QUICK REFERENCE GUIDE FOR SYMPTOM MANAGEMENT	
SYMPTOM	**TREATMENT**
Fatigue	• The most prevalent of symptoms reported in advanced disease • Rule out possible causative factors and evaluate which might be treatable given goals of care: anemia, iron deficiency, electrolyte imbalances, hypothyroidism, hypoxia, nutrition deficiencies, medications, anxiety/depression, sleep abnormalities • Exercise, physical therapy, occupational therapy • Assistive devices, caregiving support (hygiene, cleaning, meals) • Stimulants such as **methylphenidate (Ritalin®)** 2.5-5 mg PO QD or BID to start, then titrate prn • **Dexamethasone (Decadron®)** 2-8 mg PO QD, do not give in the evening • **Mirtazapine (Remeron®)** 15 mg PO QHS to enhance sleep, also improves appetite and mood
Insomnia/ Sleep Disorders	• Evaluate sleep patterns current and prior to diagnosis • Suggest sleep hygiene measures: reduce caffeine in afternoon/evening, do not watch TV/computer/cellphone/tablets in bed, limit alcohol intake, cool room, warm bath before bed • Relaxation therapy such as mindfulness exercises, meditation, guided imagery • For some, pharmacologic therapies ineffective if used daily • **Zolpidem (Ambien®)** 5-10 mg PO QHS; lower doses for women; safety concerns – sleep walking/eating • **Mirtazapine (Remeron®)** 15 mg PO QHS to enhance sleep, also improves appetite and mood • **Buspirone (Buspar®)** 5-20 mg PO TID • **Trazodone (Desyrel®)** 25-50 mg PO QHS • Avoid antihistamines (**diphenhydramine**) for sleeping aid, especially in elderly or frail
Constipation [Acute]	• Assess frequency, volume, consistency and normal patterns of BMs • Diarrhea may be due to impaction; rectal exam indicated • Goal ≈ 3/week without straining, pain, tenesmus • Identify potential causative factors that can be addressed: opioids, anticholinergics, antihistamines, phenothiazines, tricyclic antidepressants, diuretics, iron, chemotherapy, ondansetron, antacids, dehydration, inactivity, hypercalcemia, hypokalemia, partial bowel obstruction, spinal cord compression, autonomic neuropathy, depression, anorexia, hypothyroidism • Encourage varied diet • First evacuate bowel – **magnesium hydroxide (Milk of Magnesia)** 30 mL PO QD, magnesium citrate 150-300 mL per day, **bisacodyl** 2-3 tabs PO QD or 10 mg suppository or **Fleet's Enema®** (nothing per rectum if patient thrombocytopenic [< 50,000 platelets] or neutropenic [ANC < 500-1000]) – limit Fleet's and other sodium phosphate agents in renal dysfunction; if these are ineffective, give: — **Methylnaltrexone (Relistor®)** SQ [for opioid induced constipation only] – dosing is weight based; contraindicated in obstruction — **Naloxegol (Movantik®)** 12.5 or 25 mg PO Q AM [for opioid induced constipation only] — **Naldemedine (Symproic®)** 0.2 mg PO QD [for opioid induced constipation for patients with chronic noncancer pain]
