

Gout

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Overview

You wake up in the middle of the night, and your big toe feels as if it's on fire. It's hot, swollen and so tender that the weight of the blanket on it is nearly intolerable.

If so, you might be experiencing an acute attack of gout — or gouty arthritis — a form of arthritis that's characterized by sudden, severe attacks of pain, redness and tenderness in joints.

Gout has been recognized for more than 2,000 years, making it one of humankind's oldest known diseases. In the past, gout was often known as "the disease of kings" because it was associated with wealthy men who overindulged in rich food and drink. Today, it's known that gout is a complex disorder that can affect anyone. In fact, it's a painful problem for more than 2 million Americans.

It's true that men are more likely to get gout than women are, but women become increasingly susceptible to it after menopause. Fortunately, gout is treatable, and there are ways to keep it from recurring.

Signs and symptoms

The symptoms of gout are almost always acute, occurring suddenly — often at night — and without warning. They include:

Intense joint pain. Gout usually affects the large joint of your big toe but can occur in your feet, ankles, knees, hands and wrists. The pain typically lasts five to 10 days and then stops. The discomfort subsides gradually over one to two weeks, leaving the joint apparently normal and pain-free.

Inflammation and redness. The affected joint or joints become swollen, tender and red.

Causes

The cause of gout is an excessive blood level of uric acid, a waste product formed from the breakdown of purines. These are substances found naturally in your body as well as in certain foods, especially organ meats — such as liver, brains, kidney and sweetbreads — and anchovies, herring and mackerel. Smaller amounts of purines are found in all meats, fish and poultry.

Normally, uric acid dissolves in your blood and passes through your kidneys into your urine. But sometimes your body either produces too much or excretes too little of this acid. In that case, uric acid can build up, forming sharp, needle-like crystals in a joint or surrounding tissue that cause pain, inflammation and swelling.

Crystal deposits also cause another condition, known as false gout (pseudogout). But rather than being composed of uric acid, pseudogout crystals are made of calcium pyrophosphate dihydrate. And while pseudogout can affect the big toe, it's more likely to attack large joints such as your knees, wrists and ankles.

Risk factors

The following conditions or circumstances can increase the chances you'll develop high levels of uric acid that may lead to gout:

Lifestyle factors. Excess consumption of alcohol, especially beer, is the most common lifestyle factor that increases the risk of gout. Excess alcohol generally means more than two drinks a day for men and more than one for women. Weighing 30 pounds or more than your ideal weight also increases your risk.

Medical conditions and medications. Certain diseases and medications make it more likely that you'll develop gout. These include untreated high blood pressure (hypertension) and chronic conditions such as diabetes, high levels of fat and cholesterol in the blood (hyperlipidemia) and narrowing of the arteries (arteriosclerosis). Surgery, sudden or severe illness or injury, and

immobility due to bed rest also can increase uric acid levels. So can the use of thiazide diuretics — used to treat hypertension — and low-dose aspirin as well as anti-rejection drugs prescribed for people who have undergone a transplant. In addition, chemotherapy treatments for cancer may increase the breakdown of abnormal cells, releasing large amounts of purines into the blood.

Genetics. One out of four people with gout has a family history of the condition.

Age and sex. Gout occurs more often in men than it does in women, primarily because women tend to have lower uric acid levels than men do. After menopause, however, women's uric acid levels approach that of men. Men also are more likely to develop gout earlier — usually between the ages of 30 and 50 — whereas women generally develop symptoms after age 50.

When to seek medical advice

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 could be a sign of infection.

Screening and diagnosis

To help diagnose gout, your doctor may withdraw fluid from the affected joint to check for crystals of uric acid in your white blood cells. Other tests may include:

Urine test. You may have a urine test to measure the amount of uric acid you're excreting.

Blood test. Your doctor may have you undergo a blood test to measure the uric acid level in your blood.

Complications

Some people with gout develop a chronic form of arthritis, often with discolored deposits under the skin called tophi. A small number of people with gout develop kidney stones.

Treatment

For gout attacks, nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil, Motrin, others) may provide relief. Keep in mind that these medications can cause side effects, including stomach pain, bleeding and ulcers. What's more, NSAIDs have a ceiling effect — a limit as to how much pain they can control. This means that beyond a certain dosage, they don't provide additional benefits.

For severe cases, your doctor may prescribe a corticosteroid drug such as prednisone. Although steroids can provide dramatic relief, they can also cause serious side effects, including thinning bones, poor wound healing and decreased ability to fight infection. Sometimes doctors inject cortisone into the affected joint, but this approach can still cause side effects, and shots are generally limited to no more than three a year.

Once the acute attack is under control, your doctor may recommend preventive treatment to slow the rate at which your body produces uric acid or to increase the rate at which it's excreted.

Prevention

There's no sure way to prevent initial or subsequent attacks of gout, but if you already have gout, your doctor may prescribe certain drugs to reduce the risk or lessen the severity of future episodes. These drugs include allopurinol (Zyloprim, Aloprim) and probenecid (Benemid). Taken daily, they slow the rate at which uric acid is produced and speed its elimination from your body. In general, keeping uric acid levels within a normal range is the long-term key to preventing gout.

Self-care

Lifestyle changes can't cure gout, but the following measures may help relieve symptoms:

Maintain a healthy weight. Gradual weight loss will lessen the load on affected weight-bearing joints. Losing weight may also decrease uric acid levels. Avoid fasting or rapid weight loss because doing so may temporarily raise uric acid levels.

Avoid excessive amounts of animal protein. Although medications have decreased the need for severe dietary restrictions in people with gout, some dietary changes can help lessen the severity of gout attacks. They may also serve as an alternative treatment for those who have problems with gout medications. Most experts advise eating no more than 6 ounces of lean meat, poultry or fish a day for nearly everyone — especially people who have gout, because high-protein foods increase the blood level of uric acid. Organ meats (liver, brains, kidney and sweetbreads), anchovies, herring and mackerel are particularly high in purines.

Limit or avoid alcohol. Consuming too much alcohol can inhibit the excretion of uric acid, which in turn can lead to gout. Limit alcohol to no more than two drinks a day if you're a man and one drink a day if you're a woman or over age 65. If you're having a gout attack, it's best to avoid alcohol completely.

Drink plenty of liquids. Fluids help dilute uric acid in your blood and urine.

The above article is written by expertice from Mayo Clinic

