

Prospective Cohort Evaluation of Opioid Use and Pain Following Cardiac Surgery

Edward Percy^{1,2}, Sameer Hirji¹, Nicholas Leung¹, Morgan Harloff¹, Olena Cherkasky¹, Farhang Yazdchi¹, Richard Cook², Marc Pelletier³, Tsuyoshi Kaneko¹

¹Division of Cardiac Surgery, Brigham and Women's Hospital, Boston, MA, ²Division of Cardiovascular Surgery, University of British Columbia, Vancouver, BC

³Division of Cardiac Surgery, University Hospitals Cleveland Medical Center, Cleveland, OH



BACKGROUND

- Persistent opioid use is common after cardiac surgery, with between 8% and 13% of patient using opioids 3 months after surgery.
- Significant variability exists in discharge opioid prescribing practices among cardiac surgeons, however there is no evidence to guide optimal prescribing.

OBJECTIVE

- The purpose of this study was to prospectively evaluate patterns and risk factors for opioid consumption following cardiac surgery, to guide optimal opioid prescribing practices.

METHODS

- All adult patients undergoing cardiac surgery at a tertiary hospital were considered for enrollment.
- Exclusion criteria:
 - Chronic pain or opioid used within 3 months
 - Transplant or re-do sternotomy procedure
 - Discharge to a non-home facility
- Outcomes: Daily opioid use and pain scores over 10 discharge days, via patient diary and researcher-directed pill count
- Of 111 eligible patients:

5 (4.5%)
declined



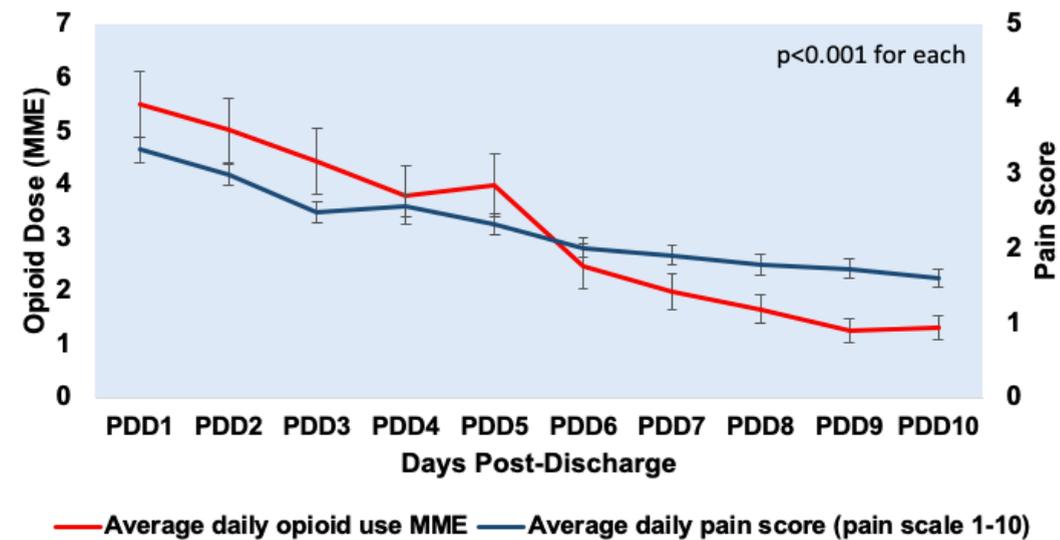
2 (1.8%) lost
to follow-up



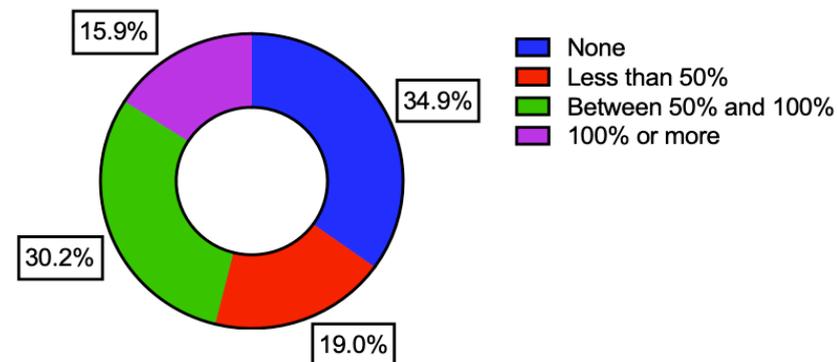
104
in final cohort

RESULTS

Mean Pain and Opioid Use in First 10 Post-Discharge Days



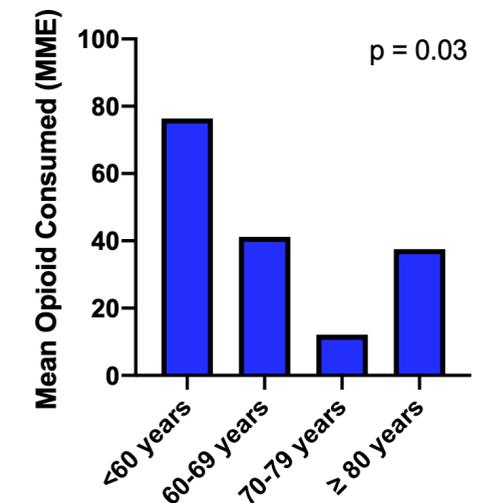
Proportion of Opioid Prescription used in first 10 days after Discharge



Predictors of Post-Discharge Opioid Use

- Diabetes (OR 4.9 [1.19-20.1], p=0.03)
- Mean pain score ≥ 3 on day of discharge (OR 2.9 [1.8-4.8], p<0.01)

SUBGROUP ANALYSIS



CONCLUSIONS

- The majority of patients used none or fewer than 50% of the opioid pills prescribed to them in the post-discharge period, and mean consumption was just 64 MME.
- Opioid use was greatest among patients under 60 years of age.
- After controlling for baseline and operative factors, diabetes and mean pain score ≥ 3 on the day of discharge were predictors of opioid use in the post-discharge period.

DISCLOSURE

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