Finger Flexion Deformity Secondary To Tophaceous Gout: A Case Report

¹Hassan MS, ²Anizar FA, ¹Chittra M, ²Rashdeen F

¹Hand and Microsurgery Department, Hospital Selayang, Lebuhraya Selayang-Kepong, 68100 Batu Caves ²Orthopaedic Department, Hospital Kuala Lumpur, Jalan Pahang, 53000 Kuala Lumpur

INTRODUCTION:

Fixed flexion deformity of a single digit cause both cosmetic and functional disability. We report a case of long standing finger flexion deformity secondary to tophaceous gout which remarkably improved after surgery.

CASE REPORT:

A 28 years old gentleman with underlying gouty arthritis had presented with 8 months history of fixed flexion deformity of left middle finger. He claimed of progressive triggering sensation upon movement since two years. Clinically, the middle finger was fixed in full flexion position (Figure 1a). A vague mass seen on the volar ulnar of wrist which move upon finger movement. No evidence of carpal tunnel syndrome. MRI revealed a well encapsulated heterogenous 1x3x2cm mass from flexor digitorum superficialis(FDS) compressing median nerve, confirming the diagnosis of tophaceous gout of FDS left middle finger.



Figure 1: Finger position at presentation (a) and 6 weeks post-surgery (b)

Intraoperatively, a 5x4x2cm nodular fusiform mass was located over the FDS tendon of finger with surrounding synovitis. Modified tenosynovectomy was done aimed to preserve function and maintain smooth gliding surface. Excision of the tendon while preserving the

epitenon and continuous loop suture was done to maintain tubularity(Figure 2). He was started on immediate tendon gliding rehabilitation. At 6 weeks post surgery he achieved full range of motion of the middle finger (Figure 1b).

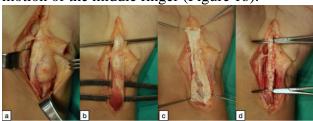


Figure 2: Intraoperative finding. Continuous loop suture to make a tubular tendon (d)

DISCUSSIONS:

In surgeon perspective, there is dilemma in between benefit of surgery against post operative complication such as delayed healing and adhesion¹. In a heavily infiltrated tendon it is not advisable to excised all the tophaceous material as it may cause morbidity². Desiccation of surrounding tissue and tendon will occur if tophi material is exposed as in direct tenosynovectomy². Therefore, debulking tophaceous deposit with preserving outer layer of tendon and reshaped into tubular structure can achieved smoother gliding surface with less risk for adhesion.

CONCLUSION:

Surgical excision of tophaceous gout of tendon should minimized morbidity. Preserve function, smooth gliding surface and less adhesion can be achieved by preserving the epitenon and continuous loop suture.

REFERENCES:

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- 2. Fitzgerald BT et al., Gout affecting the hand and wrist. Journal of the American Academy of Orthopaedic Surgeons. 2007; 15(10):625-635