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. Click Here

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. Click Here

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.

1. 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.
2. 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.
3. 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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1. 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.
2. 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.
3. 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.
4. 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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1. 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. Explore Now 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

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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.

1. 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? References Vaishnav B, Bamanikar A, Maske P, Reddy A, Dasgupta S. Gastroesophageal Reflux Disease and its Association with Body Mass Index: Clinical and Endoscopic Study. J Clin Diagn Res. 2017 Apr;11(4):OC01-OC04. Kahrilas PJ. Regurgitation in patients with gastroesophageal reflux disease. Gastroenterol Hepatol (N Y). 2013 Jan;9(1):37-9. Wang HY, Leena KB, Plymoth A, et al. Prevalence of gastro-esophageal reflux disease and its risk factors in a community-based population in southern India. BMC Gastroenterol. 2016 Mar 15;16:36. H.K. Bakhru. Indian Spices & Condiments as Natural Healers. Jaico Publishing House, 2001. 165 p. Schachter H. Indigestion and Heartburn. In: Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths; 1990. Chapter 83. Eating, Diet, & Nutrition for GER & GERD. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). Do you need diagnostic tests for heartburn?. Diseases & Conditions. Harvard Health Publishing. Harvard Medical School. Panda V, Shinde P, Deora J, Gupta P. A comparative study of the antacid effect of some commonly consumed foods for hyperacidity in an artificial stomach model. Complement Ther Med. 2017 Oct;34:111-115. Definition & Facts for GER & GERD. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). Vazquez JC. Heartburn in pregnancy. BMJ Clin Evid. 2015;2015:1411.

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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

1. Massage Light massage helps rejuvenate the body, promotes relaxation, and improves overall mood. Going for regular light massages may help alleviate feelings of anxiousness.
2. 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.
3. 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? References Anxiety Disorders. National Institute of Mental Health. What are Anxiety Disorders? American Psychiatric Association. Chand SP, Marwaha R. Anxiety. StatPearls Publishing; 2021 Jan Bandelow B, Michaelis S. Epidemiology of anxiety disorders in the 21st century. Dialogues Clin Neurosci. 2015 Sep;17(3):327-35. Khambaty, M., & Parikh, R. M. (2017). Cultural aspects of anxiety disorders in India. Dialogues in clinical neuroscience, 19(2), 117–126. The burden of mental disorders across the states of India: the Global Burden of Disease Study 1990–2017. The Lancet Psychiatry. Volume 7. Issue 2, Pg 148-161. February 2020. Depression and other Common Mental Disorders. Global Health Estimates. World Health Organisation. Chittodvega (Anxiety Neurosis). National Health Portal India. Coping Technique for Anxiety. Behavioural Healthy Partners. University of Rochester Medical Center (URMC).

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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. Click To Read 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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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. Explore Now

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). Consult with India’s leading doctors online for all the medical care and guidance you require. Click Now

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. Upload Your Prescription 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.

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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.

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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.
4. 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.
5. 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.
6. 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? References .Deane KD. Can rheumatoid arthritis be prevented? Best Pract Res Clin Rheumatol. 2013 Aug;27(4):467-85. Heidari B. Rheumatoid Arthritis: Early diagnosis and treatment outcomes. Caspian J Intern Med. 2011 Winter;2(1):161-70. Demoruelle MK, Deane KD. Treatment strategies in early rheumatoid arthritis and prevention of rheumatoid arthritis. Curr Rheumatol Rep. 2012 Oct;14(5):472-80 About Arthritis.Health and Wellness. Arthritis Foundation. Arthritis. National Statistics. Centers for Disease Control and Prevention.October 12, 2021 Aletaha D, Smolen JS. Diagnosis and Management of Rheumatoid Arthritis: A Review. JAMA. 2018 Oct 2;320(13):1360-1372 Wilsdon TD, Hill CL. Managing the drug treatment of rheumatoid arthritis. Aust Prescr. 2017 Apr;40(2):51-58.

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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.

1. 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.
2. 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.

1. 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
2. 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.
3. 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? References Aithal GP, et al. Guidelines on the management of ascites in cirrhosis. 2020 Aug. Chalasani NP, et al. Ascites: A common problem in people with cirrhosis. 2021 Apr. Chiejina M, Kudaravalli P, Samant H. Ascites. [Updated 2021 Aug 11]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. European Association for the Study of the Liver. EASL clinical practice guidelines on the management of ascites, spontaneous bacterial peritonitis, and hepatorenal syndrome in cirrhosis. 2010 Jun. Garcia-Tsao G. Cirrhosis and its sequelae. In: Goldman L, Schafer AI, eds. Goldman-Cecil Medicine. 26th ed. Philadelphia, PA: Elsevier; 2020:chap 144. National Institute of Diabetes and Digestive and Kidney Diseases website. Cirrhosis, Updated March 2018. Accessed November 11, 2020. Sola E, Gines SP. Ascites and spontaneous bacterial peritonitis. In: Feldman M, Friedman LS, Brandt LJ, eds. Sleisenger and Fordtran’s Gastrointestinal and Liver Disease. 11th ed. Philadelphia, PA: Elsevier; 2021:chap 93.

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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:
2. 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
3. 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
4. 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
5. 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.

1. 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.
2. 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.
3. 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.

1. 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.
2. 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.
3. 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? References Asthma. NCBI [Internet]. Last accessed on 31st March, 2021 Quirt Jaclyn, Hildebrand Kyla J. Mazza Jorge, Noya Francisco, Harold Kim. Asthma. Allergy Asthma Clin Immunol. 2018; 14(Suppl 2): 50. Hashmi Muhammad F, Tariq Maryam, Cataletto Mary E. Asthma. StatPearls Publishing; 2021 Jan Rina Chabra; Mohit Gupta.Allergic And Environmental Induced Asthma. StatPearls Publishing; 2021 Jan Asthma. Harvard health publishing. Jul 2008, Asthma: When to see a doctor. American lung association [Internet]. Last accessed on 31st March, 2021. Living with Asthma. NHS [Internet]. Last accessed on 31st March,2021 Arreola Rodrigo, Fabián Saray Quintero, López-Roa Rocío Ivette, Flores-Gutiérrez Enrique Octavio. Immunomodulation and Anti-Inflammatory Effects of Garlic Compounds. J Immunol Res. 2015; 2015: 401630. Elizabeth A. Townsend, Matthew E. Siviski,Yi Zhang,Carrie Xu,Bhupinder Hoonjan,and Charles W. Emala. Effects of Ginger and Its Constituents on Airway Smooth Muscle Relaxation and Calcium Regulation. Am J Respir Cell Mol Biol. 2013 Feb; 48(2): 157–16 HM Schachter, J Reisman, K Tran, B Dales, K Kourad, D Barnes, M Sampson, A Morrison, I Gaboury, and J Blackman. Health Effects of Omega‐3 Fatty Acids on Asthma: Summary. Agency for Healthcare Research and Quality (US); 1998-2005. Emma J Welsh, Anna Bara, Elizabeth Barley, Christopher J Cates.Caffeine for asthma.Cochrane Database Syst Rev. 2010 Jan; 2010(1). Hsu E, Bajaj T. Beta 2 Agonists. [Updated 2021 May 28]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. Asthma. National Heart, Lung and Blood Institute. National Institute of Health (NIH).

