

Essential Medications in Hospice

SIX CLASSES OF ESSENTIAL HOSPICE MEDICATIONS

Analgesics

- Medications used to relieve pain.

Anticholinergics

- Medications used to dry secretions, provide smooth muscle relaxation, & manage allergy symptoms

Antiemetics

- Medications used to relieve nausea and vomiting.

Antipsychotics

- Medications used to treat symptoms of psychosis.

Anxiolytics

- Medications used to relieve anxiety and provide a calming effect.

Laxatives

- Medications used to treat constipation.

Note: Many medications are used off-label in hospice care; off-label use is indicated by OL in this document

Anticholinergics

Indication: Terminal Secretions

Medication & Starting Dose	Hyoscyamine (Levsin®, Hyomax-SL®) ^{OL} <ul style="list-style-type: none">• 0.125 mg SL q4h PRN	Atropine (Isopto® Atropine) ^{OL} <ul style="list-style-type: none">• 2 drops SL q4h PRN	Glycopyrrolate (Robinul®, Cuvposa®) ^{OL} <ul style="list-style-type: none">• 0.1 – 0.2 mg SQ/IV q6h PRN
Adverse Effects	• Blurred vision, constipation, urinary retention, confusion, delirium, restlessness, hallucinations, dry mouth, and heart palpitations		
Monitoring Parameters	• Symptom improvement		
Drug Interactions	• Use cautiously with other medications with that have cholinergic actions or anticholinergic side effects; avoid alcohol use		
Clinical Pearls	• Antidepressants, antihistamines, tiotropium, and ipratropium bromide may enhance anticholinergic effect		
	• Use non-pharmacologic interventions first line; anticholinergic medications do not affect existing secretions; may prevent new secretions		

Antiemetics

Indications: Nausea, Vomiting

Medication & Starting Dose	Haloperidol (Haldol®) ^{OL} <ul style="list-style-type: none">• 0.5 mg PO/SL/PR q6h PRN	Promethazine (Phenergan®) <ul style="list-style-type: none">• 25 mg PO/PR q6h PRN	Prochlorperazine (Compazine®) <ul style="list-style-type: none">• 10 mg PO q6h PRN• 25 mg PR q12h PRN	Ondansetron (Zofran®) <ul style="list-style-type: none">• 4 mg PO/SL q8h PRN
Adverse Effects	• Haloperidol, promethazine, prochlorperazine: anticholinergic effects, EPS, sedation, orthostatic hypotension, lower seizure threshold			
	• Ondansetron: constipation, fatigue, headache, QT prolongation			
Monitoring Parameters	• Symptom improvement, adverse effects			
Drug Interactions	• Use cautiously with other medications with that have CNS depressant effects and QTc prolonging medications			
	• Haloperidol: CYP 3A4 and 2D6 (inhibitors and inducers)			
Clinical Pearls	• Avoid use of haloperidol and prochlorperazine in Parkinson's disease or Lewy body dementia; promethazine is the preferred agent			

Antipsychotics

Indication: Agitation

Medication & Starting Dose	Haloperidol (Haldol®) <ul style="list-style-type: none">• 0.5 mg PO/SL/PR/SC/IV/IM q4h PRN or ATC	Chlorpromazine (Thorazine®) <ul style="list-style-type: none">• 10 mg PO/SL q8h PRN or ATC	Quetiapine (Seroquel®) <ul style="list-style-type: none">• 25 mg PO BID	Risperidone (Risperdal®) <ul style="list-style-type: none">• 0.25 mg PO BID
Adverse Effects	• Anticholinergic effects, EPS, sedation, orthostatic hypotension, lower seizure threshold			
	• Boxed Warning (All Antipsychotics): Elderly patients with dementia-related psychosis treated with antipsychotics are at an increased risk of death compared to placebo			
	• Boxed Warning (Quetiapine): Antidepressants increase the risk of suicidal thoughts and behaviors			
Monitoring Parameters	• Symptom improvement, adverse effects			
Drug Interactions	• Use cautiously with other medications with that have CNS depressant effects and QTc prolonging medications			
	• Haloperidol, risperidone: CYP 3A4 and 2D6 (inhibitors and inducers), quetiapine: CYP 3A4 (inhibitors and inducers)			
Clinical Pearls	• Avoid use of haloperidol and chlorpromazine in Parkinson's disease or Lewy body dementia; quetiapine is the preferred agent			

