Clinical Resource Guide:
Constipation Management in Hospice

INTRODUCTION TO CONSTIPATION

Constipation is a common symptom occurring at the end-of-life and can significantly decrease patient quality of life by causing discomfort and contributing to distress. This Pharmacist Corner is designed to educate and equip hospice clinicians with a comprehensive overview of constipation in the hospice setting, including prevalence, common causes, and evidence-based treatment approaches. This guide will help address and alleviate constipation and enhance end-of-life care.

Pharmacist Corner Objectives

1.) Define constipation and opioid-induced constipation
2.) List mechanism of action adverse effects, efficacy and cost-effectiveness of common bowl regimens
3.) Identify the role in therapy and considerations to prescribing for novel bowel regimens

PREVALENCE OF CONSTIPATION

- Constipation can impact up to 27% of all adults
- Incidence increases with age, as 35% of patients ages 60-101 experience constipation
- Up to 50% of patients in a long-term care facility experience constipation
- **75%-85% of hospice patients require treatment for constipation**
- Constipation can have a significantly negative impact on quality of life

CONSTIPATION DEFINED

- Slow movement of feces through the large intestine resulting in hard, dry stool that may be difficult to pass
- Symptoms of constipation can vary depending on the patient, and include:
    - Stool infrequency
    - Incomplete evacuation of stool
    - Difficult passing stools
    - May be accompanied by discomfort, bloating, distension and pain

OPIOID-INDUCED CONSTIPATION

- Opioids affect gastrointestinal motility and secretion via suppression of neural activity by:
    - Suppressing forward motility
    - Increasing non-propulsive segmental contractions
    - Raising anal sphincter tone and sphincter tone in both small and large intestines

- Opioids may vary in constipating severity
- May be due to opioid dosage potency
- Experienced by 40%-90% of patients requiring opioid therapy

CAUSES CONTRIBUTING TO CONSTIPATION

Table 1.

Causes Commonly Contributing to Constipation	
Category	**Examples**
Comorbid Conditions	Chronic kidney disease, heart failure, bipolar disease, schizophrenia, depression, inflammatory bowel disease, diverticulosis
Metabolic causes	Hypokalemia, hypercalcemia, hypomagnesemia
Neurologic causes	Parkinson's, dementia, spinal cord injury, lack of anal reflex, malignancy affecting nerves
Motility causes	Amyloidosis, scleroderma, immobility
Structural causes	Pelvic floor dysfunction, fecal impaction, rectal prolapse, anal fissure, obstructing sigmoidocele, mechanical obstruction
Endocrine conditions	Hypothyroidism, hyperparathyroidism, panhypopituitarism
Medications	Antidepressants, antipsychotics, antispasmodics, antihistamines, anticonvulsants, antacids, sucralfate, opioids, calcium, iron, CCBs
Diet	Anorexia, dehydration, low fiber intake, excess alcohol/caffeine/dairy

MANAGEMENT OF CONSTIPATION

Nonpharmacologic Treatment Strategies
Encourage fluid intake and increase dietary fiber: ▪ High fiber diet/supplement may worsen discomfort constipation if patient not drinking enough ▪ Consider stopping psyllium, Metamucil, Fibercon, etc. in patients with limited PO intake
Sitting up and ambulation can help promote GI motility

Pharmacologic Management

- Encourage prophylaxis with laxatives when initiating/in combination with opioid therapy
- Stimulating laxative is often necessary to prevent/overcome opioid-induced constipation
- Use of stimulating laxative + osmotic laxative (see table below) preferred pharmacologic combo
- In randomized, double-blind placebo-controlled trial, no benefit found adding docusate to senna

Traditional Laxatives:

Even if patients report lack of symptom resolution when previously using commonly used laxatives, or are admitted to hospice with an active prescription for a novel laxative (see **Table 3**), strongly recommend retrialing a more traditional regimen due to increased efficacy, versatility of dosing pending changing patient factors, and significant cost-saving opportunity without sacrificing effectiveness.

The following table contains preferred laxatives to utilize when preventing or treating constipation. In the hospice setting, it is often important to ensure a patient's bowel regimen includes a stimulating laxative (especially if patient using on opioid therapy), as docusate alone is often not enough. Additionally, an osmotic laxative can be an essential part of an effective bowel regimen by helping to prevent hardening/drying of stool and promoting transit. Osmotic laxatives can be particularly helpful in patients with malignancies resulting in the narrowing of the GI tract. Polyethylene glycol is well tolerated but requires the powder to be dissolved in approximately 8 ounces of liquid. For patients unable to tolerate such intake, consider lactulose which is administered in smaller volumes of 15-30ml depending on dose.

