Patient Information

One Joint at a Time: Gout Management

Gout is defined as a complex type of arthritis marked by sudden, severe attacks of pain, redness, and tenderness in the joints, frequently the joint at the base of the big toe. This condition is caused by uric (yoo-rick) acid crystals in 1 or more joints, which leads to the characteristic pain, swelling, and redness. Uric acid is a waste product produced by the body during the breakdown of purines (pyuhr-eens), substances found in human tissue, and certain foods. Normally, uric acid is carried by the bloodstream to the kidneys and eliminated from the body through urination. But if too much uric acid is produced or if the kidneys don't eliminate enough of it, uric acid can build up in the blood. This condition, known as hyperuricemia (hi-per-yoor-uh-see-mee-uh), sometimes progresses to gout. Gout can be very painful, and its complications (such as joint damage, kidney stones, or kidney failure) can be serious.

How do I know if I'm at risk?

Your risk of developing gout increases if you have high levels of uric acid in your body, which can be attributed to:

- **Lifestyle factors.** Excessive alcohol intake (> 2 drinks a day for men and > 1 for women) increases your risk for gout.
- **Medical conditions.** Some diseases and conditions increase the likelihood that you'll develop gout (eg, untreated high blood pressure, high levels of fat and cholesterol in the blood, and narrowing of the arteries).
- **Certain medications.** Thiazide diuretics (commonly used to treat hypertension) and low-dose aspirin also can increase uric acid levels.
- **Genetics.** Having a family history of gout increases your likelihood of developing the disease.
- **Sex/Age.** Men more often than women develop gout due to the higher levels of uric acid, but women's uric acid levels approach those of men after menopause.

What are the warning signs?

With an attack of gout, you may wake up suddenly, without warning, in the middle of the night feeling as if your big toe is on fire. Other symptoms include:

- **Acute joint pain.** The large joint of your big toe is usually where gout occurs, but other areas that could be affected are your feet, ankles, knees, hands, and wrists. The most severe pain is likely to occur within the first 12 to 24 hours after initial onset.
- **Discomfort that lingers.** With the subsiding of the most severe pain, some joint discomfort might last from a few days to a few weeks.
- **Inflammation/redness.** The joint(s) affected by gout become(s) swollen, tender, and red.

Early treatment usually prevents progression of the disease, so it's important to see your doctor at the first sign of gout.

What tests do I need?

If you believe you may be suffering with gout, there are 2 tests that can help your

physician reach a diagnosis. Your doctor might draw fluid from the affected joint by using a needle and then search for urate crystals under microscopic examination. A blood test may also be recommended to measure the uric acid level in your blood, but results from such a test can be misleading. Some people who never experience gout have high uric acid levels, whereas some individuals with signs and symptoms of gout do not have unusually high levels of uric acid in their blood.

How can I avoid the problem?

Certain dietary guidelines observed during symptom-free periods can help protect against future gout attacks:

- **Keep your fluid intake high.** A good goal is to drink 8 to 16 cups of fluid and with half of it water.
- **Decrease or eliminate alcohol intake.** Whether or not any type of alcohol is safe should be discussed with your physician. Beer may be particularly likely to increase the likelihood of gout symptoms appearing, especially in men.
- **Eat a balanced diet.** You should focus on fruits, vegetables, whole grains, and fat-free or low-fat milk products.
- **Derive your protein from low-fat dairy products.** With low-fat dairy products possibly having a protective effect against gout, these protein sources are your best bet.
- **Limit meat, fish, and poultry.** You may be able to tolerate a small amount, but you should pay attention to what types—and in what quantity—seem to cause problems for you.
- **Weight management.** Weight loss may lead to decreased uric acid levels in your body.

How is it treated?

Medications are usually involved in the treatment of acute gout attacks and in the prevention of future attacks. Such medications include:

- **Nonsteroidal anti-inflammatory drugs (NSAIDs).** These medications help control inflammation and pain in people with gout. Some NSAIDs are available only by prescription; others are available over-the-counter, such as ibuprofen and naproxen. Risks associated with NSAIDs include stomach pain, bleeding, and ulcers.
- **Colchicine (kahl-chuh-seen).** This may be an alternative for those unable to take NSAIDs. In most cases, the drug's effectiveness is offset by intolerable adverse effects, such as nausea, vomiting, and diarrhea.
- **Corticosteroids (kort-ih-koh-stihr-oyds).** These medications are reserved for patients who can't take either NSAIDs or colchicine. The adverse effects of steroids may include thinning bones, poor wound healing, and a decreased ability to fight infection.

More information about gout is available on the Gout and Uric Acid Education Society Web site http://www.gouteducation.org.

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