

● <u>ENGLISH</u> ESPAÑOL 繁體中文 한국어 TIẾNG VIỆT

Gout

Overview, Symptoms, & Causes

Diagnosis, Treatment, & Steps To Take

Research & Resources

Overview of Gout

Gout is a type of inflammatory arthritis that causes pain and swelling in your joints, usually as flares that last for a week or two, and then resolve. Gout flares often begin in your big toe or a lower limb. Gout happens when high levels of urate build up in your body over a long period of time, which can then form needle-shaped crystals in and around the joint. This leads to inflammation and arthritis of the joint. When the body makes too much urate, or removes too little, urate levels build up in the body. However, many people with high levels of serum urate will not develop gout.

Areas of the body that can be affected by gout include:

- Joints.
- Bursae, cushion-like sacs between bones and other soft tissues.
- Tendon sheaths, membranes that surround tendons.
- Kidneys, because the high uric acid levels can lead to stones.

Gout is a disease that can move through several stages:

 Hyperuricemia, when you have elevated levels of urate in your blood over a long period of time and even crystals in the joint, but you do not have symptoms.

- Gout flares, when you have periodic attacks of intense pain and swelling in your joints.
- Interval or intercritical gout, which is the time between gout attacks when you do not have any symptoms.
- Tophi, a late stage of gout when crystals build up in the skin or other areas of the body. Depending on their location, tophi can permanently damage your joints and other internal organs such as the kidneys. Proper treatment can prevent the development of tophi.

With early diagnosis, treatment, and lifestyle changes, gout is one of the most controllable forms of arthritis. Many people avoid gout flares and can decrease the severity of their symptoms, and can even become gout free.

Who Gets Gout?

Many people develop gout. It is more common in men than in women. Gout usually develops in middle age. Women usually do not develop gout before menopause, which is why women tend to develop the disease at a later age than men. Less frequently, younger people develop the disease; however, if they do, the disease tends to be more severe.

Symptoms of Gout

The most common symptom of gout is pain in the affected joint. Many people have their first flare of gout in one of their big toes, but it can also affect other joints in your body. Gout flares often start suddenly at night, and the intense pain may be bad enough to wake you up. In addition, your joint may feel swollen, red, and warm.

Gout flares usually occur in one joint and can be triggered by certain foods, alcohol, certain medications, physical trauma, or certain illnesses. Flares typically get better over a week or two, and in between, you usually don't have symptoms. Some people may have frequent flares, while others may not have another flare for years. However, over time, if left untreated, your flares may happen more often and last longer.

If gout is untreated over long periods of time, tophi can develop. A tophus is the buildup of needle-shaped crystals that cause hard lumps to form under the skin, in and around the joints and other organs. Tophi start out as painless; however, over time, they can

become painful and can cause bone and soft tissue damage and misshapen joints.

Some people with gout may be more likely to have or develop other conditions or complications, especially with the heart and kidneys. Common conditions include:

- Hypertension (high blood pressure).
- Chronic kidney disease.
- Obesity.
- Diabetes.
- Nephrolithiasis (kidney stones).
- Myocardial Infarction (heart attack).
- Congestive heart failure.

Cause of Gout

Gout happens when urate, a substance in your body, builds up and forms needle-shaped crystals in your joints. This leads to pain, swelling, redness, and changes in the movement and use of the affected joint. However, not everyone with high urate levels develops gout.

Urate comes from purines, which are found in your body's tissues and many foods. When purines break down, they become urate. Normally, urate passes out of your body in urine. However, when too much is made or too little is removed, urate builds up in your blood and needle-shaped crystals form in your joints, causing inflammation that is experienced as gout flares that cause pain and swelling.

Researchers continue to study how genes and environmental factors contribute to a buildup of urate in your blood. However, certain factors may increase your chances of developing gout, including:

- Having high urate levels.
- Having a family history of gout.
- Being male.
- Having menopause.

- Increasing age.
- Drinking alcohol.
- Drinking sugar-sweetened beverages, such as soda.
- Having an unhealthy diet and eating foods that are rich in purines (usually from animal sources), a substance that breaks down into urate.

Some health conditions may increase your risk of developing gout, such as:

- Overweight or obesity.
- Metabolic syndrome, a name for a group of conditions that include high blood pressure, high blood sugar, abnormal cholesterol levels, and excess body fat around the waist.
- Chronic kidney disease, a condition that develops when your kidneys are damaged and cannot filter blood the way they should.
- High blood pressure.
- Conditions that cause your cells to turn over rapidly, such as psoriasis or some cancers.
- Rare genetic conditions (Kelley-Seegmiller syndrome or Lesch-Nyhan syndrome) that lead to increased urate.

Some medications can increase your risk of developing gout, such as:

- Diuretics, which help your body eliminate excess fluid.
- Low-dose aspirin.
- Niacin, a vitamin, when taken in large amounts.
- Cyclosporine, which is an immunosuppressant for people who have organ transplants and is approved to treat some autoimmune diseases.