommended by some doctors to take Vitamin C (ascorbic acid) including ferrous ascorbate with folic acid, with iron supplements as it improves iron absorption.

The oral iron preparations available are ferrous sulfate, ferrous fumarate, ferrous gluconate, and polysaccharide iron.

Note: You should avoid taking oral iron supplements with milk, tea, coffee, antacids or calcium supplements as these may reduce the absorption of iron.

3. Intravenous iron infusion

In some cases, the doctor may recommend intravenous (IV) iron. It may be necessary to treat iron deficiency in patients who do not absorb iron well in the gastrointestinal tract. In the case of patients with severe iron deficiency or chronic blood loss, patients can receive supplemental erythropoietin, a hormone that stimulates blood production, or patients who cannot take oral iron supplements. A few examples of IV infusions are iron sucrose, iron dextran, ferric gluconate, low molecular weight iron dextran, and ferric carboxymaltose.

Feraheme (ferumoxytol injection), a hematinic, was initially approved by the FDA in 2009 to treat iron deficiency anemia in adults with chronic kidney diseases (CKD). In 2018, the FDA expanded the indication for ferumoxytol injection to include all eligible adults with iron deficiency anemia who have an intolerance or unsatisfactory response to oral iron.

Ferric derisomaltose (monoferric) was approved by the FDA in January 2020 for iron deficiency anemia in adults who have an intolerance to oral iron or have had an unsatisfactory response to oral iron.

Note: Large doses of iron can be given at one time using iron dextran. Iron sucrose and ferric gluconate require more frequent doses spread over several weeks.

4. Blood transfusions

Red blood cell transfusions may be given to patients with severe iron-deficiency anemia who are actively bleeding or have significant symptoms such as chest pain, shortness of breath, or weakness. Red blood cell transfusions will only provide temporary improvement, it is important to find and treat the cause of anemia.

Watch this video to know more about the symptoms and treatment of iron deficiency anemia.

Home-care For Iron Deficiency Anemia

Home remedies

1. Drumstick

Drumsticks are loaded with vitamins A and C, iron, calcium, and magnesium that can help cure anemia. Chop the leaves, blend them, and drink this juice for about a month.

2. Raisins (kismish) and dates (khajur)

These dried fruits offer a combination of iron and Vitamin C. This enables the body to quickly and effectively absorb the iron from them.

3. Green vegetables

Green veggies like kale, spinach, radish greens, mustard greens, and broccoli. The vegetables contain high amounts of chlorophyll and are a good source of iron and help in treating anemia.

4. Vitamin C rich foods

Anemia tends to weaken your immune system and thus, you may be more prone to infections and inflammatory diseases. Fruits like orange, apple, lime, lemon, grapefruit, tangerine, gooseberries, apple, and berries are loaded with Vitamin C and other essential vitamins and minerals that help in the production of RBCs and hemoglobin.

5. Figs (anjeer)

Figs are a great source of iron. They are loaded with Vitamin A, folate, and magnesium.

6. Beetroot (Chukandar)

It is one of the healthiest and richest sources of iron. Consuming it regularly can help treat and prevent iron deficiency.

7. Shilajit

It is an herbal remedy that is useful in gradually increasing iron levels. The use of these herbal remedies for anemia would also ensure proper oxygen supply to all organs and improve their health.

Iron deficiency negatively affects the growth and development of both the mind and body of a child. Here’s an article highlighting the significance, detection, and prevention of iron deficiency in children.

Click and Read!

Alternate Treatment For Iron Deficiency Anemia

1. Yoga and exercise

Doing yoga and exercises three times a week can help improve blood circulation and help the body to feel fresh and prevent from feeling fatigued all the time. However, to reduce stress or pressure on the body, exercise when your condition has improved a bit and you feel stronger.

2. Water therapy

Hydrotherapy (that takes advantage of water at different temperatures and pressures) could be an adjuvant treatment for iron deficiency anemia. Specifically, it’s believed that the water could stimulate circulation and, as a result, the production of red blood cells (RBCs).

3. Lifestyle changes

Changing the lifestyle can help in curing iron deficiency anemia. Cooking in iron pots is a fine remedy to treat anemia and sitting in sun (sunbathing) for some time ensures an increase of red blood cells in the body because of the increase in blood circulation.

Living With Iron Deficiency Anemia

Self management can help in taking care of yourself. It includes:

Understanding your condition: Sometimes, iron deficiency anemia can affect the mental health of a person and it can lead to anxiety and depression. Talking to your near and dear ones can eliminate cases of emotional drainage and thus an effective treatment plan.

Exercising daily: It increases the blood circulation of the body and frees the mind from tension and stress.

Taking your medicine on time: Self helps give a sense of satisfaction to the person that he/she is aware of the condition.

Talking with a doctor openly in case of any questions related to the disease: The person having iron deficiency anemia should ask as many questions that come to his mind.

Lowering the stress levels: Practicing meditation and yoga helps in eliminating stress and keeps the person happy,

Getting adequate sleep: Sleep activates and calms the body and mind. This makes the person feel less fatigued.

In this video, Dr. Akta Bajaj clearly mentions about the anemia issues during pregnancy and multiple ways to handle the situation carefully without having side effects in infants.

Frequently Asked Questions

What is the normal hemoglobin level for iron deficiency anemia?

What causes iron-deficiency anemia in children?

What happens if you don't have enough iron in your blood?

Why is iron-deficiency anemia more common in women?

What are a few significant symptoms that are visible in the case of iron deficiency anemia?

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Irritable bowel syndrome

Also known as Spastic colon, Irritable colon, Mucous colitis, and Spastic colitis.

Overview

Irritable bowel syndrome (IBS) is a bowel disorder characterized by abdominal pain or discomfort, cramping, food intolerance, stool irregularities, increased gas and bloating.

The exact cause of IBS is not known, however, it is frequently associated with other comorbidities such as pain syndromes, overactive bladder, and migraine and psychiatric conditions such as depression and anxiety. It can present in many ways such as IBS with constipation, IBS with diarrhea, IBS with both diarrhea and constipation.

It is essential for IBS patients to identify their food triggers so that they can avoid them. Increased intake of dietary fiber, drinking plenty of water, avoiding soda, and eating smaller meals is beneficial to most patients in general.

The approach to treating IBS is based on the patient's predominant symptoms. Treatment comprises dietary and lifestyle modifications, and prescription medications like antidiarrheals, antispasmodics, bulking agents, osmotic laxatives, antidepressants, etc.

Key Facts

Usually seen in

Individuals between 26 to 55 years of age

Gender affected

Both men and women but more common in women

Prevalence

Worldwide: 11.2%

Mimicking Conditions

Carcinoid tumor

Celiac disease

Colorectal cancer

Diverticular disease

Gastrointestinal infection

Hyperthyroidism/hypothyroidism

Inflammatory Bowel disease

Ischemic colitis

Lactose intolerance

Necessary health tests/imaging

Rome criteria III (symptoms-based criteria for diagnosis of IBS)

Blood tests

Stool test

Colonoscopy

Treatment

Diet and lifestyle modifications

Medicines:

Antidiarrheal- atropine, eluxadoline, loperamide, diphenoxylate, rifaximin

Antispasmodic- Hyoscyamine, dicyclomine, pinaverium, peppermint oil, trimebutine

Antidepressants- Diazepam, lorazepam, clonazepam

Probiotics

Mental health therapies- Cognitive behavioral therapy, Gut-directed hypnotherapy, Relaxation therapy

Specialists to consult

General Physician

Gastroenterologists

Nutritionist

Symptoms Of Irritable bowel syndrome

IBS symptoms and their intensity can vary from person to person. Symptoms often occur after eating a large meal or when you are under stress, and they are often temporarily relieved by having a bowel movement.

Chronic and recurring abdominal pain

Constipation followed by diarrhea

Gassiness or bloating

Abdominal bloating, or the sensation of being full

Distention, or swelling of the abdomen

Nausea

Indigestion

Heartburn

Vomiting

Worsening of pain with food intake and relief with defecation.

Mucus in the stool

The urge to move your bowels without being able to have a bowel movement

Other Symptoms:

Patients with IBS often complaint of anxiety, depression, and tension headaches

Some women with IBS notice a link between pain episodes and their menstrual cycle.

Types of IBS:

Irritable bowel syndrome has 3 subtypes:

1. IBS with constipation (IBS-C)

The perimeters for this include:

More than a quarter of your stools are hard or lumpy and

Less than a quarter of your stools are loose or watery

2. IBS with diarrhea (IBS-D)

The perimeters for this include:

More than a quarter of your stools are loose or watery and

Less than a quarter of your stools are hard or lumpy

3. Those whose symptoms include both diarrhea and constipation (IBS-M)

The perimeters for this include:

More than a quarter of your stools are hard or lumpy and

More than a quarter of your stools are loose or watery

Did you know?

People frequently mix up Irritable Bowel Syndrome (IBS) and Inflammatory Bowel Disease (IBD). IBS is a functional gastrointestinal disorder that does not cause inflammation or damage to the intestines. It is a condition that affects the motility and sensitivity of the bowel. Whereas IBD is a chronic inflammatory disorder of the digestive tract that causes inflammation, ulcers, and tissue damage in the lining of the gut.

Click Here To know Myths About IBS

Causes Of Irritable bowel syndrome

The exact cause of IBS is not known, however, it is frequently associated with other comorbidities such as:

1. Muscle Contractions in the Intestine:

As the food passes through the digestive tract, muscles lining the intestinal walls contract. Weak intestinal contractions cause slow food passage and hard, dry stools whereas stronger and longer-lasting contractions result in gas, bloating, and diarrhea.

2. Problems in Nerve Signaling:

Poorly coordinated brain-intestine signals can cause your body to overreact to changes in the digestive process, resulting in pain, diarrhea, or constipation.

Note: Reduced plasma serotonin levels (a hormone and neurotransmitter that aids in the regulation of GI motility, sensation, and secretion) may be linked to constipation-predominant IBS, whereas increased serotonin release may be linked to diarrhea-predominant IBS.

3. Severe Infection:

IBS can develop following a severe bout of diarrhea (gastroenteritis) caused by a bacterial or viral infection.