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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? References Autism Spectrum Disorder. American Psychiatric Association. Naji, Wafaa & Qasim Waheeb, Assist. Prof. Mohammed. (2020). Autism Spectrum Disorder: Review Article. Medico-Legal Update. 20. 324-329. Charan SH. Childhood disintegrative disorder. J Pediatr Neurosci. 2012 Jan;7(1):55-7. doi: 10.4103/1817-1745.97627. PMID: 22837782; PMCID: PMC3401658. Autism Spectrum Disorder. National Institute of Mental Health. NIH. Last reviewed in March 2022. Park HR, Lee JM, Moon HE, Lee DS, Kim BN, Kim J, Kim DG, Paek SH. A Short Review on the Current Understanding of Autism Spectrum Disorders. Exp Neurobiol. 2016 Feb;25(1):1-13. R. Dietert et al. Emerging Health Threats Journal 2011, 4: 7111. Emberti Gialloreti L, Mazzone L, Benvenuto A, Fasano A, Alcon AG, Kraneveld A, Moavero R, Raz R, Riccio MP, Siracusano M, Zachor DA, Marini M, Curatolo P. Risk and Protective Environmental Factors Associated with Autism Spectrum Disorder: Evidence-Based Principles and Recommendations. J Clin Med. 2019 Feb 8;8(2):217. Chaste P, Leboyer M. Autism risk factors: genes, environment, and gene-environment interactions. Dialogues Clin Neurosci. 2012 Sep;14(3):281-92. Reichenberg A et al. Arch Gen Psychiatry. 2006;63:1026-1032. Key Facts. Autism. World Health Organization. Shapira SK, Tian LH, Aylsworth AS, Elias ER, Hoover-Fong JE, Meeks NJL, Souders MC, Tsai AC, Zackai EH, Alexander AA, Yeargin-Allsopp M, Schieve LA. A Novel Approach to Dysmorphology to Enhance the Phenotypic Classification of Autism Spectrum Disorder in the Study to Explore Early Development. J Autism Dev Disord. 2019 May;49(5):2184-2202. Elder LM, Dawson G, Toth K, Fein D, Munson J. Head circumference as an early predictor of autism symptoms in younger siblings of children with autism spectrum disorder. J Autism Dev Disord. 2008 Jul;38(6):1104-11. Al Aboud DM, Gossman W. Wood’s Light. [Updated 2022 Sep 2]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Francis K, Karantanos G, Al-Ozairi A, AlKhadhari S. Prevention in Autism Spectrum Disorder: A Lifelong Focused Approach. Brain Sci. 2021 Jan 24;11(2):151. Croall ID, Hoggard N, Hadjivassiliou M. Gluten and Autism Spectrum Disorder. Nutrients. 2021 Feb 9;13(2):572. Abdellatif B, McVeigh C, Bendriss G, Chaari A. The Promising Role of Probiotics in Managing the Altered Gut in Autism Spectrum Disorders. Int J Mol Sci. 2020 Jun 10;21(11):4159. Mughal S, Faizy RM, Saadabadi A. Autism Spectrum Disorder. [Updated 2022 Jul 19]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Baraskewich J, von Ranson KM, McCrimmon A, McMorris CA. Feeding and eating problems in children and adolescents with autism: A scoping review. Autism. 2021 Aug;25(6):1505-1519. Feng X, Li K, Jiang Q, Zhang Y, Gong Z, Zhi H, Yu J, Li W, Li J. Traditional Chinese medicine intervention for autism spectrum disorders: A protocol for systematic review and network meta-analysis. Medicine (Baltimore). 2022 Mar 4;101(9):e28957. James S, Stevenson SW, Silove N, Williams K. Chelation for autism spectrum disorder (ASD). Cochrane Database Syst Rev. 2015 May 11;5(5):CD010766. What is Autism Spectrum Disorder? Autism Spectrum Disorder (ASD).Center For Disease Control and Prevention. March 2022. Tiwari, R. ., Purkayastha, K. ., & Gulati, S. . (2021). Public Health Dimensions of Autism Spectrum Disorder in India: An Overview. Journal of Comprehensive Health, 9(2), 57–62.

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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? References Sutaria H. Amita Masood Sadia, Schlessinger v. Acne Vulgaris.Treasure Island (FL): StatPearls Publishing; 2021 Jan. Acne: Overview.Cologne, Germany: Institute for Quality and Efficiency in Health Care (IQWiG); 2006. Acne vulgaris. American dermatological association.February 19, 2020. Acne: Who gets and causes. American academy of dermatology association. Acne: diagnosis and treatment. American academy of dermatology association. Acne: Tips for managing. American academy of dermatology association. Kraft John and Freiman Anatoli. CMAJ. 2011 Apr 19; 183(7): E430–E435. Shmerling Robert H., Does diet really matter when it comes to adult acne? Harvard health blog;Aug(19)2020. Acne can affect more than your skin.American academy of dermatology association. Acne scars:Who gets and causes. American academy of dermatology association. Mohammad A. Alzohairy. Therapeutics Role of Azadirachta indica (Neem) and Their Active Constituents in Diseases Prevention and Treatment.Evid Based Complement Alternat Med. 2016; 2016: 7382506. Tan J K L, Bhate K. A global perspective on the epidemiology of acne.Br J Dermatol.2015 Jul;172 Suppl 1:3-12.

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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.

1. 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. Click Here 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

1. 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

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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.

1. 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.
2. 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.
3. 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.
4. 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.
5. 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? References Srivastav S, Jamil RT, Zeltser R. Valsalva Maneuver. [Updated 2022 Oct 25]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Wright T. Middle-ear pain and trauma during air travel. BMJ Clin Evid. 2015 Jan 19;2015:0501. PMID: 25599243; PMCID: PMC4298289. Bhattacharya S, Singh A, Marzo RR. “Airplane ear”-A neglected yet preventable problem. AIMS Public Health. 2019 Aug 26;6(3):320-325. doi: 10.3934/publichealth.2019.3.320. PMID: 31637280; PMCID: PMC6779601. H K Bakhru. Natural Home Remedies for Common Ailments. Orient Paperbacks, 1996. 232 p.

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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

1. Nasal decongestants: These can also provide symptom relief by reducing nasal congestion and make breathing easier. These include: Xylometazoline Oxymetazoline
2. 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 .
3. 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? References Janeway CA Jr, Travers P, Walport M, et al. Immunobiology: The Immune System in Health and Disease. 5th edition. New York: Garland Science; 2001. Chapter 12, Allergy and Hypersensitivity. Galli SJ, Tsai M, Piliponsky AM. The development of allergic inflammation. Nature. 2008 Jul 24;454(7203):445-54 Holgate, S., Polosa, R. Treatment strategies for allergy and asthma. Nat Rev Immunol 8, 218–230 (2008). Chang HJ, Burke AE, Glass RM. Food Allergies. JAMA. 2010;303(18):1876. doi:10.1001/jama.303.18.1876. Wheatley LM, Togias A. Clinical practice. Allergic rhinitis. N Engl J Med. 2015 Jan 29;372(5):456-63. Jensen-Jarolim E, Untersmayr E. Gender-medicine aspects in allergology. Allergy. 2008 May;63(5):610-5. Chung EH. Vaccine allergies. Clin Exp Vaccine Res. 2014;3(1):50-57.

