VANDERBILT UNIVERSITY MEDICAL CENTER

Department of Emergency General Surgery

Practice Management Guidelines: Small Bowel Obstruction

I. Background: Small bowel obstruction remains one of the more common reasons for Emergency General Surgery consultation. Protocolized management has been shown to shorten length of hospital stay and time to operative management.

II. Guideline:

A. **Initial Evaluation with Concern for Bowel Obstruction**
   a. Labs
      i. CBC
      ii. BMP
      iii. Lactate
   b. Imaging
      i. CT Abdomen/Pelvis with IV Contrast
   c. Surgical Evaluation
      i. Emergency General Surgery Consultation
      ii. If due to gastrointestinal malignancy (known or suspected), consult Surgical Oncology
      iii. If Inflammatory Bowel Disease (Crohn's Disease or Ulcerative Colitis), consult Colorectal Surgery
      iv. If due to gynecologic malignancy, consult Gynecologic Oncology
   d. Admission
      i. Patients with bowel obstruction should preferably be admitted to a surgical service

B. **Indications for Urgent Exploration**
   a. Suspected Ischemia
      i. Peritonitis on physical examination
      ii. Concerning laboratory values
         1. Leukocytosis
         2. Lactic Acidosis
      iii. Concerning CT findings
         1. Closed-loop obstruction
         2. Internal Hernia
         3. Pneumatosis Intestinalis
         4. Mesenteric Edema
   b. Incarcerated Hernia
   c. Strongly consider exploration in those without prior abdominal surgery

C. **Nonoperative Management – Small Bowel Follow Through**
   a. Nasogastric Decompression for 2 hours
   b. Abdominal X-ray to confirm gastric tube placement
   c. Orders
      i. "Xray Small Bowel Nonfluoro"
      ii. iohexoL (OMNIPAQUE) 300 mg/mL 300 mL
      iii. X-rays at 0, 2, 8, 24 hours
   d. If contrast in the colon OR bowel movement within 24 hours, passed small bowel follow through
   e. If no contrast in the colon and no bowel movement within 24 hours, consider exploration

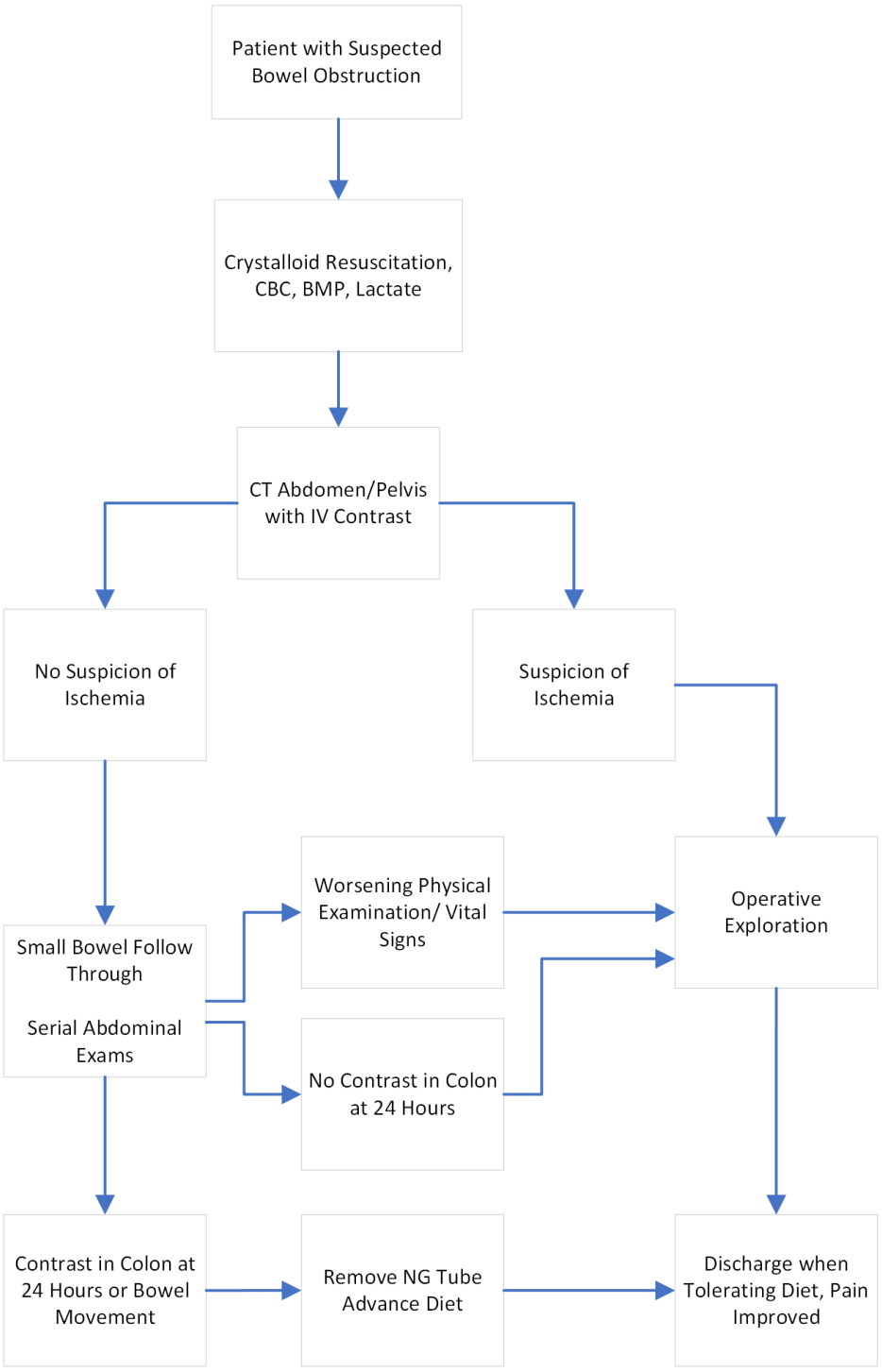
f. Analgesia
    i. Minimize opioids
    ii. Maximize non-narcotic medications
        1. Acetaminophen 1000mg PO Q8H PRN (650mg PO q8h in liver disease)
        2. Toradol 15mg IV Q6H (Hold if contraindication)

