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Pain Management In Perforated Appendicitis: Transitioning To A Minimal Narcotic Strategy

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Introduction

- Patient controlled analgesia (PCA) was previous standard for postoperative pain control for perforated appendicitis at our institution.
- We have since transitioned to a PCA-free, multi-modal pain control (MMPC) regimen postoperatively in perforated appendicitis.
  - Scheduled 48-hr IV Tylenol & Toradol
- **We aim to describe the impact of our new pain control regimen on postoperative narcotic use.**

Methods

- Single institution
- Prospective, observational study
- January 2018- June 2020
- Patients <18 yrs old who underwent laparoscopic appendectomy for perforated appendicitis

Results

Total Patients = 400	
Sex	56% male
Age (years)	10.5 (7.8, 13.0)
Race	65% caucasian
BMI (kg/m^2)	18.7 (15.9, 22.8)
Hospital LOS (days)	3.1 (2.2, 4.2)

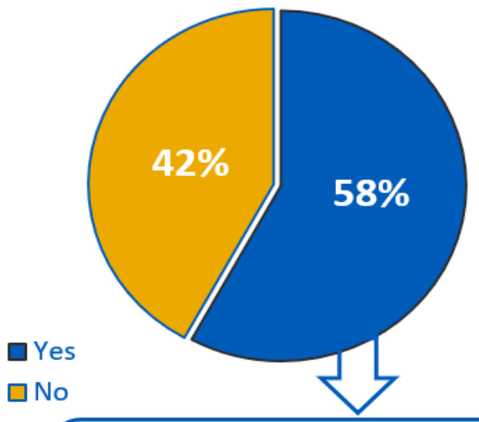
Postoperative

- Scheduled 48-hr IV Tylenol and Toradol were given.
  - 96% received IV Toradol (7 median doses [IQR 5,11]).
  - 94% received IV Tylenol (7 median doses [IQR 4,8]).
- Median pain scores were highest in the first 12 hours after surgery (median pain score 5 [IQR 3,7]).

Discharge

- 65% of patients discharged with an oral narcotic prescription with median prescribed outpatient max daily MME of 30 [IQR 16.2, 30].
  - **40% of those patients had not required any narcotics post-op.**

Postop Narcotics Once on the Floor



- Median max daily MME = 9.5 [IQR 6.3,15].
- Only 3 patients (0.8%) patients required escalation to PCA for uncontrolled pain.

Conclusions

- Multimodal pain regimen **limits narcotic use** post-operatively in perforated appendicitis
- May contribute to decreased LOS compared to prior studies.
- Discharge pain medication prescription protocolization is the next step to further reduce unnecessary narcotic exposure.

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