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WALANT Hand Surgery Does Not Require Postoperative Opioid Pain Management

Introduction: The widespread abuse of opioid has promoted alternate pain management options to limit unnecessary exposure. We sought to measure the impact of opioid restriction on pain management under Wide-Awake Local Anaesthesia No Tourniquet (WALANT) surgery.

Methods: Patients undergoing hand/upper extremity surgery under WALANT technique between September 2017 and July 2019 were prospectively enrolled in this study. All patients received the same postoperative pain management protocol, in which they were instructed to solely use over-the-counter non-opioid analgesics as needed. Adherence to this protocol was evaluated using patients' medical charts and the prescription monitoring program I-STOP. Patients' demographic information, insurance status, and comorbidity burden were collected via electronic charts. Visual analogue scale pain scores were prospectively collected during their preoperative examinations (PRE), and on postoperative day 1 (POD-1) and 14 (POD-14).

Results: 94 patients were included in this study, 2.1% of which sought opioid prescriptions from outside providers within the timeframe used. No significant differences in pain scores at each individual time point were found between groups including sex, age, Charlson Comorbidity Index, diabetes status, and previous opioid exposure (all, $p > 0.05$). Medicare patients exhibited a higher mean preoperative pain score; yet, no significant differences were found when comparing each insurance status group at the individual time points. Significant decreases in pain scores between PRE and POD-14, as well as POD-1 and POD-14 were shown for each subgroup (all, $p < 0.05$).

Discussion: Postoperative pain was effectively managed without the use of opioids in 97.9% of patients undergoing various upper extremity procedures under WALANT. Thus, WALANT may be advantageous in safely restricting opioid use in a diverse patient population without compromising postoperative pain management.