

GOUT:

An Ancient Disease with Modern Solutions

By Douglas Marks, MD



Gout is a form of inflammatory arthritis caused by the body's response to urate deposition in joints. This disease has been with mankind since the earliest recordings. The first good description came from Hippocrates, although early descriptions exist from the time of Babylon. Also, some of the most primitive human skeletal remains have shown evidence of gout. Despite this disease's long history, the first effective therapies were not discovered until the mid-20th century.

Gout arises when uric acid, a waste product of metabolism excreted by the kidneys, accumulates in excessive amounts in the body. When the concentration becomes high enough, either through too much dietary intake of the precursors of uric acid (purines) or kidney insufficiency, needle-shaped urate crystals form which can deposit in joints. The body views these crystals as foreign, and its response is to activate the immune system. This causes inflammation at the involved sites.

The symptoms of gout are extreme pain, swelling, redness, and warmth of one or multiple joints. Gout can occur in any part of the body but is commonly in the foot as crystals are more likely to form in colder parts of the body. The pain from gout flares can be severe, and patients classically describe that even a bed sheet resting lightly on an inflamed toe can be excruciating. If untreated, flares typically become more frequent over time and can lead to chronic pain, destruction of bone and joints, and formation of subcutaneous nodules formed by uric acid crystals.

In ancient times gout was often called "The Disease of Kings," since it was more often seen in nobles who dined on richer foods and had higher rates of obesity. Currently, gout afflicts more than 3 millions people in the United States. It is more common in men, postmenopausal women, and in patient's with kidney impairment. Risk factors for gout include obesity and high alcohol intake.

The diagnosis of gout is at times difficult. The disease is first suspected when patients develop flares of intensely painful and swollen joints with asymptomatic periods. Gout patients also have high uric acid levels. Confirming the diagnosis requires verification of the presence of the appropriate crystals. This is done by taking

fluid from an actively symptomatic joint. The fluid is then analyzed.

Management of gout should be directed by an experienced physician who can tailor therapy to meet the needs of each individual patient. Lifestyle modification by avoiding certain foods (such as high-fructose drinks, meats, shellfish) and alcohol (particularly beer), staying well hydrated, and keeping body weight in ideal range is important. There are many strategies to treating an acute gout flare, including nonsteroidal anti-inflammatory drugs (NSAIDs), colchicine, and corticosteroids (either oral, intramuscular, or injected into the involved joint). There are newer agents available for severe flares, including anakinra (Kineret), a medication that blocks an important particle in the inflammation caused by gout. Long-term management of patients with recurrent gout flares or other complications from the disease requires medications to lower uric acid. For patient's with severe gout not responsive to other treatments, a newly introduced IV medication can be very effective. However, all of these medications have potential serious side effects and should not be used in patients with particular medical conditions or while taking certain medications. Therefore, your doctor must take a thorough medical history, know all of the medications and supplements you are taking, and with some of these medications will need to monitor lab values over time to make sure that adverse effects from these medications are not occurring.

In summary, gout is an ancient disease that can be disabling if not treated early in its course with the appropriate therapies. However, this disease can be brought under control in most patients with today's modern therapy. If you are having symptoms concerning for gout you should be evaluated by your primary care doctor, who may refer you to a rheumatologist who is the specialist trained to manage this condition.

For more information, call 625-1655. 

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