



YOUR GUIDE TO GOUT

MUSCULOSKELETAL

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Introduction

Please take note of the following before starting any of the exercises in this guide:

- The information contained in this guide is intended to assist in managing your recovery.
- This guide is based on the latest medical research in the field and contains to the best of our knowledge, the best advice available.
- This guide is complimentary to other medical services and is not intended as a substitute for a health care provider's consultation. Never disregard medical advice or delay in seeking it because of something you have read in this guide.

● Many people have found quick and lasting relief from their pain by acting upon the information provided, but everyone decides for themselves what to do with this information. Should you doubt a particular exercise in your situation, please consult your health professional.

When consulting your health professional, it is wise to take this guide with you to show them.

What is gout?

Gout is a kind of arthritis (inflammation of a joint) that causes pain and swelling in a joint in the body. It usually occurs in one joint at a time.

It can affect any of the joints of the foot, ankle, knee, hand, wrist and elbow, but it most commonly occurs in the joint at the base of the big toe.

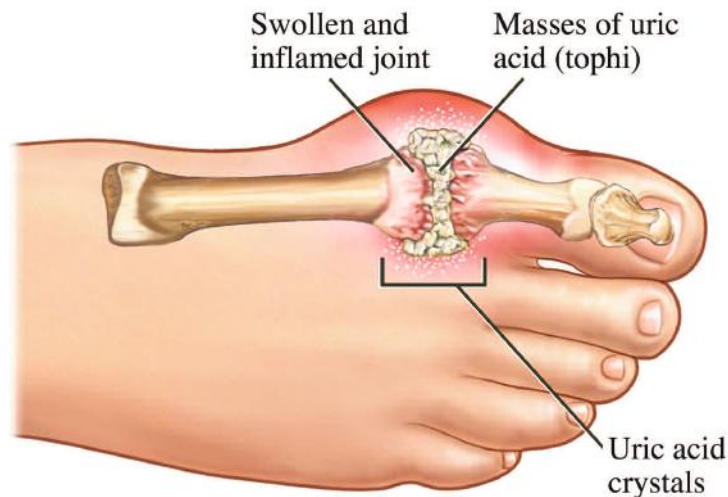
What causes gout?

Gout is caused by an excess of uric acid in the body. It develops either as a result of an over-production of uric acid or as a consequence of the body's inability to eliminate enough uric acid through the kidneys into the urine. Genetic metabolic disorders can cause an overproduction of uric acid, whilst genetic abnormality of the kidneys can impair their ability to rid the body of uric acid.

The body produces synovial fluid to

lubricate the joints. When there is an excess of uric acid, over time urate crystals form in the synovial fluid and accumulate around the joint. These crystals irritate the joint and surrounding tissue causing gout which manifests as pain and swelling.

When the body has a predisposition for the accumulation of uric acid the following are risk factors for the development of gout:



- The intake of certain foods such as organ meats (e.g. brain, liver, kidney), mushrooms, asparagus and various seafoods. These foods contain purines, which are substances found naturally in the body. When the body breaks down these purines, uric acid is released.
- The over-consumption of alcohol, especially beer, raises the uric acid levels in the body.
- The intake of fructose-sweetened soft drinks may also raise uric acid levels.
- Certain drugs e.g. diuretics, cyclosporine, niacin, certain cancer and tuberculosis medications as well as low-dose aspirin can elevate the uric acid levels.
- Medical conditions such as cancer of the white blood cells (leukaemia), high blood cholesterol (hyperlipidemia), narrowing of the arteries (arteriosclerosis), diabetes, high blood pressure (hypertension), obesity and others.
- Men are more likely to develop gout than women. However, after menopause women's uric acid levels increase.
- Recent major surgery.

What are the symptoms?

The symptoms of gout may include the following:

- A sudden, rapid onset of pain in the affected joint, often beginning at night. The pain is usually most severe within the first 12 to 24 hours after onset.
- The joint becomes inflamed, warm, swollen and is extremely sensitive to the touch.
- Severe gout is sometimes accompanied by a fever.
- The pain lasts from as little as a few hours, but may endure for between one and two weeks.
- A small percentage of people only ever experience one attack. However, others may experience repeated and more severe attacks over time, especially if it is left untreated. Subsequent attacks may also be of a longer duration and may affect more joints.

