

PALLIATIVE SYMPTOM MANAGEMENT

AGS Geriatrics Evaluation and Management Tools (Geriatrics E&M Tools) support clinicians and systems that are caring for older adults with common geriatric conditions.

From the AMERICAN GERIATRICS SOCIETY

Geriatrics Evaluation & Management Tools

CONSTIPATION

- Attempt to determine underlying cause; most common causes are opioid and anticholinergic medications, dehydration.
- Minimize or discontinue constipating medications when possible.
- Nonpharmacologic approaches: increase physical activity as tolerated, adequate hydration, scheduled toileting.
- Avoid fiber for patients unable to maintain oral fluid intake of 1.5 L/day.
- Prophylactically prescribe stimulant laxative with all opioid use to prevent opioid-induced constipation; if opioid-induced constipation still develops:
 - Add an osmotic laxative.
 - If no bowel movement for >3 days with oral laxatives, consider an enema (rectal laxative).
 - If osmotic or rectal laxatives are ineffective, consider methylnaltrexone.
- For other causes of constipation, start with stimulant or osmotic laxatives.
- Avoid magnesium laxatives and sodium-phosphate enemas because of risk of electrolyte disturbances with renal insufficiency.

Medication	Class (mechanism)	Onset	Starting Dosage (Max Dosage)	Comments
Senna	Stimulant laxative (↑ enteric muscle contraction)	6–10 h	Two 8-mg tabs/d (12 tabs/d)	Use limited by abdominal cramping, can be avoided with smaller frequent doses.
Bisacodyl (oral)	Stimulant laxative	6–10 h	5–15 mg tab/d (30 mg/d)	See comments above.
Polyethylene glycol	Osmotic laxative (↑ intraluminal volume)	48–96 h	17 g/d (17 g twice/d)	Use limited by abdominal cramping, bloating, flatulence.
Lactulose	Osmotic laxative	12–48 h	15–30 mL q12–24h (60 mL/d)	See comments above; usually more of these adverse effects than polyethylene glycol.
Bisacodyl suppository	Rectal stimulant laxative	15–60 min	10-mg suppository daily	Can lead to abdominal cramping.
Enemas	Rectal laxative	10–15 min	2 times/wk	Use tap water enemas or oil-retention enema for refractory cases; avoid sodium-phosphate enemas.
Methylnaltrexone	Peripheral opioid antagonist	30–60 min	8 mg (<62 kg) or q48h 12 mg (>62 kg) SC q48h	Use only for opioid-induced constipation; avoid if bowel obstruction suspected; has no effect on central analgesic effects of opioids.

MALIGNANT BOWEL OBSTRUCTION

- In most patients, symptoms can be alleviated by combination therapy with opioids, antispasmodic medications, antiemetics (avoid metoclopramide), antisecretory agents (see excessive secretions), and corticosteroids.
- If conservative measures fail, consider palliative surgery or venting gastrostomy tube placement.

Medication	Class (mechanism)	Onset	Starting Dosage	Comments
Dexamethasone	Corticosteroid (reduce tumor-associated inflammation)	Hours	4 mg po q6h for trial of 5–7 days; discontinue if no response	Can lead to GI irritation and agitation
Hyoscyamine	Anticholinergic, antispasmodic	Minutes to hours	0.125 mg SL q4–8h	Can lead to dry mouth, blurred vision, urinary retention, confusion
Scopolamine	Anticholinergic, antispasmodic	See above	0.1–0.2 mg SC or IV q6–8h Transdermal patch q72h	See above. Onset of patch up to 12 h
Octreotide	Reduces GI secretions	Hours	12.5 mcg/h SC or IV continuous infusion; 200–600 mcg SC or IV intermittently (max 900 mcg in 24 h)	Well tolerated but questionable benefit; expensive

DIARRHEA

- If caused by excessive laxative administration, especially after upward dose adjustments intended to clear an impaction, temporarily stop laxative treatment and reintroduce (after delay) at lower dosage.
- For fecal impaction, begin treatment with manual disimpaction and tap water enemas; do not administer laxatives until impaction is cleared because of risk of bowel perforation.
- If caused by radiotherapy involving abdomen and pelvis or as a complication of ileal resection, treat with cholestyramine 4–12 g q8h.
- For other noninfectious causes, treat with loperamide 4 mg followed by 2 mg for each loose movement (up to 16 mg/d).

