Victoria Hospice

Bowel Management Guideline

Introduction

The following guideline is intended for general advice only. Clinical assessment and judgment is unique for each patient circumstance and, along with informed patient and family discussions, should determine the most appropriate plan of care for the patient.

Bowel function is important at all times of life, especially in advanced disease and palliative care. Holmes reported that bowel problems were the most common symptom distress at 18% compared to tiredness 15%, anorexia 8%, pain 6% and nausea 4%. Upwards of 50% of patients admitted to a hospice are constipated and, by end-of-life, bowel dysfunction rises up to 80%. Although constipation is the more common problem, diarrhea also occurs and is sometimes related to treatments such as inadvertent over-use of laxatives due to opioids or adverse effects of cancer radiation, chemotherapy or surgery. Assessment and documentation of bowel function is often poorly recorded in an ongoing measurable method. This makes monitoring severity and/or alterations in bowel function difficult to assess.

This guideline covers the spectrum between constipation and diarrhea utilizing the Victoria BPS tool and management guideline. Although there are other bowel scales found in the literature, these are mostly specific to either constipation, such as the Constipation Assessment Method (CAS) and Constipation Visual Analogue Scale (CVAS) or diarrhea and are sometimes designed for a specific disease (ulcerative colitis). A patient-rated adjectival VAS scale using (0) 'worst diarrhea' to (10) 'worst constipation' was validated by Nishisato. A visual stool assessment form shows constipation to diarrhea. Assessment can also involve use of abdominal X-rays as done by Bruera et al.

Caution

If the patient is currently undergoing 'disease-modifying therapy' such as chemotherapy, and where a symptom like diarrhea may be a complication of such treatment, then consultation by the Palliative Care Physician or with the relevant specialist and Family Physician is important to determine the next steps. Emergence of such a complication may be reversible, and thus allow continued active treatment that the patient is seeking, or it may indicate need for change, or even discontinuation, of treatment.

Overview of Bowel Management Guideline

Goals

- To provide relief of distress resulting from constipation or diarrhea, as acceptable to the patient
- To assess patient's bowel needs through appropriate history, physical and laboratory evaluation
- To assess, assist and support families in understanding and coping with issues of bowel care, including imminently dying
- To develop care plan with and receive orders from the Palliative Care Physician or Family Physician
- To monitor the effects of bowel management and adjust accordingly within care plan

Assessment and Investigation (Record assessment results for each category in patient chart)

- General status – functional (PPS); quality of life; patient's hopes, goals, plans; family and home supports; ethical model
- Disease management – current active R_x; between R_x cycles; available palliative R_x in reserve; no possible/stopped R_x
- Nearness to death – stable or changing (if so, reason?). Is constipation or diarrhea prematurely contributing to decline?
- Use BPS to record relevant scores on each visit at home or daily in the Palliative Care Unit
- Additional information about stools may be valuable including bowel pattern onset (e.g. diarrhea), duration, frequency, timing, aggravating and alleviating factors, stool volume and appearance (consistency, color, odor, blood, mucous), bloating, flatus
- Intake including amount and type of food and fluids, as well as drugs which may cause diarrhea or constipation
- Physical assessment for other possible contributing factors such as bowel obstruction, hemorrhoids, fistula, anal fissure
- Evidence of under-hydration if diarrhea is present: severe thirst; dry mouth; minimal/no intake; poor tissue turgor
- Possible lab investigation including stool cultures and other tests; BUN, Creatinine; electrolytes; CBC
- Review possible and likely causes for constipation (Table AH 2) or diarrhea (Tables AH 3, AH 4) based on individual situation

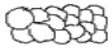
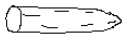
Treatment

- Investigations and treatments likely to improve function, as desired by patient, should be undertaken
- A wide range of possible treatments exist for both constipation and diarrhea
- General patient status, intake, overall current disease management plan and nearness to death are important considerations in determining the optimum treatments for each patient
- Attend to other factors such as pain, nausea, vomiting, hemorrhoids, etc. which may contribute
- Hydration may be appropriate in cases of severe diarrhea (see VHS Hydration and Hypodermoclysis Guideline)
- Determine and arrange optimum location for care based on etiology and R_x plans e.g. home, palliative unit, hospital ward, outpatient clinic

Victoria Bowel Performance Scale. *Medical Care of the Dying, 4th ed.;* p. 343.