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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:
3. 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.
4. 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.
5. 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.

1. Gender: Women are at a higher risk of developing this disease. They make up approximately 2/3rd of all Alzheimer’s patients.
2. 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.
3. 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.
4. High blood pressure (hypertension): Elevated blood pressure in middle age, especially if uncontrolled, is associated with a higher risk of AD development.
5. 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.
6. 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..
7. 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. Sleep issues: Sleep issues and poor sleep schedule may create mild cognitive impairment and trigger the beginnings of Alzheimer’s.
13. Sedentary lifestyle: A sedentary lifestyle with a lack of mind and body stimulation increases the risk of this disease.
14. 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.

1. 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.

1. 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.
2. Massage therapy and aromatherapy: Massage therapy and aromatherapy induce relaxation and may be helpful for patients with Alzheimer’s.
3. 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? References Janicki SC, Schupf N. Hormonal influences on cognition and risk for Alzheimer’s disease. Curr Neurol Neurosci Rep. 2010 Sep;10 Mielke MM. Sex and Gender Differences in Alzheimer’s Disease Dementia. Psychiatr Times. 2018 Nov;35(11):14-17. Epub 2018 Dec 30. Gottlieb S. Head injury doubles the risk of Alzheimer’s disease. BMJ. 2000 Nov 4. Dong H, Csernansky JG. Effects of stress and stress hormones on amyloid-beta protein and plaque deposition. J Alzheimers Dis. 2009;18(2):459-69. Shokri-Kojori E, Wang GJ, Wiers CE, Demiral SB, Guo M, Kim SW, Lindgren E, Ramirez V, Zehra A, Freeman C, Miller G, Manza P, Srivastava T, De Santi S, Tomasi D, Benveniste H, Volkow ND. β-Amyloid accumulation in the human brain after one night of sleep deprivation. Proc Natl Acad Sci U S A. 2018 Apr 24;115(17):4483-4488. Overview. Alzheimer’s Disease. National Health Service. July 2021. Introduction. Alzheimer’s disease. National Health Portal, India. September 2015. What is Alzheimer’s disease. Alzheimer’s.gov. National Institute on Aging (NIA). 2021. What is Alzheimer’s disease. Basics of Alzheimer’s Disease and Dementia. National Institute of Aging. July 2021. Key Facts. Dementia. World Health Organization. September 2021.

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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.

1. 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.
2. Imperforate hymen: This is a disorder in which a hymen has no opening and completely obstructs the vagina.
3. 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.
4. 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.

1. 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.
2. 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.
3. Poor nutrition: Nutritional deficiencies may affect the functioning of the hypothalamus and pituitary gland, which can lead to amenorrhea.
4. 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).

1. 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.
2. Family history If there is a family history of delayed menstruation or irregular menstruation, there can be a chance of genetic predisposition to amenorrhea.
3. Structural abnormalities Girls who have congenital abnormalities such as poorly developed genital and pelvic organs can be at the risk of developing amenorrhea.
4. Tumor and its treatments Sometimes, after receiving chemotherapy and radiotherapy ovarian failure can occur which leads to the absence of menstruation. Diagnosis Of Amenorrhoea
5. 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!

1. 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.
2. 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.
3. 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.

1. 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.
2. 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.
3. 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.
4. 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.
5. 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? References Nawaz G, Rogol AD. Amenorrhea. [Updated 2022 Feb 13]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. Majumdar A, Mangal NS. Hyperprolactinemia. J Hum Reprod Sci. 2013 Jul. Saei Ghare Naz M, Rostami Dovom M, Ramezani Tehrani F. The Menstrual Disturbances in Endocrine Disorders: A Narrative Review. Int J Endocrinol Metab. 2020 Oct 14. What are the treatments for amenorrhea. NICHD Research Information. January 2017. Woolf PD. Hypothyroidism and amenorrhea due to hypothalamic insufficiency. A study on four young women. Am J Med. 1977 Sep. Gasner A, Rehman A. Primary Amenorrhea. [Updated 2021 Sep 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. Meczekalski B, Katulski K, Czyzyk A, Podfigurna-Stopa A, Maciejewska-Jeske M. Functional hypothalamic amenorrhea and its influence on women’s health. J Endocrinol Invest. 2014 Nov. Klein DA, Paradise SL, Reeder RM. Amenorrhea: A Systematic Approach to Diagnosis and Management. Am Fam Physician. 2019 Jul 1. Amenorrhoea. Br Med J. 1965 Aug 14.

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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? References Beaty JS, Shashidharan M. Anal Fissure. Clin Colon Rectal Surg. 2016 Mar;29(1):30-7. Mapel D, Schum Michael, and Worley Ann. The epidemiology and treatment of anal fissures in a population-based cohort. Published online 2014 Jul 16. Bellini M, Tonarelli S, Barracca F, Rettura F, Pancetti A, Ceccarelli L, Ricchiuti A, Costa F, de Bortoli N, Marchi S, Rossi A. Chronic Constipation: Is a Nutritional Approach Reasonable? Nutrients. 2021 Sep 26;13(10):3386. Home care For Anal fissure, Anal fissure. NHS.Updated on 2021 Nov 09. Anal fissure.NIDIRECT. Treatment of anal fissure. Medline Plus. Updated on 2022 April 20. Jahnny Brian and Ashurst John. Anal fissures. Updated on 2021 Nov. 21. Al-Waili Noori, Saloom Khelod, Al-Waili Thia, Al-Waili Ali. The safety and efficacy of a mixture of honey, olive oil, and beeswax for the management of hemorrhoids and anal fissure: a pilot study. Published online 2006 Feb 2. Chaudhary Ranjit and Dausage Chirag. Prevalence of Anal Fissure in Patients with Anorectal Disorders: A Single-centre Experience. Updated on 2019 January.

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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!

1. 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
2. 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!
3. 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
4. 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!

1. 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.
2. 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!

