Neurogenic Bowel Management of the Spinal Cord Injury Population: An Interdisciplinary Approach

UVA-HealthSouth Rehabilitation Hospital

Rebecca Franklin, CRRN

HEALTHSOUTH®

Background

UVA-HealthSouth Rehabilitation Hospital Spinal Cord Injury Bowel Program

Purpose

To facilitate regular bowel movements in SCI patients to
1. Prevent incontinence
2. Prevent colonic over-distension

Definitions

- **Bowel program:** the entire plan to manage the bowels after SCI
  - Includes diet, exercise, equipment, PO medicines, PR medicines and bowel care education
- **Bowel care:** the procedure for initiating and assisting defecation
- **Upper motor neuron (UMN or reflexic) neurogenic bowel dysfunction:** Neurogenic bowel dysfunction where the rectocolic reflex is intact and the pelvic floor muscles have high tone.
- **Lower motor neuron (LMN or areflexic) neurogenic bowel dysfunction:** Neurogenic bowel dysfunction where the rectocolic reflex is not intact and the pelvic floor muscles have low tone.

Upon Admission, the Physician Evaluates the Patient's Level of Spinal Cord Injury (SCI) and Orders the Appropriate Bowel Program. Then Nurses Execute the Orders, per our Protocols, with Help from the Nursing Technicians as Necessary

For patients with UMN neurogenic bowel dysfunction

- Put on gloves and apply Surgilube (unless Dibucaine Gel has been ordered for bowel care, in which case you should replace Surgilube with Dibucaine Gel)
- Throughout the process, monitor the patient for signs and symptoms of autonomic dysreflexia (headache, flushed face, patient feeling anxious, etc.). If concerned, stop bowel care and check the patient's blood pressure.
- Remove any stool that would interfere with inserting a suppository.
- Place the suppository next to the rectal wall, high up in the rectum.
- Wait 5-15 minutes (no longer) for the stimulant to work.
- Start and repeat digital rectal stimulation
- The purpose of digital rectal stimulation is to relax anal sphincter tone and to induce a reflex peristaltic wave from the colon to evacuate stool (i.e. the rectocolic reflex).
- Fully insert a lubricated finger.
- Apply gentle, sustained pressure toward the sacrum to relax the puborectalis muscle.
- Move finger gently in a circular movement, dilating and relaxing the distal rectum and anal canal.
- Continue this circular finger movement until
  - Relaxation of the bowel wall is observed
  - Flatus (gas) passes
  - The stool comes down
  - 60 seconds has passed; it usually takes at least 15 seconds of circular movement for adequate digital rectal stimulation.
- Repeat digital rectal stimulation every five to ten minutes.
- Complete bowel care if
  - No stool has come out after two digital rectal stimulations, at least ten minutes apart
  - Clear mucus is coming out without stool
  - The rectum is completely closed around the stimulating finger.
- The goal is for bowel care to take less than 60 minutes.
- Wash and dry the perineal area.
- Record details of the bowel care on the bowel care log, with special attention to the consistency of the stool; the goal consistency for UMN neurogenic bowel is soft, moist, formed stool.

For patients with LMN neurogenic bowel dysfunction

- Put on gloves and apply Surgilube.
- Check to see if suppository or digital rectal stimulation have been ordered.
- If suppository is ordered with LMN bowel care, remove any stool that would interfere and place the suppository high against the rectal wall.
- Wait five to fifteen minutes for stimulant to work.
- If digital rectal stimulation is ordered, perform for 30 seconds. If effective, perform a manual evacuation (see below) and repeat digital rectal stimulation after ten minutes, followed again by manual evacuation.
- Manual evacuation: use one or two fingers to break up stool, hook it and gently pull it out.
- Assistive techniques: chair push-ups, abdominal massage, Valsalva, forward and side bending or deep breathing.
- Do a final check in the rectum with finger to make sure all reachable stool has been manually evacuated.
- Wash and dry the perineal area.
- Record details of the bowel care on the bowel care log, with special attention to the consistency of the stool.
- The goal consistency for LMN patients is firm, relatively dry stool.
- If there are any concerns about the bowel care regimen for the patient (inadequate volume of stool, wrong consistency of stool or unable to tolerate sitting on the bedside commode), the patient's physician is contacted to discuss the issue.

