

All about gout and treatments

Gout is a type of arthritis. It results from an excess of uric acid in the blood and tissues of the body, which if present for long enough, can form into needle-like crystals which can inflame your joints and cause severe pain and swelling. If you have gout, it is important to get the right treatment to relieve your suffering as quickly as possible. You will then be able to get on with your everyday life and reduce the likelihood of suffering further painful attacks

How long does a gout attack normally last?

Untreated, a sudden attack usually lasts for one or two weeks. If you have had several untreated attacks, further attacks are likely to last even longer.

What should you do if you think you have gout?

Visit your GP as soon as possible. Your doctor will be able to check whether you have gout (details of symptoms can be found in our booklet *All About Gout*), and, if so, prescribe the drug that is most appropriate for yourself for the relief of pain and swelling. He or she will also be able to give you advice and information about gout. If necessary, lifestyle changes may be recommended, and the doctor will assess whether any other treatment is subsequently required to help prevent further attacks. In certain circumstances your GP may feel it necessary to refer you to a specialist / rheumatologist for additional investigations or treatment.

What are the main medical treatments available?

Medicines to relieve pain and swelling

NSAIDs

- Sudden (acute) attacks of gout are usually treated with non-steroidal anti-inflammatory drugs (NSAIDs). NSAIDs such as diclofenac, naproxen, indomethacin or ibuprofen relieve pain and help to reduce the redness and swelling. They are usually very effective and do not contain steroids. They can, however, sometimes give rise to headaches, dizziness or dyspepsia and more rarely can cause stomach ulcers, bleeding and rashes. They can also aggravate asthma, heart and kidney failure and raise blood pressure.
- Newer NSAIDs called COX-2 selective inhibitors ('coxibs') are less likely to cause stomach upsets or gastric bleeding, and are therefore sometimes recommended for patients who are at higher risk of suffering an ulcer or bleed, but neither non-selective NSAIDs or coxibs should be taken by people with an active stomach ulcer or with bleeding in the stomach or intestines. Coxibs should be avoided in people with a history of heart problems such as heart attack, heart failure, angina or bypass surgery and all NSAIDs should be used with great care in patients with hypertension, heart and kidney disease. Only one coxib (etoricoxib) is currently approved for treating gout, but it should be avoided in people with high blood pressure which has not been adequately controlled.
- Although it is an NSAID, aspirin is not recommended for gout as it can actually increase the level of uric acid in your blood. Low doses of aspirin (75mg daily), when prescribed for the prevention of heart attacks, should not increase your uric acid levels significantly, and should be continued.

- Some NSAIDs (such as ibuprofen) are also available without a prescription from pharmacies and supermarkets. Always tell your doctor if you are taking other medicines as taking too high a dose of NSAIDs can be dangerous.
- If an NSAID or coxib has been prescribed, treatment should be started as soon as possible after the start of your gout attack and the drug should be continued for a couple of days after symptoms have resolved.

Colchicine

- Colchicine is another medicine which can be used to treat acute attacks of gout. This is a long established remedy made from a plant known as meadow saffron (the autumn crocus). It can be effective, but tends to be used less often than NSAIDs as it can make you feel very sick or give you diarrhoea. Your doctor may prescribe an initial dose of two tablets to be followed by one tablet 3 or 4 times daily until your gout attack settles or diarrhoea becomes troublesome. The risk of developing diarrhoea is reduced when the dose of colchicine is restricted to one tablet every 6–8 hours. As diarrhoea is a very unpleasant and unwelcome addition to acute gout, many people prefer to take colchicine only 3 or 4 times daily, even if it takes a little longer to be effective.

Steroids

- If an acute attack of gout does not settle with NSAIDs or colchicine, or if stomach problems or kidney disease rule out the use of these drugs, your doctor may prescribe a corticosteroid (cortisone-like) drug. This could be in the form of an injection into the affected joint or a 5–7 day course of oral steroids, usually prednisolone. Side effects with such a short course are usually limited to some minor insomnia but long term treatment with corticosteroids should be avoided as it can result in weight gain, fluid retention, high blood pressure and diabetes, as well as osteoporosis and wasting of the skin and muscles. Corticosteroids such as prednisolone are different from, and should not be confused with, the anabolic steroids that are sometimes misused by athletes to build up muscle bulk and strength.

Medicines to help prevent further attacks

- If you have repeated, very painful attacks of gout, and the blood uric acid level remains raised, you are likely to be prescribed a drug which will lower the level of uric acid in your blood. These have to be taken continuously every day after your attack of gout has settled. The doctor will adjust the dose of drug to maintain the blood uric acid level at about 5–6mg/dl (0.30–0.36 mmol/l). These preventive medicines can either reduce the production of uric acid in the body or increase its removal from the body through the kidneys in your urine.

Drugs that reduce urate formation

- The drug most commonly prescribed to lower blood levels of uric acid, by reducing its formation, is allopurinol which is available under several brand names. Doctors frequently advise delaying the start of treatment for at least a week after the attack has settled because allopurinol and other uric acid lowering drugs may actually make a gout attack last longer, or trigger acute attacks ('flares' or 'breakthrough' attacks) in the early phase of treatment. To reduce the risk of such acute flares of gout it is good practice to prescribe a small

dose of colchicine (one tablet twice daily) or an NSAID, for a number of weeks after starting treatment with allopurinol, or other uric acid-lowering drugs. Allopurinol is usually started in a small dose of 100mg daily and this is then gradually increased as instructed by your doctor. Doses of more than 300mg a day are seldom prescribed although doses as high as 800 or 900mg daily are sometimes needed to lower the blood urate to optimal levels. However, people with poorly functioning kidneys, whatever the cause, should receive a reduced dose. Skin rashes are a troublesome complication in less than 5% of gout patients. Rarely, however, these can be serious and severe, so it is advisable to consult your GP if a rash develops.