1. 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.
2. Gender Adult women suffer more frequently from anaphylaxis induced by food, drugs, and radiocontrast agents along with idiopathic anaphylaxis compared to adult men.
3. Alcohol Allergy to alcohol can cause symptoms ranging from mild, such as an itchy mouth or eyes, to severe, including vomiting or anaphylaxis.
4. 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? References Gupta, Neeraj & Bang, Akash & Mishra, Nihar. (2022). Anaphylaxis: Indian Academy of Pediatrics Standard Treatment Guidelines 2022. Khan NU, Shakeel N, Makda A, Mallick AS, Ali Memon M, Hashmi SH, Khan UR, Razzak JA. Anaphylaxis: incidence, presentation, causes and outcome in patients in a tertiary-care hospital in Karachi, Pakistan. QJM. 2013 Dec;106(12):1095-101. de Silva et al. Aetiology of anaphylaxis in patients referred to an immunology clinic in Colombo, Sri Lanka. Allergy Asthma Clin Immunol (2018) 14:81. SHAKER ET AL. Anaphylaxis—a 2020 practice parameter update, systematic review, and Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) analysis. J ALLERGY CLIN IMMUNOL APRIL 2020. Triggiani M, Patella V, Staiano RI, Granata F, Marone G. Allergy and the cardiovascular system. Clin Exp Immunol. 2008 Sep;153 Suppl 1(Suppl 1):7-11. Age-related differences in characteristics of anaphylaxis in Chinese children from infancy to adolescence. World Allergy Organization Journal. Volume 14, Issue 11, November 2021. Turner PJ, Jerschow E, Umasunthar T, Lin R, Campbell DE, Boyle RJ. Fatal Anaphylaxis: Mortality Rate and Risk Factors. J Allergy Clin Immunol Pract. 2017 Sep-Oct;5(5):1169-1178. Turner PJ, Jerschow E, Umasunthar T, Lin R, Campbell DE, Boyle RJ. Fatal Anaphylaxis: Mortality Rate and Risk Factors. J Allergy Clin Immunol Pract. 2017 Sep-Oct;5(5):1169-1178. Barg W, Medrala W, Wolanczyk-Medrala A. Exercise-induced anaphylaxis: an update on diagnosis and treatment. Curr Allergy Asthma Rep. 2011 Feb;11(1):45-51. Anaphylaxis. ASCIA HP Information Paper: Anaphylaxis. ASCIA 2013. For Healthcare Providers. Lab Tests to Collect Shortly After Severe Allergic Reaction/Anaphylaxis Following COVID-19 Vaccination. Centre for Disease Control And Prevention. Aug 2021. Tejas, K & Patel, & Patel, Tejas & Patel, Parvati & Barvaliya, Manish & Tripathi, Chandrabhanu. (2014). Drug-induced anaphylactic reactions in Indian population: A systematic review. Indian Journal of Critical Care Medicine. 18. 796-806. 10.4103/0972-5229.146313. Hussain, Md Sadique & ., Mohit. (2021). Anaphylaxis: Life-Threatening Allergic Reaction. International Journal of Pharmaceutical Sciences Review and Research. 67. 110-116. 10.47583/ijpsrr.2021.v67i02.019. Berenguer A, Couto A, Brites V, Fernandes R. Anaphylaxis in pregnancy: a rare cause of neonatal mortality. BMJ Case Rep. 2013 Jan 11;2013:bcr2012007055. Wang J. Treatment of food anaphylaxis with traditional Chinese herbal remedies: from mouse model to human clinical trials. Curr Opin Allergy Clin Immunol. 2013 Aug;13(4):386-91. The burden of allergic diseases in the Indian subcontinent: barriers and challenges. Vol 8 April 2020.

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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.

1. 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

1. 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.
2. 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.

1. 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.
2. 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.
3. 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? References Austin SB, Ziyadeh NJ, Forman S, Prokop LA, Keliher A, Jacobs D. Screening high school students for eating disorders: results of a national initiative. Prev Chronic Dis. 2008 Oct;5(4): A114. Becker, CB, Middlemass, K, Taylor, B, Johnson, C, Gomez, F.Food insecurity and eating disorder pathology. Int J Eat Disord. 2017; 50: 1031– 1040. Becker, C. B., Middlemass, K. M., Gomez, F., & MartinezAbrego, A. (2019). Eating Disorder Pathology Among Individuals Living With Food Insecurity: A Replication Study. Clinical Psychological Science, 7(5), 1144–1158. Esper DH. Utilization of nutrition-focused Physical Assessment in Identifying Micronutrient Deficiencies. Nutr Clin Pract. 2015; 30(2): 194-202. DOI: 10.1177/0884533615573054. Garner DM, Garfinkel PE. The Eating Attitudes Test: An index of the symptoms of anorexia nervosa. Psychol Med. 1979;9:273–279. DOI: 10.1017/ S0033291700030762. Garner DM, Olmsted MP, Polivy J. Development and validation of a multidimensional ED inventory for anorexia nervosa and bulimia. Int J Eat Disorder. 1983;2:15–34. DOI: 10.1002/1098-108X Mountjoy M, Sundgot-Borgen J, Carter S, Constantini N, Lebrun C, Meyer N, Steffen K, Budgett R, Ljungqvist A, Askerman K. RED-S CAT. Energy Deficiency in Sport (RED-S) Clinical Assessment Tool (CAT). Br J Sports Med. 2015 Apr;49(7);421-3. Doi: 10.1136/bjsports-2015-094873. Smolak L, Levine MP. Psychometric properties of the Children’s Eating Attitudes Test. Int J Eat Disord. 1994 Nov;16(3):275-82. Symons Downs, D., Hausenblas, H. A., & Nigg, C. R. (2004). Factorial validity and psychometric examination of the Exercise Dependence Scale-Revised. Measurement in Physical Education and Exercise Science, 8, 183–201. doi:10.1207/s15327841mpee0804 Tabbakh T, Freeland-Graves J. Development and validation of the Multidimensional Home Environment Scale (MHES) for adolescents and their mothers. Eat Behav. 2016 Aug; 22:76-82. DOI: 10.1016/j.eatbeh.2016.03.031. The Balance Between Goal-Directed and Habitual Action Control in Disorders of Compulsivity. ScienceDirect.

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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.

1. Weakened immune system Compromised immune system due to some disease or medications can increase the susceptibility to keratitis.
2. 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.
3. 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? References Al-Mujaini A, Al-Kharusi N, Thakral A, Wali UK. Bacterial keratitis: a perspective on epidemiology, clinico-pathogenesis, diagnosis, and treatment. Sultan Qaboos Univ Med J. 2009 Aug;9
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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? References Treatment. Kidney Cancer. National Health Service. Early Detection, Diagnosis, AND Staging. American Cancer Society. Kidney Cancer Statistics. World Cancer Research Fund International. Kidney cancer diagnosis. Johns Hopkins Medicine. Pandey J, Syed W. Renal Cancer. [Updated 2021 Dec 12]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. Linehan WM, Rathmell WK. Kidney cancer. Urol Oncol. 2012 Nov-Dec;30. Hancock SB, Georgiades CS. Kidney Cancer. Cancer J. 2016 Nov/Dec;22. Vogelzang NJ, Stadler WM. Kidney cancer. Lancet. 1998 Nov 21. Hsieh, J. J., Purdue, M. P., Signoretti, S., Swanton, C., Albiges, L., Schmidinger, M., Heng, D. Y., Larkin, J., & Ficarra, V. (2017). Chowdhury N, Drake CG. Kidney Cancer: An Overview of Current Therapeutic Approaches. Urol Clin North Am. 2020 Nov. Epidemiology and Risk Factors of Kidney Cancer. Journal of Clinical Oncology. October 2018.

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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.

1. 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.
2. 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.
3. 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.