If Mobility is a Potential Barrier to Success with the Bowel Program, a Physical Therapist is asked to Provide Assistance

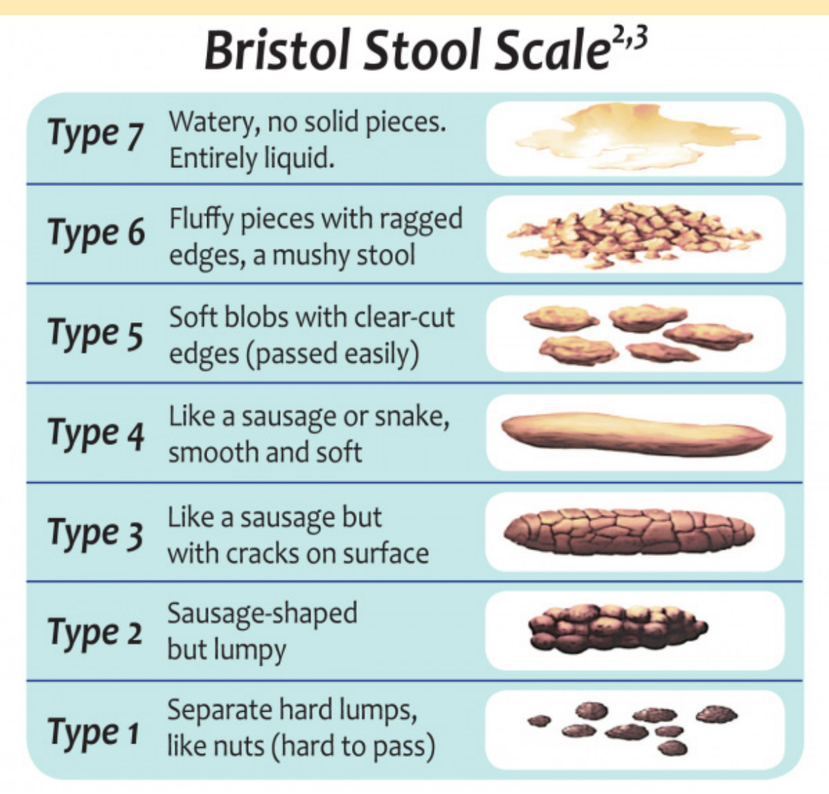
- When the nursing staff notices the patient is having trouble with bed mobility, transfers or sitting balance, this information is communicated to the patient's primary physical therapist.
- Specific concerns are shared with the therapist and continued practice, new techniques, different equipment, patient and family education are incorporated into the patient's treatment plan.




If a Patient is Struggling with any ADL Components of Bowel Care, an Occupational Therapist Provides Assistance

- When a patient is having trouble reaching to place the suppository, difficulty with digital rectal stimulation or not able to maintain hygiene after a bowel movement, their primary occupational therapist is notified.
- The occupational therapist helps the patient, staff and family develop new techniques or use assistive devices to solve the problem while encouraging the patient to be as independent as possible.