4. Changes in Gut Microbes:

Changes in the bacteria, fungi, or viruses that live in the small intestine are also important in the development of IBS.

Do you want to know how important it is to maintain gut health and how to do it?

Watch this video to know the answers from our expert doctors.

Tap Here

Risk Factors For Irritable bowel syndrome

1. Genetics

Genes may play a role in the development of IBS. Many people who have IBS have a first-degree relative (parent, child, or sibling) who also has the condition.

2. Age

IBS is more common in people under the age of 50 and is rarely diagnosed after that age. Over the age of 50, your symptoms are more likely to be caused by an organic cause rather than IBS.

3. Gender

Females are more likely than males to be diagnosed with IBS. Estrogen therapy, either before or after menopause, is another risk factor for IBS.

4. Stress

People who have faced stressful life events, especially in their childhood, are more prone to develop IBS.

To know more about techniques to deal with stress,

Click Here

5. Mental health problems

If you have anxiety or depression, you may be more prone to developing IBS. The opposite is also true: if you have IBS, you may be more prone to anxiety or depression.

Anxiety and depression can exacerbate symptoms in IBD and IBS patients. Consultation with a psychologist or psychiatrist familiar with IBD and IBS can be very helpful in managing these conditions.

Here are 5 effective self-help tips to cope with anxiety.

Click to read.

5. History of childhood abuse

People with a history of childhood physical or sexual abuse have a higher risk of developing IBS.

6. Other factors

Smoking, frequent alcohol consumption, physical or psychological stress, underlying depression, being exposed to antibiotics, contracting food poisoning, obesity, sleep problems, low exercise level, family history of mental illness, etc. can be the precipitating factors for IBS.

Do you know Covid-19 can trigger IBS?

Studies have shown that COVID-19-related psychological stress and disturbances can contribute to the occurrence of IBS. Watch this video to know more about Covid-19 from our expert doctors.

Click Here

Diagnosis Of Irritable bowel syndrome

Your doctor may be able to diagnose IBS based on your symptoms. They may also take one or more of the following steps to rule out other possible causes of your symptoms:

Have you adopted a certain diet or cut out specific food groups for a time to rule out any food allergies

Stool test to rule out infection or presence of any IBD.

Complete blood tests are done to check for anemia and rule out celiac disease (a serious immune reaction to gluten).

Perform a colonoscopy (if they suspect any type of Inflammatory Bowel Disease)

Erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP) - can show if there is inflammation in the body (which does not occur with IBS).

The diagnosis of IBS is made by performing a careful review of the patient's symptoms, determining the presence or absence of red flags, performing a thorough physical examination, and utilizing Rome IV criteria.

The Rome IV diagnostic criteria for irritable bowel syndrome:

Abdominal pain that occurs, on average, at least 1 day/week over the last 3 months, associated with two or more of the following criteria:

Related to defecation

Associated with a change in the frequency of stool

Associated with a change in the form (appearance) of stool

Evaluation of IBS should include a thorough history and identification of any red flags like:

IBS should not cause rectal bleeding, fever, weight loss, anemia

Diarrhea that prevents sleep.

Red flags indicate a colonoscopy

Celebs affected

Tyra Banks

Tyra Banks,the model-turned-actress/television host once revealed that she suffers from IBS on her TV show, Tyra. She mentioned she is 'very gassy' and follows a low FODMAP diet to keep her symptoms under control.

Shamita Shetty

Bollywood actress, Shamita Shetty shared that she has colitis and IBS. She claimed that as a result she was in constant discomfort and switched to a gluten-free diet. She asserted that it helps her with digestive problems and is good for her intestines.

Prevention Of Irritable bowel syndrome

IBS symptoms vary from person to person. Some people suffer from constipation, while others suffer from diarrhea. There are times when symptoms worsen, and other times when they improve or even disappear completely.

Here are a few tips that may help you better manage IBS symptoms:

1. Avoid foods and drinks that trigger IBS.

Foods that may make IBS constipation worse:

Dairy products, especially cheese

High-protein diets

Carbonated drinks

Caffeine and alcohol

Processed foods, such as cookies or chips

Refined grains (think white flour) in bread and cereals

Foods that may make IBS diarrhea worse:

Dairy foods, especially if you are lactose intolerant

Foods with wheat if you're gluten-sensitive

Chocolate

Carbonated drinks

Caffeine

Alcohol

Too much insoluble fiber, such as from the skin of fruits and vegetables

Fried foods

2. If you’re not sure what triggers your symptoms, try the elimination approach.

List the foods you believe may be contributing to your symptoms. After that, for 12 weeks, cut out one food at a time to see if it affects how you feel.

3. Avoid or limit processed foods.

Processed foods often contain unexpected or hidden ingredients that cause flare-ups of IBS.

Want to know more about the side effects of processed food?

Click Here to Read

4. Avoid having big portions of meals at a time.

You should aim for small meals. Eat multiple small meals throughout the day instead of 3 big meals.

5. Don’t eat too quickly.

Avoid eating quickly, eating with your mouth open or chewing gum. This will minimize

the amount of air you swallow.

6. Avoid food high in FODMAPs.

Foods containing high FODMAPs (fermentable oligosaccharides, disaccharides, monosaccharides, and polyols - which are short-chain of carbohydrates) aren’t well digested in the intestine. They can cause excess gas production causing pain and diarrhea.

Try to include low FODMAP foods like lettuces, carrots, crab, lobster, oils, pumpkin seeds, butter, peanuts, quinoa, brown rice etc. in your diet to reduce GI symptoms.

You can consult a dietitian or nutritionist to reduce high FODMAPs in your diet. Book an appointment with a dietician.

Tap Here

7. Avoid gas-producing foods.

Avoiding things like carbonated drinks, caffeine, raw fruits, and cruciferous vegetables like cabbage, broccoli, and cauliflower may be helpful if bloating and gas are issues for you.

8. Don’t smoke.

Smoking can irritate the digestive system and worsen IBS symptoms, so it's important to avoid smoking or quit if you are a smoker.

Say no to tobacco. Try our smoking cessation product range.

Tap Here

Specialist To Visit

If you experience any symptoms of IBS-

1. Consult your doctor as soon as possible for a proper diagnosis of the condition.

2. Keep track of your symptoms (for a few weeks) before going to the doctor such as:

Cramping, abdominal pain, bloating and gas, constipation, diarrhea etc.

When and for how long the symptoms appear

Which food helped to ease the symptoms

Which food flared up the symptoms

3. Take note of any other symptoms such as frequent loose, watery stools, urgent need to have a bowel movement, fullness etc.

4. Seek immediate medical attention if you have a fever, rectal bleeding, weight loss, or any other symptoms in addition to these.

Sometimes IBS is difficult to be diagnosed by a general physician and one might need to see a specialist. In such cases, your doctor might advise you to consult:

Gastroenterologists

Nutritionists

Gastroenterologists specialize in the disorders and diseases that affect the digestive system and nutritionists provide guidance on healthy eating habits and lifestyle choices that can improve digestive health.

Consult India's best doctors online.

Book An Appointment.

Treatment Of Irritable bowel syndrome

Drug therapy may be initiated when IBS symptoms start to diminish the patient’s quality of life.

1. Drug treatments for IBS with diarrhea

Antidiarrheal Medications-

Losetron

Atropine

Eluxadoline

Loperamide

Diphenoxylate

Loperamide

Antibiotics like Rifaximin amongst others are prescribed to treat bacterial infections.

2. Drug treatments for IBS with constipation

Lubiprostone

Linaclotide

Plecanatide

Fiber supplements with psyllium, in case dietary fiber intake is insufficient

Check out our wide range of constipation care products.

Click Here

3. Medication to treat abdominal pain in people with IBS.

Antispasmodics- which relax the smooth muscle in the small and large intestines, thereby reducing abdominal spasms and cramps.

Examples- Hyoscyamine, dicyclomine, pinaverium, peppermint oil, trimebutine

Low-dose tricyclic antidepressants- Diazepam, lorazepam, clonazepam

Low-dose selective serotonin reuptake inhibitors (SSRIs)- tegaserod

Coated peppermint oil capsules

4. Bloating/ Gas

It requires probiotics, dietary changes and medications such as fluoxetine.

Probiotics contain good bacteria such as bifidobacteria and lactobacilli which help maintain the health of the digestive tract and aid in proper digestion.

Explore our wide range of probiotics supplements.

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Home-care For Irritable bowel syndrome

1. Be careful with fiber- Adding fiber to your diet can help deal with constipation. Increase the amount of fiber in your diet gradually over a few weeks. Whole grains, fruits, and vegetables are high in fiber. Avoid eating too much fiber if you have diarrhea.

2. Avoid trigger foods- If certain foods aggravate your signs and symptoms, avoid them. Avoid beans, cabbage, milk, cauliflower, and broccoli if you suffer from gas.

3. Eat at regular times- To help regulate bowel function, don't skip meals and try to eat at the same time every day.

4. Be mindful of dairy products- If you’re lactose intolerant, try replacing milk with curd. Consuming milk products in small amounts or combining them with other foods is also beneficial.

5. Drink plenty of liquids- Try to include plenty of fluids in your diet. Drink 8-10 glasses of water daily.

6. Have Gluten free food- The gluten-free diet is very helpful for sufferers of IBS. Gluten is a group of proteins found in grains including rye, wheat, and barley, which may cause problems for some people with IBS.

7. Probiotics- Probiotics are live microorganisms that are similar to the good bacteria that live in the digestive tract. Taking them in the form of food or supplements helps to relieve gas and bloating.

Note: In a 2022 study, IBS patients who took a probiotic called Bifidobacterium longum for 1 month, observed a significant decrease in symptom severity compared to baseline measurements.

Want to know more benefits of probiotics?

Tap Here

8. Keep a food and symptom diary- Record the foods you eat as well as the symptoms you experience to determine which foods help or worsen your symptoms.

9. Exercise regularly- Exercise relieves depression and stress, stimulates normal bowel contractions, and can make you feel better about yourself.

10. Manage stress- Your gut and bowel habits can be affected by your mood and stress levels. Spend some time during the day doing something that helps you relax or de-stress. For example, meditating, going for a walk outside or reading a book.

Watch out this video to know more about stress and anxiety and how to cope up in such situations.

