



Inclusion and Exclusion Criteria

Inclusion: Patients with IBD receiving ileocecectomy, colectomy, proctectomy, J pouch reconstruction, or stoma closure by a general pediatric surgeon

Exclusion:

- Patients with motility disorders from the Colorectal clinic (may use protocol but will need modifications for motility issues)
- Newborns and patients < 1 year old (for now).
- Cardiac and Neonatal ICU patients
- Cerebral Palsy patients
- Thoracotomies for non-neonatal conditions (sarcoma met resections)
- Acute Care Surgery patients (appendectomies, gallstone pancreatitis, bowel perforations from trauma, etc.)
- Patients deemed to need more customized care by the surgeon
- Anorectal malformations (ARM) with significant motility issues

Preadmission

- Detailed counseling by APP and Surgeon (Including preset discharge criteria)
- Surgeon and APP to follow-up with phone instructions: Provide preoperative counseling on ERAS protocol and expectations for recovery, pain control and diet: [ERAS Surgery Explained](#)
- Consults: Child Life, Pain, Psych, WOC

Preoperative

- Encourage clears up until 2 hours before operation
- Preoperative carbohydrate loading: Preoperative carbohydrate loading: 10ml/kg up to 600 ml Gatorade or apple juice completed 2 hours before operation
- Place (SCDs) for patients age 12 or greater
 - Ensure patients and their parents have done the following: Taken pre-op medications, watched ERAS Lego video, and consumed clear liquids

Preoperative Medications

Medication	Dosage	Max Dose	Comments
Metronidazole	15 mg/kg PO TID	500 mg	Given the day before the surgery
Neomycin	15 mg/kg PO TID	1000 mg	Given the day before the surgery
Gabapentin	5 mg/kg PO x1 TID	600 mg	Given the day before the surgery
Gabapentin	5 mg/kg PO x1	600 mg	Given on the day of surgery if Gabapentin given the day before
Gabapentin	15 mg/kg PO x1	600 mg	Given on the day of surgery if Gabapentin not given the day before
Acetaminophen	10 mg/kg PO x1	650 mg	Pre-op - Give 2 hours before surgery with clear liquids
Decadron	0.15 mg/kg IV x1	8 mg	Given in the OR
Cefazolin	30 mg/kg IV x1	<120 kg: 2 g and >120 kg: 3 g	Given in the OR before the incision is made
Metronidazole	15 mg/kg IV x1	500 mg	Given in the OR before the incision is made
Ciprofloxacin	15 mg/kg IV x1	400 mg	Use if Penicillin allergy instead of Cefazolin
Ketorolac	0.5 mg/kg IV x1	30 mg	Given in the OR near the end of the case after discussion with surgeon

Intraoperative

- Antibiotic prophylaxis: <1 hour prior to incision
- Laparoscopic technique (or minimize trauma)
- Avoidance of nasogastric tubes and perianastomotic drains
- Regional anesthesia: placement of rectus sheath, QL or TAP blocks depending on a discussion between the surgeon and the pain anesthesiologist
- Minimization of opioids
- Maintenance of normothermia
- Maintenance of near zero fluid balance: limit fluids to 3-4 mL/kg/hr.

PACU

- Anesthesia team to consider giving IV Diazepam and IV Hydromorphone in the PACU after discussion with the surgeon