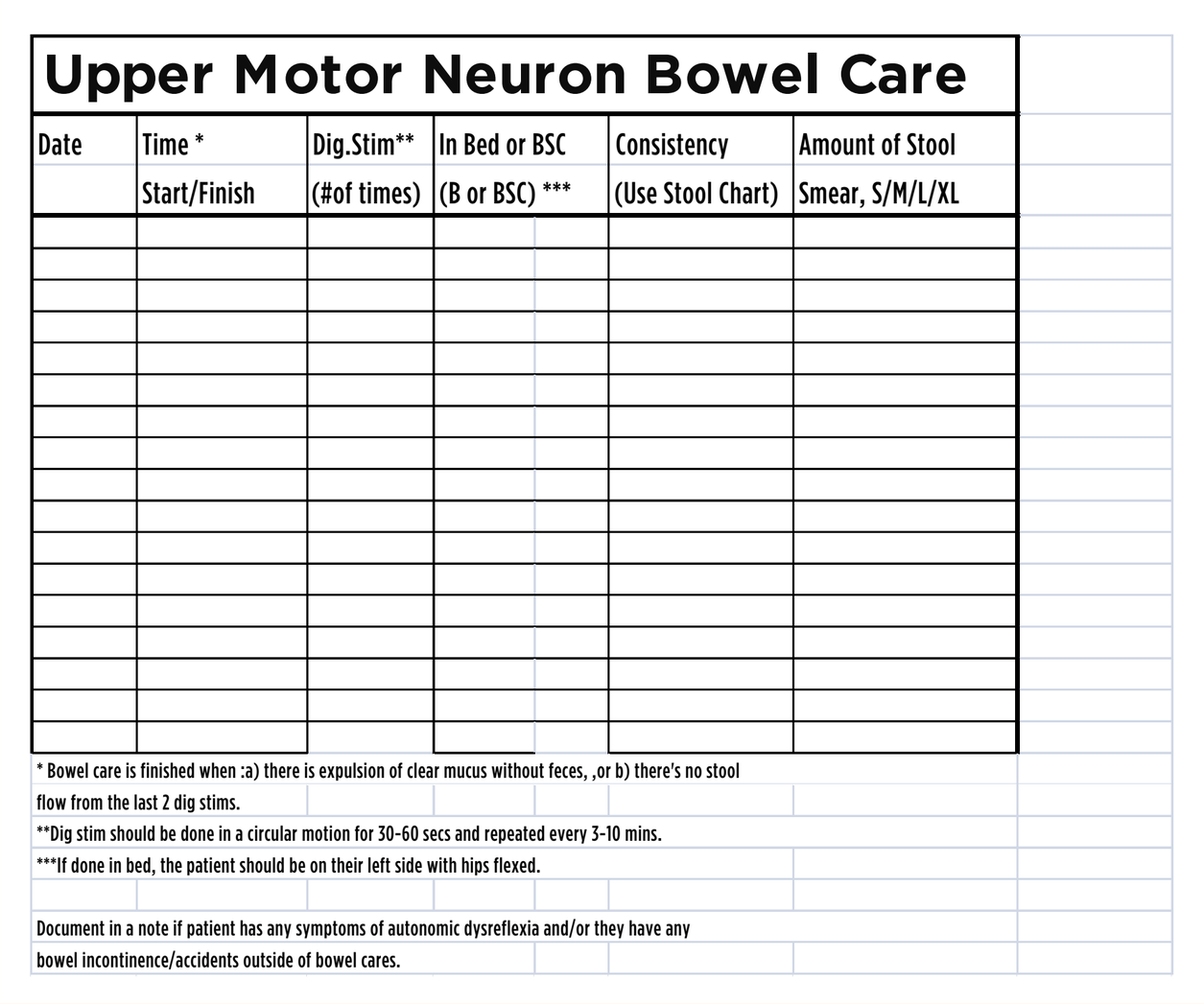

If Consistency of Stool is Impeding Optimal Bowel Evacuation, then a Dietitian is Consulted*



- If the patient's stool is too loose, the dietitian may recommend adding a fiber supplement (six to nine grams per day).
- If the patient is receiving tube feeding, the formula is reviewed to determine if there is a better choice.
- If the stool is too hard, evaluate the patient's fluid intake, as well as his or her fiber intake.
- The current recommendation for patients with SCI is to consume 15 grams of fiber per day.

*Physicians also review medication list and make appropriate changes as needed.