Tap here

Complications Of Irritable bowel syndrome

IBS can lead to both physical and mental health complications such as:

1. Diarrhea or Constipation

Diarrhea occurs when you have three or more liquid bowel movements per day. Constipation occurs when stools are frequently hard and pellet-shaped. Even when the rectum is completely empty, patients may experience a sense of incomplete evacuation.

2. Anal fissures/ Tears

These can occur as a result of pushing too hard during a bowel movement. During constipation, these small tears are difficult to heal.

3. Hemorrhoids

It can cause rectal bleeding and develop from constipation-related straining.

4. Fecal impaction

It happens when stool gets stuck in the rectum. In addition, healthcare workers will have to manually remove the impacted stool.

5. Rectal prolapse

It happens when the rectum exits the anus, causing mucus to leak out. Chronic constipation can be the reason for this.

6. Cramping

Cramping is usually caused by eating too much food. Both cramping and diarrhea may be avoided by cutting down on food consumption or eating smaller-sized meals.

7. Malnourishment

It can develop as a result of avoiding certain nutritious, healthy foods that aggravate IBS symptoms.

8. Bladder issues

Pressure on the bladder can cause irregular urination and irritation.

9. Problems in sex life

You may have difficulty enjoying your sex life. People who have IBS may experience increased urgency to use the restroom or other symptoms.

10. Agoraphobia

It is a fear of going out in public. Anxiety about finding a restroom in unfamiliar places can lead to agoraphobia symptoms.

11. Anxiety and depression

It could arise as a result of coping with IBS symptoms. IBS symptoms can cause anxiety, and anxiety can exacerbate the symptoms. It is frequently a vicious circle.

12. Sleeping disturbances

Sleeping problems are common with IBS because abdominal pain and other cramps can keep you awake at night.

Alternative Therapies For Irritable bowel syndrome

1. Herbal therapies

Herbal remedies have been shown to have a significant effect on the management of IBS symptoms. Such as turmeric extract, peppermint oil extract, artichoke (beet)leaf extract etc.

Learn more about herbs that help in managing IBS?

Click here

2. Mind-body therapies

Any stressful situation (for example, family problems, work stress, or examinations) may trigger symptoms of IBS in some people.

Hypnotherapy- Hypnotherapy for IBS can help you to learn relaxation techniques, as well as learn new ways to manage stress.

Cognitive behavioral therapy- CBT can help patients learn coping strategies to control the symptoms brought on by anxiety. The aim of this therapy is to help the patient identify their stressors and come up with healthier responses to reduce the impact of their triggers.

Click here to know more

Relaxation techniques- Specific exercises focused on promoting relaxation in the body, such as breathing exercises, are particularly helpful in fighting anxiety. This boosts the person’s confidence in battling negative thoughts as well as helps improve behavioral responses.

Gut-directed hypnotherapy- It is one of the most successful treatment approaches for chronic IBS. In addition to decreasing pain perception at the level of the brain, hypnosis may improve immune function in IBD and IBS, increase relaxation, reduce stress, and ease feelings of anxiety.

3. Acupuncture

Acupuncture can help IBS by stimulating your nervous system in a way that releases chemicals and hormones that relieve pain, stress, and other symptoms.

4. Moxibustion

It is a type of traditional Chinese medicine therapy that is typically administered in conjunction with acupuncture. The two approaches are thought to complement each other best. It is similar to heat therapy. Dry herbs are burned close to your skin, often near acupuncture points. Moxibustion combined with acupuncture may help with IBS symptoms.

Living With Irritable bowel syndrome

1. Sociological impact- IBS has a significant negative impact on patients' personal and professional lives, including a decreased tendency to travel, reduced socializing, and a loss of earnings.

IBS makes it difficult to carry out daily tasks outside of the home, where access to a bathroom is a concern. This can eventually lead to social isolation.

There are several ways to manage the sociological impact of IBS:

Join a support group for individuals with IBS or seek professional counselling to address the emotional impact of IBS on your life.

Try to communicate with others about your condition, needs and limitations. This can help reduce anxiety and make social interactions more comfortable.

2. Psychological impact- According to some studies, having IBS might increase your risk of depression, anxiety, sleep disorder, or bipolar disorder. Depression and anxiety can also make IBS worse.

Here are some tips to help manage the psychological impact of IBS:

Practice stress-reducing activities such as meditation, yoga, deep breathing etc.

Talking to loved ones

Consider consulting with a mental health professional who can help you develop coping strategies for managing anxiety, depression, and stress.

Stay physically active as it helps in reducing stress.

Track your symptoms. This can help you avoid foods that trigger your symptoms, which can reduce stress and anxiety.

3. Financial burden- IBS can be financially draining as well in the aspect of hospitalizations, physician services, prescription drugs, over-the-counter drugs, skilled nursing care etc.

This can be managed through:

Understanding the cost of therapy well in advance.

Communicating any financial issues with the doctor's team. This will help doctors to look for affordable alternatives.

Finding financial support resources through doctors, or online.

Taking help through your health insurance partners.

4. Role of caregivers- Caregivers play a very important role in the overall disease outcome of the patient diagnosed with IBS. The important role of caregivers are:

Making decisions about diseases management options

Participating in doctor appointments

Giving the medicines to the patient on time

Helping with meals

Frequently Asked Questions

Is Irritable bowel syndrome (IBS) considered a “serious illness?”

What are the Rome Criteria?

Can certain foods affect IBS symptoms?

Is there any specific diet for IBS sufferers?

What is the difference between IBS and IBD?

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Japanese encephalitis

Also known as Japanese B encephalitis, JE, Russian autumnal encephalitis and Summer encephalitis

Overview

Japanese encephalitis (JE) is a vector borne disease caused by the Japanese encephalitis virus (JEV). JEV is transmitted by mosquitoes to humans and animals. Domestic animals, especially pigs, generally act as reservoirs of the virus. This virus is not transmitted from one person to another.

Japanese encephalitis (JE) is most commonly seen in Asia and the western Pacific countries. It primarily affects children between the ages of 0 to 15 years and occasionally adults.

Most people infected with JE do not have symptoms or have only mild symptoms and treatment involves supporting the functions of the body as it tries to fight off the infection.

However, a small percentage of infected people can develop inflammation of the brain (encephalitis), with symptoms like sudden onset of headache, high fever, disorientation, coma, tremors and convulsions.

The prevention generally consists of avoiding mosquito bites by using mosquito repellents, wearing long-sleeved shirts and long pants, getting vaccinated for JE is also important especially while living in or traveling to JE endemic areas.

Key Facts

Usually seen in

Children between 0-15 years of age

Adults above 40 years of age

Gender affected

Both men and women

Body part(s) involved

Brain

Prevalence

India: 25% (2015)

Mimicking Conditions

Influenza

Meningitis

Acute ischemic stroke

Necessary health tests/imaging

Cerebrospinal fluid (CSF)

Peripheral smear examination

Serological tests: Plaque reduction neutralization test (PRNT), Hemagglutination inhibition (HI) test & Indirect immunofluorescence assay (IFA)

Treatment

Interferons

Antiviral drugs: Minocycline

Glucosidase inhibitors

See All

Symptoms Of Japanese Encephalitis

Generally, patients suffering from JE do not present with any symptoms, but if there are symptoms, they will appear 5 to 15 days after being infected. In mild cases of Japanese encephalitis, individuals might only develop fever and a headache, but in more severe cases, serious symptoms can develop quickly.

Some of the possible symptoms include:

Headache

High fever

Nausea

Vomiting

Stiff neck

Tremors (shaking)

Hyperactivity of the muscles

Abnormal posturing

Abdominal pain

The symptoms of Japanese encephalitis that indicate brain inflammation include deafness, uncontrollable emotions, and weakness on one side of the body, which can cause lifelong complications. In some cases, individuals might also undergo changes to brain function such as:

Disorientation

Coma

Stupor (state of near-unconsciousness)

Convulsions or seizures in children

Swelling of the testicles (in rare cases)

Causes Of Japanese Encephalitis

Japanese encephalitis is caused by a flavivirus, which can affect both humans and animals. The virus is passed from animals to humans through the bite of an infected mosquito. Understanding the transmission cycle is very important in knowing the cause.

Transmission

This virus exists in the zoonotic transmission cycle, which means the infections spread from animals, through insects to humans. The general carrier and host of this virus are:

Mosquitoes: The major mosquito vectors of JEV vary in different geographic regions, but the most common are Culex species (mainly Culex tritaeniorhynchus).

Pigs: They are the main contributors in the transmission cycle with respect to human infection, because these animals often stay close to human dwellings.

Bats: Recently, JEV antibodies were detected in bats, revealing that bats can be a part of the JEV transmission cycle.

Water birds: The birds belonging to the family Ardeidae (cattle egrets and pond herons) are important maintenance hosts.

In most temperate areas of Asia, JEV is transmitted mainly during the warm season whereas in the tropics and subtropical regions, transmission can occur year-round but often intensifies during the rainy season and pre-harvest period in rice-cultivating regions.

First, the endemic region is composed of Southern India, Southern Vietnam, Southern Thailand, the Philippines, Malaysia, and Indonesia. Secondly, the intermediary subtropical region, which includes Northern India, Nepal, North and Central Burma, Northern Thailand, Northern Vietnam, Southern China, and Bangladesh. Thirdly, the temperate epidemic region, spanning Northern China, Korea, Japan, Taiwan, and the southern extremities of Russia.

Japanese encephalitis virus (JEV) is a flavivirus related to dengue, yellow fever and West Nile viruses. Read more about symptoms, causes, treatment and prevention of dengue.

Click Now!

Risk Factors For Japanese Encephalitis

The risk of becoming infected with Japanese encephalitis is highest during and right after rainy seasons as mosquitos breed during this time and populations tend to increase suddenly around rainy seasons. The factors determining who of all the infected develop the disease are unknown, but factors such as age, genetic make-up, general health, and pre-existing immunity play an important role in the spread of the disease.

People in countries with year-round tropical climates are also at risk of getting Japanese encephalitis. High-risk countries include:

China

Myanmar (Burma)

Thailand

Philippines

Sri Lanka

Malaysia

Indonesia

Vietnam

Cambodia

Laos

Nepal

India

Overall, for every million travelers it is estimated that there's less than 1 case of Japanese encephalitis. But there are certain activities that can increase the risk of getting the infection. These include:

Visiting rural areas during the rainy season

Camping, or traveling in high-risk areas for a long time

Living or working outdoors in rural areas

Did you know?

