VANDERBILT UNIVERSITY MEDICAL CENTER

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**DIVISION OF TRAUMA AND SURGICAL CRITICAL CARE**

# Bowel Regimen Recommendations for Functioning Gastrointestinal (GI) Tract:

Pharmacologic Classes:
Miralax: Osmotic laxative
Senna/docusate: Stimulant laxative with stool softener
Colace: Stool softener
Milk of Magnesia: Osmotic laxative
Biscodyl suppository: Stimulant laxative
Magnesium citrate: Saline laxative

Initial management:
**-Miralax oral powder:** 17gm PO q24h
AND
-**Senna/docusate: senokot:** 2 tab PO BID
OR -**Docusate sodium: colace:** 100mg-200mg PO QD to BID
*Choose Colace over Senokot in clinical cases where stimulant is not indicated (recent anastomosis). No stimulant bowel reg: for 3 days from repair of small bowel injury, for 5 days from repair of large bowel injury

If no bowel movement in 48h

ADD:
(if normal renal function):
-**Milk of magnesia: mom:** 15mg PO TID

If no bowel movement in 72h

INCREASE:
(if normal renal function):
-**Milk of magnesia: mom:** 30mg PO TID

ADD
-**Biscodyl suppository:** 10mg PR x 1

If no bowel movement in 96h

CONSIDER:
-KUB to rule out ileus or small bowel obstruction
ADD:
-**Biscodyl suppository:** 10mg PR x 1

-**Magnesium citrate solution:** 300mL PO x 1 (if normal renal function)
OR
- **Enema (soap suds, tap water, or normal saline)** until clear x 1

**MONITOR PHYSICAL EXAM:**
If patient has the following symptoms in addition to constipation:

- Increased abdominal distention/discomfort/firmness
- Decreased or minimal flatus
- Increased belching or hiccupping
- Nausea or vomiting

-Obtain KUB to assess for ileus or obstruction

## Bowel Regimen Recommendations for a Non-Functioning Gastrointestinal (GI) Tract

If an ileus is present based on clinical presentation or imaging:

- Place NG tube to low wall suction and monitor NG tube output
- Make patient NPO
- Initiate maintenance IV fluids while NPO
- Monitor electrolytes prn while NPO
- Continue per rectal bowel regimen
- Encourage ambulation if appropriate
- KUB prn to monitor bowel gas pattern
- Discontinue or limit offending medications (e.g. opioids, anticholinergics, dopamine agonists, anti-serotonergics)
- Consider neostigmine if Ogilvie's Syndrome on imaging (can only be administered on 10N) **USE CAUTION IN PATIENTS WITH AN ANASTOMOSIS**
- Although no current RCTs, one may consider the use of methylnaltrexone 12mg SQ x 1 dose for postoperative ileus if no obstruction confirmed on imaging (may give one additional dose 24h after 1st dose if no resolution)- **DISCUSS WITH ATTENDING PHYSICIAN BEFORE ORDERING**
    - Single center, retrospective cohort study was conducted at Vanderbilt looking at the efficacy and safety of methylnaltrexone for the treatment of post-operative ileus (dosing extrapolated from trial using for treatment of opioid-induced constipation
        - Did not show difference in efficacy compared to those who did not receive therapy
        - Did not show difference in safety

**USE CAUTION IN PATIENTS WITH AN ANASTOMOSIS**

<u>References:</u>

http://www.lhsc.on.ca/Health_Professionals/LRCP/Oncology_Practice_Guidelines/Constipation.pdf

http://www.usaisr.amedd.army.mil/cpgs/Nutrition_Enteral_Parenteral_Support_04_Aug_2016.pdf

http://www.mc.uky.edu/traumaservices/TraumaProtocolManualfinal2012Word.pdf

Gathers K, Fawad K, Petros K. Evaluation of methylnaltrexone bromide for the treatment of postoperative ileus. *Crit Care Med*. 2013;41(12):929.

Chamie, K., Golla, V., Lenis, A.T. *et al.* Peripherally Acting μ-Opioid Receptor Antagonists in the Management of Postoperative Ileus: a Clinical Review. *J Gastrointest Surg* (2020). https://doi.org/10.1007/s11605-020-04671-x.

Valle, RG, Godoy, FL. Neostigmine for acute colonic pseudo-obstruction: a meta-analysis. *Ann Med Surg (Lond).* 2014;3(3):60–64.