

Atypical Trigger Finger with Carpal Tunnel Syndrome – A Case Report

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INTRODUCTION:

Gout is one of the commonest diseases of inflammatory arthritis, affecting 1-4% of population worldwide [1]. The accumulation of monosodium urate crystal in the affected joint causes painful inflammation and it can build up in soft tissues commonly, over helix of ear, olecranon and interphalangeal joints [2]. However, tophi involving infiltration of flexor tendon in the wrist is uncommon and often misdiagnosed as reported in this case.

REPORT:

54 years old gentleman with underlying diabetes and hypertension was referred for difficulty of extending right middle finger (Figure 1). There was associated numbness over thumb, index and middle finger with mass over the wrist which becomes more prominent during wrist flexion. No prior history of gouty arthritis. The right middle finger was in flexion contracture at the proximal interphalangeal joint with restricted movement. There was mass palpable, 1cm proximal to right wrist crease measuring 3cm X 4cm which was adherent to flexor tendon upon wrist flexion. It moves with right middle finger movement. A1 pulley release of right middle finger was done. Intraoperatively, the finger still remained 'locked' with chalky nodules noted along flexor tendon. Extended carpal tunnel release under WALANT was performed to explore the mass. Intratendinous chalky mass infiltrating flexor digitorum profundus and flexor digitorum superficialis was identified (figure 2). Median nerve appeared congested and flat. Excision of gouty tophus was performed. Histopathological examination showed multiple granulomata composed of central pale granular material with needle shape like spaces with surrounding giant cell reaction. No malignancy seen. Subsequently, allopurinol was initiated and low purine dietary advise given. He regained near full range of motion after physiotherapy and numbness of his fingers resolved (figure 3).



Figure 1. Right middle finger in flexed position despite A1 pulley release



Figure 2. Tophaceous infiltration of flexor tendon



Figure 3. Patient regained near full range of motion of right middle finger

CONCLUSION:

Patient with gouty arthritis mostly presented with painful joints. Rarely, tophi can occur as first sign of the disorder despite normal serum uric acid level [2]. Intratendinous infiltration of tophaceous gout can occur at wrist and coexisted with carpal tunnel syndrome due to mass effect [3]. However, concomitant presentation of trigger finger as seen in this case is rare, making diagnosis a challenge. Early surgical intervention is prudent to confirm diagnosis, tophi removal and median nerve decompression. Combination of surgical and medical treatment provide good functional outcome.

REFERENCES:

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