

Flexion deformity of the finger caused by tophaceous gout of the flexor tendon

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DESCRIPTION

A 53-year-old, right-handed man was referred to orthopaedic clinic with a 1-year history of progressive 'trigger-like' symptoms and eventual locking of the right ring and middle fingers. There was no history of trauma or joint problems. Medical history included stable chronic kidney disease and well-controlled hypertension. On examination of the right hand, there was limited passive mobility with complete flexion of the ring and middle fingers by 100° at the proximal interphalangeal joint, and additionally the ring finger by 45° at the distal interphalangeal joint. The left hand was unaffected. Furthermore, in the context of a raised serum uric acid concentration of 767 µmol/L 3 years previously, two palpable, non-tender nodules were found on the left olecranon.

Surgical exploration of the right ring finger found multiple small, white speckled deposits infiltrating the flexor tendon from the first annular pulley (A1) to just beyond the A3 pulley (figure 1). The same deposits were found in the middle finger. In both fingers, the A1 pulley was released followed by washout and debridement, while leaving the tendon

sheaths intact. A biopsy was taken which supported the clinical diagnosis of tophaceous gout. Postoperatively, function improved and rheumatological follow-up was arranged.

Gout only affects the hand in a minority of cases (16.9%), and often only in the context of advanced disease.¹ Moreover, specific involvement of the flexor tendons of the hand is uncommon.² Tophi as the initial manifestation of gout is also unusual as tophi development is related to disease duration.³

Learning points

- ▶ Gout should be considered if presented with a fixed flexion deformity, especially in an individual with risk factors related to gout such as a man with hypertension-related diuretic therapy and renal insufficiency.
- ▶ Tophi uncommonly constitute the initial presentation of gout.

Contributors JJHB is responsible for writing the first manuscript, obtaining consent and reviewing the literature surrounding the case. SC is responsible for obtaining the image. IH is the orthopaedic hand surgeon who performed the surgery, conceptualised the case report and thoroughly reviewed the introductory and background literature. All authors edited and reviewed the manuscript and have approved the final version.

Competing interests None declared.

Patient consent Obtained.

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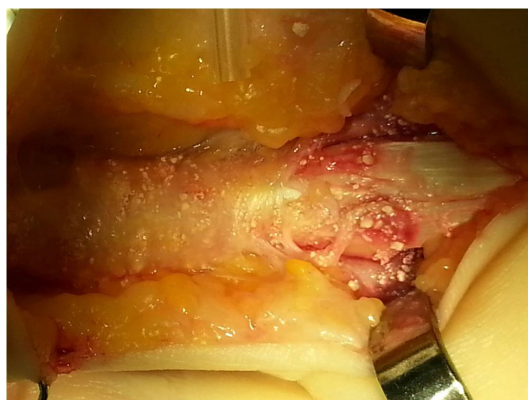


Figure 1 Intraoperative aspect of the right ring finger showing gouty deposits infiltrating the synovial sheaths of the flexor digitorum superficialis and profundus tendons.



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