Managing your gout: simple steps to long-term control

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This handout provides some information about gout and its treatment.

Gout is a type of arthritis that causes attacks of painful swelling in one or more joints. It is very common and can be fully controlled by medication. Men are more commonly affected than women, and the first attack can occur even before 30 years of age.

What causes gout?

Gout occurs as a result of the formation of crystals of monosodium urate in and around joints. The crystals form very slowly (over months) without causing pain or any other symptoms. They form in some but not all people who have a higher than normal amount of urate (uric acid) in their blood. For most people with a high level of urate in their blood, the main reason is that their kidneys, despite otherwise working well, are less effective at moving urate from the blood into the urine; this is mainly determined by inheritance. Obesity, alcohol excess and other dietary factors also play a role in determining the blood urate level.

Figure. Gout at the base of the big toe of the right foot.

Acute attacks of gout

A flare of gout typically starts abruptly, usually in the big toe, foot or ankle, and within 24 hours is so painful that walking is almost impossible. The joint usually becomes red, swollen and warm.

The flare is caused by the body's defence system 'attacking' the urate crystals in the joint. The attack does not get rid of the crystals but the inflammation it causes is painful. Treatment is aimed at suppressing this inflammation.

Other diseases, including bacterial infection, can mimic gout. It is therefore important that the diagnosis of gout is confirmed (and other possibilities excluded), preferably by examination of a small sample of joint fluid under the microscope.

Dealing with an acute attack

Treatment of a flare of gout is by medication, usually taken by mouth but sometimes by injection. Nonsteroidal anti-inflammatory drugs (NSAIDs), cortisone-type drugs or colchicine can be used, and the best choice depends on your other health issues (such as high blood pressure, kidney problems or diabetes).

Ongoing management of gout

Without treatment, gout progressively gets worse over the years. More frequent and longer flares, more days off work, permanent joint damage and disfigured feet and hands are all part of the expected outcome.

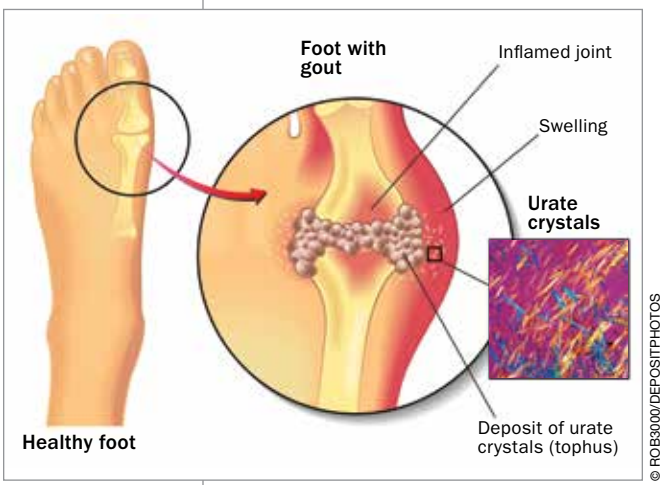
Treatment targets

To prevent the problems gout causes, further crystal formation must be prevented and the existing crystals must be dissolved. This will occur if the amount of urate in the blood is kept below the 'target' level.

The blood (serum) target urate level depends on how many crystals have already formed in your body.

- If no lumps of crystals (tophi) are present, the target is a blood urate level below 0.36 mmol/L
- If lumps of crystals (tophi) are present, the target is a blood urate level below 0.30 mmol/L.

You will need regular blood tests to determine if treatment has reduced the amount of urate in your blood to your target level and then to check that the level is remaining at target.



Unfortunately, changes in diet are rarely enough to reduce the urate amount to the target level. Medication by mouth is required, and needs to be continued lifelong, or the crystals will form again. You should, however, aim to have a healthy lifestyle, including maintaining a healthy body weight and only drinking alcohol in moderation.

Medications

Allopurinol is the usual medication used to lower urate levels, and for most people is well tolerated and safe. A small dose (usually 100 mg daily) is used initially and the dose is increased gradually until the urate concentration is below the target level. A dose of 600 mg or more daily is often needed.

A few people are allergic to allopurinol, and will develop a rash, usually within the first six weeks of taking it. If you develop a rash when taking allopurinol, you must stop taking it immediately and notify your doctor.

For people who do not tolerate allopurinol, several other drug options are available, including febuxostat and probenecid.

Whichever drug is used, even after reaching target, there is a risk of flares of gout until the crystals have dissolved. The time taken for the crystals to dissolve depends on the quantity present, but is always months to years. In the first six months of therapy, another medication (usually a low dose of colchicine) is used to reduce the risk of flares. MT

Gout is curable but requires lifelong medication. Know your target blood urate level, keep your level below it and you are on your way to being cured!