Complications

If gout is left untreated, urate crystal deposits may collect in urinary tract forming kidney stones and possibly damaging the kidney. Urate crystals may form nodules (called tophi) under

the skin. These are not painful, but may become swollen and inflamed during gout attacks. Recurrent gout attacks may precipitate joint damage.

Can gout be prevented?

Most of the risk factors for the development of gout are dietary. Consequently, adopting a correct diet will help prevent a recurrence of the condition.

Avoid purine-rich foods, drinking alcohol and fructose-sweetened soft drinks. **If you are overweight**, shed

those extra pounds slowly through exercise and a balanced diet. Drink plenty of fluids, especially water, to assist your kidneys to function effectively. **Also ensure that your GP is aware** of your susceptibility to gout so that drugs that elevate the uric acid levels are not prescribed.

What treatment can I receive?

There are two objectives in treating gout. The first step is to relieve the pain and inflammation and the second is to manage the condition by reducing the amount of urate in the blood so as to prevent further attacks. Treatment should begin as soon as possible after a gout attack occurs.

- **Nonsteroidal anti-inflammatory drugs** (NSAIDs) such as ibuprofen, naproxen and indomethacin are effective in relieving pain and inflammation. Possible side-effects of NSAIDs include bleeding, stomach ulcers, abdominal pain and anaphylactic shock. Aspirin must not be used as it increases the risk of bleeding in the stomach.

You should inform your doctor if you have a history of kidney disease, stomach ulcers, high blood pressure,

a heart condition or asthma, as taking NSAIDs may be harmful.

- **Colchicine** may be prescribed to relieve pain and inflammation if you are unable to take NSAIDs. Possible side-effects are diarrhoea, nausea and vomiting. Once the gout attack symptoms have been dealt with, low-dosage colchicine may also be used to prevent future gout attacks.
- **Corticosteroid tablets or injections** such as prednisone are an alternative to NSAIDs or colchicines. Injections are sometimes preferred for large joints such as the knee. Because of the serious side-effects of corticosteroids, they are prescribed in as low a dosage as possible and for a short period of time. Side-effects include thinning bones,

impaired wound healing ability and a decreased immunity to infection. Once the pain and inflammation have been resolved, in addition to low-dosage colchicines, other medication is necessary to prevent further gout attacks.

- **Medication to remove excess uric acid;** such as probenecid. This helps the kidneys to rid the body of excess uric acid by decreasing the uric acid levels in the blood. This is achieved by increasing the uric acid levels in your urine. Although rare, the use of this type of medication can lead to the formation of kidney stones. If you have a history of kidney stones, this medication should be avoided. Other less serious side-effects are a rash and/or stomach pain. In order to assist the uric acid to move swiftly through the urinary system you need to drink plenty of fluid. It is

advised that you drink a minimum of two litres per day, at least half of which should be water.

- **Medication to decrease the production of uric acid;** such as allopurinol. This decreases the blood uric acid levels by preventing the metabolic conversion from purines in foods to uric acid. This medication should be avoided if you have poor kidney function, as in rare instances it may cause liver damage. Other possible side-effects include a rash, headache, stomach pain or diarrhoea.

Gout can be effectively treated and controlled under the guidance of your GP who will monitor any side-effects and establish the most appropriate treatment for you.

What about exercise?

Because gout is caused by an excess of uric acid in the body, it cannot be rehabilitated through exercise. Nevertheless, being physically fit and maintaining a healthy weight through exercise can strengthen joints and help lubricate joints and connective tissues and is therefore beneficial. However, exercising an inflamed joint will simply

aggravate your condition. So only start an exercise programme once your gout has cleared.

There are no gout specific exercises, but a fitness programme that includes aerobic, strengthening and flexibility exercises will be of benefit.

REFERENCES

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Contact us

This guide is designed to assist you in the self-management of your injury/condition.

We are here to assist your recovery in the shortest but safest possible time. If you have any uncertainties or queries regarding the information, please do not hesitate to contact us on:

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