

ABSTRACT

Optimizing Pain Management After Cardiac Surgery with Less Opioids: Abstract

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On my honor, I pledge that I have neither given nor received any unauthorized assistance on this paper. March 29, 2023.

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Abstract

Background and Purpose

Deaths related to overdoses continue growing in the United States. The overprescription of opioids could aggravate the problem. Providers order analgesia with different patterns depending on the individual and the setting. Most initiatives like “Enhanced Recovery After Surgery” have focused on changing protocols when the patient is admitted. Our purpose was to increase the consistency in the prescription of multimodal analgesia and reduce unnecessary opioids at discharge after cardiac surgery.

Methods

This is a single-center, pre-post quality improvement project in adult patients after elective cardiac surgery via sternotomy. We evaluated an intervention consisting of changes in protocols, modification of order sets, creation of dashboards, and education to the providers to increase the prescription of acetaminophen around the clock in the step-down unit and at discharge, decrease the number of opioid tablets to 25 or less at discharge and decrease the prescription of opioids to 25 or less morphine milligram equivalents at discharge.

Results

The pre-intervention group included 67 patients from November to December 2021. The post-intervention group had 67 during the same period in 2022. Acetaminophen prescription in the step-down unit increased from 9% to 96% ($p<0.001$). The number of patients discharged with 25 or less opioid tablets increased from 18% to 90% ($p<0.001$), and with 25 or less morphine milligram equivalents from 30% to 55% ($p<0.01$). Acetaminophen prescription at discharge increased from 10% to 48% ($p<0.001$).

Conclusions

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Our intervention increased the use of acetaminophen and decreased the overprescription of opioids in patients after cardiac surgery at discharge. Further research is necessary to continue improving pain management and reduce the orders of unnecessary opioids after surgery.

Implications

The cardiac surgery community can also focus on the order of opioids beyond the hospital stay. Reducing the overprescription at discharge is possible with some relatively simple interventions.

Keywords

Perioperative care, opioid, cardiac surgery procedures, discharge planning, acetaminophen