Eastern States Abstract

Title: Evaluation of Post-Operative Pain Management in Patients with Opioid Use Disorder Receiving Buprenorphine or Methadone Therapy

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Presentation Objective: Explain the impact of continuation of MOUD therapy on post-operative pain management medication use

Self Assessment Question:
T/F: Continuation of buprenorphine or methadone in the perioperative setting results in lower supplemental opioid utilization compared to patients who's MOUD is discontinued perioperatively.

Background: Post-operative pain management in patients taking medications for opioid use disorder (MOUD) presents unique challenges. Optimal pain management aims for effective pain control while continuing MOUD to prevent withdrawal in the perioperative setting.

Methods:
A retrospective chart review was conducted on hospitalized adults (≥18 years) with opioid use disorder (OUD) who were taking methadone or buprenorphine and underwent a surgical procedure in 2023 or 2024. Patients were excluded if their procedure did not require an overnight stay or if they remained intubated for ≥12 hours following surgery. Collected data included demographics, surgical details, MOUD use, and opioid and non-opioid analgesic administration. The primary objective was to assess continuation of MOUD in the postoperative period. Secondary objectives included identifying the type and frequency of non-opioid pain medications administered and comparing morphine milligram equivalents (MME) between patients who continued MOUD and those who did not. Descriptive statistics and independent t-tests were used for analysis.

Results: Of the 42 patients included, 88% were on buprenorphine and 12% on methadone and 74% were continued on MOUD postoperatively. In the first 24 hours after surgery, those who were continued on MOUD had a lower mean MME than those who were not continued, 84 ± 132 vs. 95 ± 37 (p=0.039). This trend was continued in the 24-48 hour period with the mean MME being 61 ±76 and 122 ± 53, respectively (p=0.013). The most used non-opioid analgesics used after surgery were oral acetaminophen (34, 81%), parenteral ketorolac (24, 57%), and gabapentin (19, 45%). The opioid MME over 0-48 hours was decreased with the use of gabapentin (163.4 ± 127.9 vs. 181.1 ± 216.7, p=0.866) and ketorolac (131.6 ± 120.7 vs 225.4 ± 223.6, p=0.212).

Conclusion: Most patients were continued on their respective MOUD postoperatively. Those who were continued required less supplemental opioids in the 48 hours post-procedure compared to those whose MOUD therapy was interrupted. The use of certain non-opioids such as parenteral ketorolac may be associated with lower MME requirements. This supports existing recommendations to continue MOUD and use multi-modal analgesia in the perioperative period.