

Post Operative Opioid Usage Following Shoulder Arthroplasty

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INTRODUCTION: The primary aim of this study was to characterize opioid medication consumption in the initial recovery phase (first two weeks) after shoulder replacement surgery compared to the amount the patient was prescribed, as well as recording other medications (any OTC pain killers or anti-inflammatory medications) taken during initial two weeks following surgery. Secondary aims were to determine if there was an association between the pain tolerance scale of the patient obtained pre-surgery and their opioid consumption.

METHODS: Patients undergoing anatomic shoulder arthroplasty or reverse shoulder arthroplasty (RSA) were prospectively enrolled. Collected data included demographics, Pain Catastrophizing Scale (PCS), and a pain tolerance survey. Patients were instructed to fill out a diary post-operative, provided to them pre-surgery to record the intake amount, date and time of the prescription opioids and other OTC pain killers/anti-inflammatory medications during initial recovery period of 2 weeks at home. Known chronic opioid users were excluded from the study.

RESULTS: Data was collected from seventy-three (73) patients with fifty (50) patients meeting criteria to be included in this study. At 14 days, the average number of opioid pills taken was 7.54 pills, and the median number of opioid pills taken was 4.50. 11 patients (22%) elected no opioid usage, 23 patients (46%) took between 1-10 opioid pills, 13 patients (26%) took between 11-20 opioid pills, and 3 patients (6%) took 21-30 opioid pills. The average number of days on opioids was 3.62, and the median number of days on opioids was 3, with only 7 patients (14%) continuing usage for longer than one week of the initial recovery period. Average PCS-EN scores, pain tolerance survey (VAS), or occupation status/type did not differ between the two groups.

DISCUSSION AND CONCLUSION: The typical number of opioid pills prescribed post shoulder arthroplasty at our institution is 18. Nearly half (46%) of the patients only took between 1-10 opioid pills. Furthermore, only 14% of patients were dependent on opioids for pain control more than a week following surgery. These findings indicate that excess amounts of opioid medications are prescribed postoperatively following shoulder arthroplasty.