

Is Opioid-Limiting Legislation Effective for Hand Surgery Patients?

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Institutional Review Board Approval was obtained at all participating institutions for collection and analysis of patient data.

Keywords: hand surgery; legislation; opioid epidemic; opioid limiting regulation; opioid use

ABSTRACT

Purpose

Opioid abuse is a growing crisis with significant implications on clinical practice. The Rhode Island State Legislature passed the *Uniform Controlled Substances Act* in 2016, which placed limits on opioid prescriptions. We aim to objectively evaluate its' effect on postoperative opioid prescription patterns for hand surgery patients. Secondly, we aimed to evaluate risk factors for prolonged opioid use.

Methods

A six-month period (January to June 2016) prior to passage of the law was compared to a six-month period following its implementation (July to December 2017). Retrospective review of patients undergoing four common hand surgeries was performed. Thumb carpometacarpal arthroplasty and distal radius fracture fixation were classified as “major surgery” while carpal tunnel release and trigger finger release were considered “minor surgery”. Prescription Drug Monitoring Database (PDMD) was utilized to review controlled substances filled during the study periods.

Results

A total of 1,380 patients met our inclusion criteria, with 644 patients *pre-law* and 456 *post-law*. Following implementation of the legislature, only patients undergoing “major surgery” saw a significant decrease in the number of pills issued in the first postoperative prescription (41.06 vs 21.03), and a corresponding decrease in MMEs (318.63 vs 159.21 MMEs). A 30% decrease in MMEs was also seen in those undergoing “major surgery” in the first 30 days post-operatively (544.74 vs 381.74 MMEs). Risk factors for prolonged opioid use included male gender (OR 1.42) and preoperative opioid use (OR 11.48, 95% CI 7.49-17.58).

Conclusions

In Rhode Island, the implementation of opioid-limiting legislation resulted in a significant decrease in the number of pills and MMEs of the initial, post-operative prescription and a 30% decrease in total MMEs obtained in the 30-day postoperative period after “major hand surgery”. Additional research is needed to explore the association between these types of legislation and clinical outcomes.

Level of Evidence: Therapeutic, Level III