
GOUT

Gout is a common and complex form of arthritis that can affect anyone. It's characterized by sudden, severe attacks of pain, swelling, redness and tenderness in the joints, often the joint at the base of the big toe.

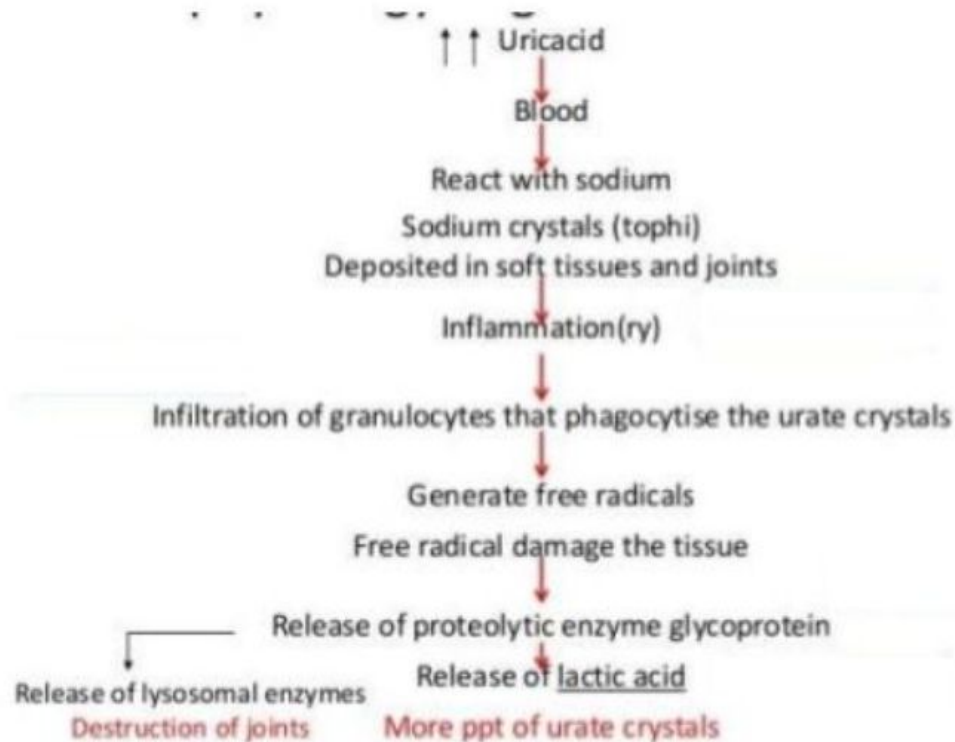


Causes

- Gout is caused initially by an excess of uric acid in the blood, or hyperuricemia.
- Uric acid is produced in the body during the breakdown of purines – chemical compounds that are found in high amounts in certain foods such as meat, poultry, and seafood.
- Normally, uric acid is dissolved in the blood and is excreted from the body in urine via the kidneys.
- If too much uric acid is produced, or not enough is excreted, it can build up and form needle-like crystals that trigger inflammation and pain in the joints and surrounding tissue.

Pathogenesis

An elevated serum urate level, together with local factors, can result in the deposition of urate crystals into the joints. Once crystals are deposited into a joint, they can be released into the joint space and initiate an inflammatory cascade causing acute gouty arthritis.



Signs and symptoms

Signs and symptoms of gout almost always occur suddenly, and often at night. They include:

- **Intense joint pain.** Gout usually affects the large joint of big toe, but it can occur in any joint. Other commonly affected joints include the ankles, knees, elbows, wrists and fingers. The pain is likely to be most severe within the first four to 12 hours after it begins.
- **Lingering discomfort.** After the most severe pain subsides, some joint discomfort may last from a few days to a few weeks. Later attacks are likely to last longer and affect more joints.
- **Inflammation and redness.** The affected joint or joints become swollen, tender, warm and red.
- **Limited range of motion.** As gout progresses, you may not be able to move joints normally.

Risk factors

There are a number of factors that can increase the likelihood of hyperuricemia, and therefore gout:

Age and gender: Men produce more uric acid than women, though women's levels of uric acid approach those of men after the menopause.

Genetics: A family history of gout increases the likelihood of the condition developing.

Lifestyle choices: Alcohol consumption interferes with the removal of uric acid from the body. Eating a high-purine diet also increases the amount of uric acid in the body.

Lead exposure: Chronic lead exposure has been linked to some cases of gout.

Medications: Certain medications can increase the levels of uric acid in the body; these include some diuretics and drugs containing salicylate.

Weight: Being overweight increases the risk of gout as there is more turnover of body tissue, which means more production of uric acid as a metabolic waste product. Higher levels of body fat also increase levels of systemic inflammation as fat cells produce pro-inflammatory cytokines.

Recent trauma or surgery: Increases risk.

Other health problems: Renal insufficiency and other kidney problems can reduce the body's ability to efficiently remove waste products, leading to elevated uric acid levels. Other conditions associated with gout include high blood pressure and diabetes.

Complications

In some cases, gout can develop into more serious conditions, such as:

- **Kidney stones:** If urate crystals collect in the urinary tract, they can become kidney stones.
- **Recurrent gout:** Some people only ever have one flare up; others may have regular recurrences, causing gradual damage to the joints and surrounding tissue.