# Gout

## What is gout?

Gout, otherwise known as podagra or uric acid arthropathy is a rheumatic complaint, that usually attacks a single joint at a time. The disease has a preference for the big toe of middle-aged men. It swells, turns red and becomes sore. The soreness is such that walking through a room can cause severe pain. It is more common in men then women by a factor of 10 to 1.

### What is the cause of gout?

The disease is caused by the deposition of sodium urate (uric acid) crystals in the joints. Uric acid is a by-product of the body's metabolism. Normally the uric acid is removed when urinating, but among patients with a predisposition for gout, the uric acid accumulates in the blood. Among some of these patients, the concentration in the blood is so high that the uric acid overflows and settles in the joints and possibly in the skin.

## **How do you get gout:**

There are two kinds of gout:

- 1) **Primary hyperuricaemia and gout:** Hyperuricaemia means an increased level of uric acid in the blood. It is usually caused by a hereditary abnormality in the system that changes the nucleic acid into uric acid. In this case the body is incapable of excreting uric acid fast enough even during normal circumstances.
- 2) **Secondary hyperuricaemia and gout:** This is caused by another disease or because of consumption of certain medicines (e.g. diuretic preparations, which increase the output of urine, and acetylsalicylic acid derivatives including aspirin). In these cases, the problem is that the body produces such large quantities of uric acid that the kidneys can not keep up.

### What are the signs of gout?

Prior to the onset of symptoms of gout, there is usually a latent period of several years in which the concentration of uric acid in the blood has gradually increased. This condition is called asymptomatic hyperuricaemia. Some 95% of the people with this condition never develop gout. The first gout attack is often at night. Typically, the afflicted person wakes up in the middle of the night with extreme pain near the joint of the big toe (if the pain is in the knee it is called gonagra). The joint is swollen and may turn a shining purple. Even the smallest stimuli produce severe pain, for instance a blanket in the toe. The first attack usually subsides after about a week. About 10% of sufferers will never again experience gout whereas others will experience more frequent and longer lasting attacks if they are not treated.

If it is not treated, repeated cases of gout over several years can produce permanent damage in the joint. If no preventative treatment is undertaken, over time, sodium urate will collect under the skin. In this case the crystals are seen as small bumps near the joints or on the outer side of the ear called tophi. Occasionally they rupture or ooze out yellowish chalky materials.

#### How is gout treated?

Treatment is concentrated on three areas:

1) During the actual attack the most important thing is to soothe the pain with non-steroidal anti-inflammatory drugs (ordinary analgesics like paracetamol will not relieve the pain, and aspirin must not be used). Colchicine is used to relieve the pain in people who can not take NSAIDS.

- 2) Once the attack has passed, you are offered preventative treatment, usually with allopurinol (e.g. Zyloric), which will reduce the level of uric acid in the blood. The preventative treatment can if it is used during an active attack of gout actually aggravate an attack, because it causes a large quantity of uric acid to be released at the same time.
- 3) Finally, it is important to change your lifestyle, as described above.

The goals of the treatment are to remove the pain and the swelling, prevent further episodes, prevent and treat tophi and to stop the production of stones in the urinary system.

### Good advice:

- Cut down on alcohol consumption.
- Avoid food that you know can cause attacks.
- Watch your weight.

#### Foods to avoid:

- Beer, other alcoholic beverages
- Anchovies, sardines in oil, fish roes, herring
- Yeast
- Organ meat (liver, kidneys, sweetbreads)
- Legumes (dried beans, peas)
- Meat extracts, consomme, gravies
- · Mushrooms, spinach, asparagus, cauliflower

### **Recommended foods to eat:**

- Fresh cherries, strawberries, and other red-blue berries
- Bananas
- Celery
- Tomatoes
- Vegetables including kale, cabbage, parsley, green-leafy vegetables
- Foods high in bromelain (pineapple)
- Foods high in vitamin C (red cabbage, red bell peppers, tangerines, mandarins, oranges, potatoes)
- Drink fruit juices and purified water (8 glasses of water per day)
- Low fat dairy products
- Complex carbohydrates (breads, cereals, pasta, rice as well as aforementioned vegetables & fruit)
- Chocolate/cocoa
- Coffee and tea
- Carbonated beverages
- Essential fatty acids (tuna, salmon, flaxseed, nuts, seeds)
- Tofu, although a legume and made from soybeans may be a better choice than meat.

Foods considered moderately high in purine but which may not raise the risk of gout include: asparagus, cauliflower, mushrooms, peas, spinach, whole grain breads and cereals, chicken, duck, ham, turkey, kidney and lima beans. It is important to remember that purines are found in all protein foods. **All sources of purines should not be eliminated.**