***contraindications to NSAIDs: active or recent GI bleed, pregnancy, CKD/AKI, liver disease, recent CABG or MI, heart failure**

g. Anti-emetics
    i. Zofran 4mg IV Q6H PRN (1st line)
    ii. Haloperidol 2mg IV Q6H PRN (2nd line)
    iii. Scopolamine patch Q72H (3rd line)

D. **Criteria for Discharge**
    a. Tolerating diet without nausea/vomiting
    b. Bowel function
    c. Resolution of pain
        i. Do **not** prescribe opioids at discharge for nonoperative management of bowel obstruction.
        ii. Follow Opioid PMG for discharge recommendations for laparotomy and laparoscopy

E. **Flowchart**


Patient with Suspected Bowel Obstruction
Crystalloid Resuscitation, CBC, BMP, Lactate
CT Abdomen/Pelvis with IV Contrast
No Suspicion of Ischemia
Suspicion of Ischemia
Small Bowel Follow Through
Serial Abdominal Exams
Worsening Physical Examination/ Vital Signs
No Contrast in Colon at 24 Hours
Operative Exploration
Contrast in Colon at 24 Hours or Bowel Movement
Remove NG Tube Advance Diet
Discharge when Tolerating Diet, Pain Improved

III. References

Choi HK, Chu KW, Law WL. Therapeutic value of gastrografin in adhesive small bowel obstruction after unsuccessful conservative treatment: a prospective randomized trial. Ann Surg. 2002 Jul;236(1):1-6.

Goussous N, Eiken PW, Bannon MP, Zielinski MD. Enhancement of a small bowel obstruction model using the gastrografin(R) challenge test. Journal of Gastrointestinal Surgery. 2013 Jan;17(1):110-6; discussion p 6-7.

Loftus T, Moore F, VanZant E, et al. A protocol for the management of adhesive small bowel obstruction. The Journal of Trauma and Acute Care Surgery. 2015 Jan;78(1):13-9; discussion 9-21.

Maung AA, Johnson DC, Piper GL, et al. Evaluation and management of small-bowel obstruction: an Eastern Association for the Surgery of Trauma practice management guideline. The Journal of Trauma and Acute Care Surgery. 2012 Nov;73(5 Suppl 4):S362-9.

Medvecz AJ, Dennis BM, Wang L, Lindsell CJ, Guillamondegui OD. Impact of Operative Management on Recurrence of Adhesive Small Bowel Obstruction: A Longitudinal Analysis of a Statewide Database. Journal of the American College of Surgeons. 2020 Apr;230(4):544-51 e1.

Moskowitz EE, McIntyre RC, Burlew CC, et al. Evaluation of a water-soluble contrast protocol for small bowel obstruction: A southwestern surgical congress multicenter trial. Am J Surg. 2019 Dec;218(6):1046-51.

Zielinski MD, Haddad NN, Cullinane DC, et al. Multi-institutional, prospective, observational study comparing the Gastrografin challenge versus standard treatment in adhesive small bowel obstruction. The Journal of Trauma and Acute Care Surgery. 2017 Jul;83(1):47-54.

IV. Authors

Elizabeth D. Krebs, MD
Andrew J. Medvecz, MD, MPH
Michael C. Smith, MD
Michael J Derickson, MD
Jade Flynn, PharmD, BCPS

Revised: August 28, 2025