

Tendon Rupture Post-Repetitive Steroid Injection In Trigger Fingers: A Single Stage Reconstruction

¹Mohd Saidfudin, Nur Sa'idah; ¹Sapuan, Jamari; ¹Abdullah, Shalimar

¹ Orthopaedic & Traumatology Department, HCTM UKM, Jln Yaacob Latif, Kuala Lumpur, Malaysia

INTRODUCTION

Steroid administration to treat trigger fingers has been vastly used as it is effective, easily administered and cheap.² However, precautions to prevent dreadful complications such as synovitis, severe adhesion and worst, tendon rupture must be adhered.^{2,3}

REPORT

A 48 year-old lady had recurrent multiple trigger fingers and was treated conservatively. A right ring finger tendon rupture was suspected after she was unable to move it following repetitive steroid injections given on the same hand but at different sites. She was planned for surgical exploration, keep in view (KIV) single stage tendon reconstruction with Palmaris Longus tendon from ipsilateral limb.

Intra-operative discovered severe adhesion at various sites on palmar region along the right ring finger. Both its flexor digitorum superficialis (FDS) and profundus (FDP) are ruptured at the site of adhesion rendering a 4cm defect preventing direct repair. Hence, single stage tendon reconstruction is commenced by harvesting Palmaris Longus tendon and affixed using pulvertaft weaving technique.



Figure 1: Severe adhesion and ruptured tendon along right ring finger is being debrided (bed preparation).



Figure 2: Harvesting maximum length of Palmaris Longus (a) for reconstruction (b) with good tension.



Figure 3: Able to actively flex her right ring finger again on day 3 post-operatively.

This early initiation of active motion exercise is crucial to prevent recurrent adhesion formation.¹ She complied with strict rehabilitation protocol of guided tendon gliding exercise, and one month later she is back to her daily chores.

CONCLUSION

Albeit rare, flexor tendons rupture yield a favourable outcome with comprehensive treatment plan. This includes pre-operative surgical planning, exploration and debridement, choice of tendon for reconstruction, single versus double stage surgery, and last but not least patient's rehabilitation.

REFERENCES:

1. Thomas E.T, *et al.*, Hand, Elbow, and Shoulder: Core Knowledge in Orthopaedics, Rheumatoid Arthritis – Hand and Wrist: Soft Tissue Reconstruction, 2006, Mosby Elsevier, page 367
2. Lu H, *et al.*, The clinical effect of tendon repair for tendon spontaneous rupture after

corticosteroid injection in hands:A retrospective observational study,2016, *Medicine*, 95(41),e5145.

<https://doi.org/10.1097/MD.00000000000005145>

3. Brinks A., *et al.*, Adverse effects of extra-articular corticosteroid injections:A systematic review. *BMC MusculoskeletDisord***11**,206(2010).
<https://doi.org/10.1186/1471-2474-11-206>