Following carpel tunnel release, what factors are associated with patients returning to the same or different hand surgeon for a subsequent procedure?

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Introduction:

Patients evolve important relationships with their surgeons. Following carpal tunnel release (CTR), patients may be indicated for subsequent hand surgery such as contralateral CTR and/or trigger finger release (TFR). While surgeons typically take pride in patient loyalty, the rate of returning to the same or different hand surgeons (and related patient factors) has not been previously characterized.

Methods:

Patients undergoing CTR were isolated from 2010-2021 Q1 PearlDiver M151 dataset, a large, national, multi-insurance, administrative database. Exclusion criteria included patients less than 18 years old and a diagnosis of traumatic, infectious, or oncologic diagnosis in the 90 days prior to index CTR. Subsequent CTR or TFR (the most common upper extremity procedures) were identified and characterized as being performed by the same or different surgeon, with patient factors associated with changing to a different surgeon determined by multivariable analyses.

Results:

In total, 1,121,922 CTR patients were identified (Figure 1). Of these, subsequent surgery was identified for 307,385 (27.4%: CTR 289,455 [94.2%] and TFR 17,930 [5.8%]). Of the patients with a subsequent surgery, 257,027 (83.6%) returned to the same surgeon and 50,358 (16.4%) changed surgeons.

Multivariable analysis found factors associated with changing surgeon (in order of decreasing odds ration [OR]) to be: TFR as the second procedure (OR 2.98), time between surgeries greater than 2-years (OR 2.30), Elixhauser-Comorbidity Index (OR 1.14 per 2-point increase), and male sex (OR 1.06), with less likely hood of changing for those with Medicare (OR 0.95 relative to commercial insurance) (p<0.001 for each). Pertinent negatives included: age, Medicaid, and having a 90-day adverse event after the index procedure.

Discussion:

Over fifteen percent of patients who required a subsequent CTR or TFR following CTR did not return to the same surgeon. Understanding what factors lead to outmigration of patients form a practice may help direct efforts for patient retention.

Significance/Clinical Relevance:

By better understanding the factors associated with staying with the same surgeon, the patient-surgeon relationship can be better understood and supported.

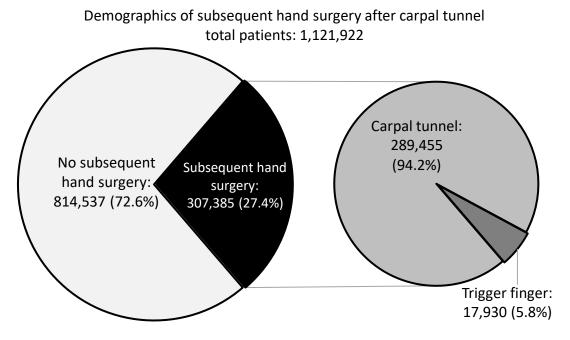


Figure 1: This chart shows the breakdown of 1,121,922 patients after the carpal tunnel release surgery. It shows how many had a second surgery and what type of surgery occurred.