Opioid prescription protocol in elective foot and ankle surgery

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Statement of Purpose
To determine the effect of an opioid prescribing protocol for patients undergoing elective foot and ankle surgery at Hennepin Healthcare.

Methodology
• This retrospective study was approved by the Institutional Review Board. The prescribing of opioid pain medication was studied for patients undergoing elective foot and ankle surgery for one month period after implementation of a specific prescribing protocol 1/1/2017-12/31/2017, and compared to a control group of patients undergoing the same types of procedures from 1/1/2014-12/31/2014. Exclusion criteria included certain procedures (non-elective incision and drainage, amputation, trauma) and patients with chronic pain, who were defined as patients receiving opioid prescriptions greater than two weeks prior to surgery.
• The protocol included written patient communications including instructions prior to any elective procedure as well as instructions for any postoperative visit. (See Figure 1).
• The protocol provided uniform parameters for prescribing types and amounts of pain medication based on procedures performed.

Results
Table 1. Summarization of prescribing protocol
The protocol divided patients into three different categories: • Soft Tissue Surgery • Foot Osseous • RRA Osseous

Table 2. Types of procedures performed during 2014 and 2017
After initiation of the prescribing protocol, there was a significant decrease in overall narcotic prescribed following elective foot and ankle surgery for all three categories of surgery:

Table 3. Summarization of total procedures performed and average MME post operatively

Table 4. Literature Review Continued
Currently the United States consumes about 80 percent of the global opioid supply and 99 percent of the hydrocodone supply. Orthopedic surgeons prescribe 8% of the total opioid prescriptions in the United States.

Analysis and Discussion:
Opioids are essential for effective analgesia after most orthopaedic procedures. Along with opioids, additional supplementary techniques are frequently used to help decrease the use of post operative opioids, including gabapentanoids, hydroxyzine, and ketorolac to name a few. Physicians face multiple challenges balancing the need to provide adequate pain relief and prevention of abuse or addiction following surgery.

The advantages of a prescribing protocol include providing a framework for uniform prescribing expectations and tools for communication for providers, nursing staff, and patients alike – during the presurgical and postoperative period. The greatest advantage of initiating a protocol is the significant reduction in opioids prescribed, as discovered during this study.

This protocol is intended to help reduce the total opioid prescribed post operatively and therefore limit the availability in the community. Despite the advancements toward understanding the dangers or opioids, rates of addiction, overdoses and deaths continue to rise. Additional research into patient quality of care and safety following elective foot and ankle surgery is needed.

Financial Disclosures

References

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Figure 1: Pre Operative Instructions
Methodology continued
Prescribing protocol following elective surgery at Hennepin health

Methodology continued
Prescribing protocol following elective surgery at Hennepin health

Methodology continued
Prescribing protocol following elective surgery at Hennepin health

Results Continued

LITERATURE REVIEW

Currently the United States consumes about 80 percent of the global opioid supply and 99 percent of the hydrocodone supply. Orthopedic surgeons prescribe 8% of the total opioid prescriptions in the United States. Mental health and substance use disorders have been identified as significant needs in the community. The importance of addressing the opioid epidemic is significant. The overuse and misuse of opioid prescriptions is leading to increased rates of addiction, overdose, and death. Rates of opioid prescriptions have continued to increase in recent years.

Over the past two decades, the number of opioid prescriptions in the United States nearly tripled from 76 million in 1991 to 207 million in 2013. This increase may be an unintended consequence of a federal mandate to include rating pain as the “fifth vital sign” and the push for proper post operative pain control in the 1990s. However, this increase may be of concern. A recent study found that although adding ketorolac did not decrease the number of narcotic pills consumed, it did significantly decrease patients pain post operatively though only post day 2.

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