Despite its name, Japanese encephalitis is now relatively rare in Japan as a result of mass immunization programmes. Understand why vaccination is needed in adults?

Click To Read!

Diagnosis Of Japanese Encephalitis

Individuals who live in or have traveled to a JE-endemic area and experience encephalitis are considered a suspected JE case. Confirming the diagnosis consist of the following:

Detailed medical and travel history

Japanese encephalitis (JE) should be considered in a patient with evidence of a neurologic infection like meningitis, encephalitis, or acute flaccid paralysis (onset of weakness or paralysis with reduced muscle). Individuals who have recently traveled to or resided in an endemic country in Asia or the western Pacific are also suspected of infection with JEV.

Laboratory tests

Clinically, it is difficult to distinguish JE from other cases of encephalitis, therefore laboratory confirmation is necessary in such circumstances. This is generally accomplished by testing of the following:

1. Cerebrospinal fluid (CSF): The ideal method for laboratory confirmation is testing cerebrospinal fluid (CSF) or serum for JEV-specific IgM antibodies to detect virus-specific IgM antibodies. JE virus IgM antibodies are usually detectable 3 to 8 days after onset of illness and persist for 30 to 90 days, but longer persistence has also been documented.

2. Peripheral blood picture: A peripheral smear examination shows moderate leukocytosis with relative lymphopenia (decreased white blood cells called lymphocytes). The case fatality rate is high, around 25–50%, and most of the deaths occur around 5–9 days after onset.

3. Serological tests: In JE cases, generally the infection is asymptomatic. Several assays have been developed for detection of antibodies induced by natural infection or vaccination. A multitude of tests based on nucleic acid detection have been explored for JEV detection in humans as well as the swine population. These tests include:

Plaque reduction neutralization test (PRNT): PRNT is considered as a gold standard in flavivirus diagnosis. To discriminate between potentially cross-reactive antibodies with other flaviviruses, PRNT is the test of choice. A fourfold increase in IgG titre in acute and convalescent sera is considered as a confirmatory test.

Hemagglutination inhibition (HI) test: The hemagglutination inhibition (HI) assay is used to titrate the antibody response to a viral infection. The principle behind the hemagglutination test is that the nucleic acids of viruses encode proteins such as hemagglutinin, that are expressed on the surface of the virus.

Indirect immunofluorescence assay (IFA): It is a standard virologic technique to identify the presence of antibodies by their specific ability to react with viral antigens expressed in infected cells; bound antibodies are visualized by incubation with fluorescently labeled anti-human antibody.

Enzyme-linked immunosorbent assay (ELISA): The JEV-specific IgM antibody capture ELISA (MAC-ELISA) has now become the first-line diagnostic assay recommended by the WHO for detection of acute infections.

Virus isolation: Isolation can be done in mice using intra cerebral route. However, transient and low-level presence of virus in blood is observed in JE infection, therefore, the isolation of virus is not a method of choice for diagnosis in clinical specimens.

Nucleic acid amplification: The RT-PCR tests, quantitative PCR (TaqMan), restriction fragment length polymorphism (RFLP) analysis are useful molecular assay tests as they are very specific, sensitive and can detect low viral copies in acute or early phase of infection.

Staphylococcal coagglutination tests: This test is done using polyclonal or monoclonal antibodies in rapid diagnosis of JE.

Did you know?

Anti-N-methyl-D-aspartate receptor (NMDA) encephalitis is a neuro-autoimmune disease. It can be confirmed by a test NMDA IGg, read more about it.

Click Here!

Prevention Of Japanese Encephalitis

Japanese encephalitis virus is spread to people through the bite of an infected mosquito. The best way to prevent Japanese encephalitis virus infection is to protect from mosquito bites. The tips that can help prevent it are:

Use Environmental Protection Agency (EPA) registered insect repellents

Spray insect repellent onto hands and then apply to a child’s face

Cover strollers and baby carriers with mosquito netting

Do not use products containing oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) for children under 3 years old

Do not apply insect repellent to a child’s hands, eyes, mouth, cuts, or irritated skin

Always follow the product label instructions

Reapply insect repellent as directed

Do not spray repellent on the skin under clothing

Apply sunscreen first and then insect repellent, if using a sunscreen

Wear long-sleeved shirts and long pants

Use 0.5% permethrin (insecticide that kills or repels mosquitoes) to treat clothing and gear (such as boots, pants, socks, and tents)

Use screens on windows and doors and repair holes in screens to keep mosquitoes outdoors

Prevent water stagnation to stop mosquitoes from laying eggs in or near water

Use air conditioning, if available

Empty or throw out items that hold water such as tires, buckets, planters, toys, pools, birdbaths, flowerpots, or trash containers, once a week

While traveling, choose a hotel or lodging with air conditioning or window and door screens

Minimize outdoor activities during dawn and dusk in JE endemic areas

Improved and safe methods of animal rearing

Use mosquito nets correctly in the following way:

Tuck the net under the mattress to keep the mosquitoes out

Tuck netting under the crib mattress or select a mosquito net long enough to touch the floor

Pull the net tightly to avoid choking hazards for young children. Check label instructions for additional information

Hook or tie the sides of the net to other objects if they are sagging in towards the sleeping area

Check for holes or tears in the net where mosquitoes can enter

Do not sleep directly against the net, as mosquitoes can still bite through holes in the net

Travelers to rural areas can be vaccinated after consulting the doctor. Types of vaccinations available are:

Purified, formalin-inactivated mouse-brain-derived JE vaccine

Inactivated hamster kidney cell-culture-derived JE vaccine

Vaccine based on the SA14-14-2 strain

Cell-culture derived live attenuated JE vaccine

Vaccination in India

The JE vaccination campaign was launched during 2006 wherein 11 of the most sensitive districts in Assam, Karnataka and Uttar Pradesh were covered. Altogether, 86 JE endemic districts in the states of Assam, Andhra Pradesh, Bihar, Haryana, Goa, Karnataka, Kerala, Maharashtra, Tamil Nadu, Uttar Pradesh, and West Bengal have been covered.

Inactivated Japanese Encephalitis virus protein is used for prevention of Japanese Encephalitis. Learn more about Inactivated Japanese Encephalitis virus protein.

Click Now!

Specialist To Visit

Most people infected by the Japanese encephalitis virus have either no symptoms or mild short-lived symptoms, which are often mistaken for influenza (flu). In rare cases, it can cause neurological problems as well. The doctors to visit in this case are:

General physician

Neurologist

A neurologist is a doctor specialized in organic disorders of nerves and the nervous system.

If you are facing such an issue, seek advice from our trusted professionals.

Consult Now!

Treatment Of Japanese Encephalitis

There is no specific treatment for JE except for supportive care for hospitalized patients, controlling convulsions and treating raised intracranial pressure when they occur.

Treatment is mostly symptomatic and consist of the following:

Adequate amount of fluids

Use of pain relievers

Medication to reduce fever may relieve some symptoms

Apart from this there are few other promising modalities like:

Interferons

Interferon-á is currently the most promising potential treatment. It is produced naturally in cerebrospinal fluid (CSF) in response to infection with Japanese encephalitis virus.

Naturally occurring compounds such as arctigenin, a phenylpropanoid dibenzyl butyrolactone lignan, and rosmarinic acid, a phenolic compound found in various herbs like basil, mint, rosemary, sage, savory, marjoram, and oregano has been found to provide protection to mice against JEV.

Antiviral drugs

A number of antiviral agents have been investigated, including INF alfa-2a68 and diethyldithiocarbamate (a low molecular weight dithiol). However, none of these have convincingly been shown to improve the outcome of JE. Mannitol might be used to reduce intracranial pressure.

Minocycline, a member of the broad-spectrum antibiotic tetracycline group, has been a notable breakthrough in anti-flavivirus drug research. Another compound that has shown inhibition of JEV replication completely in vitro is an N-methylisatin-β-thiosemicarbazone derivative.

Glucosidase inhibitors

This works on the mechanism that eliminates the production of several endoplasmic reticulum–budding viruses, including dengue type II (DEN-2) and JEV.

Jenvac Vaccine is a medicine used for prevention of Japanese encephalitis (JE). It protects against JE and is given as part of a universal immunization program for selected places endemic to JE. Read more about it.

Click Now!

Home-care For Japanese Encephalitis

There is no effective and exact treatment for Japanese Encephalitis, but like any other viral infections, mild symptoms can be managed by:

Drinking adequate fluids

Taking enough rest

Eating a nutritious, wholesome and well balanced diet

Managing pain with painkillers

Taking multivitamin supplements

Adding honey and lemon to the diet

Keeping oneself warm and comfortable

Adding bananas and rice to soothe an upset stomach and curb diarrhea

Relieving the symptoms of fever with tulsi leaves

Are you down with fever?

If you are down with fever and are wondering what to do to lower your body temperature, here is a list of a few do’s and don’ts to follow.

Read To Know!

Complications Of Japanese Encephalitis

Complications of JE that increase risk of death are treatable in most of the cases. Some of the common complications include:

Seizures: JE is associated with seizures in 46% of the patients in the acute stage of encephalitis which is easily controlled by monotherapy.

Increased intracranial pressure: Growing pressure inside of the skull due to seizures in case of JE.

Status epilepticus: A seizure that lasts longer than 5 minutes, or having more than 1 seizure within a 5 minutes period, without returning to a normal level of consciousness between episodes.

Parkinson's-like symptoms: These include symptoms such as mask‐like face, rigidity, and tremor. However, acute flaccid paralysis can be a presenting symptom.

Acute encephalitis: Rapid implantation of the brain, most commonly caused by virus.

Aspiration pneumonia: It occurs when food, saliva, liquids, or vomit is breathed into the lungs or airways leading to the lungs, instead of being swallowed into the esophagus and stomach. This is due to reduced gag reflex in patients with JE.

The case-fatality rate among those with encephalitis can be as high as 30% and permanent neurologic or psychiatric sequelae can occur in 30%–50% of those with encephalitis. Read about ways to prevent it.

Click Now!

