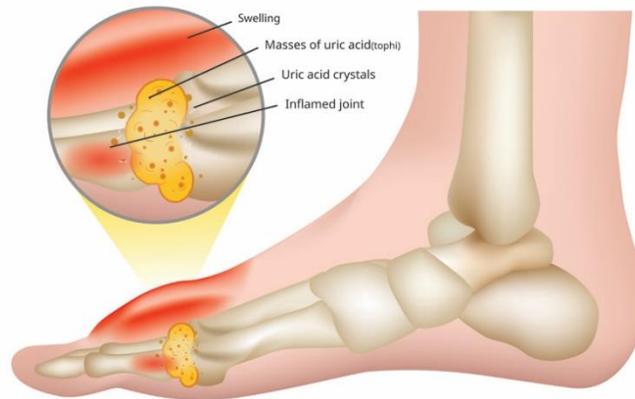


GOUT & PSEUDOGOUT

Gout (Inflammatory Arthritis)



Written By: Dr. Neha S Ramjuttun

What is gout? Gout is a type of arthritis that causes inflammation and pain in the joints due to the deposition of crystals. The common sites for gout are big toe, knee, ankle, mid-foot, finger joint, and wrist.

Statistics: In the United States, about 8.3 million people are affected by gout.

Etiology: The main cause of gout is due to the excess production of uric acid that builds up in the joint and eventually forms crystals. Uric acid usually is excreted by the kidneys but if your body creates too much uric acid or if the kidneys excrete very little uric acid, then uric acid gets accumulated and forms crystals causing swelling and pain of the affected joint.

What are the risk factors? The factors that trigger gout are alcohol, sweetened drinks, red meat, seafood, genetics, male gender, obesity, insulin resistance, heart disease, kidney disease and medications such as thiazide diuretics, cyclosporine.

What are the signs and symptoms? A person with gout will experience extreme joint pain, inflammation, and erythema of the affected joint, tenderness, warmth of the affected area, discomfort and lack of joint movement.

How is the diagnosis made? The diagnosis is done by performing physical examination, x-rays, and lab tests to check the uric acid level and creatinine level. Sometimes, a joint fluid test is performed where a fluid is drawn from the affected joint and further analyzed.

Treatment: The treatment for gout is mainly medications such as nonsteroidal anti-inflammatory drugs (NSAIDS), corticosteroids and colchicine. If gout does not respond to medical treatment, then it can cause severe harm to the joints and/or tendons. If gout has severely affected the joints and/or tendons, surgery may be needed. Some remedies that work for gout are cherries, Vitamin C, magnesium supplements, celery, ginger, lemon juice, turmeric, Epsom salts and applying a cold or hot compress.

How it may be prevented? In order to prevent gout, one must be well-hydrated and take plenty of fluids, avoid alcoholic beverages and sweetened drinks, avoid food such as red meat, seafood and maintain a healthy weight.



Are any complications associated with it? If gout is left untreated, it may lead to complications such as the formation of tophi (cluster of crystals that harden beneath the skin), joint damage, joint deformity, bone loss, kidney stones, and renal failure.

How do gout and pseudogout differ from each other? Gout and pseudogout are similar in the manifestations they produce. The crystals produced in gout are known as monosodium urate monohydrate crystals whereas pseudogout produces calcium pyrophosphate crystals. Pseudogout affects the knee and larger joints such as elbow, shoulder, ankle, wrist, hip, and hand. Pseudogout may be linked with trauma to the joint, thyroid and parathyroid problems, excess calcium, excess iron, and low magnesium. Additional lab tests such as thyroid tests and

checking for mineral imbalances may be performed in pseudogout. There is no cure for pseudogout but the treatment is similar to that of gout's treatment.

A person experiencing any type of arthritis should seek medical attention before it worsens or before the development of any complications.

References:

1. Rothschild, MB (2019). *What is the prevalence of gout in the US?* [online]. Available at: <https://www.medscape.com/answers/329958-10236/what-is-the-prevalence-of-gout-in-the-us> [Accessed 15 Apr. 2019].
2. *Gout and Pseudogout*. [online]. American Society for Surgery of the Hand. Available at: <https://www.assh.org/handcare/hand-arm-conditions/Gout-and-Pseudogout> [Accessed 15 Apr. 2019].
3. Sampson, S (2018). *Natural Home Remedies for Gout*. [online]. Available at: <https://www.healthline.com/health/gout/home-remedies#home-treatments> [Accessed 15 Apr. 2019].
4. Konkel, L (2018). *Gout Complications and Related Conditions*. [online]. Available at: <https://www.everydayhealth.com/gout/complications-related-conditions/> [Accessed 15 Apr. 2019].
5. *Pseudogout*. [online]. Mayo Clinic (2018). Available at: <https://www.mayoclinic.org/diseases-conditions/pseudogout/symptoms-causes/syc-20376983> [Accessed 15 Apr. 2019].
6. Morrison, W (2018). *Is it Gout or Pseudogout?* [online]. Available at: <https://www.healthline.com/health/pseudogout-vs-gout#Causes-of-pseudogout-vs.-gout-> [Accessed 15 Apr. 2019].