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Guidelines & Protocols Advisory Committee

Part 2: Pain and Symptom Management
Constipation

Effective Date: February 22, 2017

Key Recommendations

- Prevent constipation by ordering a bowel protocol when regular opioid medication is prescribed.

Assessment

1. Understand the patient's bowel habits, both current and when previously well (e.g., frequency of bowel movements (BMs), stool size, consistency, and ease of evacuation). Consider using the bowel performance scale available at: http://www.bccancer.bc.ca/family-oncology-network-site/Documents/BPSConstipationScale.pdf
2. The goal is to restore a patient's normal BM frequency, consistency, and ease of passage.
3. For lower performance status patients (e.g., reduced food intake and activity), lower BM frequency is acceptable as long as there is no associated discomfort.

Management

1. There are many etiologies (e.g., reduced food/fluid/mobility and adverse effects of medications).
2. Exclude impaction when a patient presents already constipated. Abdominal x-ray can be useful when physical examination is inconclusive.
3. Minimize/avoid rectal interventions (enemas, suppositories, manual evacuation), except in crisis management. Note that rectal interventions are contraindicated when there is potential for serious infection (neutropenia) or bleeding (thrombocytopenia), or when there is rectal/anal disease.
4. When risk factors are ongoing, as they are in most cancer patients, suggest laxatives regularly versus prn. Adjust dose individually. Laxatives are most effective when taken via escalating dose according to response, termed "bowel protocol".
5. Sennosides (e.g., Senokot®) are the first choice of laxative for prevention and treatment. Patients with irritable bowel syndrome may experience painful cramps with stimulant laxatives and often prefer osmotic laxatives such as lactulose or polyethylene glycol (PEG). There is weak evidence that lactulose and sennosides are equally effective;[1] however lactulose can taste unpleasant and cause bloating.
6. If rectal measures are required, generally a stimulant suppository is tried first, then an enema as the next option.
7. The BC Palliative Care Drug Plan covers laxatives written on a prescription for eligible patients.
8. For patients with opioid-induced constipation, after a trial of first-line recommended stimulant laxatives and osmotic laxatives, methylnaltrexone (or nalaxegol) may be helpful. Cancer, GI malignancy, GI ulcer, Ogilvie's syndrome and concomitant use of certain medications (e.g., NSAIDs, steroids and bevacizumab) may increase the risk of GI perforation in patients receiving methylnaltrexone. [Health Canada MedEffect Notice: http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2010/14087a-eng.php]
9. A bowel protocol and patient handouts on constipation are available at: http://www.bccancer.bc.ca/health-professionals/networks/family-practice-oncology-network/guidelines-protocols.

Constipation Management Algorithm

Hyperlinks indicate additional information available in guideline sections above:
A = Assessment
M = Management

BM bowel movement
WBC white blood cell count
Plt platelet count

Assessment (A1)
- Normal bowel habit
- Current bowel performance (A3)
  - Stool frequency
  - Stool consistency
  - Ease of evacuation

Obstructed bowel? — Yes → Manage according to FPON guideline, ***Medical Management of Malignant Bowel Obstruction***

No

Constipation? — No → **PREVENTION needed**; Yes → **TREATMENT needed (M2)**

PREVENTION needed → Irritable bowel syndrome? — No → **Sennosides-based Protocol (M4+5)**; Yes → **Osmotic Laxative (M4+5)**

Osmotic Laxative (M4+5)
- Lactulose or sorbitol
- Polyethylene glycol
- Escalating doses until satisfactory BM

No success → **Sennosides-based Protocol (M4+5)**

TREATMENT needed (M2) → 1. Rectum empty; **OR** 2. Contraindications to rectal intervention:
- neutropenia (WBC <0.5) **OR**
- thrombocytopenia (Plt <20)

→ **Rectal Measures (M3)**
- Manual disimpaction (if indicated)
- Glycerin supp
- Bisacodyl supp
- Microlax enema
- Fleet enema*
- Warm water enema
- Oil enema

followed by Sennosides-based Protocol

Sennosides-based Protocol (M4+5)
- Escalating doses until satisfactory BM
- Maximum senna dose 36 mg tid
- Add rectal measures at any time if indicated and no contraindications (M3)

No success → Assess cause

Assess cause →
- **Hypomobility** (e.g., ascites, autonomic neuropathy, abdominal cancer) → Consider prokinetic agent (e.g., domperidone, metoclopramide) → Add or switch to osmotic laxative
- **Opioid-induced (M9)** → Consider switching to less constipating opioid (e.g., fentanyl) → Add or switch to osmotic laxative → Consider methylnaltrexone (or naloxegol)

No success → **Palliative Care Consult**

*Contraindicated in patients with renal failure.