Alternative Therapies For Japanese Encephalitis

Japanese encephalitis is a virus spread by the bite of infected mosquitoes that can cause brain swelling. Many clinical trials and research are in progress to battle this infection. Some of the latest advances include:

RNA interference

This is an innovative study on mice that uses RNA interface to administer intracranial dose of lentivirus-delivered short hairpin RNA has been sufficient to provide protection against lethal encephalitis.

TNF activity

Tumor necrosis factor (TNF) can be a product of T cells and can act on T cells. Pentoxifylline has been studied as an adjunctive treatment for both malaria and dengue fever because of its anti-TNF activity, can also inhibit JEV replication in vitro and has protective effects in mouse models of Japanese encephalitis.

TLRs

Toll-like receptors (TLRs) are a class of proteins that play a key role in the innate immune system. Tlr4 protects mice against the lethal effects of Japanese encephalitis; therefore, this receptor represents a potential therapeutic target. The effect of TLR4 is nullified by eritoran (an investigational drug for the treatment of severe sepsis), which has been used in phase III trials for sepsis and has also been shown to protect mice in a model of influenza.

Living With Japanese Encephalitis

Japanese encephalitis is a very low risk disease with mild symptoms for most travelers, traveling to JE affected countries. However, some travelers will be at increased risk of infection based on factors like periods of travel, travel during the JE virus transmission season, and spending time in rural areas. To prevent this individual at higher risk can follow these tips:

Wear long sleeved shirts and pants

Use EPA approved mosquito repellent

Stay indoors as much as possible

Use air conditioning

Do not allow mosquitoes to breed in stagnant water

Use mosquito nets

Get vaccinated while planning to live in a JE-endemic country for a month or longer

In case of the infection with mild symptoms, following things can be done:

Staying hydrated

Taking medication for pain and fever

Resting as much as possible

Eating a nutritious diet

Viral infections are extremely common. Every other person seems to be having one infection or the other. Read about 4 simple habits to follow to prevent these infections.

Click Here!

Frequently Asked Questions

How is Japanese encephalitis transmitted?

Is Japanese encephalitis contagious?

Is Japanese encephalitis deadly?

Is Japanese encephalitis curable?

How to prevent JE?

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Jaundice

Also known as Yellowing of the skin

Overview

Jaundice is a condition characterized by yellowish discoloration of the skin, sclera (whites of the eyes), and mucous membranes resulting from the accumulation of excessive amounts of bilirubin. Bilirubin is a waste product that is made during the normal breakdown of hemoglobin. It passes through the liver and is eventually excreted from the body. Excessive bilirubin is the result of increased production or impaired excretion.

The normal serum levels of bilirubin are less than 1mg/dl; however, peripheral yellowing of the eye sclera (also known as icterus), is seen when the bilirubin levels are as high as 3 mg/dl as sclerae have a high affinity for bilirubin due to their high elastin content. As the serum bilirubin levels increase, the skin will progressively discolor ranging from yellow to green. The green color is due to biliverdin, a type of bile pigment that gives the color.

Jaundice usually does not require treatment in adults. Treatment if required is mostly focussed on its underlying causes and complications. Jaundice can generally be managed with diet or lifestyle, but if the cause is severe, the individuals may need immediate surgical or long-term treatment.

Key Facts

Usually seen in

Adults above 45 years of age

Gender affected

Both men and women but more common in men

Body part(s) involved

Liver

Gallbladder

Pancreas

Mimicking Conditions

Carotenoderma

Quinacrine

Necessary health tests/imaging

Laboratory evaluation: Complete blood count (CBC), Alanine transaminase test, Aspartate transaminase test, and γ-Glutamyltransferase test

Imaging: Ultrasonography, Dual phased computed tomography (CT), and Magnetic resonance cholangiopancreatography

Liver biopsy

Treatment

Medications: Iron supplements, Antihistamines, Cholestyramine, Rifampin, and Naltrexone.

Surgery

Liver transplant

Specialists to consult

General physician

Gastroenterologist

Internal medicine specialist

Symptoms Of Jaundice

Some individuals may present certain signs and symptoms while others don’t. Here are common symptoms of jaundice that include:

A yellow tinge to the skin, mucous membranes, and the whites of the eyes

Pale or clay-colored stools

Dark urine

Itchiness in the skin

Weight loss

Vomiting

Nausea

Loss of appetite

Other symptoms that accompany jaundice may include:

Fatigue, tiredness, and drowsiness

Abdominal pain and tenderness

Blood in vomit or stool

Dark or tarry stool

Flu-like symptoms (fever and chills)

Agitation or confusion

Easy bruising or bleeding, causing the tiny reddish-purple rash

Did you know?

Yellowing of the skin, sparing the sclerae, is indicative of carotenoderma which occurs in healthy individuals who consume excessive carotene-rich foods like carrots. Though the excessive consumption can lead to carotenoderma, carrots are a powerhouse of nutrients. Here's more benefits of carrots.

Read Here!

Causes Of Jaundice

On the basis of causes, jaundice can be classified into three types. They are:

Pre-hepatic jaundice

Hepatic jaundice

Post-hepatic jaundice

1. Pre-hepatic jaundice

This type of jaundice is caused due to hemolysis (destruction of red blood cells), therefore it is also known as hemolytic jaundice. The causes of prehepatic/hemolytic jaundice are classified into:

Congenital causes (present at birth)

Spherocytosis: This condition affects the red blood cells (RBCs) and is characterized by anemia, jaundice, and enlarged spleen.

Elliptocytosis: It is a hereditary disorder in which the RBCs are elliptical in shape rather than the normal round shape.

Congenital LCAT deficiency: This is a genetic disorder that affects the body's ability to process cholesterol. It is characterized by corneal opacities (clear front surface of the eye), hemolytic anemia, and kidney failure.

Thalassemia: It is an inherited blood disorder caused when the body doesn't make enough hemoglobin.

Sickle cell anemia: It is a group of inherited disorders known as sickle cell disease that affects the shape of RBCs.

Stomatocytosis: A rare condition of RBCs characterized by a mouthlike or slitlike pattern rather than the normal shape.

Acanthocytosis: It is a red cell phenotype (determines the antigen present in RBCs) indicative of various underlying conditions.

Echinocytes: In this condition, the RBCs are crenated (notched) and resemble a hedgehog or sea urchin rather than the pale-centered biconcave disks.

GSH synthetase deficiency: Glutathione synthetase (GHS) deficiency is a disorder that prevents the production of an important molecule called glutathione which is required to prevent cell damage.

Pyruvate kinase deficiency: An inherited lack of the enzyme pyruvate kinase, without which, the RBCs break down too easily, resulting in hemolytic anemia (low level of RBCs).

G6PD deficiency: It is a genetic disorder in which the enzyme called glucose-6-phosphate dehydrogenase (G6PD) is less. G6PD protects RBCs from substances in the blood that could harm them.

Erythroblastosis fetalis: It is hemolytic anemia in the fetus or neonate.

Acquired causes

Microangiopathy: It is a disease of the microvessels and small blood vessels in the microcirculation system.

Hemolytic uremic syndrome: It is a condition that can occur when the small blood vessels in the kidneys become damaged and inflamed.

Disseminated intravascular clot: This is a serious disorder in which the proteins that control blood clotting become overactive.

Paroxysmal nightly hemoglobinuria: It is a rare disorder in which RBCs break apart prematurely.

Thrombotic thrombocytopenic purpura: This condition is characterized by the formation of blood clots (thrombi) in small blood vessels throughout the body.

Hypophosphatemia: A condition in which your blood has a low level of phosphorus leading to muscle weakness, respiratory or heart failure, seizures, or comas.

Other causes

Resorption of extensive hematomas (blood clots)

Autoimmune hemolysis

Long-distance runners

Infections like malaria

Chemicals like nitrites and aniline dyes

Toxins such as snake venoms

Transfusion reactions

Trauma

Vitamin B12 deficiency

Folic acid deficiency

Vitamins are essential nutrients for our various bodily functions like immunity, digestion, and metabolism. Learn why are vitamins so important?

Tap To Read!

2. Hepatic jaundice

It is a type of jaundice in which the basic defect lies within the liver mainly in the hepatocytes. The causes include:

Congenital causes

Wilson’s disease: It is a rare inherited disorder that causes copper to accumulate in your liver, brain, and other vital organs.

Rotor’s syndrome: A mild condition characterized by elevated levels of a substance called bilirubin in the blood (hyperbilirubinemia).

Hemochromatosis: An inherited condition where iron levels in the body slowly build up over many years.

Crigler Najjar syndrome: It is a severe condition characterized by hyperbilirubinemia.

Gilbert’s syndrome: A common, harmless liver condition in which the liver doesn't properly process bilirubin.

Dubin-Johnson’s syndrome: It is characterized by jaundice that appears during adolescence or early adulthood.

Acquired causes

Drug-related hepatitis (e.g. NSAIDs)

Sepsis

Pregnancy

Malnutrition

Physical trauma

Hepatic adenoma (non-cancerous liver tumor)

Viral hepatitis

Alcoholic hepatitis

Autoimmune hepatitis

3. Post-hepatic jaundice

It is the type of jaundice in which the cause lies in the biliary portion of the hepatobiliary system (liver, gallbladder, and bile ducts). The major cause of post-hepatic jaundice is biliary obstruction outside the liver, hence, it is also known as obstructive jaundice. The causes include:

Congenital causes

Biliary atresia: This is a condition in which there is a blockage in the tubes (ducts) that carry bile from the liver to the gallbladder.

Cystic fibrosis: An inherited disorder that affects the cells that produce mucus, sweat, and digestive juices.

Idiopathic dilatation of the common bile duct: This can be an indicator for obstructive jaundice.

Pancreatic biliary malfunction: A medical condition that results from the inability of the sphincter to contract and relax normally.

Choledochal cyst: This is a congenital anomaly of the duct (tube) that transports bile from the liver to the gallbladder and small intestine.

Acquired causes

Portal biliopathy: It refers to the abnormalities seen in bile duct imaging that occur in patients with portal cavernoma (changes in the portal vein).

Strictures: It causes abnormal narrowing of the bodily passages.

Choledocholithiasis: It refers to the presence of at least one gallstone in the common bile duct.