Anxiolytics

Indications: Anxiety, Dyspnea, Insomnia, Muscle Spasm, Seizure

Medication & Starting Dose	Lorazepam (Ativan®) <ul style="list-style-type: none">• Anxiety, dyspnea^{OL}: 0.5 mg PO/SL/PR/SC/IV/IM q4h PRN (starting dose may differ for other indications)• Seizures: 2 mg PR/SL q15minutes PRN
Adverse Effects	• Sedation, dizziness, weakness, ataxia, agitation
	• Boxed Warning: concomitant use with opioids; abuse, misuse, and addiction; dependence and withdrawal reactions
Monitoring Parameters	• Symptom improvement, respiratory rate, hypotension
Drug Interactions	• CNS depressants
Clinical Pearls	• Potential for paradoxical worsening of agitation
	• Preferred benzodiazepine in the elderly due to lack of active metabolites
	• Approximate PO equivalence to other benzodiazepines: lorazepam 1 mg ≈ alprazolam (Xanax®) 0.5 mg ≈ diazepam (Valium®) 5 mg

Laxatives

Indication: Constipation

Medication & Starting Dose	Senna (Senokot®) <ul style="list-style-type: none">• 2 tabs PO daily PRN or scheduled	Bisacodyl (Dulcolax®) <ul style="list-style-type: none">• 5 mg PO daily or 10 mg PR daily PRN	Docusate + Senna (Senna-S®) <ul style="list-style-type: none">• 2 tabs PO daily PRN or scheduled
Adverse Effects	• Diarrhea, nausea, vomiting, abdominal cramps, electrolyte and fluid imbalance		
Monitoring Parameters	• Symptom improvement, adverse effects		
Drug Interactions	• Senna: polyethylene glycol, digoxin		
	• Bisacodyl: polyethylene glycol, antacids		
Clinical Pearls	• Available as an oral solution (8.8 mg/5 mL)	• May combine with oral stool softener	• May not be more effective than individual
	• May combine with oral stool softener	• Full rectum: suppository may be ineffective	• Poor taste when crushed
	• Onset of action: 6-12 hours (oral)	• Onset of action: 6-12 hours (oral)	• Onset of action: 6-12 hours (oral)

ANALGESICS

Acetaminophen (Tylenol®)

Uses
• Pain, fever
Dosing
• Starting Dose: 325 mg PO/PR q4h PRN
• Maximum Daily Dose: 3,000 mg for most patients; 2,000 mg for patients with liver disease or malnutrition
Adverse Effects
• Generally, well tolerated, liver & renal toxicity with chronic overdose
• Rare but serious skin reactions including toxic epidermal necrolysis (TEN) and Stevens-Johnson Syndrome (SJS)
Monitoring Parameters
• Symptom improvement
Drug Interactions
• Avoid multiple acetaminophen-containing medications to reduce accidental overdose; avoid excessive alcohol use
Clinical Pearls
• May be used with an NSAID or opioid
• Weigh risks versus benefits in patients with severe liver impairment

Morphine (Roxanol®)

Uses
• Pain, dyspnea, ^{OL} cough ^{OL}
Dosing
• Starting Dose: <ul style="list-style-type: none"> Immediate release: 2.5-5 mg PO/SL/PR q4h PRN Extended release: 15 mg PO/PR q12h
Adverse Effects
• Boxed Warnings: addiction, abuse and misuse; respiratory depression; accidental injection; medication errors (oral solution); concomitant CNS depressant
• Somnolence, constipation, nausea, hypotension, vomiting, dry mouth, urinary retention, pruritus, respiratory depression, opioid-induced neurotoxicity
Monitoring Parameters
• Symptom improvement
• Mental status; vitals: blood pressure, heart rate, respiratory rate
• Signs of opioid-induced neurotoxicity, urinary retention, and constipation
• Misuse/abuse
Drug Interactions
• CNS depressants, alcohol
Clinical Pearls
• Use caution in renal impairment; high risk for opioid-induced neurotoxicity

Oxycodone (Roxicodone®, OxyFast®)

Uses
• Pain, dyspnea, ^{OL} cough ^{OL}
Dosing
• Starting Dose: 2.5 mg PO/SL/PR q4h PRN
Adverse Effects
• Boxed Warnings: addiction, abuse and misuse; respiratory depression; accidental injection; risk of medication errors (oral solution); concomitant CNS depressants
• Somnolence, constipation, nausea, hypotension, vomiting, dry mouth, urinary retention, pruritus, respiratory depression, opioid-induced neurotoxicity
Monitoring Parameters
• Symptom improvement
• Mental status; vitals: blood pressure, heart rate, respiratory rate
• Signs of opioid-induced neurotoxicity, urinary retention, and constipation
• Misuse/abuse
Drug Interactions
• CNS depressants, alcohol
Clinical Pearls
• Preferred IR in renal impairment
• Use of combination products limited by max daily dose of acetaminophen

