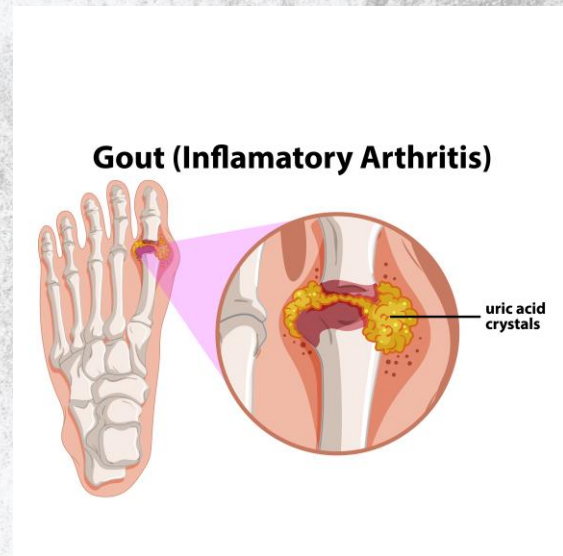
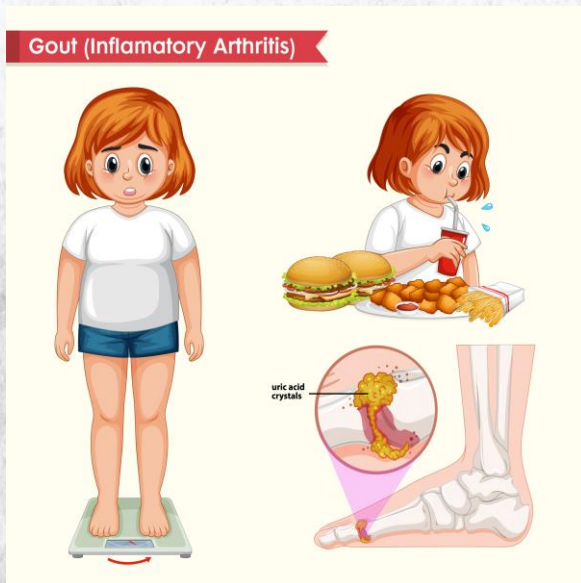


Gout



Overview:

- Gout is a form of arthritis, causing sudden onset of severe pain, swelling, and redness of a joint.
- Urate can form crystals that build up in different parts of the body, causing symptoms, such as kidney stones and associated problems.
- Gout is a complex disease and many factors play a role in its occurrence.
- The goal of treating gout attacks is to reduce pain, inflammation and complications.

What are the stages of gout?

- First stage, the level of uric acid starts to rise without side effects.
- Second stage, acute gout attacks that may last for days.



- Third stage, severe symptoms between attacks, usually last for months or years.
- In the last stage, the condition develops into chronic gout in the event that the appropriate treatment is not received.

What are the causes of gout?

Gout occurs when urate crystals accumulate in your joint, causing the inflammation and intense pain of a gout attack. Urate crystals can form when you have high levels of uric acid in your blood. Your body produces uric acid when it breaks down purines — substances that are found naturally in your body.

Purines are also found in certain foods, including red meat and organ meats, such as liver. Purine-rich seafood includes anchovies, sardines, mussels, scallops, trout and tuna. Alcoholic beverages, and drinks sweetened with fruit sugar (fructose) promote higher levels of uric acid.

Normally, uric acid dissolves in your blood and passes through your kidneys into your urine. But sometimes either your body produces too much uric acid or your kidneys excrete too little uric acid. When this happens, uric acid can build up, forming sharp, needlelike urate crystals in a joint or surrounding tissue that cause pain, inflammation and swelling.

Risk Factors:

many factors play a role in its occurrence, such as:



- Obesity.
- Genetic factors.
- Some medical conditions where uric acid is high (such as: high cholesterol, high blood pressure, diabetes and heart disease).
- Certain medications may increase uric acid levels such as diuretics.
- Age and gender, it is more common in men than in women under 60 years of age.
- Red meat, shellfish and some protein-rich foods increase uric acid levels.
- Soft drinks.
- Joint injuries.
- Recent surgery or trauma.
- Chemotherapy.
- Chronic kidney disease.
- Overeating or fasting for a long time.

The risk factors for recurrence of gout:

- Injury or recent surgery.



- Drinking alcohol.
- Overeating.
- Dehydration.
- Taking medications that induce sudden changes in blood urate levels.

What are the symptoms of gout?

- **Intense joint pain.** Gout usually affects the big toe, but it can occur in any joint. Other commonly affected joints include the ankles, knees, elbows, wrists and fingers. The pain is likely to be most severe within the first four to 12 hours after it begins.
- **Lingering discomfort.** After the most severe pain subsides, some joint discomfort may last from a few days to a few weeks. Later attacks are likely to last longer and affect more joints.
- **Inflammation and redness.** The affected joint or joints become swollen, tender, warm and red.
- **Limited range of motion.** As gout progresses, you may not be able to move your joints normally.

Complications:

- Accumulation of crystals in the joints may not be accompanied by pain, but can cause damage to the joints, bones, and cartilage.



- Joint damage and deformity.
- Kidney stones.
- Kidney diseases or kidney failure

When to see a doctor

If you experience sudden, intense pain in a joint, call your doctor. Gout that goes untreated can lead to worsening pain and joint damage. Seek medical care immediately if you have a fever and a joint is hot and inflamed, which can be a sign of infection.

Diagnosis:

Tests to help diagnose gout may include:

- Medical history.
- Blood tests.
- Physical examination.
- X-ray imaging, ultrasound, CT scan.

The best way to diagnose gout is for a doctor to examine the fluid lining of the affected joint (synovial fluid) under a microscope to look for urate crystals. Also, the doctor focuses on the intensity of pain, the attack length and the affected joints.

Treatment:



- Anti-inflammatory medications are the best treatment for gout flares. They are most effective when started early in the course of a flare and they work to reduce swelling in the joint. If you have a history of gout, your doctor can give you medication to keep on hand in the event of a flare. This is important because early treatment is key in minimizing the amount of time it takes to decrease the pain, severity, and duration of a flare.
- Preventive Treatment: It aims to prevent or reduce the occurrence of gout flares. It is usually recommended by the doctor and is taken daily at low doses to avoid gastrointestinal side effects.

Prevention:

Healthy food: Eating healthy foods help reduce the level of uric acid in the blood:

- All types of vegetables.
- Low-fat dairy products.
- Whole grain.
- Vegetable oils.
- Certain types of fruits.
- Vitamin C.
- Drink plenty of fluids particularly water.

Physical activity: Exercising