Intra-abdominal tuberculosis (TB): A type of TB that affects the gut, the peritoneum (the lining of the abdominal cavity), abdominal lymph nodes, and, more rarely, the solid organs in the abdomen like the liver, pancreas, and spleen.

Other causes: Trauma, AIDS, tumors, cholecystitis (inflammation of the gallbladder), and pancreatitis (inflammation of the pancreas).

Pancreatitis is inflammation of the pancreas. It happens when digestive enzymes start digesting the pancreas itself. Read more about pancreatitis.

Click Here!

Risk Factors For Jaundice

The risk factors that may increase the chances of jaundice are similar to that for liver and gallbladder disorders. They may include:

Autoimmune disorders

Extensive use of medications that may damage the liver

Infections like hepatitis A, hepatitis B, or hepatitis C

Exposure to certain industrial chemicals

Presence of congenital abnormalities

Trauma to the liver

Obstruction in the bile duct

Deficiencies of certain vitamins and enzymes

Excessive alcohol consumption

Did you know?

The term alcoholic liver disease refers to medical conditions and their respective symptoms which develop due to liver damage by alcohol abuse and misuse. Understand better about alcoholic liver disease.

Read More!

Diagnosis Of Jaundice

The differential diagnosis for jaundice is based on whether the disease responsible for jaundice is pre-hepatic (primarily unconjugated hyperbilirubinemia), hepatic (mixed hyperbilirubinemia), or post-hepatic (conjugated hyperbilirubinemia). Jaundice can be diagnosed by checking for any signs of liver disease and it includes:

1. Physical examination and history

A detailed alcohol and drug use history can help identify intrahepatic disorders such as alcoholic liver disease, viral hepatitis, chronic liver disease, drug-induced liver injury or any underlying malignancies.

The physical examination should include the following:

Evaluating encephalopathy by testing for asterixis (motor control disorder) and changes in the mental status.

Assessing for any signs of chronic liver disease including bruising.

Looking for abnormal collection of blood vessels near the surface of the skin (spider angiomas), redness of palms and hands (palmar erythema), and an increased amount of breast tissues in men (gynecomastia).

Examining the abdomen completely to evaluate for enlargements of the liver and spleen, right upper quadrant tenderness, and ascites (fluid build-up in the stomach).

2. Laboratory evaluation

The laboratory evaluation to determine the etiology of jaundice should include:

Fractionated bilirubin: Used in the diagnosis and treatment of liver diseases, hemolytic disorders, hematologic disorders, and metabolic disorders, including hepatitis and gallbladder obstructive disease.

Complete blood count (CBC): To identify hemolysis and evaluate for anemia of chronic disease and thrombocytopenia, which is common in acute deterioration of liver function.

Alanine transaminase test and aspartate transaminase test: To check for hepatocellular damage.

γ-Glutamyltransferase test: An elevated γ-glutamyltransferase level can be associated with biliary obstruction and hepatocellular damage.

Alkaline phosphatase test: An elevated alkaline phosphatase level can be associated with biliary obstruction and parenchymal liver disease, but it is also associated with several other physiologic and non-biliary pathologic processes in bone, kidney, intestine, and placenta

Other tests: Low levels of prothrombin time (INR), albumin, and protein can indicate decreased synthetic function and liver decompensation.

Note: If the jaundice etiology is unknown after the initial laboratory evaluation, it is necessary to perform additional tests including hepatitis panle and autoimmune panel such as antinuclear, smooth muscle, and liver-kidney microsomal antibodies.

3. Imaging

Noninvasive imaging modalities in individuals with jaundice include:

Ultrasonography and dual phased computed tomography (CT): These are used to evaluate obstruction, cirrhosis, and vessel patency of the liver.

Magnetic resonance cholangiopancreatography: To visualize the intra and extrahepatic biliary tree.

4. Liver biopsy

It is done in cases of jaundice in which the diagnosis is unclear after the initial history and physical examination, laboratory studies, and imaging tests.

Prevention Of Jaundice

Jaundice is related to liver function. Since there are numerous causes for jaundice, there are no perfect prevention guidelines. The basic way to prevent jaundice is by taking care of the liver with several lifestyle changes such as:

Avoiding hepatitis infections

Keeping the weight in check to prevent being overweight or obese

Monitoring cholesterol levels

Eating a well-balanced diet

Exercising regularly

Controlling the alcohol consumption

Making sure that toxins from chemicals and other sources, both inhaled and touched are avoided

Managing medications carefully by avoiding taking more than the recommended dose

Consulting a doctor before starting on any herbal therapies

Quitting smoking and avoiding recreational drugs

Getting the recommended vaccinations before traveling

Practicing safe sex and using condoms to avoid chances of infections

Getting a full body checkup, if family history of autoimmune conditions is present

Did you know?

Liver disease accounts for around 2 million deaths every year across the world. Here are 5 simple tips to prevent liver disease.

Click To Know!

Specialist To Visit

Jaundice is when your skin or the whites of your eyes turn yellow. It can be a sign of something serious such as a liver disease. The doctors that can help diagnose and treat jaundice are:

General physician

Gastroenterologist

Internal medicine specialist

Seek medical help if you notice the following:

Skin or the white part of the eyes looks yellow.

Itching in the skin, darker urine, and paler stool than usual.

Consult India's best doctors online from the comfort of your home.

Consult Now!

Treatment Of Jaundice

Jaundice usually does not require any treatment in adults, but the treatment is majorly based on the cause of jaundice. The treatment of choice for jaundice is the correction of the underlying hepatobiliary or hematological disease. Here are some of the options for the treatment and management of jaundice:

If the cause of jaundice is acute viral hepatitis, then it will go away on its own as the liver begins to heal.

Surgery may be required if the cause of jaundice is a blocked bile duct.

Pruritus (itchy skin) associated with cholestasis (liver disease when the flow of bile from the liver is reduced or blocked) can be managed based on the severity.

For mild pruritus, warm baths or oatmeal baths help in relieving the discomfort.

Antihistamines can also help with pruritus.

Patients with moderate to severe pruritus can benefit from medications like cholestyramine or colestipol.

Other less effective therapies include:

Rifampin

Naltrexone

Sertraline

Phenobarbital

Hemolytic jaundice is treated with iron medication. Including iron-rich foods in the diet is also effective.

Steroids also prove effective in treating jaundice.

Liver transplantation may be the only effective therapy for pruritus if all the medical treatments fail. A liver transplant is also suggested if jaundice is due to liver decomposition, depending on the severity of the liver injury.

Iron helps in building our hemoglobin levels and making us more energetic and active. Read more about the reason behind feeling cold and superfoods to tackle it.

Click Here!

Home-care For Jaundice

Individuals suffering from jaundice generally feel fatigued, have a low appetite, and have itchy skin. It usually gets better on its own, but, it is important to treat the underlying cause of jaundice. However, to manage the disease at home several measures can be taken like:

Eating pleasant-tasting bland food

Having a well-balanced diet with low-fat

Avoiding supplements, herbs, or medications that can cause side effects

Drinking fluids and juices as much as possible

Taking adequate amounts of rest

Following the instructions given the doctor

Avoiding any herbal medication or therapy

Taking medications (if any) by the doctor

Applying moisturizer for itchy skin

Taking warm water baths

The food you eat plays a vital role in your mental and physical wellness. Read more about 6 tips to reap the benefits of a healthy diet.

Tap To Read!

Complications Of Jaundice

These vary depending on the medical conditions, the type of jaundice, and severity. Some common complications include:

Bleeding

Constipation

Abdominal pain

Gastritis

Diarrhea

Anemia

Infections

Bloating of the stomach

Swelling in the legs

Liver cirrhosis

Kidney failure

Some of the uncommon complications seen in severe conditions include:

Primary sclerosing cholangitis (disease of the bile duct)

Cholangiocarcinoma (cancer of the bile duct)

Hepatic amyloid (amyloid deposits in the liver)

Chronic hepatitis (inflammation of the liver)

Cholangitis (inflammation of the bile duct)

Alternative Therapies For Jaundice

Jaundice may indicate another condition or disease. Diagnosing the cause and getting proper treatment can be the key to a healthy recovery. Here are some of the alternative therapies:

Unani

Unani is a traditional medicine practiced in South Asia and modern-day Central Asia. According to this therapy, an oil-free and bland diet along with adequate rest is essential for recovery from jaundice. Here are some helpful dietary tips for those affected by yarqaan (jaundice). They are:

Eating a diet that is easily digestible, usually a liquid diet.

Incorporating a high carbohydrate diet without spices and fat.

Drink enough fluids and always drink boiled water.

Eating vegetables and fruit juices that are raw or steamed.

Adding fruits, yogurt and porridge to the diet.

Karela (bitter gourd) and saijan ki phalli (drumsticks or moringa) are very beneficial for jaundice patients.

Increasing the intake of foods rich in calcium and other minerals like iron and magnesium.

Consuming smaller and frequent meals.

Fasting with fruit juice for about one week is very effective for the patients.

Fruits are natural laxatives, diuretics, and fat burners. They are a powerhouse of fiber, energy, vitamins, minerals, and antioxidants. Here's more on fruit juices v/s whole fruits.

Click To Read!

Home remedies

Some of the popular food items that can help in the treatment of jaundice are:

1. Sugarcane (Ganna) juice: It aids in strengthening the liver and helps in its proper functioning.

2. Yogurt (Dahi):The probiotics in it help in decreasing the bilirubin levels by fighting against harmful bacteria and increasing immunity.

3. Tomatoes (Tamatar): They contain a compound called lycopene, which is a potent antioxidant and helps with detoxification of the liver.

4. Indian gooseberry (Amla): It is filled with Vitamin C and other essential nutrients that help in combating jaundice by improving liver functioning and balancing the serum bilirubin levels.

5. Goat’s milk: It is easy to digest and contains antibodies that can help in curing jaundice.

6. Grape (Angoor) juice: Grapes, especially the green ones, help in improving liver function and balance the serum bilirubin levels.

7. Ginger (Adrak): Ginger has excellent antioxidative and can help in reducing cholesterol levels, thus aiding liver recovery.

8. Garlic (Lahsun): Garlic is a powerful antioxidant. This helps with liver detoxification and thus contributes to curing jaundice.

