

Improvements in Sleep and Pain After Carpal Tunnel Release Surgery



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BACKGROUND

- Nearly half of a million carpal tunnel release (CTR) procedures performed per year.
- Nighttime symptoms have been a well-documented sequelae of carpal tunnel syndrome (CTS) including pain and paresthesias that wake a patient up at night requiring bracing.
- Additionally, pain and decreased function are common complaints in this population and there are some who rely on narcotic pain medication to assuage the severity of symptoms.

OBJECTIVE

- The aim of this study is to show objective improvement in sleep, narcotic use, and pain scores after CTR.

HYPOTHESIS

- Sleep and nighttime symptoms will improve after CTR.

METHODS

Study Design: 61 patients with electromyographically proven CTS scheduled to undergo CTR were solicited to participate in this study. Preoperatively, patients filled out Pittsburgh Sleep Quality Assessments (PSQI), Visual Analog Scale (VAS), and Disabilities of Arm, Shoulder, and Hand (DASH). These patients were seen at two and six weeks post-operatively and given those same tests in addition to answering questions regarding narcotic use and specific symptom relief.

- All statistical analyses were computed using a 2-sided Z test with alpha of .05 as a threshold for significance.

Disclosure

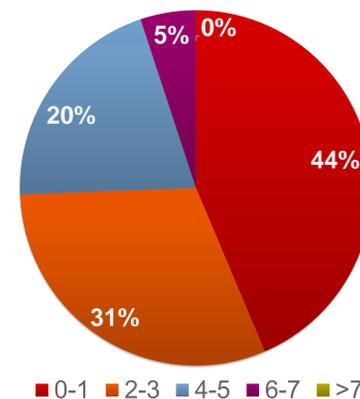
Authors of this presentation have nothing to disclose concerning possible financial or personal relationship with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.

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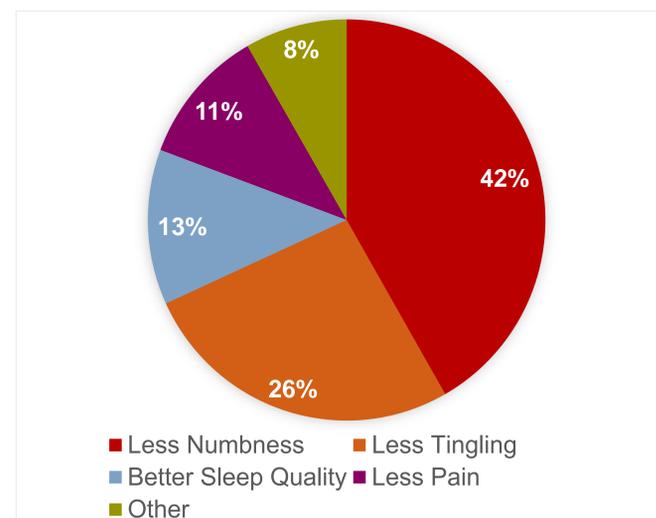
RESULTS

- Average DASH scores improved from 51 pre-operatively to 38.7 and 24.5 at two and six weeks after CTR ($p < 0.05$).
- Average VAS scores improved from 6.7 to 3.5 and 2.9 at two and six weeks ($p < 0.05$).
- Average PSQI scores also improved from 10.4 to 7.8 and 6.4 at two and six weeks post-operatively ($p < 0.05$).

How Long (in Days) After CTR Did Patients Notice Improvement in Sleep?

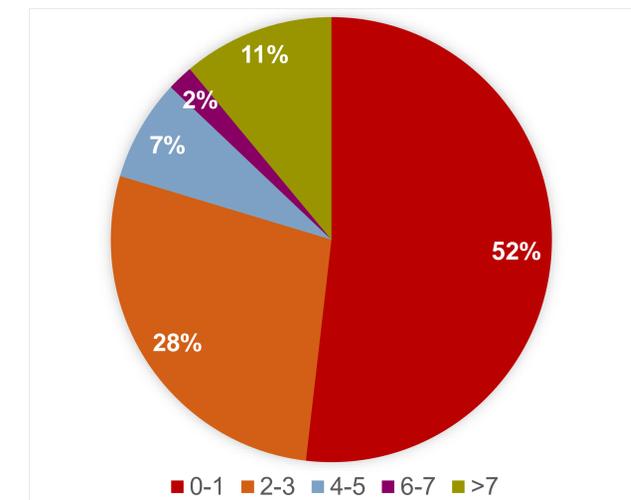


Patient Reported Improvements Post-Operatively



RESULTS (CONT.)

How Many Days Post-operatively Did Patients Report Narcotic Use?



DISCUSSION

- Improvement in pain, sleep, and functionality at both 2- and 6-weeks post-operatively.
- Most patients recognize resolution of symptoms less than one week post-operatively.
- Numbness and tingling are the pre-operative symptoms that patients note improvement in after CTR.
- Narcotics consumed post-operatively dramatically decreased after the third post-operative day.