Postoperative Management

	Surgery Day	POD 1	POD 2	POD 3	POD 4
Activity	Early Ambulation: OOB x1	Ambulation: OOB x4	<ul style="list-style-type: none"> Ambulation: OOB x4 Encourage patient to ambulate, shower, and dress independently 	<ul style="list-style-type: none"> Ambulation: OOB x4 Encourage patient to ambulate, shower, and dress independently 	<ul style="list-style-type: none"> Ambulation: OOB x4 Encourage patient to ambulate, shower, and dress independently
Nutrition	<ul style="list-style-type: none"> Early oral intake starting with juice in PACU, then advance diet as tolerated Encourage chewing gum and gummies 	<ul style="list-style-type: none"> Normal diet according to tolerance Encourage chewing gum and gummies 	<ul style="list-style-type: none"> Normal diet according to tolerance Encourage chewing gum and gummies 	<ul style="list-style-type: none"> Normal diet according to tolerance Encourage chewing gum and gummies 	<ul style="list-style-type: none"> Normal diet according to tolerance Encourage chewing gum and gummies
Fluids/ Drains	<ul style="list-style-type: none"> Maintenance of near zero fluid balance: limit unnecessary boluses May saline lock PIV when patient tolerating PO 	<ul style="list-style-type: none"> Remove Foley Catheter May saline lock PIV when patient tolerating PO Encourage PO fluid intake 	<ul style="list-style-type: none"> Encourage aggressive oral intake Monitor PO fluid intake and output from stoma and urine to create positive oral fluid balance 	Monitor PO fluid intake and output from stoma and urine to create positive oral fluid balance	Monitor PO fluid intake and output from stoma and urine to create positive oral fluid balance
Respiratory	Aggressive pulmonary toilet: start incentive spirometry	Incentive spirometry	Incentive spirometry	Incentive spirometry	Incentive spirometry
Consults	Care collaboration with Pain, Psych, WOC, Child Life as needed	Care collaboration with Pain, Psych, WOC, Child Life as needed	Care collaboration with Pain, Psych, WOC, Child Life as needed	Care collaboration with Pain, Psych, WOC, Child Life as needed	Care collaboration with Pain, Psych, WOC, Child Life as needed
Stoma Care	Nurse to perform stoma care	<ul style="list-style-type: none"> WOC Nurse to involve patient in stoma care Start imodium teaching 	<ul style="list-style-type: none"> Nurse to involve patient in stoma care Continue imodium teaching 	<ul style="list-style-type: none"> Nurse to involve patient in stoma care Continue imodium teaching 	Patient demonstrated competent changing of ostomy device and understanding of Imodium teaching
Pain	Minimize narcotic use if possible	<ul style="list-style-type: none"> Consider transition to oral medications. If so, assess if pain is being controlled with oral medications 	<ul style="list-style-type: none"> Consider transition to oral medications. If so, assess if pain is being controlled with oral medications 	Assess if pain is being controlled with oral medications	Assess if pain is being controlled with oral medications

Postoperative Medications

Medication	Dosage	Max Dose	Comments
Gabapentin	5 mg/kg PO q8h	300 mg	
Acetaminophen	10 mg/kg PO q4h	650 mg	Give scheduled doses while awake - Max 5 doses/day
Ibuprofen	10 mg/kg PO q6h	600mg	Once tolerating PO and Ketorolac is discontinued
Morphine	0.1 mg/kg IV q3h PRN	4 mg	Breakthrough >6 pain only
Ondansetron	0.1 mg/kg IV PRN	4 mg	Nausea and vomiting
Methocarbamol	15 mg/kg IV q8hrs for first 24 hours	1000 mg	For the first 24 hours post-op
Methocarbamol	15 mg/kg IV q8hrs PRN spasms for the next 48 hours	1000 mg	After the first 24 hours post-op

Discharge Criteria

- Ambulated successfully
- Able to dress and shower independently at home (or as before surgery) or has assistance
- Demonstrated competence of changing of ostomy device
- Positive fluid balance (intake > output of urine and stoma by 500 cc)
- Tolerating diet
- Pain is well controlled by oral meds
- No fevers

Discharge Planning

- APP to schedule clinic follow-up appointment
- Provide patient with all prescriptions including pain medications and Imodium if applicable
- Review preoperative medications and determine which ones are appropriate to continue
- Encourage the patient to make an appointment with their gastroenterologist, if appropriate
- If stoma present, ensure patient has all the necessary supplies and is comfortable caring for the stoma at home
- Provide wound care education and ensure dressing is dry
- Answer all questions and provide all paperwork and handouts