Resources

References

1. Agra Y, Sacristán A, González M, et al. Efficacy of senna versus lactulose in terminal cancer patients treated with opioids. J Pain Symptom Manage. 1998;15(1):1-7.

Abbreviations

AEs	adverse effects
BM	bowel movement
GI	gastrointestinal
NSAIDs	non-steroidal anti-inflammatory drugs
PEG	polyethylene glycol

Appendices

Appendix A – Medications Used in Palliative Care for Constipation

For additional guidance on constipation, see also the **BC Inter-professional Palliative Symptom Management Guidelines** produced by the BC Centre for Palliative Care, available at: www.bc-cpc.ca/cpc/symptom-management-guidelines/

Appendix A: Medications Used in Palliative Care for Constipation

Tailor dose to each patient; those who are elderly, cachectic, debilitated or with renal or hepatic dysfunction may require reduced dosages; consult most current product monograph for this information: http://www.hc-sc.gc.ca/dhp-mps/prodpharma/databasdon/index-eng.php

LAXATIVES[A]						
Generic Name	Trade Name	Available Dosage Forms	Standard Adult Dose	Drug Plan Coverage[B]		Approx. cost per 30 days[C]
				Palliative Care	Fair PharmaCare	
bisacodyl	Dulcolax®, G	**Tabs:** 5 mg	5 to 10 mg PO x 1 dose	Yes, LCA	No	$1 (G) $6 per 30 days
		Supp: 10 mg	10 mg PR x 1 dose			$0.51 (G) per supp
sennosides	Senokot®, G	**Tabs:** 8.6, 12 mg	2 tabs PO at bedtime to 3 tabs tid			$3–20 (G) $6–40 per 30 days
		Oral syrup: 8.8 mg per 5 mL	10 mL PO at bedtime to 15 mL tid	Yes, LCA	No	$14–72 per 30 days
glycerin supp[D]	G	**Supp:** 2.65 g	1 supp PR x 1 dose	Yes	No	$0.25 (G) per supp
lactulose	G	**Oral solution:** 667 mg per mL	15 mL PO daily to 30 mL PO bid	Yes, LCA	Special Authority, LCA	$7–28 (G) per 30 days
polyethylene glycol 3350 (PEG)[D]	Lax-A-Day®, Pegalax®, RestoraLAX®, G	**Powder:** 17g sachets	17 grams in 250 mL fluid PO daily	No	No	$20–25 per 30 days
sorbitol[D]	G	**Oral solution:** 70%	15 to 45 mL PO daily to qid	No	No	$10–136 (G) per 30 days
glycerin-sodium citrate-sodium lauryl sulfoacetate- sorbic acid-sorbitol[D]	Microlax®	**Micro-enema:** 5 mL	5 mL PR x 1 to 2 doses	Yes	No	$1.80 per micro-enema
phosphates enema[D, E]	Fleet enema®, G	**Enema:** 22 g per 100 mL	120 mL PR x 1 dose	Yes	No	$6 per enema
mineral oil enema[D]	Fleet Enema Mineral Oil®	**Enema:** 130 mL	120 mL PR x 1 dose	Yes	No	$8 per enema
methylnaltrexone[D]	Relistor®	**Inj:** 12 mg per 0.6 mL	8 to 12 mg SC every 2 days	No	No	$616 per 30 days
naloxegol	Movantik®	**Tabs:** 12.5, 25 mg	25 mg PO once daily	No	No	$193 per 30 days

Abbreviations: G generics; **LCA** subject to Low Cost Alternative Program; **PO** by mouth; **PR** per rectum; **SC** subcutaneous; **Supp** suppositories (rectal); **tabs** tablet

[A] Refer to guideline and/or algorithm for recommended order of use.

[B] PharmaCare coverage as of October 2016 (subject to revision). Obtain current coverage, eligibility, and coverage information from the online BC PharmaCare Formulary Search page at pharmacareformularysearch.gov.bc.ca

[C] Cost as of October 2016 and does not include retail markups or pharmacy fees. Generic and brand name cost separated as indicated by (G).

[D] Cancer, gastrointestinal malignancy, gastrointestinal ulcer, Ogilvie's syndrome and concomitant use of certain medications (e.g., NSAIDs, steroids and bevacizumab) may increase the risk of GI perforation in patients receiving methylnaltrexone. [Health Canada MedEffect Notice: http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2010/14087a-eng.php

[E] Contraindicated in patients with renal failure