

GOUT – YOU CAN TAKE CONTROL

WHAT IS GOUT?

Gout is a type of arthritis that affects the joints.

It is caused by a build-up of a substance called urate in the body, with crystals forming in and around joints.** This causes inflammation, intense pain, redness and swelling. Gout attacks (flares) usually come on very quickly, often overnight. Gout commonly occurs in the big toe, but can occur in many other joints. Gout affects men more often than women.

**In relation to gout, the terms urate and uric acid are often used interchangeably.

WILL IT GO AWAY?

Without treatment, a gout flare usually lasts about 1 week.

Another flare may not happen for months or even years. However, if gout is not well managed, the time between flares may get shorter, the attacks more severe, and more joints may be affected.

Repeated gout flares can form swollen growths called tophi. Urate crystals and tophi can cause permanent damage to joints over time. High urate levels also increase the risk of kidney stones and other health conditions.

HOW IS GOUT DIAGNOSED?

A rheumatologist or GP can diagnose gout and make sure symptoms are not due to some other type of arthritis or an injury.

Diagnosis is based on symptoms, medical history and lifestyle, and laboratory tests.

- A blood test can measure urate levels (although high levels don't always cause gout).
- A needle can be used to withdraw fluid from the swollen joint. The fluid is then examined for the presence of urate crystals (and for bacteria to exclude infection).

CAN GOUT BE SUCCESSFULLY TREATED?

Absolutely, gout can be prevented!! There are 6 general principles for gout management:

1. Lifestyle modifications (including diet);
2. Treating gout flares;
3. Long term urate-lowering therapy;
4. Preventing a gout flare when starting urate-lowering therapy; and
5. Identifying and managing other conditions associated with gout.
6. Patient and healthcare provider education

The 1st and 5th points are discussed in turn below. Some people wrongly think that they only need to take medication during a flare.

LIFESTYLE MODIFICATIONS

It is important to understand the role of lifestyle modification on reducing your gout.

- Maintain a healthy weight. Avoid sudden weight loss by 'crash' dieting, which can actually increase urate levels and trigger a gout flare.
- Avoid excess alcohol intake (especially beer and spirits). Also, binge drinking can trigger gout.
- Consuming large amounts of fructose, a type of sugar, can increase urate levels in the blood. It is found in high levels in soft drinks, processed foods and fruit juices.

There is only limited evidence that avoiding the purine-rich foods listed above can successfully reduce gout attacks.

Not all purine-rich foods are thought to cause gout, and a number of vegetables (asparagus, mushrooms, cauliflower and spinach) are rich in purines but appear less likely to cause gout than diets containing meat and shellfish.

Low-fat dairy foods may lower urate levels and help manage gout.

GOUT AND DIET

There are many misconceptions about diet and gout.

For most people with gout, a healthy balanced diet is all that is needed, together with medicines to reduce urate levels.

However, several studies have shown that people with gout are more likely to eat certain foods. These foods contain high levels of substances called purines that can be made into urate in the body.

Purine-rich foods include:

- Meat – particularly red meat and offal, such as liver, kidneys and heart
- Seafood – particularly shellfish, scallops, mussels, herring, mackerel, sardines and anchovies
- Foods containing yeast – such as Vegemite and beer

TREATING GOUT FLARES

Acute gout flares can be managed by following a personal plan.

Each person with gout needs a unique treatment plan. A rheumatologist or GP can prescribe the right treatment for gout and help you manage it over time. Gout flares are usually treated with the following anti-inflammatory medications.

- A non-steroidal anti-inflammatory (NSAID) such as ibuprofen, naproxen, or indomethacin
- Colchicine
- Steroid injections or tablets

Visit your GP or specialist immediately if your gout flares become more severe, more frequent, or affect more joints.

LONG TERM URATE-LOWERING THERAPY

You can significantly reduce the frequency and severity of gout flares by taking medications that lower urate levels.

These medications help dissolve urate crystals and stop new crystals from forming. They can slow or stop progression of gout and joint damage.

There are 4 medications used for the long-term management of gout.

- Allopurinol
- Probenecid
- Febuxostat
- Lesinurad

These medication either reduce urate production or increase urate excretion in the urine. In both cases, they lower urate levels in the blood and help prevent urate crystals forming in the joints. Sometimes, more than one of these medications may be needed.

Your urate level can be checked with a blood test. For most people with gout, the target urate level you are aiming to achieve with treatment is:

- less than 0.36 mmol/L, or
- for some people with more severe gout, the target urate level will be less than 0.30 mmol/L.**

When you reach your urate target, ask your doctor to check your urate level every 6 months.

Do not stop this medication during a flare.

Do not reduce this medication after a flare

**mmol/L is just a way of expressing the level of urate in the blood

PREVENTING A GOUT FLARE WHEN STARTING URATE-LOWERING THERAPY

Sometimes a flare of gout can happen when starting urate-lowering therapy. This is not unexpected and does not mean that the therapy is failing.

Your doctor can minimise the risk of a flare happening by starting with a low dose of urate-lowering medication and slowly increasing the dose over time. Also, your doctor is likely to prescribe another medication that helps to reduce the risk of a gout flare when starting urate lowering therapy. This will be one of 3 anti-inflammatory medications:

- A non-steroidal anti-inflammatory (NSAID)
- Colchicine
- Steroid

These are the same medications used to treat an existing gout flare, but the dose for prevention may be different.

IDENTIFYING AND MANAGING OTHER CONDITIONS ASSOCIATED WITH GOUT

Conditions associated with gout include hypertension, diabetes, high cholesterol, kidney disease, and obesity.

Gout is associated with an increased risk of cardiovascular disease (such as heart disease), so assessing overall cardiovascular risk, is recommended.

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Bibliography/patient resources

1. Arthritis Information Sheet: Gout and Diet. Arthritis Australia and Australian Rheumatology Association 2017. Available at: https://arthritisaustralia.com.au/wordpress/wp-content/uploads/2018/02/ArthAus_GoutDiet_1805.pdf
2. Patient Fact Sheet: Gout. American College of Rheumatology 2019. Available at <https://www.rheumatology.org/Portals/0/Files/Gout-Fact-Sheet.pdf>
3. Arthritis Information Sheet: Gout. Arthritis Australia and Australian Rheumatology Association 2017. Available at: https://arthritisaustralia.com.au/wordpress/wp-content/uploads/2017/09/ArthAus_Gout_1705.pdf
4. Taking Control of Your Gout. Arthritis Australia 2019. Available at <https://arthritisaustralia.com.au/get-support/resources/booklets/>
5. Patient Education: Gout (The Basics). UpToDate.
6. Patient education: Gout (Beyond the Basics). UpToDate. Available at: <https://www.uptodate.com/contents/gout-beyond-the-basics>
7. Lifestyle modifications and other strategies to reduce the risk of gout flares and progression of gout. UpToDate.
8. Musculoskeletal Australia: Gout. Available at: <https://www.msk.org.au/wp-content/uploads/2020/02/Gout.pdf>