Results of Bowel Care are Clearly Documented in the EMR, as well as at the Bedside, for the Entire Team's Reference



Upper Motor Neuron Bowel Care

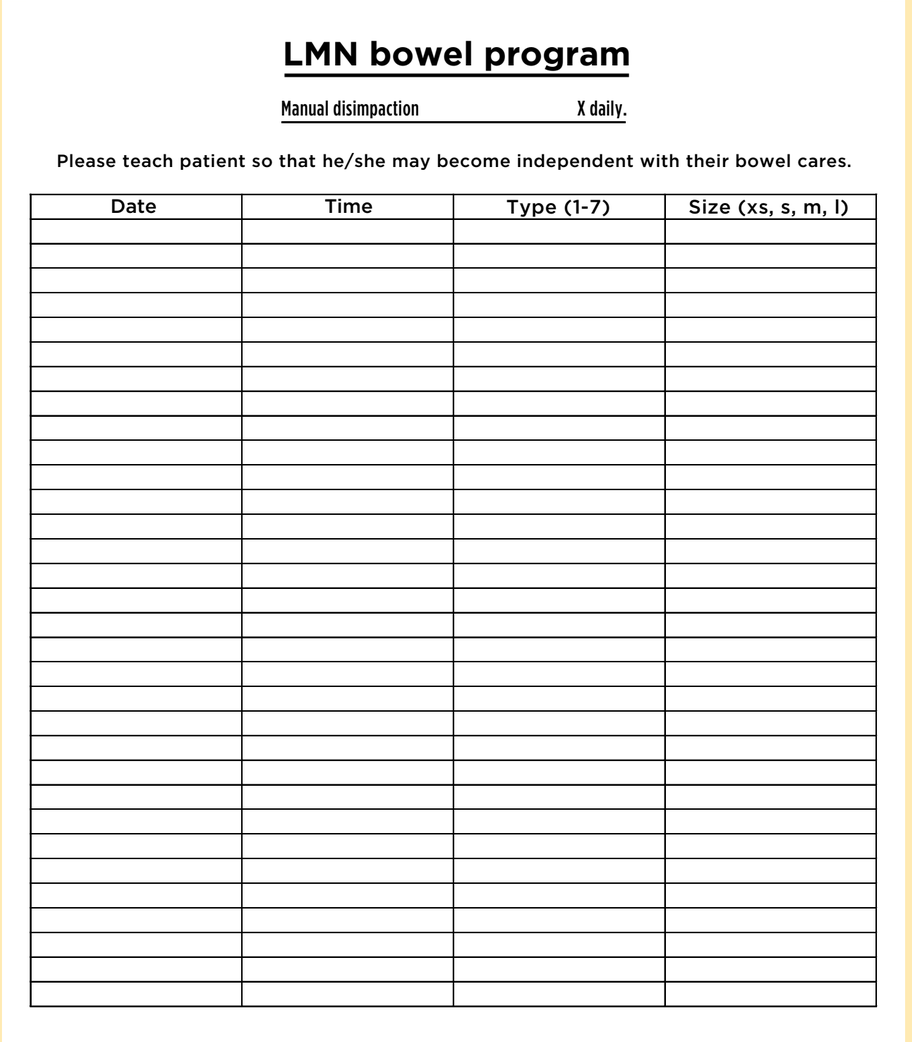
Date	Time * Start/Finish	Dig.Stim** (#of times)	In Bed or BSC (B or BSC) ***	Consistency (Use Stool Chart)	Amount of Stool Smear, S/M/L/XL

* Bowel care is finished when :a) there is expulsion of clear mucus without feces, ,or b) there's no stool flow from the last 2 dig stims.

**Dig stim should be done in a circular motion for 30-60 secs and repeated every 3-10 mins.

***If done in bed, the patient should be on their left side with hips flexed.

Document in a note if patient has any symptoms of autonomic dysreflexia and/or they have any bowel incontinence/accidents outside of bowel cares.

