Recent Publications of Interest

**Intravenous acetaminophen for postoperative pain control after open abdominal and thoracic surgery in pediatric patients: a systematic review and meta-analysis**

Pediatric opioid exposure increases short- and long-term adverse events (AE). The addition of intravenous acetaminophen (IVA) to pediatric pain regimes to may reduce opioids but is not well studied postoperatively. Our objective was to quantify the impact of IVA on postoperative pain, opioid use, and AEs in pediatric patients after major abdominal and thoracic surgery. Medline, Embase, CINAHL, Web of Science, and Cochrane Library were searched systematically for randomized controlled trials (RCTs) comparing IVA to other modalities. Five RCTs enrolling 443 patients with an average age of 2.12 years (± 2.81) were included. Trials comparing IVA with opioids to opioids alone were meta-analyzed. Low to very low-quality evidence demonstrated equivalent pain scores between the groups (-0.23, 95% CI -0.88 to 0.40, p 0.47) and a reduction in opioid consumption (-1.95 morphine equivalents/kg/48 h, 95% CI -3.95 to 0.05, p 0.06) and minor AEs (relative risk 0.39, 95% CI 0.11 to 1.43, p 0.15). We conclude that the addition of IVA to opioid-based regimes in pediatric patients may reduce opioid use and minor AEs without increasing postoperative pain. Given the certainty of evidence, further research featuring patient-important outcomes and prolonged follow-up is necessary to confirm these findings.

**Utilization of an enhanced recovery after surgery (ERAS) protocol for pediatric metabolic and bariatric surgery**

Enhanced recovery after surgery (ERAS) protocols for pediatric metabolic and bariatric surgery are limited. In 2018, an ERAS protocol for patients undergoing robotically assisted vertical sleeve gastrectomy (r-VSG) was instituted. Utilization of ERAS led to a significant decrease narcotic utilization, time to first oral intake, and hospital LOS with no change in adverse events following pediatric metabolic and bariatric surgery. Larger studies, including comparative analysis of health care utilization, should be carried out.

**Tramadol Use in Pediatric Surgery: Trends After the Food and Drug Administration Black-Box Warning**

The U.S. Food and Drug Administration (FDA) issued a black-box warning in 2017 contraindicating tramadol in children <12 y. Longitudinal trends and factors associated with perioperative tramadol use in children remain unclear. Despite the FDA contraindication, tramadol prescribing continues among children <12 y undergoing surgery, with use varying by patient and institutional factors. Interventions are required to reduce perioperative tramadol use in children.
Recent Publications of Interest

**The Canadian Consortium for Research in Pediatric Surgery: Roadmap for Creation and Implementation of a National Subspecialty Research Consortium**

Clinical practice should be driven by high-quality research that produces evidence to inform best practices. Generation of such evidence is often challenging, particularly for smaller specialties, such as pediatric surgery, that treat many patients with rare diseases. Multi-institutional collaboration is seen as a major strategy to address these challenges. We have recently created the Canadian Consortium for Research in Pediatric Surgery, a national consortium that includes all major pediatric surgical services across Canada. The mission of the Consortium is to improve pediatric surgical care through high-quality collaborative research.


Surgical repair of pectus excavatum and carinatum in children has historically been associated with severe postoperative pain and prolonged hospitalization. Enhanced Recovery After Surgery (ERAS) is a multidisciplinary, multimodal approach designed to fast-track surgical care. However, obstacles to implementation have led to very few within pediatric surgery. The aim of this study is to outline the process of development and implementation of an ERAS protocol for pectus surgical repair using fundamental principles of implementation science.

**Predictive Value of Routine White Blood Cell Count Obtained Prior to Discharge for Organ Space Infection in Children with Complicated Appendicitis: Results from the Eastern Pediatric Surgery Network**

The objective of this study was to evaluate the clinical utility of a routine pre-discharge white blood cell count (RPD-WBC) for predicting post-discharge organ space infection (OSI) in children with complicated appendicitis. Routine pre-discharge WBC data have poor predictive value for identifying children at risk for post-discharge OSI following appendectomy for complicated appendicitis.

**Implementation of Enhanced Recovery Protocols for Gastrointestinal Surgery in Children: Practical Tools From Key Stakeholders**

We explored patient, caregiver, and provider recommendations for development of a tool kit to implement enhanced recovery protocols (ERPs) for pediatric patients undergoing gastrointestinal surgery. ERPs are widely used for adults to decrease hospital length of stay, hospital costs, and complications while hastening patient recovery after surgery. With limited data available for ERPs among pediatric populations, informed modification of adult ERPs is needed to facilitate successful implementation for pediatric surgery.

Hello all!

For those hospitals that volunteered to be pilot project sites and are having challenges with the DUA process, please reach out to me with any questions. I’m happy to talk with any member of your team who may have concerns or specific questions regarding the projects.

If you didn’t volunteer to be a pilot site in the first go round-no worries. You are welcome to join at any time if you wish.

I will be out of the office from March 7th through March 21st. I will not have access to email or text.

Please email me at terry.fisher@uth.tmc.edu if you have any questions or I can help in any way.

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