



Acute gout attacks

Yolanda Moroney, BSc (Pharm)

Introduction

Gout attacks are characterised by the sudden onset of severe pain, swelling, warmth and redness of a joint. These attacks often occur in the joint of the big toe. However, any joint may be involved. An acute gout attack usually reaches its peak 12–24 hours after onset and may last for 3–10 days. It is important to treat acute attacks effectively to prevent the condition from becoming chronic.

Causes

The inflammation and intense pain of a gout attack are caused by the accumulation of urate crystals in the affected joint. These crystals form when there are high levels of uric acid in the blood. Uric acid is produced when the body breaks down purines, which are substances which occur naturally in the body, and are also found in certain foods.

Usually uric acid dissolves in the blood and passes through the kidneys into the urine. Sometimes, either the body produces too much uric acid or too little uric acid is excreted by the kidneys. Uric acid levels build up and may be deposited in a joint, forming sharp, needle-like urate crystals which cause pain, inflammation and swelling.

Risk factors for gout

- Eating too much purine-rich food, including red meat, organ meats and seafood, and vegetables such as cauliflower, asparagus and beans.
- Drinking certain beverages, such as alcoholic beverages particularly beer, and drinks sweetened with fruit sugar.
- Certain medical conditions, such as untreated hypertension, diabetes, kidney and heart diseases, blood and metabolism disorders.

- Taking certain medications including thiazide diuretics and low-dose aspirin.
- Age – men of middle age and postmenopausal women are more likely to suffer from gout.
- A family history of gout.
- Obesity – being overweight causes the body to produce more uric acid, making elimination by the kidneys difficult.

Symptoms

Acute gout attacks occur suddenly, often at night. Symptoms are most severe for 12–24 hours but may last up to 10 days. There may be:

- **Intense joint pain**, most commonly in the big toe, but gout can occur in other joints, including the ankles, knees, elbows, wrists and fingers.
- **Inflammation and redness**, with the affected joint or joints becoming swollen, tender, and warm.

Symptoms do not occur between attacks. Repeated attacks of acute gout can cause permanent damage to the joints and later, attacks are likely to last longer and affect more joints. As the condition progresses, it may become difficult to move the affected joints normally. Effective treatment of acute gout attacks can reduce the risk of complications from gout.

Treatment

The aim of treatment for an acute attack of gout is to suppress the inflammation and control the pain. This can be achieved with nonsteroidal anti-inflammatory drugs (NSAIDs), colchicine, or corticosteroids.

NSAIDs usually provide pain relief within a few hours. Agents which are available over-the-counter (OTC) include ibuprofen, diclofenac, naproxen, and indomethacin. Therapy for the acute attack should be initiated in the upper dosage range at the first sign of the attack to reduce the severity and duration of the symptoms more effectively. Thereafter the dose should be reduced, and treatment discontinued when the symptoms resolve. Should NSAIDs be contraindicated such as in people with peptic ulcer disease, colchicine may be a useful alternative.

Colchicine is effective in the acute attack but gastro-intestinal side-effects are common. Lower doses of colchicine are better tolerated and may be used in combination with NSAIDs.

Corticosteroids may be considered for treating acute gout. This agent is available in tablet form for oral use, or in injectable form, and treatment should be initiated by a doctor.

Aspirin is unsuitable for analgesic use in the acute attack.

When recommending OTC treatment for an acute attack of gout, it is important to observe the recommendations of the manufacturer in respect of dosage, contra-indications and side-effects. Existing medical conditions and other medications should be borne in mind.

Points to note:

- If the patient is on chronic gout medication (e.g. allopurinol), this treatment should not be stopped when treating an acute attack.

Complications

The complications of gout include:

- Chronic gout.
- The development of tophi – these are hard lumps which form under the skin, and damage bone and cartilage. They may leave the joints permanently disfigured.
- The presence of gouty arthritis with damage to joints.
- The development of kidney stones, or the presence of renal impairment.

Prevention tips

- Increase fluid intake, especially water, and keep well hydrated.
- Limit the intake of alcohol and sweetened fluids.
- Limit the intake of purine-rich foods such as red meat, shellfish and organ meat.
- Eat low-fat dairy products and plenty of vegetables.
- Maintain a desirable body weight.
- Exercise and stop smoking.

See the doctor if:

- Sudden, intense pain occurs in a joint. Gout that goes untreated can lead to increased pain and joint damage.
- There is fever and the affected joint is hot and inflamed, since this can be a sign of infection.
- Conservative measures to treat the acute attack are not helpful, or the attacks become more frequent than once a year.

Conclusion

Acute gout attacks occur commonly and may be extremely painful. The symptoms of acute gout should be treated effectively before the condition becomes chronic or leads to other complications. This may be achieved by treatment with OTC agents such as NSAIDs or colchicine. The risk of an acute attack of gout may be reduced by observing appropriate lifestyle measures.

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