

A RANDOMISED CONTROLLED TRIAL OF FLEXOR TENDON TRACTION TENOLYSIS IN TRIGGER FINGER RELEASE

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Introduction: Trigger finger or flexor stenosing tenosynovitis is one of the common hand condition that affects the adult population. Open trigger finger surgery involves release of the A1 pulley. Traction tenolysis is an additional step taken to ensure complete release. This study was conducted to compare the postoperative clinical outcome between open A1 pulley release with and without flexor tendon traction tenolysis.

Methodology: In this prospective study conducted from January 2018 until June 2019, patients with grade II-IV trigger finger who required surgical intervention were selected. Patients were randomised into two surgical intervention groups: Group I: Open A1 pulley release with flexor tendon traction tenolysis and; Group II: Open A1 pulley release only without flexor tendon traction tenolysis. Patients were reviewed at 2 weeks, 2 months and 4 months post-operatively. Finger range of motion, QuickDASH score, post-operative complications and duration of surgery were documented.

Discussion: We included 46 patients into the study with an average age of 56 (± 9.6) years. The left hand and middle finger were the most affected. 73.9% of patients presented with grade III trigger finger. Traction tenolysis results in statistically significant increased finger range of motion and QuickDASH score at two weeks but not at two months or four months follow up. Traction tenolysis surgery had a statistically significant longer duration of surgery (16.4 ± 5.7 mins). Two patients in Group I had wound infection but resolved with antibiotics. 16 out of 23 (69.6%) visceral synovium showed fibrocartilagenous histopathological changes.

Conclusion: Traction tenolysis in open trigger finger release results in increased finger range of motion and lower QuickDASH score at two weeks' post-surgery. However, at 2 months and 4 months there was no difference. Traction tenolysis requires a longer duration of surgery. Most visceral synovium in trigger finger showed fibrocartilagenous tissue changes.