- A recently developed drug, febuxostat, should become available by the end of 2009, for the treatment of patients with gout who are unable to tolerate allopurinol, or who have failed to respond adequately to optimal doses. It acts in a similar way to allopurinol, but appears to be more powerful at reducing uric acid levels, and may be more suitable for those with poor renal (kidney) function.

Uricosuric drugs

- These lower the level of uric acid in the blood and help you to rid the body of excess uric acid by increasing its removal by the kidneys. Sulphinpyrazone is the only uricosuric drug generally available in the UK at present. It is usually prescribed at an initial dose of 100–200mg daily, increasing as required to 600mg per day. It should always be taken with food. Heartburn and stomach problems are the most frequent side effects. Allergic rashes can occur and on rare occasions sulphinpyrazone can have serious effects on the bone marrow and blood.
- Sulphinpyrazone doesn't work well in people with reduced kidney function and it is best avoided by people who have had kidney stones. You should always drink lots of water when taking a uricosuric drug in order to avoid high concentrations of uric acid developing in your urine. High levels of uric acid in your urine can increase the likelihood of uric acid stones forming in your kidneys or bladder.
- Benzbromarone is a more powerful uricosuric drug which can sometimes be effective when allopurinol and sulphinpyrazone cannot be used. Unlike sulphinpyrazone it can be effective in people with moderately reduced kidney function. Benzbromarone is not available for general use in the UK but can be obtained by doctors for individual patients who need it. It is, however, sometimes associated with toxic effects on the liver.
- Vitamin C also has a mild uricosuric effect. Supplements of Vitamin C but not dietary Vitamin C alone have been shown to reduce the risk of developing gout in a study looking at men over a 20 year period. Those who had the highest vitamin C intake (both dietary and supplements) had the lowest risk of developing gout. Another study has demonstrated that Vitamin C 500mg daily lowers blood uric acid levels. In addition to ensuring that you have an adequate dietary intake of Vitamin C present evidence suggests that it could be helpful to supplement your diet with Vitamin C tablets (500–1500mg/day). If you do consider this, please make sure you discuss it with your GP as some prescription medicines can interact adversely with Vitamin C and higher doses can cause stomach upsets and diarrhoea. It is also important to understand that Vitamin C alone is not an adequate substitute for prescribed uric acid lowering drugs when these are indicated.

Will I be on treatment for the rest of my life?

Although it is generally recommended that uric acid lowering drugs should be continued for an indefinite period, changes in lifestyle such as gradual weight loss, reduction in the consumption of sugar-sweetened

soft drinks, beer, alcohol and foods with high purine content, may allow some people to avoid the need for lifelong treatment with uric acid lowering drugs. (See UK Gout Society's *All About Gout and Diet* Fact Sheet).

Are herbal remedies useful for gout?

Various herbal remedies have been claimed to have a beneficial effect on gout e.g. nettle leaves, devils claw and a medicine called quercetin made from plant extracts. However, medical evidence to support their use is extremely limited and the strength and purity of these products may vary. You should always consult your doctor before taking herbal medicines as they may interact with prescribed medicines that you are already taking. In addition it may be helpful to speak to a trained therapist in complementary medicine before experimenting with such remedies.

I cannot bear anything touching my gout. What should I do?

Resting the affected joint in an elevated position can be helpful. For those who find that they cannot even bear the weight of the bedclothes on the inflamed joint at night, an improvised 'bed cage' to hold the sheets away from the gouty joint can help. Duvets are generally better than blankets but sometimes it is best just to leave the inflamed joint exposed to the cool air. Some people find that an ice pack (or a packet of frozen vegetables) applied to the skin can also relieve pain to some extent, while others recommend putting their acutely painful foot in a very cold bath of water.

What else can I do to help myself?

Lifestyle changes including reducing your alcohol intake, gradual weight reduction and limiting protein and purine content in your diet (which increase uric acid levels in your blood) can go some way towards reducing the frequency or likelihood of having further attacks of gout. It is very important to avoid getting dehydrated and to avoid going without food for long periods, in addition to avoiding binges of eating and drinking. For more information on diet, see our *All About Gout and Diet* fact sheet by visiting www.ukgoutsociety.org

Remembering to take your allopurinol (or other uric acid lowering drug) regularly is very important. This is less likely to be at the top of your mind when you no longer have any symptoms. Knocks and even minor trauma to your joints may also trigger an attack of gout in gout sufferers, so try to avoid injuries.

Diuretics, particularly thiazide (water) drugs, which help to reduce fluid retention in people with heart problems, can also increase your chance of developing gout. Sometimes alternative treatments, which have less effect on the blood uric acid level, can be used for treating high blood pressure and heart failure. Discuss this possibility with your doctor but do not stop taking diuretics without medical advice.

For further information:

1. UK Gout Society. Web: www.ukgoutsociety.org
Email: info@ukgoutsociety.org
2. Arthritis Research Campaign. Web: www.arc.org.uk.
Email: info@arc.org.uk Tel: 0870 850 5000
3. British Society for Rheumatology and British Health Professionals in Rheumatology guideline for the management of gout. *Rheumatology* (Oxford). 2007;46(8):1372–4.



UK Gout Society