Postoperative Trigger Finger Complications and Subsequent Treatments: An In-Depth Analysis

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Abstract:

Introduction: Complications following trigger finger release (TFR) are well-documented, but there is limited understanding of the incidence of subsequent adjacent, contralateral or the same digit triggering requiring treatment.

Methods: In this retrospective review conducted at a single tertiary care center between July 2015 and December 2017, all patients who underwent operative treatment for trigger finger release were examined. The electronic medical records were scrutinized for prior TFR and subsequent TFR within the following 5 years. Univariate statistical analysis was conducted to determine the proportion of patients requiring further treatment, either through steroid injections or operative A1 pulley release. Bivariate analysis compared the frequency of subsequent treatment between patients with and without prior carpal tunnel release (CTR) in either wrist.

Results: Among 1128 patients who underwent primary TFR, 220 had undergone prior or sameday CTR. Right-hand releases were more common (58.4%), and a significant portion of patients had previously received a steroid injection before surgical release (58.9%). After the initial release, 341 patients (30.2%) received at least one subsequent steroid injection, with 28 (2.5%) of these involving the same finger. In addition, 227 patients (20.1%) underwent at least one subsequent A1 pulley release, with only 1 case (0.09%) involving the same finger as the initial release. A notable 12.6% of patients required three or more additional procedures, while one patient underwent 11 subsequent procedures. Postoperative wound complications, such as infection or dehiscence, occurred in 1.6% of patients after their primary release. Patients with a prior or concurrent CTR exhibited similar rates of subsequent injections (31.4% vs. 30.0%) and subsequent A1 pulley releases (22.3% vs. 19.6%).

Discussion and Conclusion: Although TFR is relatively straightforward, a substantial number of patients require additional treatment in different digits and should be counseled accordingly. Notably, prior CTR does not seem to influence the likelihood of subsequent triggering.

<u>Keywords</u>: Trigger finger release (TFR), Subsequent treatment, Digital triggering, Carpal tunnel release (CTR), Complications