

Gout: Causes, Symptoms, and Treatments

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What Is Gout?

Gout is a type of inflammatory arthritis characterized by sudden and severe pain, redness, and swelling in the joints. It occurs due to the buildup of **uric acid crystals** in the joints, most commonly affecting the big toe but also other joints such as the ankles, knees, and fingers.



Causes of Gout

Gout develops when there is an excess of uric acid in the blood, leading to the formation of sharp, needle-like crystals in the joints. Contributing factors include:

- Dietary Choices:**
 - High consumption of purine-rich foods like red meat, organ meats, and seafood.
 - Excessive intake of alcohol and sugary beverages.
 - Metabolic Factors:**
 - Hyperuricemia:** Elevated levels of uric acid due to overproduction or underexcretion.
 - Medical Conditions:**
 - Chronic kidney disease, high blood pressure, and diabetes.
 - Medications:**
 - Diuretics, aspirin, and immunosuppressive drugs can increase uric acid levels.
 - Genetics:**
 - A family history of gout increases susceptibility.
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Symptoms of Gout

Gout symptoms often appear suddenly and primarily during a "gout attack." These include:

- Intense Joint Pain:**
 - Often affects the big toe (podagra) but can also involve other joints.
 - Redness and Swelling:**
 - Inflamed, tender, and swollen joints that may feel warm to the touch.
 - Limited Range of Motion:**
 - Difficulty moving the affected joint due to pain and swelling.
 - Tophi (Chronic Cases):**
 - Hard, uric acid crystal deposits under the skin, typically around joints or ear cartilage.
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Treatment for Gout

1. Acute Gout Attack:

- **Nonsteroidal Anti-Inflammatory Drugs (NSAIDs):**
 - Ibuprofen or naproxen to relieve pain and inflammation.
- **Colchicine:**
 - Reduces inflammation during acute flare-ups.
- **Corticosteroids:**
 - Oral or injectable steroids for severe cases.

2. Long-Term Management:

- **Urate-Lowering Therapy (ULT):**
 - Medications like allopurinol or febuxostat to reduce uric acid levels.
- **Lifestyle Modifications:**
 - Low-purine diet, regular exercise, weight management, and hydration.



3. Prevention of Future Attacks:

- **Avoid Trigger Foods and Alcohol:**
 - Reduce intake of red meat, shellfish, and sugary drinks.
- **Monitor Uric Acid Levels:**
 - Regular blood tests to ensure levels remain within the target range.



Complications of Untreated Gout

- **Chronic Gout:**
 - Frequent and severe attacks leading to joint damage.
- **Kidney Stones:**
 - Uric acid crystals can form stones in the kidneys.
- **Tophaceous Gout:**
 - Large deposits of uric acid crystals causing deformities and functional impairment.

