Gout is a common form of arthritis characterised by repeated attacks of extreme joint pain, swelling and redness.

The most commonly affected joint is the big toe, but gout can affect your feet, ankles and knees, elbows, wrists and fingers.

Cause
Gout occurs when uric acid, a normal waste product, builds up in your bloodstream and forms urate crystals in a joint.

Your body makes uric acid when it breaks down purines, a substance found in your body and in some foods.

Uric acid normally dissolves in your blood, is processed by your kidneys and leaves your body in urine.

If your body makes too much uric acid, or your kidneys can’t clear enough of it out, it builds up in your blood. This is called hyperuricaemia.

Having hyperuricaemia doesn’t mean you’ll develop gout - in fact most people with hyperuricaemia don’t go on to develop gout. Because of this it’s thought that other factors such as your genes may be involved.

Similar attacks to gout can be caused by a condition called pseudogout (or acute calcium pyrophosphate arthritis). In this case, crystals of calcium (rather than urate) are deposited in joint cartilage and then shed into the joint space. This is likely to affect your knees and other joints more than the big toe and is most common in people with osteoarthritis.

Risk factors
You’re more likely to have a gout attack if you:

- are male
- have a family history of gout
- have high levels of uric acid in your blood
- drink too much alcohol (especially beer)
- eat a diet high in purines such as meat, sweetbreads, offal, shellfish, and fructose
- are overweight
- use diuretics
- become dehydrated
- crash diet or fast.

Symptoms
An attack of gout usually happens suddenly, often overnight. Symptoms include:

- intense joint pain
- joint swelling
- skin over the joint may look red and shiny
- affected joint may be hot to touch
- tophi (lumps of crystals that form under the skin) may occur in people who have repeated attacks.
Diagnosis
Gout is diagnosed using a number of tests including:

- medical history
- physical examination
- blood test to measure urate levels - although this cannot confirm gout
- removing a sample of fluid from the joint; if you have gout, uric acid crystals can be seen under a microscope - this is the most definitive test for gout
- ultrasound scan can identify early crystal formation in the fluid between your joints.

Early diagnosis and treatment is very important. The main goal for everyday management of gout is to reduce the level of uric acid in your blood so it can’t form crystals in the tissues or joints and cause joint damage.

Treatment
The first step in treating your gout is getting the pain and inflammation under control. This may involve medication (e.g. anti-inflammatories, analgesics), cold packs on the swollen joint, and rest.

Once the painful attack is under control, your doctor may prescribe medications that lower the levels of uric acid in your blood. This will depend on things such as:

- how often you’re having gout attacks
- if you’ve developed tophi or kidney stones
- other health conditions you may have (e.g. kidney disease).

Self-management
During a gout attack, you can reduce pain and swelling by applying an ice pack to the painful joint for short periods of time, and protecting and resting the joint.

Other things you can do to prevent future attacks:

- take your medication as prescribed.
- maintain a healthy body weight. If you do need to lose weight, make sure your weight loss is gradual as crash diets can increase uric acid levels.
- drink alcohol in moderation and avoid binge drinking.
- avoid, or eat in moderation, foods that are high in purines. Talk with a dietitian for tips and advice.
- drink plenty of water and stay hydrated.
- exercise regularly – aim to complete at least 30 minutes of physical activity most days of the week.
- work closely with your doctor to prevent further attacks and actively manage your condition.

Where to get help
- Your doctor
- Your rheumatologist
- Dietitian
- Musculoskeletal Australia www.msk.org.au
  MSK Help Line: 1800 263 265

How we can help
Call our MSK Help Line and speak to our nurses.
Phone 1800 263 265 or email helpline@msk.org.au.

We can help you find out more about:
- gout and musculoskeletal conditions
- ways to live well with these conditions
- managing your pain
- upcoming webinars, seminars and other events.

More to explore
- Versus Arthritis UK www.versusarthritis.org
- Better Health Channel www.betterhealth.vic.gov.au

The whole or part of this material is copyright to the State of Victoria and the Better Health Channel. Reproduced with permission of the Victorian Minister for Health. Users are permitted to print copies for research, study or educational purposes.

This information has been produced in consultation with and approved by: Musculoskeletal Australia.

June 2018