

GOUT

The Disease of Kings

Gout - Basics

- Form of arthritis, frequently present in patients with metabolic syndrome.
- Uric acid crystal deposits in the joint space. Uric acid is a byproduct of fructose metabolism.
- Fructose inhibits the excretion of uric acid, hence ↑ uric acid levels.

Physical findings

- Involvement of a single or multiple joints
- Swelling, warmth, redness, tenderness, and limited movement, often in the big toe, starting at night

Complications of gout

- Degenerative arthritis
- ↑ susceptibility to infection
- A risk factor for coronary artery disease
- Kidney stones
- Nerve or spinal cord impingement
- Fractures in gout joints

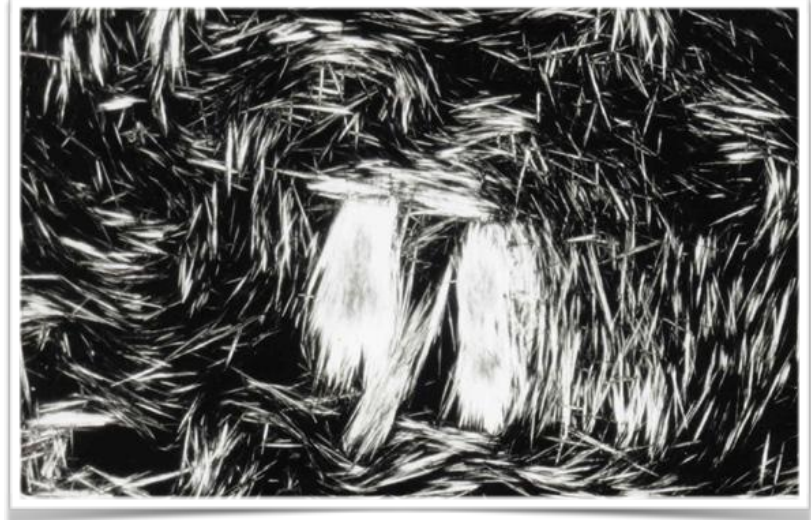


Image: Needles of urate crystals (polarizing microscopy)

Gout - Prevention Strategies

- Limit fructose intake, including high fructose corn syrup (HFCS) hidden in many common foods. Tart cherries, however, contain anthocyanins and bioflavonoids which ↓ uric acid levels. Consume in moderation.
- Avoid soy which elevates serum urate and risk of gout.
- Eat potassium-rich foods (avocado, spinach) - potassium alkalizes urine and improves the excretion of uric acid.
- Exercise daily except during time of active symptoms of gout. Exercise normalizes insulin and leptin, ↓ uric acid.
- Limit consumption of beer - yeast used in the production of beer is a strong uric acid trigger.