

Introduction

Length of stay (LOS) in the Post Anesthesia Care Unit (PACU) is dramatically impacted by the administration of opioid pain medication.

Many patients become somnolent and experience post-operative nausea & vomiting (PONV) increasing LOS.

Purpose of the Study

Determine whether



utilizing IV acetaminophen and NSAID would reduce IV opioid administration post operatively thereby decreasing side effects of nausea, vomiting & LOS. Reducing opioid administration in the PACU and utilizing a multimodal approach of non-opioid intravenous (IV) medications patient throughout will be optimized



Methods

Analysis involved a retrospective review of 250 surgical charts of patients having hernia or gynecological procedures.



The analysis was sub-divided into 4 groups:

- 1) NSAID only
- (Ketorolac or Caldolor)
- 2) non-acetaminophen/ non-NSAID
- 3) acetaminophen with NSAID
- 4) acetaminophen only.

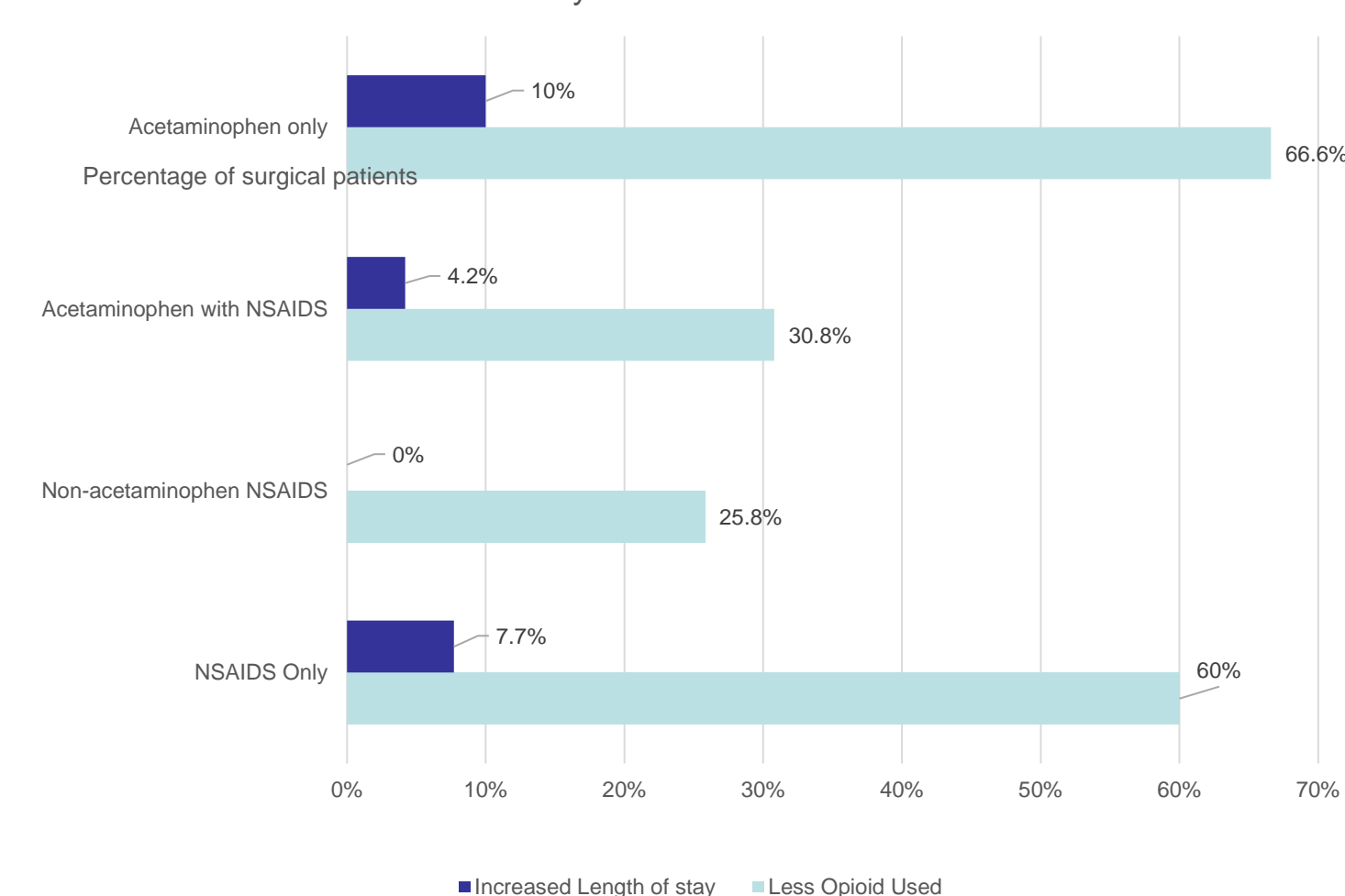


Data collection included:

- Use of opioid medications
- Treatment for nausea and vomiting
- length of stay in PACU.

Results

Data Analysis Outcomes of Patients



Outcomes: smaller proportion of group 2 and 3 patients (25.8% and 30.8%) required Opioids compared to groups 3 and 4 (46.2% and 54.0%) $p=0.011$
 PACU Interventions were less frequently used in groups 2 and 3 (35.5% and 35.0%) compared to groups 1 and 4 (60% and 66%) $p=0.001$

PACU interventions for N/V were least in group 3 (41.3%) and most in group 4 (68.0%) $p=0.014$

Adverse events increasing LOS occurred less often in groups 2 and 3 (0% and 4.2%) vs. groups 1 and 4 (7.7% and 10.0%) $p=0.035$

LOS: group 2 had the shortest PACU hours (1.3) vs. group 4 with the longest (1.7) $p=0.007$

Associations

The use of NSAID and acetaminophen (multimodal approach) showed the greatest benefit for the patient. This impacted the way we manage care in our surgi-center. For many of the cases we now give the NSAID in combination with acetaminophen. We continue to see a decrease in opioid use and decrease in PONV resulting in decreased

LOS. Anesthesia has added blocks and long acting local anesthesia for many cases decreasing post-op pain that impacts PONV and LOS. This ultimately keeps our patients safe and increases patient satisfaction.

References

provided on request