Victoria Hospice

Victoria Bowel Performance Scale (BPS)

- 4	- 3	- 2	- 1	BPS Score 0	+ 1	+ 2	+ 3	+ 4
← Constipation			Normal			Diarrhea →		
Impacted or Obstructed +/- small leakage 	Formed Hard with pellets 	Formed Hard 	Formed Solid 	Characteristics Formed Semi-solid 	Formed Soft 	Unformed Loose or paste-like 	Unformed Liquid ± mucous 	Unformed Liquid ± mucous 
No stool produced	Delayed ≥ 3 days	Delayed ≥ 3 days	Patient's Usual	Pattern Patient's Usual	Patient's Usual	Usual or Frequent	Frequent	Frequent
Unable to defecate despite maximum effort or straining	Major effort or straining required to defecate	Moderate effort or straining required to defecate	Minimal or no effort required to defecate	Control Minimal or no effort to defecate	Minimal or no effort required to control urgency	Moderate effort required to control urgency	Very difficult to control urgency and may be explosive	Incontinent or explosive; unable to control or unaware

Cohen's kappa 0.70; Abs Agree ICC 0.85 [95% CI] (p=0.0001)

Instructions for Use

1. BPS is a 9-point numerical scale. It is a **single score**, based on the overall '**best vertical fit**' among the above three parameters [characteristics, pattern, control] and is recorded for example as: BPS +1, BPS -3 or BPS +2
2. Look vertically down each BPS level to become familiar with how the three parameters of **characteristics, pattern and control** change in gradation from constipation to diarrhea
3. The 'usual' bowel pattern for a patient may be in the 0, -1 or +1 columns. For any of these, the actual frequency of bowel movements may vary among patients from one or more times daily to once every 1-2 days but the patient states that this is their usual pattern
4. Patients with a surgical intervention (colostomy, ileostomy, short loop bowel) may have a more frequent 'usual' bowel pattern than above. BPS is still overall graded by combining all three parameters (e.g. +2 or +3 with ileostomy) to ascertain a 'best fit'
5. Patients may use different words than above to describe their bowel activity. One must use clinical judgment in deciding which boxes are most appropriate
6. In potential confounding cases, determination of the most appropriate BPS score is made using the following methods:
   - Two vertically similar parameters generally outweigh the third;
   - Single priority weighting among parameters is Characteristics > Pattern > Control

BPS Case Examples

Example One

A 62-year-old male has metastatic Ca prostate. His PPS is 40% and ECOG performance status is 3. He currently takes hydromorphone, colace and senokot. His bowel movements have been regular, but today he states he had two "mushy" stools this morning and "I had to go right away."
His BPS is rated at **BPS +2**. Although his bowel **pattern** has been usual, today frequency increased to twice. Looking at the scale, this probably fits best with the 'usual or frequent' box. The stool **character** is "mushy" and most resembles the 'unformed, loose or paste-like' box. Finally, there was some effort required to **control** his bowels since he noted having to get to the bathroom 'right away.' This could indicate either the +1 box [minimal or no effort to control] or the +2 box [moderate effort required to control]. Taking all three parameters into account, the best overall vertical fit would fall at the BPS +2 rating.

Example Two

A 78-year-old female has metastatic Ca breast. She is quite active at PPS 70% and ECOG 2 but, with increasing pain in her back, she has required higher doses of long-acting morphine. This has caused bowel troubles for her and she has gone only twice in the last week. The stool was lumpy and hard and it sometimes hurts to pass a bm. She denies having hemorrhoids.
Her score is **BPS -2**. She notes a change from her usual pattern with decreased frequency since "twice per week" she calls 'trouble.' This pattern fits with either -2 or -3, but not -1 or -4. Also, the stool can be painful to pass which indicates some difficulty in control. It is not clear whether this difficulty requires mild or moderate effort but it does not appear to be a major problem. The stool is **characterized** as lumpy and hard which means it is both 'formed' and 'hard' and does not seem by the description to be broken up into pellets. The overall best 'vertical' fit is BPS -2.

Victoria Bowel Performance Scale. *Medical Care of the Dying, 4th ed.;* p. 345. ©Victoria Hospice Society, 2006.

