Pain Management after Outpatient Foot and Ankle Surgery

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Category: Pain Management, Anesthetic Advances

Keywords: outpatient, narcotic, opioid, pain management, nerve block, spinal

Introduction/Purpose: The number of opioid prescriptions in the United States has significantly increased over the past 20 years, including those given after low-risk surgery. Unintentional opioid overdoses have also dramatically risen. Excess pills are widely acknowledged as a source of diversion, which accounts for up to 40% of opioid-related overdoses. In the foot and ankle literature, there are no studies looking at the quantity of pain medications that should be prescribed following outpatient surgery. Furthermore, with the increasing use of peripheral nerve blocks, their effect on quantities of narcotics needed after these surgeries have not been explored. This study aims to determine prescribing patterns for common outpatient foot and ankle surgery and whether patients are over or under-prescribed opioids and if so, by how much.

Methods: 57 patients undergoing outpatient foot and ankle surgeries were prospectively enrolled. Patients received a spinal neuraxial block and a long-acting popliteal peripheral nerve block, and did not receive ketorolac perioperatively. Patients were excluded if they had a history of chronic pain, or were currently using opioids or muscle relaxers. Enrolled patients received a standard post-operative prescription regimen of 60 tablets of narcotics, 3 days of scheduled ibuprofen, aspirin 81mg twice a day (or alternate based on risk factors) for DVT prophylaxis, and ondansetron taken as needed. Patients used a pain diary to record when their block wore off and the quantity of narcotic taken. They received surveys at post-operative day (POD) 3, 7, and 14 detailing how many days they took the medication and how many pills were consumed, how their actual pain compared to their expected level of pain, and if they were satisfied with their pain control.

Results: At POD 3, compared to their expected level of pain 36 patients had less pain, 15 had the same pain, and 3 had more pain than expected. The mean pain score was 4. Patients first started feeling the block wear off at 0.9 days. Patients averaged 10.3 pills of narcotics in the first 3 days and rated their overall satisfaction with pain control at 8.5. Between days 4-7, patients took an average of 7 pills, and on POD 7, 22 patients were still taking narcotics. At POD 14, patients experienced 74.4% relief of pain compared to their expected pain, and rated their overall satisfaction at 8.2. Patients had an average of 33.5 remaining pills on POD 14 and 13 patients (22.8%) were still taking narcotics.

Conclusion: Patients receiving spinal and long-acting popliteal blocks, followed by the prescription regimen described above had excellent pain control after outpatient foot and ankle surgeries. Patients had a high level of satisfaction with their pain control, with many patients describing better pain relief than expected. However, 60 tablets of narcotics were excessive in most cases. We suggest that in patients receiving spinal and long-acting popliteal blocks, 30 tablets of a narcotic would cover the pain needs of most patients. This would provide a small excess in case of need, but would help minimize the risk of narcotic related complications and diversion.

Foot & Ankle Orthopaedics, 2(3)
DOI: 10.1177/2473011417S000350
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