# A Locked Finger Secondary to Gouty Tenosynovitis

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### INTRODUCTION:

Gouty tenosynovitis (GT) is a rare condition that present in hand as nerve compression, joint contractures, tophaceous infiltration of the tendon, or tenosynovitis [1]. Due to low incidence, GT rarely considered as differential diagnosis of such presentations [2]. We present a case of gouty tenosynovitis involving the flexor tendon.

#### REPORT:

A 41-year-old gentleman with a history of left distal radius fracture with plating done presented with symptoms of progressive worsening of median nerve (MN) compression 12 months following surgery. He also complained of locked Middle Finger (MF) with an inability to extend his digit both actively and passively, which worsened in the last two months.

Clinical assessment noted a firm and cord-like swelling over the volar radial aspect of the wrist with the left MF in a fixed flexed position and in situ distal radius volar plate (Figure 1). Preoperative suspicion was hardware-related complication with probable tendon attrition.

However, surgical exploration along with removal of implant and decompression of carpal tunnel revealed a large fusiform-shaped gouty tophus well incorporated with flexor digitorium superficialis (FDS) tendon of MF (Figure2). The swelling lead to an impediment of tendon gliding and secondary compression of MN evidenced by hourglass appearance if hence it was removed en mass along with FDS tendon. Postoperatively, he regained motion over his left MF and relieve of median nerve compressive symptoms.



Figure1

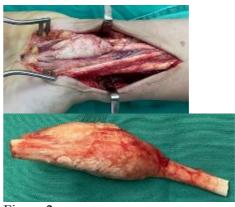


Figure 2

### DISCUSSION:

Gout is characterized by the collection and deposition of sodium urate crystals in articular, peri-articular, renal, tendon, nerve, and synovial sites [1] [2]. For these reasons, a high index of suspicion of gout as a possible etiology must be considered that explains the given symptoms [3]. Surgical management is indicated to improve function, pain, control of drainage and infection along with reduction of urate levels medically [4].

### **CONCLUSION:**

Prompt diagnosis is paramount to initiate proper surgical management of gouty flexor tenosynovitis of the fingers.

## **REFERENCES:**

- Weniger, F.G., et al., *Gouty flexor tenosynovitis of the digits:* report of three cases. The Journal of hand surgery, 2003. **28**(4): p. 669-672. 1.
- Primm Jr, D.D. and J.R. Allen, Gouty involvement of a flexor tendon in the hand. The Journal of hand surgery, 1983. 8(6): 2.
- 3.
- tendon in the hand. The Journal of hand surgery, 1983. **8**(6): p. 863-865. Moore, J.R. and A.J. Weiland, *Gouty tenosynovitis in the hand*. The Journal of hand surgery, 1985. **10**(2): p. 291-295. Lianga, J., G. Waslen, and C. Penney, *Tophaceous gout presenting with bilateral hand contractures and carpal tunnel syndrome*. The Journal of rheumatology, 1986. **13**(1): p. 230-231. 4.