1. 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.
2. 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? References Acute kidney injury (AKI), National Kidney Foundation, Last Reviewed in Feb, 2022. Li J, et al. (2019). The role of phosphate-containing medications and low dietary phosphorus-protein ratio in reducing intestinal phosphorus load in patients with chronic kidney disease. Negi S, et al. Acute kidney injury: Epidemiology, outcomes, complications, and therapeutic strategies. Seminars in Dialysis. 2018.

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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.

1. 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.
2. 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:
3. 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.
4. 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:
5. 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.
6. 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.
7. 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.
8. Abdominal ultrasound: An abdominal ultrasound scan offers moderate sensitivity specificity to diagnose kidney stones, although it is lower than a CT scan.
9. 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.
10. Nuclear functional renal scan: A renal scan involves the use of nuclear radioactive material to examine kidneys and assess their function.
11. 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.

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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? References Alelign T, Petros B. Kidney Stone Disease: An Update on Current Concepts. Adv Urol. 2018 Feb 4. Kallidonis P, Tsaturyan A, Lattarulo M, Liatsikos E. Minimally invasive percutaneous nephrolithotomy (PCNL): Techniques and outcomes. Turk J Urol. 2020 Nov. Govardhan R, Naga Vardhan, et al. RENAL CALCULUS - A REVIEW ARTICLE. wjpmr, 2018,4(4), 78 - 80. Health. Ureteroscopy.Johns Hopkins Medicine. Nojaba L, Guzman N. Nephrolithiasis. [Updated 2021 Aug 11]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Kidney Stones. Eating, Diet, & Nutrition for Kidney Stones. National Institute of Diabetes and Digestive and Kidney disease. May 2017. Fontenelle LF, Sarti TD. Kidney Stones: Treatment and Prevention. Am Fam Physician. 2019 Apr 15. Alelign T, Petros B. Kidney Stone Disease: An Update on Current Concepts. Adv Urol. 2018 Feb 4. Treatment. Kidney Stones. National Health Service. April 2022. Kidney Stones. Urology Care Foundation. Alelign T, Petros B. Kidney Stone Disease: An Update on Current Concepts. Adv Urol. 2018 Feb 4;2018:3068365. doi: 10.1155/2018/3068365. PMID: 29515627; PMCID: PMC5817324. Siener R. Nutrition and Kidney Stone Disease. Nutrients. 2021 Jun 3;13(6):1917. doi: 10.3390/nu13061917. PMID: 34204863; PMCID: PMC8229448.

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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!

1. 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!

1. 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!

1. 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!

1. 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: Click To Visit!

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! Consult Now! 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!

1. Use oils and creams For pain relief, menthol-containing pain relief creams give a cooling effect that temporarily relieves back pain.
2. 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.
3. 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.
4. 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!

1. 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.
2. 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.
3. 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
4. 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.
5. 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!

1. 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? References Kathee de Falla P. Medications for Back Pain and Neck Pain [Internet]. Spine-health. 2021 [cited 11 November 2021]. Casiano VE, Sarwan G, Dydyk AM, et al. Back Pain. [Updated 2022 Feb 22]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan. Yasufumi HAYASHI. Classification, Diagnosis, and Treatment of Low Back Pain. JMAJ 47(5): 227–233, 2004. Ehrlich, George E. “Back pain.” The Journal of Rheumatology. Supplement vol. 67 (2003): 26-31. Urits, Ivan et al. “Low Back Pain, a Comprehensive Review: Pathophysiology, Diagnosis, and Treatment.” Current pain and headache reports vol. 23,3 23. 11 Mar. 2019, doi:10.1007/s11916-019-0757-1. Supreet Bindra, Sinha A.G.K, et al. Epidemiology Of Lower Back Pain In Indian Population: A Review. International Journal of Basic and Applied Medical Sciences ISSN: 2277-2103. 2015 Vol. 5 (1) January-April. Zaina, Fabio & Balagué, Federico & Battié, Michele & Karppinen, Jaro & Negrini, Stefano. (2020). Low Back Pain in 2020: new frontiers and old limits of our understanding. An overview of the state of the art from a rehabilitation perspective. European journal of physical and rehabilitation medicine. 56. 10.23736/S1973-9087.20.06257-7. Al-Otaibi ST. Prevention of Occupational Back Pain. J Family Community Med. 2015 May-Aug;22(2):73-7. Koes, B W et al. “Diagnosis and treatment of low back pain.” BMJ (Clinical research ed.) vol. 332,7555 (2006): 1430-4. doi:10.1136/bmj.332.7555.1430. Rao D, Scuderi G, Scuderi C, Grewal R, Sandhu SJ. The Use of Imaging in Management of Patients with Low Back Pain. J Clin Imaging Sci. 2018 Aug 24;8:30. TENS ( Transcutaneous electric nerve stimulation). NHS UK. APR 2022. Laran Chett. A Critical Review of Low Back Pain Guidelines. SAGE publications. Vol 65. Sep 2017. Montazeri, Ali & Mousavi, Seyed Javad. (2010). Quality of Life and Low Back Pain. 10.1007/978-0-387-78665-0\_232. Al-Otaibi ST. Prevention of Occupational Back Pain. J Family Community Med. 2015 May-Aug;22(2):73-7. Katonis P, Kampouroglou A, Aggelopoulos A, Kakavelakis K, Lykoudis S, Makrigiannakis A, Alpantaki K. Pregnancy-related low back pain. Hippokratia. 2011 Jul;15(3):205-10. PMID: 22435016; PMCID: PMC3306025. Jennifer Cuthbertson. Tai Chi Shown to Ease Back Pain. Arthritis Foundation. A James Rainville, Carol Hartigan, et al. Exercise as a treatment for chronic low back pain.The Spine Journal Volume 4, Issue 1, 2 January 2004. Roger Chou,Richard Deyo, et al. Nonpharmacologic Therapies for Low Back Pain: A Systematic Review for an American College of Physicians Clinical Practice Guideline. ACP Journals. Annals of Internal Medicine. Apr 2017. Liu L, Skinner M, McDonough S, Mabire L, Baxter GD. Acupuncture for low back pain: an overview of systematic reviews. Evid Based Complement Alternat Med. 2015;2015:328196.

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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.

