

Gout

Information from the Department of Rheumatology, Middlemore Hospital, Otahuhu, Auckland

Gout is one of the most common forms of arthritis (joint inflammation). It appears as an acute attack often coming on overnight. Within 12-24 hours there is severe pain and swelling in the affected joint. The skin over the joint may be red and shiny.

Gout usually affects only one or two joints at a time - most often the feet and ankles. The ball of the big toe is the commonest site. Without treatment the attack subsides in a week or so and when patients first develop gout there may be intervals of many months or even years between attacks. As time goes by, these tend to become more frequent and more severe and eventually many joints may be involved, sometimes all at the same time. At this stage a state of chronic or continuous joint disease may develop with progressive joint damage, disability and crippling (chronic gout). Gout affects mostly men and is very rare in women until after the menopause when it is quite often seen. Gout is very common in New Zealand and it is particularly common in Maori and Pacific peoples. Some surveys have shown it to be present in up to 10% of adult Maori males.

What causes Gout?

Uric acid is a chemical which is part of the normal breaking down and building up of food and body tissues. The level in the blood can be measured and shows how much there is in the body overall. The condition of raised blood uric acid is called hyperuricaemia. When this is present the uric acid which is normally dissolved in the blood may, from time to time, form microscopic crystals in the joint. These crystals set up the painful inflammation which is called acute gouty arthritis or acute gout.

Therefore gout often develops in persons whose uric acid is higher than normal. There are many causes of this. The following are some of the more common causes:

- Overnutrition, that is, being overweight for your height.
- High alcohol intake.
- High intake of food containing purines (see below).
- Some of the drugs used to treat high blood pressure, for example diuretics (water tablets) such as frusemide.
- Long term low-dose aspirin intake.
- Less commonly, longstanding kidney disease may result in high blood levels of uric acid. This can occur in people with poorly controlled diabetes.
- High levels of uric acid can also be part of the genetic (inherited) make-up of some families. For example, some of your family may also have pain caused by gout.

Dietary treatment of Gout

The first step wherever possible must be to correct those factors mentioned above which give rise to high uric acid levels. Purines are substances found in food, which, when broken down produce a lot of uric acid. You should try to eat or drink very little of the following foods which are high in purines:

- Shellfish such as pauas, pipis, mussels, oysters and sea eggs.
- Excessive amounts of red meat.
- Offal foods such as liver, kidneys, tripe, sweetbreads and tongue.
- Peas, lentils and beans.
- Alcohol, especially beer and wine. Two glasses of beer a day or less is sensible.

In addition, weight loss may be very important, as if you are overweight you are much more likely to have a high uric acid and gout, and have difficulty controlling the number of attacks. Eating less fatty food will help you lose weight. Avoid eating large meals or going for many hours without eating. Small meals eaten at regular times are best. Also remember to drink plenty of fluids, at least 8 glasses per day if possible. Regular exercise, such as a brisk walk for 30 minutes five times a week, will reduce your weight, and have other good effects on your heart, blood pressure, and blood sugar levels.

Treating the Acute Attack

One or other of the non steroidal anti-inflammatory drugs (NSAIDs) such as Diclofenac (Voltaren) or Naproxen (Naprosyn) can be very effective. To gain the best results the drug should be taken as soon as possible at the first sign of an attack, and continued until the pain and swelling go down. Hence medical advice must be sought early. With effective treatment the attack may be controlled within 12-24 hours and treatment need not be continued after a few days. If you are unable to take NSAIDs, medication such as colchicine or prednisone can help reduce the pain of gout. Rest and elevation of the part involved and drinking 4 or 5 extra glasses of water a day is also important.

Complications of Gout

Where high uric acid levels have been present for a long time and acute gout has been frequent and severe, deposits of uric acid salts may appear around the affected joint and even in tissues elsewhere such as the ears. These are seen as chalk coloured nodules called tophi. Uric acid deposits can also cause arthritic damage to the joints seen on Xray. Their presence indicates the need for treatment with one or other of the long term uric acid lowering drugs such as Allopurinol.

Your doctor may also ask you if you have ever had kidney stones, which may also be caused by having a raised uric acid level, and cause kidney problems. These can be successfully treated with Allopurinol.

High uric acid levels and recurrent gout are often associated with high blood pressure, which your doctor will check and treat as necessary. This combination of hyperuricaemia and high blood pressure can lead to kidney damage so it is all the more important, not just because of the effects on the joints, to correct this state of affairs through the proper use of all the measures mentioned in this pamphlet.

How to Lower Raised Uric Acid (Hyperuricaemia)

If in spite of all the measures above the uric acid remains high and attacks continue or become more frequent, drugs can be used which lower the uric acid level in the blood. The most common is Allopurinol (also known as Zyloprim, Prologout or Allorin) which stops uric acid forming. This medicine must be taken long term, often for years, to lower your uric acid into the normal range, and keep it there. Once this occurs, further attacks of gout will be prevented, as long as the drug is continued. Do not stop the medication even when your painful gouty attacks stop, because the uric acid level could well rise again and damage your joints and possibly your kidneys. If you do take the tablets regularly, you can eat more of the foods you enjoy, and drink alcohol again in moderation.

It is also very important when beginning such drugs to realise that for the first few months of treatment, gouty attacks may become more frequent. This can be controlled by taking one or two tablets a day of an additional drug (such as Colchicine) for several months at least and if any acute attacks do appear they must be treated in the usual way and the long term-medicines continued. It will be worth it.

Remember - Gout won't go away unless you take your medications regularly

- Ask your doctor what your uric acid level is; it should be less than 0.36

You Can Help Yourself Get Rid of the Pain

If you are careful you can avoid having more bad attacks of this very painful condition. Here are a few tips to help you control your gout:

- If you need uric acid lowering treatment with Allopurinol, make sure to take your tablets every day. If you think they make you feel worse talk to the doctor about changing the tablets but don't stop taking them without medical advice.
- Try to keep your weight down - you can ask your doctor or health worker to give you good advice about diets that will help you do this.
- Try to cut down or avoid the foods mentioned above which make your gout much more painful - shellfish, red meats, peas and beans, and alcohol (beer and wine).

Modified from the NZ Arthritis Foundation/NZRA pamphlet (P Gow February 2002)