Paper #52

Patients at Risk: Preoperative Opioid Use Affects Opioid Prescribing, Refills and Outcomes after Total Knee Arthroplasty

Notes

Joshua Parry, MD, Nicholas M. Hernandez, MD, Tad M. Mabry, MD, Michael J. Taunton, MD

Introduction: The purpose of this study was to evaluate the effect of preoperative opioid use on opioid prescriptions, refills, and clinical outcomes following total knee arthroplasty (TKA).

Methods: A retrospective review identified 113 opioid naïve patients and 53 patients on preoperative opioids who underwent primary TKA with at least one year follow up. Opioid refills, Knee Society Score (preoperative and follow up), morphine equivalent dose (MED) prescribed, and persistent opioid use were compared between groups.

Results: The average total MED prescribed at discharge was 1280 mg, ranging from 0 to 4640 mg. The average daily MED used prior to discharge was greater in the preoperative opioid group compared to the opioid naïve group (90 \pm 75 mg versus 53 \pm 42 mg; p=0.001), vet the preoperative opioid group was discharged on a smaller average daily MED (125±59 mg versus 156±63 mg; p=0.003) and a smaller total MED prescription (1116±899) versus 1355±605; p=0.04). The preoperative opioid group, compared to the opioid naïve group, required more refills $(1.3\pm1.6 \text{ versus } 0.4\pm0.6; p=0.0001)$, was more likely to remain on opioids (21 (50%) versus 5 (5%), p=0.0001), had lower postoperative KSS (85±11 versus 91±14; p=0.01), and needed more manipulations under anesthesia (4 (8%) versus 1 (1%), p=0.03). Preoperative tramadol users had the same risk of refills, persistent opioid use, reduced KSS scores, and MUA as those taking other opioids.

Conclusions: Preoperative opioid users were discharged with less opioids, required more refills, were more likely to remain on opioids, and required more manipulations under anesthesia than opioid naïve patients. These risks extended to preoperative tramadol users.