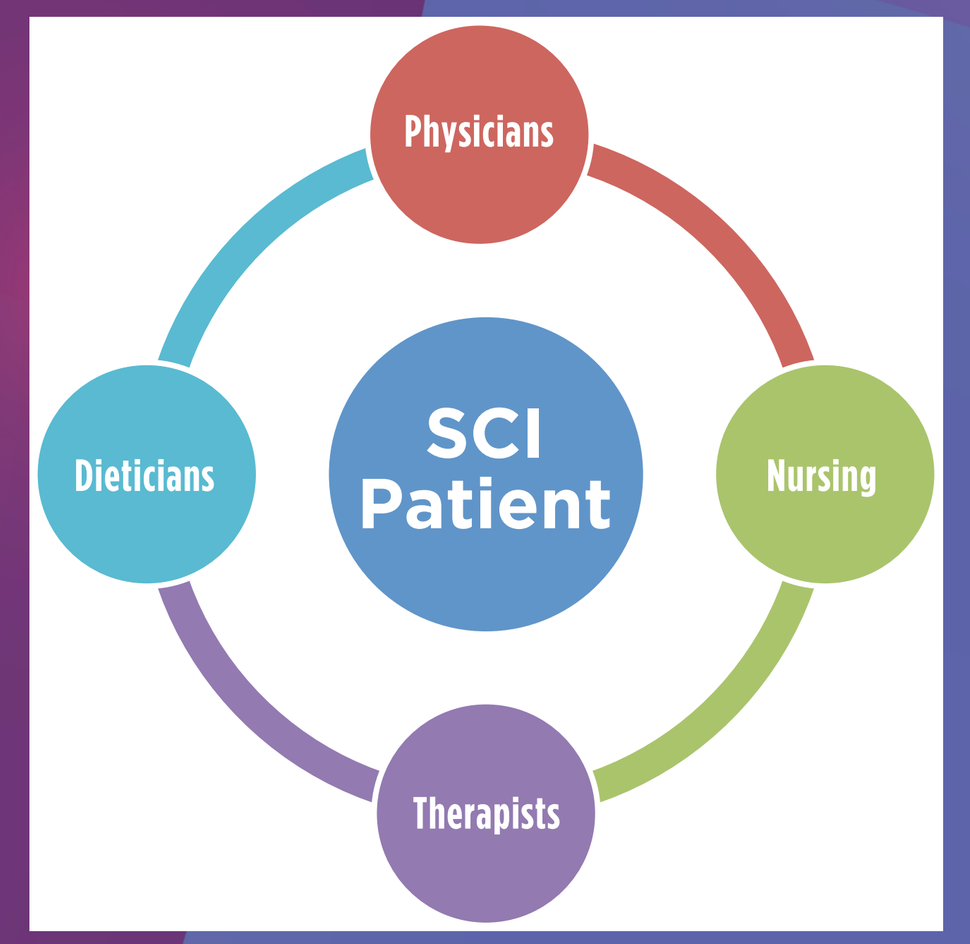


LMN bowel program

Manual disimpaction X daily.

Please teach patient so that he/she may become independent with their bowel cares.

Date	Time	Type (1-7)	Size (xs, s, m, l)



References

Steins, S., Singal, A., & Korsten,M. (2010). Spinal Cord Medicine Principals and Practice. Lin, V., Bono, C., Cardenas, D., Frost, F., Hammond, M., Lindblom, L., Perkash, I., Woosley, R. (eds.), The Gastrointestinal System after Spinal Cord Injury: Assessment and Intervention. 382-403.

Burns, S., & Hammond, M. (eds.), (2009). Yes, You Can! A Guide to Self-Care for Persons with Spinal Cord Injury. 33-39.

Special thanks to Geoffrey Smith, M.D. for lending his expertise and commitment to delivering superior outcomes for our SCI patients. The protocols and flow sheets in this display were created by him using the references above, coupled with his wealth of knowledge and experience.