9. Lemon (Nimbu): Lemon juice helps in enhancing immunity and stops further damage to the liver by unblocking the bile ducts as it has antioxidant properties.

10. Holy basil (Tulsi): It is perfect for the liver as it protects the liver, increases immunity, and fights against infections.

11. Papaya (Papita) leaves:They are rich in enzymes that support digestion and improve liver health.

Living With Jaundice

All the conditions associated with jaundice require medical diagnosis and treatment. In some cases, the only treatment needed may be observed. Jaundice can be managed with certain modifications in lifestyle like:

Maintaining proper hygiene to avoid infections

Decreasing alcohol consumption

Focusing on eating a well-balanced diet

Consulting the doctors before starting any herbal therapies

Avoiding medications that have ill-effect on the liver

Drinking adequate fluids

Exercising regularly

Getting vaccinated for hepatitis B and hepatitis C infections

Hepatitis B vaccine (rDNA) is a vaccine which helps develop immunity by initiating a mild infection. Learn more about it.

Click Here!

Frequently Asked Questions

What is bilirubin?

Can one still have jaundice if they are not showing a yellowish tinge?

Is liver dysfunction the only cause of jaundice?

Is jaundice a fatal condition?

What is the best diet for patients with jaundice?

What are the risks of developing jaundice?

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Joint pain

Also known as Arthralgia

Overview

Joint pain is a perception of pain or discomfort in the joints. While pain in the joints is a common occurrence with age, other factors like weight, previous injuries, overuse and underlying systemic medical conditions can also cause it. Joint pain is mostly associated with major joints like knee, hip, ankle or wrist but involvement of small joints is also seen in case of systemic disorders like rheumatoid arthritis, psoriasis etc.

Of the various types of joint pain, osteoarthritis is the most commonly seen joint problem. It is estimated that 9.6% of men and 18% of women above 60 years of age have symptomatic osteoarthritis. This condition is associated with degenerative changes of the joint and most commonly affects the knees, hips, spine and hands.

To know the exact cause of the joint pain, your doctor may advise various radiological and laboratory tests. In most cases, joint pain is treated with medications such as painkillers to provide symptomatic relief or with medications that treat the underlying cause of pain. In a few cases, surgery is also recommended. Other therapies such as exercise, yoga, and physiotherapy are also known to be useful in reducing joint pain.

Key Facts

Usually seen in

Adults above 60 years of age

Gender affected

Both men and women but more common in women

Body part(s) involved

Knees

Hips

Spine

Hands

Shoulder

Elbow

Ankle

Mimicking Conditions

Neuropathic pain

Muscle spasms

Necessary health tests/imaging

X-Ray Both Knees Standing AP & Lateral Views

MRI Both Knee Joints

Bone Densitometry Whole Body

Complete Blood Count (CBC)

Erythrocyte Sedimentation Rate

C-Reactive Protein Quantitative

Uric Acid

AntiNuclear Antibody

Rheumatoid Arthritis Panel

HLA-B27

PCR

Calcium

Vitamin D (25 - OH)

Treatment

NSAID analgesics:Ibuprofen, Diclofenac & Paracetamol

Narcotics: Tramadol & Morphine

Muscle relaxants: Cyclobenzaprine

Corticosteroids: Prednisolone

Disease-modifying anti-rheumatic drugs (DMARDs): Methotrexate and Leflunomide

Antigout drugs: Allopurinol & Colchicine

Surgery: Synovectomy, Osteotomy & Joint replacement surgery

Specialists to consult

Orthopedic

Rheumatologist

See All

Symptoms Of Joint Pain

The following symptoms commonly occur with joint pains -

Pain and tenderness around the joint

Redness, warmth or swelling around the joint

Joint stiffness

Reduced range of motion of the joint

Feeling of locking sensation, where the joint feels locked in a particular position

Severe pain that may radiate to surrounding body parts

Weakness of the muscles surrounding the joint

Risk Factors Of Joint Pain

Joint pain is usually associated with the following risk factors:

Previous injury to a joint

Repeatedly use and/or overuse of a joint and muscle

Chronic medical conditions associated with arthritis

Old age

Depression, anxiety or stress

Overweight

Poor nutritional health

Immunocompromising diseases

Types Of Joint Pain

Joint pain refers to a feeling of discomfort in the joints, such as knee joint, hip joint, ankle joint, spine, etc. Joint pains may occur in any joint of the body. There are two major types of joint pains:

Acute joint pain: This may affect a single joint, such as in cases of an injury or acute infection of the joint, or it may affect multiple joints, such as post-viral fever joint pains. Acute pain is usually sudden in onset and may last up to a few days. It usually responds well to conventional treatments and may get cured completely.

Chronic joint pain: Joint pains lasting more than a few weeks are called chronic joint pains. They may occur due to age-related degenerative changes in the joints known as osteoarthritis or may be due to other diseases of the bones and joints, such as rheumatoid arthritis, gout, etc. Chronic joint pains may affect a single joint or multiple joints. The pain is gradual in onset, and the severity may increase with time. Chronic joint pains are difficult to treat and may or may not recover completely.

Causes Of Joint Pain

There are various causes of joint pain, such as:

Injuries: Injuries to the joint, such as contusion, ligament sprains or tears, fracture, joint dislocation, soft tissue injuries, etc., that occur due to trauma and cause acute joint pain.

Infections: Infections can occur in the joint as a complication of injury or internal infection, such as septic arthritis, and osteomyelitis. This may further cause redness, swelling, warmth, tenderness, and acute pain in the affected joint. Infections may also be chronic, such as tuberculosis infection of the joints.

Degenerative changes: Degenerative changes occur due to age-related wear and tear of the joint surface, cartilage, and surrounding soft tissues. Degenerative changes of the joint, also known as osteoarthritis, are the most common cause of joint pains. Osteoarthritis most commonly affects the knees, hips, spine, and hands.

Chronic inflammation: Repetitive mild trauma to the joint and surrounding structures causes chronic inflammatory changes, such as tendinitis, bursitis, etc. Certain diseases also cause chronic inflammation in the joints which is an important cause of joint pain like gout.

Systemic Diseases: Systemic and genetic diseases associated with involvement of the bones and joints and cause joint pains are:

Ankylosing spondylitis - a disease with a genetic predisposition that affects the spine

Fibromyalgia - a chronic condition characterized by widespread musculoskeletal pain

Avascular Necrosis - a condition in which blood supply to the joints is affected, leading to the death of bone tissue. This commonly affects the hip joints.

Bone Cancer - Osteosarcoma, leukemia and other types of bone cancers that spread to bones and joints can cause severe joint pains.

Paget’s Disease - in this disease, the bones become abnormally shaped and brittle, which can cause severe joint pains.Rickets - a deficiency of vitamin D that causes the bones to weaken and may cause joint pains.

Autoimmune disorders: Certain autoimmune diseases can involve joints and cause joint pains are:

Rheumatoid Arthritis - a condition characterized by chronic inflammation, stiffness, and deformity of the joints. It commonly affects the small joints of the hands in initial phase of disease.

Systemic Lupus Erythematosus - an autoimmune disease that causes inflammation and pain in multiple joints apart from involvement of other organ systems of the body.

Miscellaneous causes: There are many other causes of joint pains, such as viral fever, Lyme disease, sarcoidosis, juvenile idiopathic arthritis, etc.

Take a break after every 2-3 minutes while texting to ease strain on your fingers & hands

In this age of technology, we are addicted to our phones and laptops. But the constant, repetitive motions of our hands while texting, typing or holding the phone puts strains on our shoulder joints and joints of our fingers. It is advisable to take a break after every 2-3 minutes while texting. Also, opt for simple stretching exercises to keep your wrist and hand joints in good condition. Boost your exercise schedule with our range of workout essentials.

Shop Now!

Diagnosis Of Joint Pain

The following evaluations are performed by the doctor to evaluate joint pain and establish a cause-

History and physical examination

The doctor will take a detailed history of the onset of symptoms, perform a thorough physical examination, and check for joint stiffness, inflammation around the joint, joint mobility, muscle spasms, muscle strength, etc., to evaluate the affected joints.

Imaging studies

X-Rays: X-Ray studies of the affected joint are performed to evaluate the bony changes in and around the affected joint. Based on the location of the pain, your doctor may advise you to go for:

X-Ray Both Knee Standing AP & Lateral Views

X-Ray Hip Joint AP View

X-Ray Cervical Spine AP & Lateral

X-Ray Lumbar Spine AP & Lateral

X-Ray Right Ankle AP & Lat View

X-Ray Right Wrist AP & Lat View

MRI: MRI scans of the affected joints are performed to perform in-depth study of the bony and soft tissue changes occurring in the affected joint. These include:

MRI Both Knee Joints

MRI Both Hip Joint

MRI Screening of Whole Spine

MRI Ankle Joint

MRI Shoulder Joint

Other imaging studies: Bone Densitometry Whole Body - to check for concomitant osteoporosis, a condition where the bones lack calcium and become brittle and weak.

Laboratory tests

Complete Blood Count (CBC), Erythrocyte Sedimentation Rate, C-Reactive Protein Quantitative to detect any ongoing infection or inflammation in the body.

Serum Uric Acid in suspected Gout.

Anti Nuclear Antibody to check for auto-immune diseases.

Rheumatoid Arthritis Panel in cases of suspected Rheumatoid Arthritis. It consists of 3 tests - antinuclear antibody, anti-cyclic citrullinated peptide antibody, and rheumatoid factor.

HLA-B27, PCR in case of suspected ankylosing spondylitis.

Serum Calcium - to check for calcium deficiency which plays an important part in bone and joint pains.

Vitamin D (25 - OH) - to check for Vitamin D deficiency which plays an important role in absorbing calcium into the body.

Other tests like synovial fluid analysis, tissue biopsy, etc., may be performed for certain conditions.

Celebs affected

Hrithik Roshan

Famous Bollywood actor and dancer Hrithik Roshan has Ankylosing Spondylitis.

Kathleen Turner

Kathleen Turner was one of Hollywood’s biggest celebrities until she had rheumatoid arthritis and had to take a break from her career.

Prevention Of Joint Pain

Certain conditions that cause joint pain cannot be prevented. A few things that can help prevent the occurrence of severe joint pains and maintain the overall health of your joints are:

Following a healthy diet rich in calcium and other minerals.

