

## **CARPAL TUNNEL SYNDROME POST TRIGGER FINGER RELEASE. A PROSPECTIVE COHORT STUDY.**

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**Introduction:** Carpal tunnel syndrome (CTS) is the most common peripheral neuropathy of the upper limbs while trigger finger (TF) is another disease that affects the hand function. Both conditions are caused by a decreased space in an enclosed anatomical region and often presents concomitantly. Between 5% to 20% of patients who has undergone carpal tunnel release surgery will present with trigger finger post-surgery. The purpose of our study is to investigate the prevalence of CTS in patients presenting with trigger finger and the incidence of CTS post-trigger finger release.

**Methodology:** This is a prospective cohort study. Recruited patients are graded according to Green's classification of TF and evaluated for concurrent CTS. Nerve conduction study (NCS) for the median nerve was also performed preoperatively. TF release was performed and subsequently followed up at 2 weeks, 3 and 6 months post-operatively. Clinical evaluation for CTS and NCS were also performed at 3 and 6 months post-operatively. We evaluated the prevalence of TF and CTS and incidence of CTS post-trigger finger release. By using NCS, change in median nerve conduction study pre and post-TF release were evaluated and lastly to compare the clinical diagnosis of CTS and median nerve conduction study findings pre & post-TF release.

**Discussion:** From this study, we have concluded that the prevalence of CTS in TF is 7% and the incidence of CTS post-trigger finger release is 26%. From the median NCS analysis, we also concluded that there is a progression towards development of CTS post-trigger finger release.

**Conclusion:** In conclusion, TF and CTS are 2 debilitating disease that often occurs together. Trigger finger release surgery or carpal tunnel release surgery can fasten the presentation of one of the other diseases. Awareness of this association may aid in early diagnosis and treatment of CTS in patients that present with TF and vice-versa.