NAUSEA/ VOMITING

- Attempt to determine cause, choose appropriate antiemetic based on pathway-mediating symptoms, administer around-the-clock medication if nausea is constant.
- If possible, discontinue medications with nausea as adverse effect (antibiotics, opioids, NSAIDs, etc).
- Avoid topical lorazepam, haloperidol, and diphenhydramine gel for nausea because of lack of evidence of efficacy.
- Avoid medications with anticholinergic properties, such as promethazine, diphenhydramine, meclizine, and hydroxyzine because of risk of sedation, confusion, delirium, falls, and urinary retention.
- Evidence for cannabinoids (dronabinol) is poor for effectiveness in nausea treatment.
- For refractory nausea, consider a trial of corticosteroids such as dexamethasone (see below).

Medication	Class (mechanism)	Onset	Starting Dosage	Comments
Ondansetron	Serotonin antagonist (GI tract and chemoreceptor trigger zone [CTZ])	Minutes	4–8 mg po q8 h	Generally safe; effective for chemotherapy-induced nausea; can lead to constipation and prolonged QT interval.
Haloperidol	Dopamine antagonist (CTZ)	Minutes to hours	0.5–2 mg po, IV, SC q6h, then titrate	Effective antiemetic medication; sedating, can lead to orthostasis/falls, tardive dyskinesia (TD), extrapyramidal symptoms (EPS), prolonged QT interval.
Prochlorperazine	Dopamine antagonist (CTZ)	Minutes to hours	10–20 mg po q6h 25 mg pr 5–10 mg IV q6h	As above.
Metoclopramide	Prokinetic (GI tract and CTZ)	Minutes to hours	5–20 mg po q6 h	Useful if nausea due to dysmotility; avoid in complete bowel obstruction; can lead to TD and EPS.
Dexamethasone	CNS	Hours	6–10 mg po loading dose followed by 2–4 mg po q6–12h	Use for intracranial lesions, high intra-abdominal tumor burden; can lead to GI irritation; not a long-term solution; monitor for agitation, insomnia, delirium; consider adding proton-pump inhibitor.

DYSPNEA

- Treat underlying cause (eg, diuretics for pulmonary edema or bronchodilators for bronchospasm).
- Blow-by air (facial breeze), positioning, or relaxation exercises can reduce sensation of air hunger.
- Avoid supplemental oxygen unless symptomatic from hypoxemia.
- The most effective pharmacologic agents for treatment of dyspnea are opioids. Morphine has been best studied, but all opioids can relieve dyspnea.

Medication	Class (mechanism)	Onset	Starting Dosage	Comments
Morphine	Opioid (unknown mechanism)	5–30 min	Tabs: 5–10 mg q2h prn Liquid (20 mg/mL): 0.25–0.5 mL q15–30min prn	Avoid in renal insufficiency; use oxycodone or hydromorphone (opioid equivalent) instead.
Lorazepam	Benzodiazepine (anxiolytic)	30 min	0.5–2 mg po q2–4h prn	Use in conjunction with opioids to reduce anxiety associated with dyspnea; benzodiazepines alone will not relieve dyspnea unrelated to anxiety.

EXCESSIVE SECRETIONS (LOUD RESPIRATIONS)

- Education that this is a natural process at end of life and does not cause patient discomfort.
- Antimuscarinic medications may not be more effective than nonpharmacologic interventions such as positioning.

Medication	Class (mechanism)	Onset	Starting Dosage	Comments
Atropine 1% eye drops	Antimuscarinic (↓ production of salivary secretions)	Minutes	1–2 drops SL q1–2h	Can be easily delivered in home setting
Glycopyrrolate	See above	Minutes	1–2 mg po q8–12h (max 8 mg/d) 0.1–0.4 mg IM, SC, IV q4h	Does not cross blood-brain barrier; 5 times more potent than atropine drops
Scopolamine	See above	Up to 12 h	0.3–0.6 mg SC q4h 1-mg patch q72h	Can cross blood-brain barrier; generally not indicated in final hours of life (slow onset)

FATIGUE, WEAKNESS

- Reduce energy expenditure (modify environment, take breaks between tasks, etc).
- Ensure adequate sleep hygiene.

Medication	Class (mechanism)	Onset	Starting Dosage	Comments
Methylphenidate	Psychostimulant	20–30 min	Start 2.5 mg qAM; can titrate up to 3 times/day	Monitor for agitation, psychosis, insomnia; can cause weight loss.
Modafinil	Psychostimulant	20–60 min	200 mg qAM	See above.

See the corresponding *AGS Geriatrics Evaluation & Management Tools* for information on the following conditions: Delirium, Behavioral Disturbances in Dementia, Nutrition (Anorexia and Cachexia), Depression, Insomnia, Pain.