

## ANKLE TOPHI

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### Abstract:

Gout is most widely understood rheumatological disease of heterogeneous nature, often familial, associated with abnormal deposits of urate in tissues and characterized initially by a recurring acute arthritis, usually monoarticular, and later by chronic deforming arthritis. Tophi are associated with chronic gout.

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Fig 1



Fig 2

**Case report and Discussion:** A diagnosed case of gouty arthritis presented to us in the outdoor patient department of Guru Nanak Dev Hospital and government medical college, Amritsar with complains of pain, tenderness and restricted movements around the right ankle joint. On examination, a tophi was noticed with signs of inflammation around the joint.

The tophus is the cardinal feature of advanced gout. Some patients with recurrent acute gout, especially those with uncontrolled hyperuricaemia, develop chronic tophaceous gout characterized by tophi in soft tissues<sup>1</sup>. Microscopically, tophi are chronic foreign body granuloma-like structures containing collections of monosodium urate (MSU) crystals surrounded by inflammatory cells and connective tissue.

Tophi can be found around external ears, feet, olecranon, prepatellarbursae, and hands<sup>2</sup>. Ankles are rather “uncommon” site for tophi to occur. Picture 1 and 2 shows tophi at the above described unusual site.

Important differential diagnosis are septic arthritis, reactive arthritis, pseudogout (characterized by elderly onset, predilection for knees or wrists, radiological chondrocalcinosis, and synovial fluid pyrophosphate crystals) and rheumatoid arthritis (with polyarticular presentation)<sup>3</sup>. In patients with tophi, detection of MSU crystals

in the toothpaste-like material aspirated from the lump is diagnostic for gout<sup>4</sup>. Tophi are implicated in the development of structural joint damage and increased mortality risk in people with gout.

Effective treatment of tophaceous gout requires long-term urate-lowering therapy, ideally to achieve a serum urate concentration of <5 mg/dL (300 μmol/L). Recent advances in gout therapeutics have expanded urate-lowering therapy options for patients with severe tophaceous disease to allow faster regression structural outcomes.

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