

EMERGENCY GENERAL SURGERY

Ostomy Reversal Pathway

Outpatient Management: Colostomy

1. First postoperative visit 7-14 days postoperatively OR two weeks after discharge if hospitalized on postoperative day #14
2. Second postoperative visit 2 months postoperatively (telehealth if eligible)
3. Pre-Reversal Workup
 - If age > 44 and no recent colonoscopy
 - Order colonoscopy
 - Barium enema if indicated on checklist
 - If age < 44 or recent colonoscopy:
 - Barium enema if indicated on discharge checklist
 - If family history of colon cancer, consider screening colonoscopy prior to reversal
 - If known or possible sphincter injury, will need in person appointment with rectal examination
 - Anal manometry ordered at faculty discretion
 - If manometry abnormal, refer to colorectal surgery
 - Schedule date of surgery, consider time of reversal at 6 months.¹
 - Consider minimally invasive reversal ²
4. Preoperative Orders
 - Antibiotic Bowel Preparation³
 - Neomycin 1g TID day prior to surgery (2:00 PM, 4:00 PM, 10:00 PM)
 - Erythromycin 1g TID is reasonable substitute if neomycin unavailable
 - Metronidazole 500 mg TID day prior to surgery (2:00 PM, 4:00 PM, 10:00 PM)
 - Mechanical Bowel Preparation³
 - Magnesium citrate 1-2 bottles **OR**
 - Miralax (polyethylene glycol) 256 g
 - Chlorhexidine Wipes to be used the day before surgery
 - NPO 6 hours prior to procedure with electrolyte/sports drink immediately prior to NPO
 - Anesthesia: Perioperative Consultation Service consultation for adjunctive analgesia

Outpatient Management: Ileostomy

1. First postoperative visit 7-14 days postoperatively OR 2 weeks after discharge if still hospitalized on postoperative day #14
2. Second postoperative visit 2 months postoperatively (telehealth if eligible)
3. Pre-Reversal Workup
 - If age > 44 and no recent colonoscopy
 - Order colonoscopy
 - Barium Enema if indicated on discharge checklist
 - If age < 44 or recent colonoscopy:
 - Barium enema if indicated on discharge checklist

- If family history of colon cancer, consider screening colonoscopy prior to reversal
 - Patients with sphincter injury will need in person appointment with rectal examination
 - Anal manometry ordered at faculty discretion
 - If manometry abnormal, refer to colorectal surgery
 - Schedule date of surgery
4. Preoperative Orders
- No need for bowel preparation
 - Chlorhexidine wipes to be used the day before surgery
 - NPO 6 hours prior to procedure with Gatorade immediately prior to NPO
 - Anesthesia: Perioperative Consultation Service consultation for adjunctive analgesia

Preoperative Risk Optimization

1. Glycemic Control: If history of diabetes, measure Hemoglobin A1c and consider deferring elective surgery if > 7%. Refer to PMD or endocrinology if medication adjustment/long term management needed.
2. Smoking/Nicotine cessation. Consider Referral to Tobacco Quit Line if patient amendable to these.
3. Anesthesia Referral
 - a. VPEC (phone call or in person) for patients at low perioperative risk
 - b. Hi-Rise for patients at elevated perioperative risk

References:

- 1) Johnston LR, Bradley MJ, Rodriguez CJ, McNally MP, Elster EA, Duncan JE. Assessing Risk and Related Complications after Reversal of Combat-Associated Ostomies. *J Am Coll Surg*. 2018 Sep;227(3):367-373. doi: 10.1016/j.jamcollsurg.2018.05.008. Epub 2018 Jun 12. PMID: 29906614.
- 2) Davis, Bradley R. M.D.1; Valente, Michael A. M.D.2; Goldberg, Joel E. M.D.3; Lightner, Amy L. M.D.2; Feingold, Daniel L. M.D.4; Paquette, Ian M. M.D.5; Prepared on behalf of the Clinical Practice Guidelines Committee of the American Society of Colon and Rectal Surgeons. The American Society of Colon and Rectal Surgeons Clinical Practice Guidelines for Ostomy Surgery. *Diseases of the Colon & Rectum* 65(10):p 1173-1190, October 2022. | DOI: 10.1097/DCR.0000000000002498
- 3) Obaid O, Torres-Ruiz T, Back W, Al-Alwan A, Kenner M, Jamil T, Bosio RJ. Does luck always favor the prepared? Analysis of the NSQIP database shows benefits of combined bowel preparation on colostomy reversal outcomes. *Surgery*. 2025 May;181:109210. doi: 10.1016/j.surg.2025.109210. Epub 2025 Feb 14. PMID: 39954318.

Authors:

Steve Gadomski, MD
 Luke Johnston, MD MBA

Revisions: May 2024, June 2026

Discharge Checklist to be Completed by Operating Surgeon:

- Estimated Time to Reversal = _____
 - a) Unless otherwise specified, assumption is 4 months prior to colostomy reversal
 - b) If patient is NOT a candidate for reversal, discussion needs to be held with patient/family by surgeon
- Time to first post-operative visit = _____
 - a) Unless otherwise specified, 7-14 days
- Time to second post-operative visit = _____
 - a) Unless otherwise specified, 60 days
- Workup to be done prior to second post-operative visit = _____
 - a) Patients < 44 do not need a colonoscopy unless significant personal/family history of colon cancer. If family history of colon cancer, should have colonoscopy 10 years prior to youngest family member's age at diagnosis.
 - b) Caution against routine barium enema for Hartman's performed at VUMC
 - c) All patients with DLI should have evaluation of their anastomosis prior to reversal (preference is barium enema)
- Does patient need to see HI-RISE or VPEC in person = YES/NO
- Barriers to reversal that require outpatient management
 - a) Smoking
 - b) Obesity
 - c) Diabetes
 - d) Wound Healing