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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. Order Now 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. References Lomer MC, Parkes GC, Sanderson JD. Review article: lactose intolerance in clinical practice–myths and realities. Aliment Pharmacol Ther. 2008 Jan 15;27(2):93-103. doi: 10.1111/j.1365-2036.2007.03557.x. Epub 2007 Oct 23. PMID: 17956597. Misselwitz B, Butter M, Verbeke K, et alUpdate on lactose malabsorption and intolerance: pathogenesis, diagnosis and clinical managementGut 2019;68:2080-2091. Deng Y, Misselwitz B, Dai N, Fox M. Lactose intolerance in adults: biological mechanism and dietary management. Nutrients. 2015 Sep 18;7(9):8020-35. Ugidos-Rodríguez S, Matallana-González MC, Sánchez-Mata MC. Lactose malabsorption and intolerance: a review. Food & function. 2018;9(8):4056-68. Catanzaro, R., Sciuto, M. & Marotta, F. Lactose Intolerance—Old and New Knowledge on Pathophysiological Mechanisms, Diagnosis, and Treatment. SN Compr. Clin. Med. 3, 499–509 (2021). Malik TF, Panuganti KK. Lactose Intolerance. [Updated 2023 Feb 12]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan. Di Costanzo M, Canani RB. Lactose intolerance: common misunderstandings. Annals of Nutrition and Metabolism. 2018;73(4):30-7. InformedHealth.org [Internet]. Cologne, Germany: Institute for Quality and Efficiency in Health Care (IQWiG); 2006-. Living with lactose intolerance. 2010 Sep 15 [Updated 2018 Nov 29]. Brandao Gois MF, Sinha T, Spreckels JE, Vich Vila A, Bolte LA, Weersma RK, Wijmenga C, Fu J, Zhernakova A, Kurilshikov A. Role of the gut microbiome in mediating lactose intolerance symptoms. Gut. 2022 Jan;71(1):215-217. doi: 10.1136/gutjnl-2020-323911. Epub 2021 Mar 18. PMID: 34086598; PMCID: PMC8666824. Ojetti, V. , Annalisa, T. , Gianluca, I. , Flavio, B. , Daniele, F. , Francesco, B. , Giuseppe, Z. and Antonio, G. (2013) The impact of anxiety on lactose intolerance symptoms. Open Journal of Gastroenterology, 3, 89-92. Swagerty Jr DL, Walling AD, Klein RM. Lactose intolerance. American family physician. 2002 May 1;65(9):1845-51.

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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? References Leprosy. World Health Organisation. Hansen’s Disease - Leprosy. Centres for disease control and prevention. Ramos JM, Martínez-Martín M, Reyes F, Lemma D, Belinchón I, Gutiérrez F. Gender differential on characteristics and outcome of leprosy patients admitted to a long-term care rural hospital in South-Eastern Ethiopia. Int J Equity Health. 2012 Oct 4;11:56. World Leprosy Day: Bust the Myths, Learn the Facts. Leprosy. Centres for disease control and prevention. Ramos JM, Martínez-Martín M, Reyes F, Lemma D, Belinchón I, Gutiérrez F. Gender differential on characteristics and outcome of leprosy patients admitted to a long-term care rural hospital in South-Eastern Ethiopia. Int J Equity Health. 2012 Oct 4;11:56. Leprosy Elimination. World Health Organization. Kushtha Rog. National Health Portal of India. Leprosy. National Health Portal of India. Fe Eleanor F. Pardillo, Tranquilino T. Fajardo, Rodolfo M. Abalos, et al. Methods for the Classification of Leprosy for Treatment Purposes, Clinical Infectious Diseases, Volume 44, Issue 8, 15 April 2007, Pages 1096–1099, 1086/512809. Pradhan S, Nayak BP, Dash G. Childhood leprosy: A review. Indian J Paediatr Dermatol 2019;20:112-6. Leprosy. Standard Treatment Guidelines. National Health Mission. Government Of India. World Health Organization. Global Leprosy Programme. Global leprosy strategy 2016-2020. Accelerating towards a leprosy-free world, 2016. Guidelines for the Diagnosis, Treatment and Prevention of Leprosy. Word Health Organization (WHO). Sparsh Leprosy Awareness Campaign, 2019 operational guidelines. National Leprosy Eradication Programme, Ministry of Health and Family Welfare, GOvernment of India.

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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.

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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.

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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.

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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.

Order medications from India’s largest online pharmacy for guaranteed delivery. Upload your prescription now 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.

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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. Click here

Mahashankh vati: It helps with re-establishing the digestive fire, enhances the appetite, and removes digestive endotoxins produced in leptospirosis. Shop for mahashankh vati products. Buy here 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? References Goarant C. Leptospirosis: risk factors and management challenges in developing countries. Res Rep Trop Med. 2016 Sep 28. Budihal SV, Perwez K. Leptospirosis diagnosis: competency of the various laboratory tests. J Clin Diagn Res. 2014 Jan;8(1):199-202. John TJ. The prevention and control of human leptospirosis. J Postgrad Med. 2005 Jul-Sep. Budihal SV, Perwez K. Leptospirosis diagnosis: competency of various laboratory tests. J Clin Diagn Res. 2014 Jan;8(1):199-202. Treatment. Leptospirosis. Centers for Disease Control and Prevention. June 2015. Introduction. Leptospirosis.National Health Portal, India. Jan 2016. Nick Day. Leptospirosis: Epidemiology, microbiology, clinical manifestations, and Diagnosis. Oct 2022. Prasad S, Aggarwal BB. Turmeric, the Golden Spice: From Traditional Medicine to Modern Medicine. In: Benzie IFF, Wachtel-Galor S, editors. Herbal Medicine: Biomolecular and Clinical Aspects. 2nd edition. Boca Raton (FL): CRC Press/Taylor & Francis; 2011. Chapter 13. Rahmani AH, Shabrmi FM, Aly SM. Active ingredients of ginger as potential candidates in the prevention and treatment of diseases via modulation of biological activities. Int J Physiol Pathophysiol Pharmacol. 2014 Jul 12;6(2):125-36. PMID: 25057339; PMCID: PMC4106649. Achufusi TGO, Patel RK. Milk Thistle. [Updated 2022 Sep 12]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan. Wang S, Stobart Gallagher MA, Dunn N. Leptospirosis. [Updated 2022 May 2]. Rajapakse S. Leptospirosis: clinical aspects. Clin Med (Lond). 2022 Jan;22. Ahmed S, et al. Laboratory diagnosis of leptospirosis. Journal of Postgraduate Medicine. Volume : 51 Issue : 3 . 2005. R. W. ROSS RUSSELL. NEUROLOGICAL ASPECTS OF LEPTOSPIROSIS. J. Neurol. Neurosurg. Psychiat., 1959, 22, 143. De Silva NL, Sivayoganathan S, Sivashangar A, Wickramasinghe W, Gooneratne L, Rajapakse S. Can findings on peripheral blood smear differentiate leptospirosis from other infections? A preliminary comparative study. Trans R Soc Trop Med Hyg. 2018;112(2):94-96. Shakshi et al. LEPTOSPIROSIS: AN AYURVEDIC APPROACH. World Journal of Pharmaceutical and Life Sciences. Nov 2017. National Guidelines Diagnosis, Case Management Prevention and Control of Leptospirosis. National Centre For Disease Control. 2015. Khattak et al. Leptospirosis: A disease with global prevalence. J Microbiol Exp. @018;6(5):219‒221. Shivakumar, Singh. (2008). Leptospirosis - Current Scenario in India. 10.13140/2.1.4905.6968.

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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.

