

GOUT & PSEUDOGOUT

GOUT OVERVIEW?

Gout and pseudogout are a form of arthritis frequently seen by foot and ankle orthopaedic surgeons. Like other types of arthritis, it causes pain, swelling, and potential deformity in the joints as well as surrounding soft tissues. Gout develops in some people who chronically have a condition called "hyperuricemia," meaning high levels of a substance called urate (also known as uric acid) in the blood. Urate can form crystals that build up in different parts of the body causing symptoms. Gout is different from another disease called calcium pyrophosphate crystal deposition (CPPD) disease (formerly called "pseudogout").

Gout is a challenge to many medical professionals as it can be difficult to differentiate infection from gout. The first step is to identify the correct diagnosis. Your physician will ask questions and perform a physical in order to best determine the cause of your pain, redness, and swelling. Sometimes a serum uric acid level is ordered.

GOUT RISK FACTORS

The risk of gout increases with age and is rare in children. It commonly develops earlier in adult men (often between the ages of 30 and 45) than in women (usually after age 55); it is particularly common in people older than 65 regardless of gender. It is estimated that gout affects nearly 4 percent of adults in the United States.

There are several medical conditions and lifestyle factors that increase a person's risk of developing gout, including:

- Obesity
- High blood pressure
- Chronic kidney disease
- Overeating or prolonged fasting
- Consuming excessive amounts of alcohol
- Consuming large amounts of meat or seafood
- Consuming beverages containing high fructose corn syrup
- Certain medications that affect blood levels of urate (especially diuretics)

In people with history of diagnosed gout ("established gout"), there are also certain factors that increase the risk of repeated gout flares, including:

- Recent trauma or surgery
- Fasting
- Consuming excessive amounts of wine or other alcohol
- Overeating
- Taking medications that induce sudden changes in blood urate levels
- Dehydration

GOUT DIAGNOSIS

There are many illnesses that can cause joint pain and inflammation. Gout is strongly suspected if a person has one or more acute attacks of joint pain, followed by a period in which there are no symptoms but there is persistent hyperuricemia. It is important to confirm the diagnosis of gout to ensure that potentially harmful medications are not taken unnecessarily over a prolonged period of time. In order to do so, your physician may obtain synovial (joint) fluid or obtain serum uric acid levels.

TREATMENT OF GOUT

Treatment options include prevention, medications for acute and chronic management, chemotherapy, and surgery.

Acute Gouty Flare. The goal of treatment of acute gout flares is to reduce your pain, inflammation, and the accompanying disability quickly and safely. This treatment is usually short-term and limited to the duration of the flare. Deciding which medication to use is based upon several factors, including your risk of bleeding, kidney health, and whether you have a past history of an ulcer in the stomach or small intestine. Antiinflammatory medications are the best treatment for gout flares (NSAIDs – ibuprofen, indomethacin, celecoxib). They are most effective when started early in the course of a flare but are generally not recommended for people over the age 65 with history of kidney or liver disease, bleeding problems, use anticoagulant medications such as warfarin (brand name: Coumadin), or have history of stomach or duodenal ulcer. People who have had previous flares may start taking an NSAID at the first signs of a recurrence if deemed appropriate by your doctor. NSAID treatment is stopped within a day or two after the gout flare resolves. NOTE: Although aspirin is an NSAID, it is not

Developed in conjunction with the physicians at South Bend Orthopaedics

usually recommended for the treatment of gout because it can, depending upon the dose, either raise or lower urate levels in the blood. In addition, colchicine (a prescription oral medication) may be prescribed for a gout flare instead of an NSAID. Colchicine does not increase the risk of ulcers, has no known interaction with anticoagulants ("blood thinners"), and, in proper doses, does not affect kidney function. However, colchicine can have bothersome side effects when given in excess, including diarrhea, nausea, vomiting, and crampy abdominal pain. Glucocorticoids (steroid medications) are effective and frequently used for treating gout flares. Certain people are generally not candidates for glucocorticoid treatment, including those who have poorly controlled diabetes, in whom infection is a concern, or who cannot tolerate steroids for some other reason.

Prevention. Preventive (also called prophylactic) antiinflammatory therapy aims to prevent or reduce the occurrence of gout flares. The most effective method for management is prevention strategies discussed by your primary care physician, endocrinologist, or rheumatologist that may involve diet changes, activity modifications, as well as medications. Some medications may be used during acute flares but are not considered longterm solutions and may even cause a gouty flare if used inappropriately. Some medications used for gout and pseudogout are intended to treat your symptoms whereas other medications help prevent recurrence. We recommend discussing longterm options with your primary care physician.

Long-Term Management. Over time, medications and lifestyle changes can lower urate levels and, as a result, prevent or reverse urate crystal deposits that can cause joint damage, disability, kidney stone formation, and possibly kidney damage. People who have one or more of these complications are especially encouraged to take a urate-lowering treatment. However, not everyone with gout will require urate-lowering therapy, and long-term management should be discussed with your primary care physician.

Medications lower urate levels in one of three ways: they increase urate excretion by the kidneys; they decrease the body's production of urate; or they break down urate. Medications that lower urate levels include the following: allopurinol (brand names: Alloprim, Zyloprim) and febuxostat (brand names: Uloric, Adenuric), probenecid, lesinurad (brand name: Zurampic), pegloticase (brand name: Krystexxa).

Dietary changes. Improving your diet may reduce the frequency of gout flares. Because obesity is a risk factor for gout, as well as for many other health conditions, losing weight (if you are overweight) is an important goal. However, extreme or "fad" diets are not recommended. Changes in diet are often recommended along with urate-lowering medications. Changing your diet alone is unlikely to lower blood urate levels by more than about 15 percent, even if you make major changes to your diet. On the other hand, if you lose weight in addition to changing your diet, it is possible to see more significant improvements in urate control, along with benefits to your general health. Dietary guidelines for people with established gout have changed over time, and it is not completely clear which combination of foods is best. Until validated diet guidelines for gout are available, a reasonable approach is to try to establish and maintain a healthy body weight with a balanced diet, drink plenty of water to avoid dehydration, and limit your intake of alcohol and sugar-sweetened drinks.

Surgery. Chronic gout and pseudogout may result in joint and soft tissue destruction that results in pain and deformity unrelieved by medications and orthotics or braces. When conservative management options fail, surgery may be necessary to correct your deformity and relieve your pain.