Table 2. Traditional Laxative Medications

Stimulating Laxatives			
Medication	**Usual Adult Dose**	**Onset of Action**	**Side Effects**
Bisacodyl	10mg po daily 10mg rectally daily	6-10 hours 15-60 minutes	gastric irritation rectal irritation
Senna	1-2 tablets (8.6mg/tab) po daily to BID	6-12 hours	gastric irritation, bloat
Osmotic Laxatives			
Medication	**Usual Adult Dose**	**Onset of Action**	**Side Effects**
Polyethylene Glycol (Miralax®)	8.5 (1/2 capful)-34g (2 capfuls) in 8oz	6-10 hours 15-60 minutes	nausea, bloating, cramping
Lactulose	10g/15mg to 20g/30ml up to BID	8-24 hours	abdominal bloating, flatulence
Sorbitol	30g (120mg of 25% solution) daily	24-48 hours	abdominal bloating, flatulence
Glycerin	1 suppository rectally daily	15-60 minutes	rectal irritation
Magnesium citrate	200ml (11.6g) po daily	30 minutes to 3 hours	watery stools, urgency, electrolyte abnormality
Magnesium hydroxide	5-15ml as needed up to 4 times daily	30 minutes to 6 hours	
Magnesium sulfate	1-2 tsp (5-10g) in 240ml of water daily	30 minutes to 3 hours	
Surfactants (Softeners)			
Medication	**Usual Adult Dose**	**Onset of Action**	**Side Effects**
Docusate	100mg 1-2 times/day	24-72 hours	well tolerated

Table 3. Novel Agents the Management of Constipation

Novel Laxatives				
Medication	**Mechanism of Action**	**Indication of Use**	**Efficacy and Cost**	**Additional Notes**
Lubiprostone (Amitiza®)	Calcium channel activator (ClC-2), promotes fluid secretion, increasing motility	Chronic idiopathic constipation, opioid-induced constipation in patients with chronic non cancer pain, IBS w/constipation	▪ NNT: 13 ▪ No significant difference from placebo ▪ Cost: > **$350/month**	▪ Contraindicated for GI obstruction ▪ Hepatic dose adjust ▪ Side effects ○ Nausea: 11% ○ Diarrhea: 8% ○ Abd pain, gas: 4% ○ Dyspnea: 3%
Linaclotide (Linzess®)	Guanylate cyclase-C agonist	Irritable bowel syndrome with constipation, chronic idiopathic constipation	▪ **NOT INDICATED FOR OPIOID-INDUCED CONSTIPATION** ▪ Indicated for IBS and chronic idiopathic constipation ▪ Cost: > **$350/month**	▪ Contraindicated for children < 6 and those with suspected GI obstruction. ▪ Diarrhea most common side effect.
Methylnatrexone (Relistor®)	Mu-opioid receptor selective antagonist	Opioid-induced constipation in noncancer pain	▪ NNT: 4 ▪ Cost: ○ SQ: **$184/dose** ○ Tab: **$900/month**	▪ Be within close proximity to toilet following use ▪ Contraindicated in GI obstruction ▪ Discontinue laxatives prior to use, may restart after 72 hrs with no BM ▪ Subcutaneous administration or tablet
Naloxegol (Movantik®)	Mu-opioid receptor antagonist	Opioid-induced constipation in noncancer pain	▪ NNT: 8 ▪ Cost: **$300/month**	▪ Discontinue laxatives prior to use, may resume if no BM in 24 hours ▪ Abdominal pain is most common side effect ▪ Long polyethylene glycol chain prevents from crossing the blood-brain barrier ▪ Avoid grapefruit juice and CYP3A4 inhibitors

SUMMARY

This guide can serve as a resource to support compassionate care at the end-of-life by helping to improve management of constipation. By understanding the underlying causes of constipation and implementing evidence-based strategies, clinicians can effectively manage this distressing symptom, promote comfort, and enhance quality of life. For questions regarding patient-specific scenarios, please call BetterRX for a Clinical Pharmacy Consultation.

References

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