1. 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.
2. 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.
3. 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.
4. 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.
5. 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? References Schuppan D, Afdhal NH. Liver cirrhosis. Lancet. 2008 Mar 8 Suk KT, Kim DJ. Staging of liver fibrosis or cirrhosis: The role of hepatic venous pressure gradient measurement. World J Hepatol. 2015 Mar 27 Olave MC, Gurung A, Mistry PK, Kakar S, Yeh M, Xu M, Wu TT, Torbenson M, Jain D. Etiology of cirrhosis in the young. Hum Pathol. 2020 Feb Overview. Cirrhosis. National Health Service. June 2020 Moon DB, Lee SG. Liver transplantation. Gut Liver. 2009 Sep;3 What is chronic liver disease. Overview. Stanford Health Care. Rahimi RS, Rockey DC. Complications of cirrhosis. Curr Opin Gastroenterol. 2012 May Definition & Facts for Cirrhosis. Cirrhosis. National Institute of Diabetes and Digestive and Kidney Disease.March 2018.

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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. Click Here To Read!

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. Click To Know!

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? References Cancer. World Health Organisation. HIV/AIDS. World Health Organisation. Types of Primary Immune Deficiency Diseases. National Institute of Allergy and Infectious Diseases Segerstrom SC, Miller GE. Psychological stress and the human immune system: a meta-analytic study of 30 years of inquiry. Psychol Bull. 2004 Jul;130(4):601-30. eiler A., Fagundes C.P., Christian L.M. (2020) The Impact of Everyday Stressors on the Immune System and Health. In: Choukèr A. (eds) Stress Challenges and Immunity in Space. Springer, Cham. Immunity Boosting Measures. Ministry Of Ayush. Guidelines for Homeopathy Practitioners for Covid-19. Ministry of Ayush. Childs CE, Calder PC, Miles EA. Diet and Immune Function. Nutrients. 2019;11(8):1933.

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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. Click To Know!

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
4. 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.
5. 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.
6. 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. Tap To Read! 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!

1. Secondhand smoke: Getting exposed to second-hand smoke also increases a person’s risk of developing lung cancer.
2. 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.
3. 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).
4. 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
5. 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
6. 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.
7. 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. Click To Read!

1. Air pollution: In cities, with heavily trafficked roads, air pollution (especially near) appears to raise the risk of lung cancer slightly.
2. 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! Click To Read!

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. Click To Know!

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! Click To Read! 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! Click Here! 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. Click Here! 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? References Bradley SH, Kennedy MPT, Neal RD. Recognising Lung Cancer in Primary Care [published correction appears in Adv Ther. 2020 Apr. Risk factors. Lung Cancer Causes, Risk Factors, and Prevention. American Cancer Society. Oct 2019. Lung Cancer: Epidemiology, Aetiology, and Prevention. Charles S. Dela Cruz, MD, PhDa,\*Lynn T. Tanoue.Clin Chest Med. 2011 December. Non-small cell lung cancer. National Comprehensive Cancer Network. Jan 2020. Niederhuber JE, et al., eds. Cancer of the lung: Non-small cell lung cancer and small cell lung cancer. In: Abeloff’s Clinical Oncology. 6th ed. Elsevier; Jan 2020. National Cancer Institute. Physician Data Query (PDQ). Health Professional Version. Non-Small Cell Lung Cancer Treatment. Jun 2019. Lung cancer prevention (PDQ). National Cancer Institute. Mar 2020. Lung cancer — non-small cell: Screening. American Society of Clinical Oncology. Mar 2020.

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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.

1. 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.
2. 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
2. To rule out other potential causes such as lyme disease and Ramsay Hunt syndrome.
3. To determine fasting glucose or HbA1c to assess diabetes mellitus as a risk factor.
4. If herpes simplex virus-1 (HSV-1) or varicella zoster virus (VZV) are suspected, serology can be sent for confirmation.
5. Hearing and balance tests to assess any involvement of the inner ear.
6. Salivary flow test to evaluate changes in salivation.
7. Tear test to measure the eye’s ability to produce tears.
8. 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.
9. 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. Read Article Here!

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.

1. 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.

1. 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.

1. 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? References National Institute of Neurological Disorders and Stroke website. Bell’s palsy fact sheet. Bell’s Palsy - Facial Palsy UK. Facial Palsy UK. 2018. Eviston TJ, et al. J Neurol Neurosurg Psychiatry 2015;86:1356–1361. Zhao H, Zhang X, Tang YD, Zhu J, Wang XH, Li ST. Bell’s Palsy: Clinical Analysis of 372 Cases and Review of Related Literature. Eur Neurol. 2017;77(3-4):168-172. Wenjuan Zhang,et al. The etiology of Bell’s palsy: a review. Journal of Neurology (2020) 267:1896–1905 Glass GE, Tzafetta K. Bell’s palsy: a summary of current evidence and referral algorithm. Fam Pract. 2014 Dec;31(6):631-42. Prabasheela B. et al. Understanding Bell’s palsy –a review. Pharmaceutical and Biological Evaluations 2017; Vol. 4 (3): 130-134. Gilbert SC. Bell’s palsy and herpesviruses. 2002;9:70-73. A. Greco et al. Bell’s palsy and autoimmunity. Autoimmunity Reviews 12 (2012) 323–328 Holland NJ, Weiner GM. Recent developments in Bell’s palsy. Br Med J 2004;329: 553–7. Shafshak TS. The treatment of facial palsy from the point of view of physical and rehabilitation medicine. Eura Medicophys 2006;42:41-7.

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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? References Ghosh SK, Rahi M. Malaria elimination in India-The way forward. J Vector Borne Dis. 2019 Jan-Mar;56(1):32-40. Narain JP, Nath LM. Eliminating malaria in India by 2027: The countdown begins! Indian J Med Res. 2018 Aug;148(2):123-126. National Framework For Malaria Elimination In India (2016–2030). DIRECTORATE OF National Vector Borne Disease Control Programme (NVBDCP) Directorate General Of Health Services (DGHS) Ministry Of Health & Family Welfare Government Of India. World Malaria Day 2020. The World Health Organization (WHO). Malaria. Key facts. World Health Organization (WHO). Last updated, Apr 2021. National Institute of Malaria Research, New Delhi. National Vector Borne Disease Control Programme. Guidelines for diagnosis and treatment of malaria in India 2014. Rosenthal PJ, Kamya MR. Malaria. In: Goldman L, Schafer AI eds. Goldman’s Cecil Medicine. 25th ed. Philadelphia, PA: Elsevier Saunders; 2016:chap 345. Ten things you didn’t know about malaria. UNICEF. Last updated, Apr 2018. Malaria. The Centers for Disease Control and Prevention (CDC). Last updated, Jan 2019. Moody A. Rapid diagnostic tests for malaria parasites. Clin Microbiol Rev. 2002;15(1):66-78. Malaria Diagnosis. The Centers for Disease Control and Prevention (CDC). Last updated, Jul 2018.

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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? References Canker sores (mouth ulcers): Overview. 2019 Aug 15. Plewa MC, Chatterjee K. Aphthous Stomatitis. StatPearls. Treasure Island (FL): Tarakji B, Gazal G, Al-Maweri SA, Azzeghaiby SN, Alaizari N. Guideline for the diagnosis and treatment of recurrent aphthous stomatitis for dental practitioners. J Int Oral Health. 2015 May;7(5):74-80. Scully C, Shotts R. Mouth ulcers and other causes of orofacial soreness and pain. West J Med. 2001 Jun;174(6):421–4. Sivapathasundharam B, Sundararaman P and Kannan K. Oral Ulcers - A Review. J Dent & Oral Disord. 2018; 4(4): 1098. Dr. Ambika Dhiman Et Al: Role Of Ayurveda In Management Of Mukhpak (Stomatitis) –A Review Article. International Ayurvedic medical Journal {online} 2016 Mouth Ulcers - Stomatitis. National health Portal of India.

