

## Background

Perioperative palate repair pain management protocols aim to minimize discomfort and expedite patient recovery. These pain management strategies vary substantially following palatoplasty among cleft surgeons. This variation is the result of surgeon experience and preference, and provides a unique opportunity to study the impact of various post-operative analgesic strategies while controlling for other perioperative variables, including anesthetic and nursing protocols.

**The purpose of this study is to define analgesic variables that affect post-operative narcotic use and time to resumption of oral intake.**

## Methods

- Retrospective review of non-syndromic patients undergoing primary palate repair between 2015-2018
- Variables investigated:
  - Method of narcotic administration (Nurse Controlled Analgesia/NCA vs. PRN IV Dosing)
  - Long lasting local anesthetic (bupivacaine)
  - Application of palatal pack
  - Suprazygomatic nerve block
- Post operative medications administered *prn* were controlled for (dexamethasone, IV acetaminophen, ketorolac)
- Outcome variables: quantity of opioid medication administered and time to resumption of oral intake

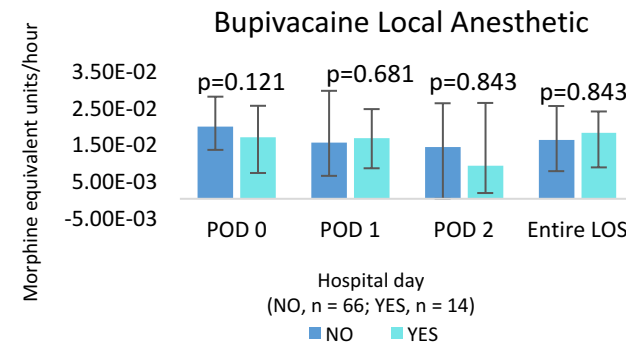
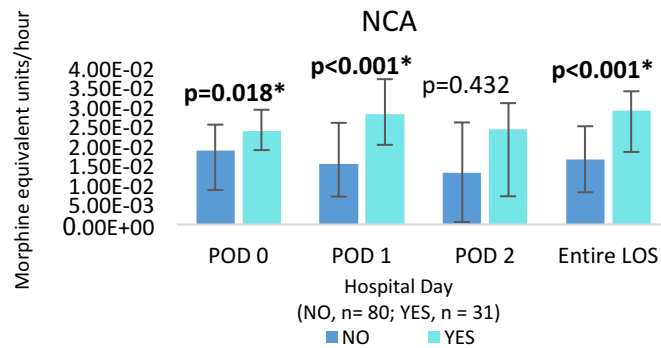
## Results

## Conclusions

**1** Use of **NCA** was associated with a significant **increase** in opioid use on post operative days 1 & 2, as well total use over full length of stay. For subsequent analyses, patients with NCA were removed from this study due to this confounding variable.

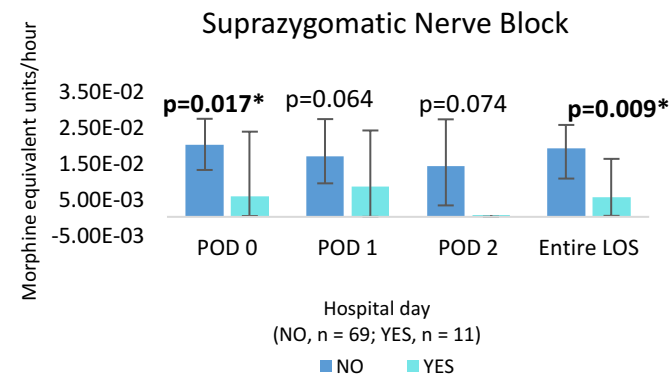
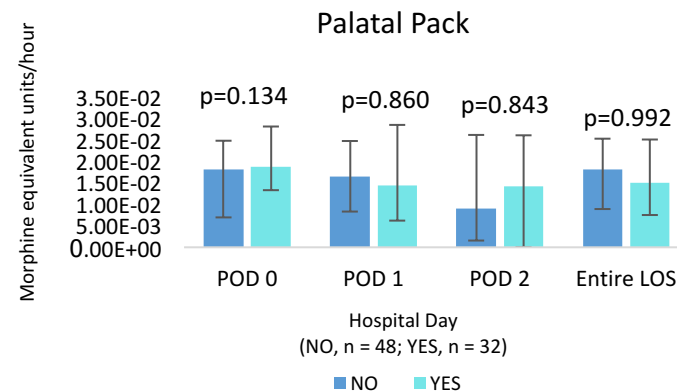
**2** **Bupivacaine** addition to the local anesthetic was not associated with significant difference in opioid use over length of stay.

Strategies to reduce narcotic administration following palate repair are numerous. The findings of this study suggest NCA can result in higher narcotic dosing without clinical benefit, and that perioperative palatal blocks with long acting analgesic medications may provide superior pain control than without. There may be a role for standard dosing of medications that are currently given *prn* at our institution (ketorolac, dexamethasone, IV acetaminophen). Larger population studies and robust costing analyses are needed to further evaluate the risks and benefits of performing palatal blocks for palate repairs, particularly the time-related cost of this additional intra-operative procedure.



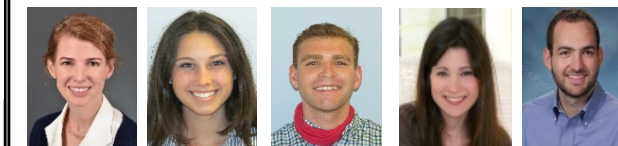
**3** **Palatal Pack** use was not associated with significant difference in opioid use over length of stay.

**4** **Nerve Block** infiltration was associated with a significant **decrease** in opioid use on post operative day 1, as well as overall use over length of stay.

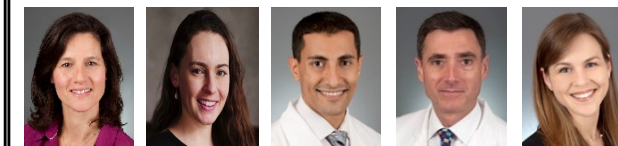


## Authors and Disclosures

Disclosure: The authors have no relevant financial or non-financial relationships.



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