

GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

MASTERS IN CLINICAL INVESTIGATION PROGRAM

MSCI THESIS DEFENSE

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Via Zoom Meeting

Evaluation of a Tiered Opioid Prescribing Guideline for Inpatient Colorectal Operations

Background: In light of the opioid epidemic, reducing excess prescription quantities while tailoring to patient need is key. We previously created an opioid prescribing guideline using retrospective institutional data to satisfy the majority of patients' opioid needs following inpatient colorectal surgery.

Objective:

This study sought to validate an institutional prescribing guideline based on defined opioid consumption patterns following inpatient colorectal operations.

Methods:

We carried out a cohort study comparing opioid prescribing and consumption patterns before (07/15/18 – 01/15/2019) and after (09/01/19 – 02/29/20) adoption of a tiered opioid prescribing guideline for inpatient elective colorectal operations (colectomies, proctectomies, ostomy reversals) at a single tertiary care medical center. Opioid use was quantified as Equianalgesic 5mg Oxycodone Pills (EOP), and patients were grouped in three tiers based on opioid consumption in the 24-hours prior to discharge: Tier 1 (0 EOP), Tier 2 (0.1-3 EOP), and Tier 3 (>3 EOP). Our guideline recommended maximum prescriptions of 0 EOP for Tier 1, 12 EOP for Tier 2, and 30 EOP for Tier 3.

Results:

The study included 100 patients before and 101 after guideline adoption. Demographic and operative variables were similar before and after guideline adoption. Guideline adherence was 85%. Overall, there was a 41% reduction in mean prescription quantity and 53% reduction in excess pills per prescription with no change in opioid consumption or refill rates.

Conclusion:

Adoption of a tiered opioid prescribing guideline significantly reduced opioid prescription quantity with no change in consumption or refill rates. Standardization of discharge prescriptions based on patient consumption in the 24 hours prior to discharge may be an important step towards minimizing excess prescribing.

Mentor(s)

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