

Decreasing Opioid Prescriptions Following Surgical Fixation in Orthopaedic Trauma: The “Lopioid” Protocol

Kenneth A Egol MD; Emma Landes BA; Philipp Leucht MD; Nirmal C Tejwani MD; Abhishek Ganta MD; Sanjit R Konda MD

NYU Langone Medical Center, New York, NY, United States

Purpose: In order to decrease the number of opioids prescribed at our institution, we began a protocol of a “safer” opioid and non-narcotic pain medications instead of schedule 1 and 2 narcotics. The purpose of this paper is to assess the effectiveness of the “Lopioid” protocol in decreasing opioid prescriptions following surgical fixation in orthopaedic trauma.

Methods: On January 1, 2019 we began a standardized protocol of postoperative pain medications that included: 50 mg of tramadol, 1 pill 4 times a day, 15 mg of meloxicam once daily, and 200 mg gabapentin twice daily. This multimodal regimen was dubbed the “Lopioid” protocol. All surgical cases for fixation of orthopaedic trauma at our institution in 2018 and 2019 were identified. Our Reporting/Data Extracts Department compiled a list of the opioid prescriptions for these patients. All opioid prescriptions for each patient were broken down by the drug prescribed at discharge from their procedure and any following refills from the orthopedic surgery department. Each prescription was converted to morphine milligram equivalents (MMEs) so that they could be compared between years. Data were analyzed with independent samples t tests and χ^2 tests using IBM SPSS statistics.

Results: There were 362 patients from 2018 and 151 patients from 2019 who underwent surgery for a traumatic fracture with available data who were discharged with opioids or not. There was a greater mean MME prescribed at discharge from fracture fixation surgery in 2018 compared to 2019 (339.00 vs 189.89; $P < 0.0001$). In this cohort, there was a difference in the type of opioid medication prescribed at discharge ($P < 0.0001$). The most prescribed opioid medication at discharge in 2018 was oxycodone-acetaminophen 5-325 mg oral tabs (60.6%) and in 2019 was tramadol 50 mg oral tabs (40.9%). There was no difference in the number of refills provided for patients discharged with opioids after surgical treatment between 2018 and 2019 ($P = 0.486$).

Conclusion: The “Lopioid” protocol was effective in decreasing the amount of Percocet, Vicodin, and Dilaudid prescribed following surgery for orthopedic fractures. While opioid refills remained constant, tramadol’s lower potency decreased the MMEs prescribed. Surgeons should consider the “Lopioid” protocol and the lower risk opioid, tramadol, as a means to limit more potent opioids prescribed upon discharge following surgical fixation in orthopaedic trauma.