Constipation [Ongoing Prevention]	• All patients on opioids should have an order for a bowel regimen • Add stimulant and softener combination (e.g., senna/docusate) and titrate to effect (max 8 tabs/day) • Increase with upward titration of opioid dose • If persistent, consider adding **bisacodyl** 2-3 tabs PO QD or 1 rectal suppository QD; lactulose 30-60 mL PO QD; **metoclopramide (Reglan®)** 10-20 mg PO QID; **magnesium hydroxide (Milk of Magnesia)** 30 mL PO QD • When constipation is related to opioids or in debilitated patient, changing the diet or adding fiber supplements is rarely helpful • Educate patients/families; there is much stigma about discussing bowel function ***Even when not eating, patients should have bowel movements every 1-2 days. Untreated constipation can lead to discomfort and increased pain, as well as agitation in the cognitively impaired patient.***
Diarrhea	• Evaluate for potential causes of diarrhea common in palliative care and correct/treat when feasible: medications (overuse of laxatives, antibiotics, magnesium, chemotherapy, immunotherapy), infection, diet, herbal products (e.g., milk thistle, cayenne, ginger) fecal impaction, malabsorption syndromes from surgery or tumor, radiotherapy that includes abdomen in treatment field, inflammatory bowel disease and other comorbid disorders • **Loperamide (Imodium®)** 2 mg PO –start with 4 mg, followed by 2 mg after each BM, not to exceed 8 capsules/24 hours • **Diphenoxylate/atropine (Lomotil®)** 1-2 tabs PO QID, maximum 8 per 24 hours • **Tincture of opium** – 0.6 mL PO q 4-6 hours prn • **Methylcellulose (e.g. Metamucil®)** or pectin can help provide bulk to liquid stools • **Octreotide (Sandostatin®)** 50 mcg SQ/IV q 8 hours, maximum 1500 mcg/day • **Cholestyramine** – 2-4 g PO/day before meals (especially for c. difficile diarrhea) • **Pancrelipase (Creon®, Pancreaze®)** 500 – 2500 lipase units/kg PO with meals
Dyspnea [Shortness of breath; Air hunger]	• Identify and treat reversible causes: airway obstruction (e.g., bronchodilators and/or corticosteroids), infection (e.g. antibiotics), CHF or fluid overload (e.g., diuretics), anxiety (e.g., anxiolytics) • Opioids are first line therapy; start with **morphine** 2.5-5 mg PO every hour (any opioid can be used) - titrate upward aggressively 25-50% if unrelieved • Liquids may be easier to swallow or can be placed sublingually [although absorbed enterally]: **morphine** liquid; **oxycodone** liquid • **Parenteral (IV or SQ) opioids -** can be used if patient unable to swallow • Add anxiolytics (benzodiazepines) only if anxiety is present [e.g., lorazepam every 4 hours as needed] or opioids fail to provide relief • Elevate head of bed [can use a fan for comfort]; pursed lip breathing • Consider oxygen only if patient is hypoxemic • Distraction, relaxation, mindfulness, create calm environment
Anorexia	• Educate and counsel patient/family regarding anorexia as a natural response to disease; interventions below only when loss of appetite bothersome to patient • Environmental alterations: small, frequent meals, moist foods or those with sauce/gravy take less energy to eat, assistance with meal preparation to improve energy for eating • **Dexamethasone (Decadron®)** 4 mg PO QD or prednisone 20 mg PO QD, especially when prognosis < 6 weeks • **Dronabinol (Marinol®)** 2-10 mg PO every 4 hours, use with caution in the older adult • **Mirtazapine (Remeron®)** 15 mg PO QHS to enhance sleep, also improves appetite

