

## Gout

### What is gout?

Gout is a disease usually caused by having too much uric acid in your body. This excess of uric acid may not cause symptoms for years, but after a time it usually causes painful joint inflammation (arthritis). The most common site of this painful inflammation is the joint between the foot and the big toe. Later attacks often affect other joints of the foot and leg. Less often, the arms and hands area affected.



In addition to the arthritis, gout causes the formation of tophi. Tophi are lumpy deposits of uric acid crystals just under the skin. Common places for tophi to develop are in the outer edge of the ear, on or near the elbow, over the fingers and toes, and around the Achilles tendon in the ankle.

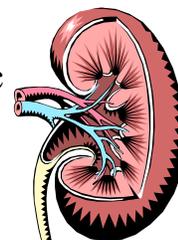


Gout can also cause kidney stones made of uric acid.

Although most people who have gout are middle-aged men, it can occur at any age. Only 5% of cases of gout occur in women, most often after menopause.

### How does it occur?

Gout usually occurs because too much uric acid is in your joints. This may happen when your kidney does not eliminate enough uric acid from your body or when your body produces too much uric acid. People who have recently had a serious illness or surgery have an increased chance of having an attack of gout. Some people have gouty arthritis even though they have normal uric acid levels.



You may have an inherited tendency to produce too much uric acid. Overproduction of uric acid may also happen if you have a disease such as cancer and certain types of red blood cell disorders. A diet high in alcoholic



drinks and purine-rich foods can also cause your body to produce too much uric acid.

Most cases of gout are caused by poor elimination of uric acid by the kidneys, but it can be hard to know why it is happening. The specific problem with the kidney is usually never found.

Certain conditions, such as dehydration, can cause excess levels of uric acid. Diuretics (a type of medication sometimes called water pills) can increase levels of uric acid. Other medications can also affect the level of uric acid in the blood. It is important to make sure your health care provider knows all the medications you are using, both prescription and nonprescription.

### **What are the symptoms?**

Some people have high uric acid blood levels for years and never have any symptoms. Only 10% to 20% of people with high levels of uric acid develop the symptoms of sudden, severely painful arthritis, especially of just one joint at a time, with redness and swelling. The arthritis usually occurs before tophi or kidney stones develop. These sudden attacks are sometimes related to physical illness, trauma, or excessive alcohol use.

The tophi do not cause any symptoms unless they open and drain. They are often not painful. Depending on their location, they may limit the movement of joints. The symptoms of uric acid stones are like those of other kidney stones. They can cause severe abdominal pain and sometimes nausea, vomiting, fever, or blood in the urine.

### **How is it diagnosed?**

Your health care provider will suspect that you have gout if:

Your first toe joint is inflamed.

The level of uric acid in your blood is high.

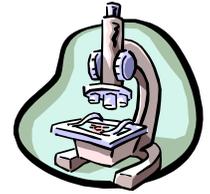
The arthritis responds to the drug colchicine. (Colchicine, an anti-inflammatory drug, is effective only in gouty-type arthritis.)



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To confirm the diagnosis, your health care provider may take a sample of fluid from the affected joint or joints and send it to the lab for examination. If you have uric acid crystals in the fluid, you have gout.



## What is the treatment?

If you have symptoms of gout, the goals of treatment are:

Treat the gouty arthritis or kidney stones.

Try to prevent the recurrence of these problems by controlling the uric acid levels.

Prevent serious complications such as kidney damage.

Treatment of the arthritis initially involves the use of anti-inflammatory medications, such as colchicine or indomethacin. Sometimes a corticosteroid drug, such as prednisone, is used. These medications are sometimes used on a daily basis to prevent recurrent attacks of gouty arthritis.



If the gouty arthritis becomes chronic (frequently recurring), allopurinol and probenecid may be used to prevent damaging deposits of uric acid in the joints. Usually, if you have high uric acid levels but no symptoms, you will not need treatment. In special cases (for example, if you have a strong family history of gouty arthritis or kidney stones) you may be treated for gout even though you do not have any symptoms.

## What can be done to prevent gout?

There is no sure way to prevent gout. However, you can take these steps to lessen the chance that you will have high uric acid levels:

Eat a diet low in purines and do not overindulge in alcohol. Purine-containing foods include organ meats (such as sweetbreads, liver, and kidney), shrimp, anchovies, sardines, and dried legumes.

Drink lots of fluids.



Developed by McKesson Clinical Reference Systems.

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