

Background

In the last two decades, the opioid-related death toll in the United States has reached approximately 500,000, urging physicians to reevaluate opioid prescription practices. Post-surgical opioid prescriptions are a contributing factor to narcotic addiction, and over-prescription of narcotics in a post-operative period has been documented previously. The goal of this investigation is to study trends in the frequency and quantity of opioid prescriptions following total knee arthroplasty (TKA) and total hip arthroplasty (THA) in a single institution closed urban setting, focusing on an indigent population.

Methods

Using the I-STOP Prescription Monitoring Program for the State of New York, opioid prescription data was collected on 100 consecutive patients who received a primary TKA or THA at our institution between July 2024 and December 2024. The following parameters were noted: prescription, number of pills, and time of dispense related to surgery dates. Milligram morphine equivalents (MME) were calculated from this data. The data was divided into 30, 60, 90, and 180 days post-surgery intervals for analysis. We quantified total opioid consumption and recurrence of refills.

Results

We chose findings specific to oxycodone, as it was prescribed to 96% of our patients. Post-operative prescribing patterns revealed that 29% of patients continued to receive opioid refills past 30 days, 24% continued past 60 days, 20% continued past 90 days, and 14% of patients continued to receive opioids after 180 days. Of note, only 13% of patients received no narcotics. Our data indicate that 19.7% of TKA and 41.7% of THA patients received more than the recommended number of opioids reported in the literature. A recent JAAOS study found that a comparable urban institution had an average of 826.5 MMEs prescribed after elective arthroplasties. At our institution, the average MME prescribed for THA was 770.6, with 20.83% of patients over 826.5 MME. Similarly, the average MME prescribed for TKA was 867.8, with 27.6% of TKA patients above the JAAOS average. Notably, 10% of patients were not opioid naive pre-operatively.

Conclusions

These data demonstrate that both patients and physicians in this setting are accustomed to the use of excess opioids post-surgery. Both parties would benefit from a new approach to pain management to decrease the amount of opioids used in the community. This study reveals the significance of evaluating the quantity and duration of narcotic medications prescribed by physicians in a specific setting, and creating a standard procedure for opioid prescriptions.