Opiate Free Multimodal Pain Pathway in Elective Foot and Ankle Surgery: A Prospective Study

James Benjamin Jackson, Rachel LaVerne Glenn, Daniel Joseph Ross¹, Tyler Gonzalez

¹Prisma Health - Midlands

INTRODUCTION: Orthopaedic surgeons frequently prescribe and overprescribe narcotic pain medications during the postoperative period, despite our increased understanding of the opioid crisis. In an effort to minimize narcotic analgesia and its potential side effects, opiate free multimodal pain pathways have been developed with promising results. However, there is a lack of published literature looking at opiate free multimodal pain protocols for elective outpatient foot and ankle surgeries. At our institution we have been implementing a novel opiate free multimodal postoperative pain protocol for elective outpatient foot and ankle surgeries. The purpose of this study was to explore the efficacy, feasibility, outcomes, and satisfaction of an opioid-free, multimodal postoperative pathway in patients undergoing elective outpatient foot and ankle surgery.

METHODS:

This study was approved by our IRB. Data was collected from December 1, 2020 through February 9, 2022 for patients who underwent a primary elective outpatient foot and ankle surgery including bunion correction surgery with or without a lesser toe procedure(s). These patients completed a comprehensive opioid-free, multimodal pain management protocol and a follow up with one of two fellowship trained orthopaedic foot and ankle surgeons. The multimodal treatment protocol included oral pregabalin, acetaminophen, ketorolac tromethamine, and cyclobenzaprine to begin POD#0. Meloxicam was given to POD #4 once ketorolac tromethamine was completed. All data was collected in a prospective manner. At POD#1, #3, and #8, patients were contacted to collect VAS scores, complications, ED and Urgent care visits, and pain medication needs. At two-week follow up these were again collected in addition to overall satisfaction rates.

RESULTS: Thirty-three patients enrolled with a mean age of 55 (19-81) years old. The average follow up was 11.5 weeks. On POD#1, #3, #8, and at 2 week follow up our patients' average VAS pain score was a 4.0, 2.5, 1.6, and 1.4 out of 10, respectively. In total, 18% of patients required narcotics within the first 2 weeks. By 2 weeks no patients were taking narcotics. No patients visited an ED/urgent care during the first 2 weeks. Common side effects were drowsiness/tiredness and constipation. Only 4 reported nausea or GI upset at 2 weeks. Overall, 91% were satisfied with their pain control, 78% would follow the same protocol again, and 82% would recommend this pain management regimen to others.

DISCUSSION AND CONCLUSION: An opioid-free, multimodal pain management pathway is a safe and effective option in properly selected patients undergoing elective outpatient foot and ankle surgery with a very low risk of requiring rescue opioids, having significant side effects, and/or needing an ED or urgent care evaluation within the first 2 week postoperative period.