Methadone (Dolophine®)

Uses
• Pain
Dosing
• Starting Dose (opioid-naïve): 2.5 mg PO/SL/PR q12h or 2.5 mg PO/SL/PR q24h
Adverse Effects
• Boxed Warnings: addiction, abuse, and misuse; respiratory depression; QT prolongation; accidental ingestion; concomitant CNS depressants
• Dizziness, sedation, N/V, constipation, QT prolongation, arrhythmias, respiratory depression, urinary retention
Clinical Pearls
• Not commonly used outside of hospice and palliative care so prescriber may not be comfortable with dosing
• Only 5 mg and 10 mg tablets can be used for pain

Ibuprofen (Motrin®, Advil®)

Uses
• Pain, fever
Dosing
• Starting Dose: 400 mg PO q6h PRN
• Maximum Daily Dose: 3,200 mg
Adverse Effects
• Decreased hemoglobin, edema, abdominal pain, bloating, dyspepsia, nausea
• Boxed Warnings: serious cardiovascular thrombotic events; serious gastrointestinal bleeding, ulcerations, and perforation
Monitoring Parameters
• Symptom improvement
Drug Interactions
• Use caution with other medications that may increase bleeding risk, such as anticoagulants, antiplatelets, and SSRIs
• Avoid concomitant use with corticosteroids; avoid alcohol use
Clinical Pearls
• Take with food or milk to lessen stomach upset
• Weigh risk versus benefit in patients with renal insufficiency

Hydromorphone (Dilaudid®)

Uses
• Pain, dyspnea, ^{OL} cough ^{OL}
Dosing
• Starting Dose: 1 mg PO/SL/PR q4h PRN
Adverse Effects
• Boxed Warnings: addiction, abuse and misuse; respiratory depression; accidental injection; risk of medication errors (oral solution); concomitant CNS depressants
• Somnolence, constipation, nausea, hypotension, vomiting, dry mouth, urinary retention, pruritus, respiratory depression, opioid-induced neurotoxicity
Monitoring Parameters
• Symptom improvement
• Mental status; vitals: blood pressure, heart rate, respiratory rate
• Signs of opioid-induced neurotoxicity, urinary retention, and constipation
• Misuse/abuse
Drug Interactions
• CNS depressants, alcohol
Clinical Pearls
• Oral solution (1 mg/mL) available but not dose concentrated
• Use caution in renal impairment

Fentanyl transdermal patches (Duragesic®)

Uses
• Pain
Dosing
• Starting Dose (opioid-tolerant patients only): 25 mcg/hour q72h
Adverse Effects
• Boxed Warnings: addiction, abuse and misuse; respiratory depression; accidental injection; medication errors (buccal, intranasal, lozenge, sublingual); concomitant CNS depressants
• Somnolence, constipation, nausea, hypotension, vomiting, dry mouth, urinary retention, pruritus, respiratory depression, opioid-induced neurotoxicity
Monitoring Parameters
• Symptom improvement
• Mental status; vitals: blood pressure, heart rate, respiratory rate
• Signs of opioid-induced neurotoxicity, urinary retention, and constipation
• Misuse/abuse
Drug Interactions
• CNS depressants, alcohol
Clinical Pearls
• Easy to administer but difficult to titrate if pain crisis or escalating pain

Monitoring Parameters
• At each visit: symptom improvement, respiratory rate less than 10 breaths per minute, pinpoint pupils, excess sedation, difficulty arousing patient, heart palpitations, change in heart rate/rhythm
• Signs of opioid-induced neurotoxicity, urinary retention, and constipation; misuse/abuse
Drug Interactions
• CNS depressants, CYP 3A4 and 2B6 (inhibitors and inducers), QTc prolonging medications

• Tablets can be crushed and still retain long-acting properties
• Methadone has a long half-life; use caution with initiation and dose titration
• Avoid use for dyspnea; reserve use for pain management

References

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3. Protus BM, Kimbrel J, Grauer P, eds. *Palliative Care Consultant: Guidelines for Effective Management of Symptoms*. 4th Edition. Montgomery, AL: HospiScript; 2015.