



Origination 03/2023

Last 03/2023

Approved

Effective 03/2023

Last Revised 03/2023

Next Review 03/2026

Contact Stephanie Spain:
Trauma Prgm
Mgr Adult

Area Trauma Surgical
Critical Care

Applicability Erlanger Health -
Baroness

Bowel Practice Management Guideline (Neurogenic)

1. Process/Procedure Description

Develop a regimented and consistent approach to bowel management in patients with alteration of normal bowel function and to facilitate consistent nursing interventions.

2. Who Should Read This Process/Procedure?

All Trauma Surgical Critical Care Staff/ Nursing

3. Definitions

Neurogenic bowel dysfunction can be a result of diseases and/or injuries of the brain and spinal cord. These include but are not limited to congenital malformation, spinal cord injuries or lesions, tumor or neoplasm of brain or spine, degenerative disease, vascular insult or hemorrhage, traumatic/anoxic brain injuries, psychological regression.

Neurogenic bowel is an inability to inhibit or initiate bowel evacuation due to interruption of nerves supplying the rectum and external sphincter.

Current neurogenic bowel function - types and characteristics:

1. Reflexic/Hypertonic bowel or upper motor neuron bowel (UMN) - a result of a spinal cord injury above the sacral segments. Spinal cord and colon connections remain intact which allows reflex coordinated stool propulsion. Voluntary relaxation of the external sphincters is impaired which inhibits urge to defecate sensation. Thus, digital stimulation works.

- a. Sensory loss of urge to defecate

- b. Inability to control reflex defecation

- c. Bowel empties automatically
2. Areflexic/Flaccid/Hypotonic bowel or lower motor neuron (LMN) – a result of a spinal cord injury at or below the sacral segments. No spinal cord mediated reflex occurs. Thus, digital stimulation would not work.
- a. Ineffective reflex
 - b. Flaccid anal sphincter
 - c. Continuous seeping of fecal matter
3. Uninhibited bowel- a result of an injury to cortical and subcortical lesions above C1. Some examples are strokes, traumatic brain injuries, and multiple sclerosis. Bowel sensation and anal reflexes are intact. Sensory impulses reach the brain but are unable to be interpreted. Due to the decreased urge or awareness to defecate there is decreased voluntary control of the anal sphincter leading to involuntary elimination.

4. Process/Procedure

Step:	Process Instructions/Description:
1.	Obtain a physician's order prior to initiating any bowel program. Factors to consider when determining type of bowel program to initiate are:
	1. Type of neurogenic bowel or dysfunction. 2. Pre-injury history of bowel habits. 3. Emotional, physical and functional status of patient. 4. Willingness for patient and /or caregiver to participate. 5. Funding available for needed equipment and supplies. 6. Skin integrity. 7. Discharge plans/life factors. A. Amount of assist available. B. Home accessibility.
2.	Nursing and the physician should perform a comprehensive bowel/GI/abdominal assessment QD. Assessment should include last bowel movement.
	• See order set for neurogenic bowel.
3.	Physician and nursing should regulate consistency of patient's stool with appropriate diet, fluid, and bowel program.
	1. Ensure adequate fluid intake 2000 ml per day unless contraindicated. 2. Begin a high residue diet. Consider one dose of bran per day mixed with ½ cup of applesauce and 2 tsp. of prune juice and or change in diet. Goal is for no less than 15 grams of fiber per day. 3. Choose a consistent time for the bowel program based upon the gastro-colic reflex (occurs approximately 30 minutes after a meal), the patient's previous bowel habits and the anticipated schedule at discharge.

