

ERAS PEDS*- Gastrostomy Tube Pathway

Preop & Intraop Components

Pre-Admit	Optimization Screening for Anemia and Nutritional Deficiency: CBC, T&S, Albumin, Prealbumin Education (provided by Surgeon and APN in surgery clinic): Peds ERAS pamphlet, yellow card NPO guidelines, seen by Child Life	
Preop DOS	Review ERAS Plan with patient Verify carbohydrate loading and NPO >2 hrs <u>Preemptive Analgesia</u> (Written by anesthesia team and given right after induction and IV placement) <ul style="list-style-type: none"> • Acetaminophen - IV <ul style="list-style-type: none"> ○ <40kg - 15mg/kg ○ 40-59kg - 650mg ○ >60kg - 1000mg • Dexmedetomidine bolus (0.5 – 1 mcg/kg) once PIV obtained, prior to incision 	<u>Fasting and Carbohydrate Loading Guideline</u> <ul style="list-style-type: none"> • Follow ASA NPO guidelines • Allow for liberal clear carbohydrate consumption until 2 hours before surgery (inpatient) or scheduled arrival time (outpatient) <ul style="list-style-type: none"> ○ Clear carbohydrate beverages include: Gatorade, vitamin water, apple juice. (no protein containing liquids, no sugar free versions of above)
Intraoperative	<p><i>*Midazolam, given by and at discretion of ACT</i></p> <p><u>Antibiotic Prophylaxis</u> – Cefazolin (Clinda if PCN Allergic) 15-60 mins before incision</p> <p><u>Anti-Emetic Prophylaxis</u></p> <ul style="list-style-type: none"> •Dexamethasone 0.1 mg/kg IV (MAX DOSE 8 mg) •Ondansetron 0.1mg/kg (MAX DOSE 4 mg IV) •Bolus with NS at 20mls/kg after induction <p><u>Types, Doses, and Routes of Anesthetics Administered</u></p> <ul style="list-style-type: none"> •Rectus sheath blocks bilaterally •Sevoflurane titrated to MAC 0.8-1.2; no N₂O •Minimize opioids – use fentanyl if needed. <ul style="list-style-type: none"> ○ If possible, avoid narcotics for intubation. Consider Dexmedetomidine to blunt hemodynamic effects of laryngoscopy •OG tube decompression – remove at the end of the case •Be prepared to insufflate stomach (slip tip syringe based on tube size) for gastrostomy tube placement <p><u>Patient Warming Strategy</u></p> <ul style="list-style-type: none"> •Upper body or under body Bair Hugger •Esophageal temp probe (no skin temp probes) •Room temp ≥72°F until child 36°C <p><u>Emergence</u></p> <ul style="list-style-type: none"> • Avoid Caffeine if discharge expected within 8 days or in the middle of an apnea countdown (resets countdown) 	<p><u>Mechanical Ventilation Guidelines</u></p> <ul style="list-style-type: none"> •TV 8 ml/kg IBW, PEEP 4, FiO₂ minimal need to maintain > 95% O₂ Sat •Recruitment breaths every 30 minutes <p><u>BP Goals</u></p> <ul style="list-style-type: none"> •MAP > 65 mmHg (for smaller children use age specific MAP targets) •Maintain SBP within 20% of baseline <p><u>Intra-operative Fluid Management Strategy</u></p> <ul style="list-style-type: none"> •Generalized principles to limit excessive crystalloid •Intraoperative maintenance fluid based on <u>IDEAL BODY WEIGHT</u>. •No maintenance IV fluid needed after bolus •If on TPN, continue TPN at pre-operative rate •If hypotensive (MAP <20% baseline), bolus 5 ml/kg Albumin 5% (Max 250ml), for a total dose of 2 boluses •If hypotensive despite albumin bolus x2, start phenylephrine infusion; titrate to MAP goal within 20% baseline <p><u>Transfusion Guidelines per ASA</u></p> <ul style="list-style-type: none"> •Maintain goal hemoglobin >7 g/dL – unless symptomatic •Discuss transfusion with surgeon prior to administration of blood products •Administer 10ml/kg/dose or 1 unit/dose for children >30kg

PACU	<ul style="list-style-type: none"> •Ondansetron 0.1mg/kg/dose IV PRN nausea (MAX DOSE 4mg) •Promethazine 3mg IV PRN refractory nausea (MAX # DOSES=2) only in PACU, contraindicated for kids <2yo and use with caution in younger children •Fentanyl 0.5mcg/kg/dose IV (MAX DOSE 25mcg) x4 doses •No long-acting opioids (AVOID morphine, hydromorphone, and opioid infusions)
------	---

**ERAS PEDS Gastrostomy Tube Pathway:
Postop Components**

Floor	Service-Specific	Pain Management	Nutrition & GI Recovery	Early Mobilization	Drains and Lines
POD 0	<ul style="list-style-type: none"> •Post-op fluids: General guideline to minimize IVF •Use 4-2-1 rule for maintenance calculation •Medlock IVF once taking enough by mouth and/or gastrostomy tube (usu 12 hours post-op) 	<ul style="list-style-type: none"> •Acetaminophen Q6H <ul style="list-style-type: none"> ○ <40kg - 15mg/kg ○ 40-59kg - 650mg ○ >60kg - 1000mg •Celecoxib liq* <ul style="list-style-type: none"> ○ ≤ 19 kg: none ○ >20-39kg - 100mg BID ○ >40kg - 200mg BID ○ <u>May use ibuprofen for <19kg if >6 months old</u> •Morphine 0.05mg/kg/dose every 3 hours as needed PRN for severe pain •Start Oxycodone 0.1mg/kg PO q6hrs PRN (MAX DOSE 10mg) – written by peds surgery 	<ul style="list-style-type: none"> •Ok to give meds per tube immediately •Clear liquid diet for 6 hours •Initiate feeds per pre-op feeding plan. Start at 50% goal 6 hours post-operatively <ul style="list-style-type: none"> ○ Bolus: advance to 75% then 100% at the third bolus ○ Continuous: advance by 25% every 2 hours for goal after 6 hours •Advance to regular diet as tolerated •Medlock IVF once at goal •Ondansetron 0.1mg/kg/dose (maximum dose 4mg) every 4 hours PRN 	<ul style="list-style-type: none"> •Morning surgery: OOB & Ambulation on POD 0 •Daily ambulation at least 3 X daily (if able to ambulate) •Daily ambulation distances recorded by nursing staff in Epic chart •PT/OT/Child Life consult as needed 	<ul style="list-style-type: none"> •Avoid NGT •Leave g-tube to gravity until feeds initiated. •After starting feeds vent tube every 4 hours and PRN •Involve parents in g-tube and pump management immediately
POD 1				<ul style="list-style-type: none"> •Afternoon surgery: OOB & Ambulation on POD 1 •Daily ambulation at least 3 X daily •Daily ambulation distances recorded by nursing staff in Epic chart •Continue PT/OT/Child life as needed 	

Post-Discharge	<p>Criteria for Discharge: Pain control on oral pain meds, hydrated off IVF, ostomy teaching completed (when applicable)</p> <p>Tracking of Post Discharge Outcomes: Readmission within 30 days, ED visits, LOS, Opioid utilization in hospital and at home per opioid stewardship program, NSQIP-P complications</p>
----------------	---

<p>DISCHARGE OPIOIDS:</p> <p>< 1 year old: 0 doses Oxycodone</p> <p>1-10 years old: 0-5 doses Oxycodone (0.05-0.1 mg/kg/dose)</p> <p>>10 years old: 0-10 doses Oxycodone (0.05-0.1 mg/kg/dose)</p>