Victoria Hospice

BPS Management Guideline

- 4	- 3	- 2	- 1	BPS Score 0	+ 1	+ 2	+ 3	+ 4
← Constipation			Normal			Diarrhea →		
Prior as tolerated	Prior as tolerated	Increase fluid Increase fibre as tolerated	Maintain usual	Intake* Maintain usual	Maintain usual	? Reduce fibre	Reduce fibre Alter solid intake	No fibre Alter intake to clear fluids
Laxatives as prior Trial **one** of: - Fleet Phospho Soda oral - Citromag - X-Prep ? Polyethylene glycol (PEG) 3350 ? methyl-naltrexone ? Rotate opioid	Increase laxatives to maximum. tolerable: Docusate 2-3 tid Senokot 2-3 tid **and/OR** start: Lactulose 30-60 ml od-bid or Sorbitol ? Polyethylene glycol (PEG) 3350 ? methyl-naltrexone ? Rotate opioid	If **already on** laxatives, then increase dose If **not** on laxatives then start: - Senokot i-ii hs or bid - Docusate i-ii hs or bid [NB. Some don't recommend docusate due to limited evidence]	Maintain current laxative regimen if already taking Otherwise, no laxatives may be necessary. An important **exception** is if an opioid is first being initiated. [if so, then begin laxatives as in BPS -2]	PO Meds* Maintain current laxative regimen if already taking Otherwise, no laxatives may be necessary. An important **exception** is if an opioid is first being initiated. [if so, then begin laxatives as in BPS -2]	Maintain current laxative regimen if already taking Otherwise, no laxatives may be necessary. An important **exception** is if an opioid is first being initiated. [if so, then begin laxatives as in BPS -2]	Reduce or hold current laxatives and reassess laxative needs, especially if a persistent problem or hygiene issue	Hold all laxatives ? Hold antibiotics, etc. ? increase opioid ? Add one of: - Loperamide - Codeine - Diphenoxylate - Hyoscine Anti-infectives as indicated Specific disease related drugs e.g. Crohn's, IBS	Hold all laxatives Prior meds as indicated in BPS +3 ? Attapulgite (Kaopectate) ? Cholestyramine ? add Octreotide 50-200ug SC bid-tid ? add Ondansetron
Enema: Peroxide Oil retention Soap Suds May require 1-2x daily as tolerated until relief or Dx of irreversible obstruction.	As prior in BPS -2 Fleet PRN or Oil retention enema Daily until BPS score reduced	Dulcolax supp PRN OR Microlax enema PRN	No	PR Supp and/or Enemas* No	No	No	No	No
As prior in BPS -3 DRE check for stool or leakage Disimpaction (use anesthetic gel and sedation): rarely requires nerve block in extreme cases Anusol HC PRN	As prior in BPS -2 Assistance such as commode, pads, etc. for optimal toileting ? disimpaction if fatigue issue Anusol HC PRN	Assess abdomen, bowel sounds, etc. Increase activity as possible Timing with gastrocolic reflex Sitting position as possible	Maintain current personal regimen	Physical Care Maintain current personal regimen	Maintain current personal regimen	Skin care Hygiene Barrier cream Anusol HC PRN	Skin care Hygiene Barrier cream Anusol HC PRN ? Fever, bleeding	Skin care Hygiene Barrier cream Anusol HC PRN ? Fever, bleeding, postural hypotension
? X-ray, US, CT abdomen to rule out obstruction, with surgery or other treatment as indicated Treat nausea or vomiting if due to GI obstruction	? X-ray abdomen to assess stool in quadrants (see Edmonton method(308)	None necessary	None necessary	Investigations and Treatment None necessary	None necessary	None necessary	Lab: ? stool C. and S. ? C. diff. ? O. and P. ? melena ? elect., CBC, etc. Usual treatment for pre-existing e.g. IBS, Crohn's, etc.	Same as prior in +3 ? CT, MRI of vertebrae to rule out SCC or pelvic nerve compression ? Radiation ? Diverting colostomy ? Artificial hydration or IV fluids

* NB. For patients imminently dying within a few days, bowel care including laxatives and enemas is usually stopped unless the patient is uncomfortable

Victoria Bowel Performance Scale. *Medical Care of the Dying, 4th ed.;* p. 346.