QUICK REFERENCE GUIDE FOR SYMPTOM MANAGEMENT

SYMPTOM	TREATMENT
Nausea & Vomiting ***Not intended to prevent or treat chemo -induced N&V***	• Rule out potentially reversible causes: constipation, central nervous system disease, pain, altered electrolytes, ↑ICP, obstruction, antibiotics, chemotherapy, radiation therapy, opioids, digoxin **If N & V due to activation of chemoreceptor trigger zone (CTZ) (e.g., medication-induced):** ♦ **Prochlorperazine (Compazine®)** 10 mg PO q 6 hours or 25 mg PR q 8 hours ♦ **Haloperidol (Haldol®)** 0.5-4 mg PO or IV/SQ q 6 hours ♦ **Ondansetron (Zofran®)** 4-8 mg PO or IV q 8 hours (best when used for chemo or RT induced N/V; less effective when treating opioid induced N&V) ♦ **Olanzapine (Zyprexa®)** 2.5 – 10 mg PO QD - BID ♦ **Promethazine (Phenergan®)** 12.5 –25 mg IV q 6 hours or 25 mg PO or PR q 6 hours **If N & V due to gastric stasis causing early satiety, GI tract spasm:** ♦ **Metoclopramide (Reglan®)** 10-20 mg PO or IV TID AC & HS **[not with bowel obstruction]** ♦ **Hyoscyamine (Levsin®)** 0.125-0.25 mg PO/SL q 4 hours prn **If N & V due to vestibular effects (nausea exacerbated by movement):** ♦ **Scopolamine** transdermal patch 1.5 mg q 3 days (especially if underlying mechanism is vestibular - increased nausea or dizziness with ambulation) ♦ **Cyclizine (Meclizine®)** 25-50 mg PO every 8 hours; best for motion sickness or increased intracranial pressure **If mechanism of N *&* V is unclear, or unresponsive to other therapies:** ♦ **Dexamethasone (Decadron®)** 4-8 mg PO/IV daily ♦ **Dronabinol (Marinol®)** 2-10 mg PO every 4 hours ***Administer antiemetics around the clock (scheduled). If nausea is controlled, then try reducing after 2-3 days.***
Pain in the Final Hours of Life	• Observe for escalating pain and increase medications accordingly • May need to change route if swallowing is diminished; alternatives include transdermal, concentrated liquids taken orally in small volumes, parenteral • Abruptly discontinuing opioids or benzodiazepines may precipitate withdrawal syndrome - reduce dose 25% daily if no sign of pain in comatose patient; return to previous dose if any sign of return of pain • Myoclonus may occur; treat with **clonazepam (Klonopin®)** 0.5 mg PO TID, MAX 20 mg/day or **lorazepam (Ativan®)** 0.5-2.0 mg PO/IV q 4 hours if patient unable to swallow; may require **midazolam (Versed®)**; IV/SQ; rotate opioids
Delirium & Agitation	• Identify and treat reversible causes: full bladder, fecal impaction, pain, dyspnea (hypoxemia, secretions, pulmonary edema), severe anxiety, nausea, pruritus, medications (e.g., corticosteroids, neuroleptics, anticholinergics), dehydration, infection • Reduce noise, orient gently, reduce nighttime interruptions to promote sleep/wake cycle • **Haloperidol (Haldol®)** 0.5-2 mg PO every 2-4 hours PRN or IV/SQ 50% of oral dose (may repeat q 1 hour PRN in severe delirium) • **Olanzapine (Zyprexa®)** 2.5 – 5 mg PO QHS; to start, increase to 10 mg after one week • **Risperidone (Risperdal®)** 1-2 mg PO q PM, increase by 0.5-1 mg q 2-7 days • **Quetiapine (Seroquel®)** 12.5 – 25 mg PO q 12-24 hours; to start, increase up to 50 mg BID • **Chlorpromazine (Thorazine®)** 12.5-25 mg PO/SQ q 4-12 hours, or 25 mg per rectum q 4-12 hours (IV can cause hypotension-avoid unless other agents ineffective and oral/rectal route unavailable) • **Buspirone** 5-20 mg PO TID
Excessive Secretions [“Death Rattle”]	• **Atropine** 0.4 mg SQ q 15 minutes PRN • **Scopolamine** transdermal patch 1.5 mg topical, start with 1 mg (about 4 hour onset), increase to 2 mg after 24 hrs. If insufficient, begin scopolamine 50 mcg/hr IV or SQ; double every hour to maximum of 200 mcg/hr • **Glycopyrrolate (Robinul®)** 1-2 mg PO or 0.1 mg –0.2 mg IV/SQ q 4 hours PRN or 0.4-1.2 mg/day continuous IV/SQ infusion (this agent does not cross the blood brain barrier – less likely to cause confusion) • **Hyoscyamine (Levsin®)** 0.125 – 0.25 mg PO q 4 hours (liquid can be placed sublingually) • Change patient’s position • D/C IV and/or enteral fluids as they may increase discomfort (e.g., cough, pulmonary congestion, sensations of choking/drowning, vomiting, edema, pleural effusions, ascites) • If fluids not discontinued, IV or SQ rate ought not exceed 500 mL/24 hours • **Furosemide (Lasix®)** PRN to control over hydration. • Control thirst by moistening lips and mouth with substitute saliva (**Oral Balance Moisture Gel®** or **Salivart®,** at bedside apply as frequently as needed) ***Patients may be too weak to expectorate. This is not painful, but distressing to family. Suctioning is traumatic, can cause bleeding and is painful. Do not suction beyond the oral cavity***.

References (and for more details):

Ferrell, B., & Paice, J. (Eds). (2019). *Oxford textbook of palliative nursing*, 5th Edition. New York, NY: Oxford University Press.

Dahlin, C., Coyne, P., & Ferrell, B. (Eds). (2016). *Advanced practice palliative nursing.* New York, NY: Oxford University Press.

For additional resources, refer to:
City of Hope Nursing Research and Education Resources www.cityofhope.org/NRE; and
ELNEC: End-of-Life Nursing Education Consortium www.aacnnursing.org/ELNEC

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