4.	Recommendations for Bowel Programs: 1. Reflexic bowel (upper motor neuron) - A. Perform digital stimulation program once daily as ordered by the physician (most often follows suppository or enema). See guidelines and order set. • Must assess for cardiac history and inability to tolerate vasovagal stimulation and/or neurological injury which is prone to neuro storms. B. Suppository per rectum QD in conjunction with additional bowel medications as determined by the physician. C. Consider laxatives and/or stool softeners if taking narcotics or iron. Hold for loose stools. D. Encourage yogurt for patients taking antibiotics. 2. Areflexic bowel (lower motor neuron) - A. Digital stimulation not effective. B. Suppository per rectum inserted with water soluble lubricant as per physician order. C. Perform rectal clearing using water soluble lubricant and/or numbing agent prior to inserting the suppository and 30 minutes after the suppository. D. May need to adjust program to A.M. and P.M. based upon patient's needs as preparing for discharge. Timing should be consistent in order to regulate an areflexic bowel. E. Encourage yogurt for patients on antibiotics. F. Consider a bulk forming agent to stimulate peristalsis and for retaining water in the stool. G. Consider starting patients on laxatives if taking narcotics or iron. H. If leaking increase frequency of rectal clear. May be better to complete 30 minutes after every meal. 3. Uninhibited bowel - for patients with voluntary control and urgency or constipation: A. Begin insoluble/soluble fiber supplement. B. Drink at least 6-8 glasses of fluid per day. C. Plan bowel evacuation at consistent times daily. Best 30 min after meals to stimulate gastro-colic reflex. D. Drink a cup of hot liquid prior to scheduled evacuation. E. Elevate knees above hips on toilet unless contraindicated. F. Rub abdomen in clockwise motion G. Allow at least 15 minutes to evacuate bowels. H. Bowel training usually takes approximately 2 weeks.
5.	If patient has little or no voluntary control, may consider adding a suppository every day or every other day to the above program as per physician order.
6.	The nurse should complete an ongoing assessment of the effectiveness of the bowel program and assess for any complications. Complications include but are not limited to: rectal bleeding, hemorrhoids, pain, constipation, diarrhea, nausea and vomiting, or an

	increase in accidental defecations. The physician should be notified with any complications or concerns. • Every patient being monitored on the bowel management program should have a graphic record initiated upon the start of the program documenting the program in use, results with color amount and consistencies of stool along with the amount of time required for results. This should be kept at the bedside. Additional documentation should include effectiveness and patient response to the bowel program along with their independence level and ability to demonstrate the procedures. • The patient and caregiver should be educated regarding the importance of this record and should receive instruction on how to maintain while performing self-directed bowel program.
7.	The patient should be assured a prompt response with any noted problems with the prescribed bowel management program.
8.	The patient should be monitored for and the physician notified with any signs or symptoms of autonomic dysreflexia. a. Signs and symptoms include cold skin and goose bumps above the level of injury, hypertension and bradycardia. b. Rectal stimulation and bowel distention can trigger autonomic dysreflexia in patients with a spinal cord injury at T6 or above. Application of a numbing agent as prescribed by the physician 5 minutes prior to digital stimulation or suppository insertion may help to decrease the risk.
9.	The nurse should complete education with the patient and/or the caregiver regarding the patients prescribed bowel program. a. The nurse should assess the effectiveness of the program and the patient/caregivers ability and willingness to perform the program on a competent level. b. The nurse should educate the patient/caregiver regarding medications utilized in the prescribed bowel program and assure understanding. c. The nurse should allow the patient/caregiver complete control of and responsibility for the program as able. d. The nurse should provide continuous evaluation of the program and document the patient and caregiver's independence level and ability to demonstrate the prescribed procedures.

References:

Paralyzed Veterans Association. (n.d.). Spinal cord injury information. Retrieved from <https://pva.org/research-resources/spinal-cord-injury-information/>

Approval Signatures

Step Description	Approver	Date
COO	Robert Maloney: Executive VP & Chief Operating Officer	03/2023
Trauma Services Committee Approval	Stephanie Spain: Trauma Program Manager	03/2023
	Stephanie Spain: Trauma Program Manager	03/2023

Applicability

Erlanger Health - Baroness

COPY