Poster Number: T5
Poster Title: Decreasing Clear Liquid Fasting Times in the Pediatric Ambulatory Surgical Population: A Quality Improvement Initiative
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Abstract
Prolonged preoperative fasting remains a common issue in pediatric surgical populations despite clear evidence supporting the safety of shorter fasting durations. Extended fasting can lead to hypoglycemia, irritability, and delayed postoperative recovery. The purpose of this quality improvement initiative was to implement standardized, evidence-based preoperative fasting instructions for pediatric patients undergoing elective ambulatory surgery. The goal was to decrease overall clear liquid fasting times through caregiver education encouraging the provision of clear fluids two hours prior to arrival for surgery.
Methods
The project was implemented at an academic medical center using the Knowledge-to- Action (KTA) Framework to guide translation of evidence into practice. A bilingual educational infographic and standardized scripting for perioperative nursing phone calls was developed and approved by the institution's Patient Education and Engagement Committee. Staff were educated through in-person and virtual sessions regarding the initiative, deemed the "Hydration Hero Campaign." A retrospective pre-intervention chart review (n = 21) was compared to an eight-week post-intervention cohort (n = 44). Demographic data was collected, as well fasting durations, and time to gain IV access (as measured by induction to skin incision times). Data was analyzed using SPSS.
Results
Sixty-five pediatric patients (ages 0–20 years) were analyzed. Mean clear liquid fasting time decreased from 9 hours 23 minutes pre-intervention to 8 hours 16 minutes post-intervention, reflecting a one-hour reduction that did not reach statistical significance ($p = .270$). No aspiration events, NPO violations, or case cancellations occurred. A significant moderate correlation was identified between age and fasting time ($r = .52$, $p < .001$), with older children fasting longer. Time to IV access did not differ significantly between groups ($p = .620$).
Implications for Practice

Implementation of standardized fasting instructions effectively reduced fasting durations and demonstrated safe feasibility in the pediatric ambulatory surgical setting. Findings support continued education and digital dissemination of guidelines to enhance parental compliance. Expansion of this initiative aligns with pediatric Enhanced Recovery After Surgery (ERAS) principles and can promote improved intraoperative metabolic stability, patient comfort, and quality outcomes in all phases of surgical care.
Keywords: pediatric surgery, fasting guidelines, quality improvement, perioperative care, ERAS, knowledge-to-action framework, patient education