Multimodal Pain Control in Common Neonatal Surgeries: Postoperative Pain Protocol Reduces Opiate Exposure and Side Effects

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Multimodal Pain Control in Common Neonatal Surgeries: Post-op Pain Protocol Reduces Opiate Exposure and Side Effects

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Background

- Opioids are the primary post-op analgesic in neonates with side effects including hypotension, apnea and ileus.
- Previous studies have shown that IV acetaminophen decreases opiate exposure however the effect of IV acetaminophen as part of a post-op pain algorithm is unknown.

Objectives

- To determine if (a) a post-op pain algorithm including IV acetaminophen and (b) IV acetaminophen exposure reduces cumulative opioid requirements in neonates undergoing common surgeries in the NICU.

Methods

- Retrospective cohort study comparing post-operative opiate exposure between infants with common surgeries
  - infants who receive post-op IV acetaminophen vs did not.
- Wilcoxon Rank Sum tests were used for outcome comparisons amongst groups

Results

- Implementation of a post-op pain algorithm in the NICU significantly reduced cumulative opioid exposure and the incidence of post-operative hypotension.
- Post-op hypotension was reduced with acetaminophen exposure.

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