OPEN ACCESS Freely available online

Rheumatology: Current Research

ISSN: 2161-1149

Opinion Article

Significance of Gout and its Treatment

Liyan Wan*

Department of Rheumatology, Zhejiang University School of Medicine, Hangzhou, China

ABOUT THE STUDY

Gout is a type of inflammatory arthritis that is caused by the build-up of uric acid crystals in the joints. This condition is often characterized by sudden, severe attacks of pain, swelling, and redness in the affected joint. While gout can affect any joint in the body, it most commonly affects the big toe.

Causes of gout

Gout is caused by the build-up of uric acid in the blood. Uric acid is a waste product that is produced when the body breaks down purines, which are found in many foods and are also produced naturally by the body. Under normal circumstances, uric acid is dissolved in the blood and excreted by the kidneys. However, if the body produces too much uric acid, or if the kidneys are unable to excrete it properly, it can accumulate in the blood and form crystals.

The formation of uric acid crystals in the joints is triggered by various factors, including:

Diet: Foods that are high in purines, such as red meat, seafood, and alcohol, can increase the production of uric acid in the body and trigger gout attacks.

Obesity: Being overweight or obese can increase the risk of developing gout, as excess weight can lead to higher levels of uric acid in the blood.

Genetics: Some people may be genetically predisposed to gout, as it tends to run in families.

Medications: Certain medications, such as diuretics and aspirin, can increase the risk of gout attacks.

Symptoms of gout

The symptoms of gout typically develop suddenly and can be extremely painful. The most common symptom of gout is severe pain in the affected joint, which is usually accompanied by swelling, redness, and warmth. Other symptoms may include:

- Stiffness in the joint
- Tenderness
- Limited range of motion
- A sensation of warmth in the affected joint
- Fever and chills (in some cases)

The pain associated with gout is often described as being excruciating and can last for several hours to several days.

Diagnosis of gout

To diagnose gout, a doctor will typically perform a physical examination and ask about the patient's symptoms and medical history. They may also order blood tests to check for high levels of uric acid in the blood, as well as imaging tests such as X-rays, ultrasounds, or CT scans to check for the presence of uric acid crystals in the affected joint.

In some cases, a doctor may perform a joint aspiration, which involves removing a small sample of fluid from the affected joint and examining it for the presence of uric acid crystals.

Treatment of gout

The treatment of gout typically involves managing the symptoms of acute attacks and preventing future attacks from occurring.

Medications: Nonsteroidal Anti-inflammatory drugs (NSAIDs) and colchicine are commonly used to relieve pain and inflammation during gout attacks. In some cases, corticosteroids may be prescribed to reduce inflammation.

Lifestyle changes: Making changes to your diet and lifestyle can help reduce the risk of gout attacks. This may include avoiding foods that are high in purines, limiting alcohol intake, losing weight, and staying hydrated.

Medications to lower uric acid levels: In some cases, medications may be prescribed to lower uric acid levels in the blood and prevent future gout attacks. These medications include allopurinol, febuxostat, and probenecid.

Maintain a healthy weight: One of the most important things you can do to prevent gout is to maintain a healthy weight. Being overweight or obese increases the risk of developing gout, as excess weight can lead to higher levels of uric acid in the

Correspondence to: Liyan Wan, Department of Rheumatology, Zhejiang University School of Medicine, Hangzhou, China, Email: wanli12@yahoo.com

Received: 10-Feb-2023, Manuscript No. RCR-23-22057; **Editor assigned:** 13-Feb-2023, PreQC No. RCR-23-22057 (PQ); **Reviewed:** 28-Feb-2023, QC No. RCR-23-22057; **Revised:** 07-Mar-2023, Manuscript No. RCR-23-22057 (R); **Published:** 14-Mar-2023, DOI: 10.35841/2161-1149.23.13.336

Citation: Wan L (2023) Significance of Gout and its Treatment. Rheumatology (Sunnyvale). 13: 336

blood. Losing weight through a combination of diet and exercise can help lower your risk of developing gout.

Limit your intake of purine-rich foods: Foods that are high in purines, such as red meat, seafood, and alcohol, can increase the production of uric acid in the body and trigger gout attacks. To prevent gout, it is important to limit your intake of purine-rich foods. Instead, focus on consuming low-purine foods, such as whole grains, fruits, and vegetables.

Stay hydrated: Drinking plenty of water and other fluids can help prevent gout attacks. Adequate hydration helps flush excess uric acid from the body, reducing the risk of uric acid crystals forming in the joints. Aim to drink at least eight glasses of water per day, and avoid sugary drinks and alcohol, which can dehydrate the body and increase the risk of gout.

Limit alcohol intake: Alcohol, particularly beer, can increase the risk of gout attacks. Beer is particularly high in purines, and drinking too much alcohol can also lead to dehydration, which can trigger gout attacks. If you drink alcohol, limit your intake to no more than one or two drinks per day.

Avoid high-fructose corn syrup: High-Fructose Corn Syrup (HFCS) is a sweetener that is commonly found in processed foods and soft drinks. Studies have shown that consuming high levels of HFCS can increase the risk of gout attacks. To prevent gout, it is important to read food labels and avoid foods and drinks that contain high levels of HFCS.

Exercise regularly: Regular exercise can help prevent gout attacks by reducing weight and improving overall health. Exercise can also help reduce inflammation in the body, which can reduce the risk of gout attacks. Aim for at least 30 minutes of moderate exercise most days of the week.

Take medications as prescribed: If you have been diagnosed with gout, it is important to take medications as prescribed to prevent future attacks. Your doctor may prescribe medications to lower uric acid levels in the blood, such as allopurinol, febuxostat, or probenecid. It is important to take these medications as directed to prevent future gout attacks.

Manage other health conditions: Certain health conditions, such as high blood pressure and diabetes, can increase the risk of gout attacks. To prevent gout, it is important to manage these conditions effectively. This may involve taking medications as prescribed, making dietary changes, and exercising regularly.