Enough exposure to the morning sunlight to ensure a sufficient level of Vitamin D in the body.

Regular exercise to maintain strength and mobility in the joints.

Following correct ergonomics while weight lifting and exercising.

Avoiding sudden, jerky, and twisting movements of the joints.

Weight loss lessens strain on joints.

With our modern sedentary and stressful lifestyle, the chances of developing joint pain increases manifold. Here are 7 everyday habits that are harming your joints.

Click Here To Read!

Specialist To Visit

When symptoms of joint pain start to become bothersome and it becomes difficult to perform daily activities, or you have sustained an injury to the joints, it is essential to visit a doctor who will diagnose and treat the condition. Specialists who can help in the diagnosis of the condition such as fractures, arthritis, etc. include:

General physician

Orthopedician

Rheumatologists

Treatment Of Joint Pain

Depending on the cause and severity of the joint pain, your doctor may advise you to take medications to relieve the pain or go for surgery.

Medical management

It involves use of medications to relieve the symptoms and treat the underlying cause of the joint pain such as arthritis or gout. In some cases, medications to improve overall bone and joint health can be prescribed.

Symptom Relief

NSAID Analgesics help relieve pain and inflammation. These medicines must always be consumed with meals, as taking them on an empty stomach can irritate the gastric lining. Some of the common drugs are Ibuprofen, Diclofenac, Paracetamol.

Narcotics (opioids) i.e. tramadol, morphine, may be required for severe pain, which is not relieved by the first line of medications. These tablets must be used only as prescribed by the physician as they are potentially habit-forming.

Muscle Relaxants help relieve the painful spasms and stiffness associated with osteoarthritis of the spine. Examples include Cyclobenzaprine.

Corticosteroids may be prescribed for a short duration or even as an injection to address resistant pain. These include drugs containing prednisolone.

Topical application of analgesic ointments (diclofenac), sprays and rubefacient can help with symptomatic pain relief.

Dietary supplements, like glucosamine, calcium, vitamin D3 may help in improvement.

Intra-articular Injections can be given In cases of severe pain that does not respond to medications, a hydrocortisone injection may be given in the joint to offer quick relief. In some cases, hyaluronic acid injections are also given in the joint to aid joint lubrication.

Treatment of underlying cause

Rheumatoid arthritis: Disease-modifying anti-rheumatic drugs (DMARDs), such as Methotrexate and Leflunomide are used to treat rheumatoid arthritis.

Gout: Allopurinol formulations and colchicine formulations are used to treat Gout.

Arthritis: Antibiotics are also used to treat septic arthritis.

Surgical management and other invasive procedures

In this, use of injections to relieve the pain or corrective surgeries to improve the condition can be advised. Joint replacement surgery is another common procedure used to treat joint pain.

Corrective surgery

Corrective surgeries like synovectomy, osteotomy, laminectomy, spinal fusion, fracture reduction, etc., are performed in the case of severe joint deformities that cause limitation of function and pain.

Joint replacement surgery

For severely damaged knees and hips, a prosthesis may be fitted, and the worn-out joints are completely replaced by mechanical joints. This can be done for hip, knee and shoulder joints. surgeon removes parts of the patient’s bone and implants an artificial joint made from metal or plastic. This procedure has had excellent results and the majority of patients feel long-lasting pain relief after this type of surgery.

Home Care For Joint Pain

Along with medications, the following home care tips can help manage symptoms and lead to the best possible disease outcomes-

Take a wholesome, balanced diet rich in calcium and other minerals.

Follow the exercise routine suggested by the doctor or physiotherapist.

Hot fomentation or icing (as applicable) and application of topical analgesic preparations help relieve pain and stiffness.

Gentle massage performed by a massage therapist can aid relaxation and promote pain relief.

Use joint supports, such as knee caps, cervical collar, lumbosacral belt, wrist cuffs, etc., to help support the frail joints.

The use of walking aids, such as a cane or walker, may help offload the diseased joints, promote safer walking, and offer pain relief.

Avoid lifting heavyweights. When weight training is a part of an exercise program, it must be done with extreme caution and correct ergonomic posture.

Change the mattress and sleeping pillow if not proper and use those that offer good support and stabilize the spine.

Did you know?

RICE therapy is particularly important during the first 24 to 72 hours after a sprain or strain happens. RICE therapy indicates R- rest, I- ice , C- compression , E- elevation.

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Complications Of Joint Pain

If join pain is left untreated, the following complications can occur -

Complete loss of mobility and extreme stiffness in the joints rendering a patient bed-ridden or with severe walking issues. Deformities in the hands can hinder skillful activities, such as writing, sewing, etc.

Chronic debilitating pain may hamper a patient’s quality of life, interfere with sleep, and be a source of anxiety or depression.

Infection in the joints may spread to surrounding areas and may cause septicemia.

Alternative Therapies Of Joint Pain

Along with medicines and topical analgesic preparations, various other treatment options help manage joint pains-

Exercise and yoga: Regular exercises and yoga focused on strengthening the joints and surrounding musculature and improving mobility help manage the pain and stiffness caused by arthritis and other joint conditions.

Massage: Gentle massage improves blood flow to the affected parts, promotes relaxation, and helps with pain relief. Massage must be performed only by a qualified massage therapist.

Physiotherapy: Physiotherapeutic modalities, such as Interferential Therapy (IFT) and Transcutaneous Electrical Nerve Stimulation (TENS), are very useful in pain relief, even from nerve pain. IFT and TENS use electric currents, applied via electrodes directly over the joint to stimulate the surrounding nerves and muscles. This leads to muscle relaxation and inhibition of the painful sensation. The rehabilitation exercises focus on strengthening and correcting weight-bearing of the joint and surrounding muscles, improving the overall strength and mobility of the affected joints.

Acupressure and acupuncture: Chronic joint pain may respond to acupuncture or acupressure therapy, an alternative form of therapy that works by applying pressure or noxious stimuli on the peripheral trigger points. Accupressure and accupuncture must be performed by a qualified therapist or under supervision of a qualified therapist only.

Ayurveda: There are various Ayurvedic preparations in the form of oils and liniments such as menthol and camphor oil, sesame oil, etc. to be applied locally at the site of pain. They provide good relief from symptoms and promote joint health.

Homeopathy: Homeopathic preparations in the form of injections or oral drops/pills, such as Rhus Toxicodendron, Arnica Montana, Solanum Dulcamara, etc., are known to improve pain and other troublesome symptoms of patients with joint pain.

External orthoses support: Using knee caps, cervical collars, lumbosacral belts, and walking aids like a stick or walker offer much-needed support to the degenerative joints and are useful in alleviating joint pain. Use them if advised by your doctor and exactly as instructed as misuse may cause more harm to the joints.

Chronic joint pains and aches can be quite disabling. In addition to conventional treatment, here are some excellent essential oils that you could try to relieve chronic joint pains.

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Living With Joint Pain

Joint pain has a great impact on an individual’s quality of life. Severe, chronic, and debilitating pain may interfere with basic activities, such as walking, thereby leading to restrictions in movements and travel. Often, chronic pain is a source of anxiety and depression in patients with osteoarthritis, rheumatoid arthritis, and other joint diseases. They find themselves withdrawn from society and the community at large. Joining knee care, spine care, and other such musculoskeletal health clubs may help these patients deal with joint issues and bond with others suffering from similar pain.

Winters are known to be the worst for people with joint pain because change in weather causes changes in the atmospheric pressure resulting in more inflamed tissue leading to swelling and pain. Here are a few lifestyle changes one can incorporate into their routine life to ease off joint pains, especially during winter.

1. Supplement bone & joint healthy foods: Stock up dairy products and spend at least 15 minutes in sunlight daily to increase the intake of vitamin D.

Include foods rich in omega-3 fats such as salmon, nuts, fish oil in your diet as these ease inflammation.

Foods rich in vitamin K are helpful because of its pain-soothing properties. Include greens in your meal such as spinach, fenugreek (methi), cabbage, kale, etc.

Foods rich in vitamin C halt cartilage loss associated with arthritis. Add juicy oranges, sweet red peppers, tomatoes, amla and other vitamin C-rich foods in your diet.

2. Exercise regularly:Go for a 30-minute walk daily. If cold weather makes you lazy to go out in the mornings, go for an afternoon walk. Also, stretch your muscles as it helps maintain your mobility.

3. Stay hydrated: Drink plenty of water in winters as dehydration reduces flexibility and increases stiffness.

4. Get a massage: Massage therapy by a professional helps in relaxing the muscles around the painful joints, thereby reducing pain and making you more mobile.

5. Cover up: Try to keep painful joints covered with a sleeve or wrap. Keeping them warm helps reduce pain and increases mobility. Using a muscle relaxant gel on the aching joints and then covering up has been seen to be very helpful.

6. Use hot packs:Hot packs/hot baths/steam helps to soothe the painful joints. Heat stimulates blood flow, which brings healing nutrients to the affected area and inhibits the pain messages being sent to the brain.

7. Take medication on time: Do not forget to take your medications as advised by your doctor. If you suffer from chronic joint pain, consult your doctor for painkillers. Do not self-medicate. Also, go for regular doctor consultation, especially if your symptoms recur/worsen.

8. Watch your weight: Major joints like the hips, knees and back carry one’s body-weight while performing daily activities. The pressure gets compounded depending upon the nature of activity and more the pressure; more is the wear and tear that the joints are subject to. So lose weight.

9. Improve your posture: Consciously maintaining a correct upright posture is paramount. While you are standing, your spine should be straight, buttocks pressed against each other, belly in and chest out. When sitting, your core should firmly rest on the chair’s backrest and it is advisable that you sleep on a firm mattress facing sky-wards. Do not slouch when watching TV or using a laptop.

10. Get enough sleep: Sleep is the best healer is a saying that is all the more true for our joints. Our bones, muscles and tendons are never off-duty during an average day so letting them recover is something that cannot be skipped. A tired tissue is more susceptible to injury.

Frequently Asked Questions

Can I play sports if I have joint pain?

Will I need joint replacement surgery if I have osteoarthritis?

Which foods should I avoid if I have joint pain?

Does massage help relieve joint pain?

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