

## **Opioid Maintenance Therapy in Orthopaedic Trauma Patients; An Orthopaedic Blindspot?**

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### **INTRODUCTION:**

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:**

A total of 477 tibial (AO 42) and femoral shaft (AO 32) fractures were identified at a single level-one 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 ( $p = 0.05$ ).

### **DISCUSSION AND CONCLUSION:**

The balance of appropriate pain control vs. inappropriate narcotic use is challenging in all patients, and is even more difficult in patients with prior substance use or 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 representation rate and life-threatening complication rate, this may be a patient cohort who might benefit from targeted interventions and development of established pathways.