Gout**:** isan arthritic syndrome caused by an inflammatory response to crystals of monosodium urate crystals which deposits in the joints like ankle, heels, knees, wrists, fingers, elbows.

Gout facts

* Type of arthritis
* Caused by elevated uric acid level in blood
* More common in men than women
* Women more likely to experience gout

Cause of gout: Major cause of gout is hyperuricemia, which is abnormal high level of uric acid in blood which forms sharp crystals in joints and kidney. This uric acid comes from Purine compound that is in all the cells of body as cells divide and multiply, the body continually breaks down purine and re uses its components to make new cells.

Extra purine is secreted out of body in the urine in the form of uric acid. When there is lot of uric acid in body, it will form crystals. Under microscope crystals of uric acid are sharp and pointy and look like needles. Uric acid crystals may also deposit under skin forming a lump that can sometimes be felt on the outside of body this is called a “tophus”.

The immune system, realizes that the crystals should not be there and starts attacking them. This causes joint pain, swelling, and tenderness when a person has gout.

Extra uric acid may also deposit in the kidneys and cause kidney stones.

**Risk factors**

* Raised serum urate
* Genetic mutation in genes for URAT1
* Age, 2% of 45 to 65 year old men
* Gender, male: female ratio 3:1in those >65 years
* Osteoarthritis, gout attacks more likely in joints affected by osteoarthritis, while rheumatoid arthritis is protective
* Diet containing rich in purine like shellfish and organ meat, such as liver, kidney, and brain. Dried beans, peas and anchovies.
* Drinking too much alcohol interferes with body ability to get rid of extra uric acid and causes higher levels in blood stream.
* Exposure to high levels of lead tends to increase the level of uric acid in the blood.
* Overweight
* Some medications increases the risk of hyperuricemia or high level of uric acid like water pills, called diuretics, interfere with kidney, s ability to excrete uric acid from blood.
* Other medications like levodopa, which are given to patients with Parkinson disease and salicylates such as aspirin, can also increase the levels of uric acid in blood.
* Patients who are on cyclosporine are at a higher risk of developing gout. Cyclosporine is a medication typically given to patients who have received an organ transplant.
* Increase production of purines due to use of fructose

**Symptoms**

* Big toe most commonly effected
* Swelling
* Redness
* Sharp, intolerable pain
* Feeling of warmness
* Inflammation
* Attack can be sudden, a few hours to few days
* Redness swelling and pain in big toe is also called as podagra
* If gout is not treated, it can become permanent disabling and crippling. This last stage is known as tophaceous gout.