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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:
7. 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!

1. 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
2. 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
3. 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!

1. 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!

1. 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.
2. 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!

1. 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.
2. 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!

1. 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.
2. 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.
3. 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 Click Here! 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:
5. 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!

1. 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.
2. 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.
3. Turmeric (Haldi): Turmeric has antibacterial and anti-inflammatory properties. It can be consumed orally with water or warm milk.
4. 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.
5. 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.
6. 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? References Overview. Fungal Diseases and COVID-19. Center For Disease Control And Prevention. March 2022. Most Common Fungal Diseases. Types of Fungal Diseases. Center For Disease Control And Prevention. March 2022. George Petrikkos, Anna Skiada et al. Epidemiology and Clinical Manifestations of Mucormycosis. Manifestations of Mucormycosis d CID 2012:54 (Suppl 1). Lata Potey, Dhanashri Tumme, et al. A Brief Review on Mucormycosis. International Journal of Science and Research (IJSR) ISSN: 2319-7064. SJIF (2020). Deepthi Somarouthu*, Vasantha Thota, et al. A Review on Mucormycosis. International Journal of Scientific Research and ManagementJSRM Volume 09 Issue 07 July 2021. AKM Moyeenul Huq, Md. Golzar Hossain, et al. Mucormycosis (black fungus) and its impact on the COVID-19 patients: An updated review. J Adv Biotechnol Exp Ther. 2022 Jan; 5(1): 198-217. Abhishek Sharma,*, Gulnaz Bano, et al. Mucormycosis: A manifestation in COVID-19 infection. / Indian Journal of Pharmacy and Pharmacology 2021;8(3):189–194. Sundaram N, Bhende T, Yashwant R, Jadhav S, Jain A. Mucormycosis in COVID-19 patients. Indian J Ophthalmol. 2021;69(12):3728-3733. Mucormycosis. Fungal Diseases. Center For Disease Control And Prevention. Feb 2021. Khina Sharma, Jyoti, et al. Mucormycosis in COVID-19 Patients: A Review. Indian Journal of Continuing Nursing Education | Published by Wolters Kluwer - Medknow. July 15, 2022. Jesil Mathew Aranjani, Atulya Manuel, et al. COVID-19–associated mucormycosis: Evidence-based critical review of an emerging infection burden during the pandemic’s second wave in India. November 18, 2021. Singh AK, Singh R, Joshi SR, Misra A, Mucormycosis in COVID-19: A systematic review of cases reported worldwide and in India, Diabetes & Metabolic Syndrome: Clinical Research & Reviews (2021). Chakrabarti, A.; Dhaliwal, M. Epidemiology of mucormycosis in India. Curr. Fungal Infect. Rep. 2013, 7, 287–292. Prakash H, Chakrabarti A. Global Epidemiology of Mucormycosis. J Fungi (Basel). 2019;5(1):26. Published 2019 Mar 21. Revannavar SM, P S S, Samaga L, V K V. COVID-19 triggering mucormycosis in a susceptible patient: a new phenomenon in the developing world? BMJ Case Rep. 2021 Apr 27;14(4):e241663. Sarkar S, Gokhale T, Choudhury SS, Deb AK. COVID-19 and orbital mucormycosis [published correction appears in Indian J Ophthalmol. 2021 Jul;69(7):1978]. Indian J Ophthalmol. 2021;69(4):1002-1004. Guideline for management of Mucormycosis in Covid – 19 patients. DGHS. Accessed on 26 May 2021. Dimitrios P Kontoyiannis, Russell E Lewis. How I treat mucormycosis. Blood.The Journal of the American Society of Hematology 118 (5), 1216-1224, 2011. Thomson SR, Bade PG, Taams M, Chrystal V. Gastrointestinal mucormycosis. Br J Surg. 1991;78(8):952-954. Rocha ICN, Hasan MM, Goyal S, et al. COVID-19 and mucormycosis syndemic: double health threat to a collapsing healthcare system in India. Trop Med Int Health. 2021;26(9):1016-1018. Pilmis B, Alanio A, Lortholary O, Lanternier F. Recent advances in the understanding and management of mucormycosis. F1000Res. 2018 Sep 7;7:F1000 Faculty Rev-1429. Skiada A, Lass-Floerl C, Klimko N, Ibrahim A, Roilides E, Petrikkos G. Challenges in the diagnosis and treatment of mucormycosis. Med Mycol. 2018 Apr 1;56(suppl\_1):93-101. Strasser MD, Kennedy RJ, Adam RD. Rhinocerebral mucormycosis. Therapy with amphotericin B lipid complex. Arch Intern Med. 1996;156(3):337-339. Mucormycosis in COVID 19. AIIMS Guidance. 26 May 2021. Maini A, Tomar G, Khanna D, Kini Y, Mehta H, Bhagyasree V. Sino-orbital mucormycosis in a COVID-19 patient: A case report. Int J Surg Case Rep. 2021 May;82:105957. Jeong W, Keighley C, Wolfe R, et al. The epidemiology and clinical manifestations of mucormycosis: a systematic review and meta-analysis of case reports. Clin Microbiol Infect. 2019;25(1):26-34. Inbarajan A, Natarajan S, Thirumalai Thangarajan S, et al. (October 24, 2018) Impact of Prosthodontic Treatment on the Oral Health-related Quality of Life in a Mucormycosis Patient: A Case Report. Cureus 10(10): e3493. Ankesh Singh1 and Ayushi Gupta. Surviving Mucormycosis: Impact on Psychological Well-Being and Quality of Life. Acta Scientific Otolaryngology. Volume 3 Issue 7 July 2021.

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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.

1. 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.

1. 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.
2. 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.

1. 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.

1. 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).

1. 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.

1. 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? References What is Multiple Myeloma? Canadian Cancer Society. Multiple Myeloma. General Discussion. NORD’s Rare Diseases. Last updated in Aug 2011. Epidemiology. Multiple Myeloma. Indian Council of Medical Research. Consensus Document for Management of Multiple Myeloma. Last reviewed in 2017. Multiple Myeloma. Description. MedLinePlus. Last updated in May 2016. Tests to Find Multiple Myeloma. Multiple Myeloma. Early Detection, Diagnosis and Staging. American Cancer Society. Last revised in Feb 2018. How is Immunotherapy for Multiple Myeloma Changing the Outlook for patients? Cancer Research Institute. Last updated 2021. Bone Marrow Transplantation. What is a bone marrow transplantation? John Hopkins Medicine. Massage Therapy. Complementary therapies. Canadian Cancer Society. Aromatherapy with Essential Oils. Complementary and Alternative Medicine. National Cancer Institute. Overview. Multiple Myeloma. NHS.Last reviewed in June 2021.

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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.