HAND ABSTRACTS

Opioid Use Following Open Versus Endoscopic Carpal Tunnel Release—A Population Study

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INTRODUCTION: Open carpal tunnel release (OCTR) and endoscopic carpal tunnel release (ECTR) are both effective treatments for carpal tunnel syndrome, with similar outcomes and complication rates. However, given the opioid epidemic in the United States, consideration of how surgical modality impacts narcotic use is important. We compared perioperative and postoperative narcotic use between OCTR and ECTR in order to identify potential risk factors for continued postoperative use.

METHODS: Using the PearlDiver database, we identified Humana-insured patients who underwent OCTR and ECTR from 2008 to 2015. Patients with opioid use were analyzed for trends. Early refills were defined as filling an additional opioid prescription between 2 and 30 days after surgery. Prolonged use was defined as another refill between 30 and 90 days postoperative. New persistent use was defined as a previously opioid-naïve patient who filled an additional prescription in the 30- to 90-day postoperative period. Predictors for opioid use studied included age, gender, Charleston comorbidity index, and surgery type (open versus endoscopic). Regression analyses were used to calculate odds ratios and 95% CIs.

RESULTS: A total of 29,583 patients met inclusion criteria: 24,458 (86%) had OCTR. The rate of preoperative opioid exposure was 22% for the overall cohort, with no significant difference between groups. More OCTR patients filled a perioperative prescription than ECTR patients (62% versus 60%; \( P = 0.03 \)), and the OCTR group filled higher quantities of opioids (411 OME versus 379 OME; \( P < 0.001 \)). With multiple logistic regression, patients in the OCTR group were 19% more likely to obtain an early refill (CI, 1.07–1.33; \( P < 0.01 \)). OCTR patients were also 13% more likely to have prolonged postoperative opioid use (CI, 1.02–1.25; \( P = 0.02 \)).

CONCLUSIONS: When compared to ECTR, patients who underwent OCTR filled higher quantities of opioids in the perioperative period were more likely to obtain early refills and were more likely to have prolonged postoperative use. Furthermore, patients with preoperative opioid exposure were at significantly increased risk of early refills and prolonged use in both groups. These findings suggest a possible lower opioid requirement after ECTR, which may be useful when choosing surgical modality for patients with prior opioid use or risk factors for new opioid abuse.

Comparing Digital Replantation Versus Revision Amputation Patient-reported Outcomes for Traumatic Digital Amputations of the Hand: A Systematic Review and Meta-analysis

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PURPOSE: Adults with traumatic digital amputation of the hand may be surgically managed with replantation or revision amputation. Preferences between treatment options vary between North American and Asian populations. This study aims to determine whether replantation compared to revision amputation yields superior patient-reported outcomes (PROs) and other outcomes. To date, there is no systematic review evaluating PROs in this population to suggest the optimal treatment approach depending on digital involvement (ie, thumb versus nonthumb) and the level of injury.

METHODS: Three databases (MEDLINE, Embase, and PubMed) were systematically searched from database inception until June 13, 2019 independently and in duplicate by 2 reviewers. Primary randomized and observational studies comparing replantation and revision amputation for isolated traumatic digital amputation in human subjects were considered for inclusion. Methodological quality of...