

Opioid Maintenance Therapy in Orthopaedic Trauma Patients: An Orthopaedic Blind Spot?

*Patrick Curtin, MD; Luke Latario, MD; Alexandra Conway, BS; Marc Lubitz, MD;
Eric Swart, MD*

Purpose: As the opioid epidemic continues to affect the United States, it is becoming common to treat patients on opioid maintenance therapy such as suboxone or methadone for unrelated medical issues. The purpose of this project was to look at patients on opioid maintenance therapy presenting with orthopaedic trauma to evaluate how their pain is managed, and how their outcomes compare to patients not on opioid maintenance therapy with equivalent injuries.

Methods: 477 tibial (AO 42) and femoral shaft (AO 32) fractures were identified at a single Level I trauma center. Opioid maintenance therapy was defined as being actively prescribed suboxone or methadone at the time of injury. Patient demographics and follow-up information were collected for all patients.

Results: Of the 477 patients meeting inclusion criteria, 24 (5%) were on maintenance opioid therapy at the time of injury. For these 24 patients, there was a heterogeneous distribution of pain treatment strategies employed including continuation of opioid maintenance medication, temporarily holding maintenance, or indefinitely holding maintenance therapy. Compared to the 453 patients who were not on opioid maintenance therapy (control), there was a similar rate of follow-up (95.1%) compared to those on opioid maintenance therapy (95.8%). Those on opioid maintenance therapy, however, were 5.5 times more likely to present to the emergency department and be rehospitalized within 90 days ($P = 0.0001$) and 5.4 times more likely to be admitted for opioid overdose ($P = 0.0001$) compared to the control group. Patients on opioid maintenance therapy were also 2.3 times more likely to be uninsured or on Medicaid ($P = 0.05$).

Conclusion: The balance of appropriate pain control versus inappropriate narcotic use is challenging in all patients, and is even more difficult in patients with prior substance use or who are on opioid maintenance therapy. While access to orthopaedic follow-up does not seem to be a problem, there is an alarmingly high rate of representation in the 90-day postoperative period. Given the high re-representation rate and life-threatening complication rate, this may be a patient cohort that might benefit from targeted interventions and development of established pathways.