

# Non-pain Symptom Management in Seriously Ill

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## Disclosures

- Dr. Nowels has served on the ABIM Test Writing Committee on Hospice and Palliative Medicine within the last 2 years. No exam questions will be disclosed in this presentation.

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## Objectives

- Discuss common symptoms and evaluation approach in seriously ill patients
- Identify one non-pharmacologic and one pharmacologic management approach for each separate symptom discussed
- Identify potential mechanisms applicable to symptom management

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### Symptoms in seriously ill

- Fatigue
- Anorexia
- Pain
- Depression
- Dyspnea
- Sleep disturbance
- Anxiety
- Confusion/delirium
- Constipation
- Nausea/vomiting

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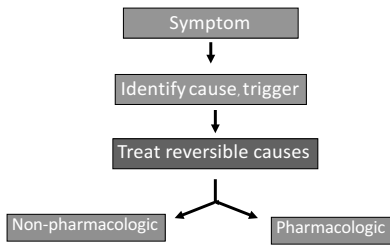
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### Approach to symptom management



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### Approach to symptom management

Disease focused therapy may not adequately address symptoms and their impact on QOL

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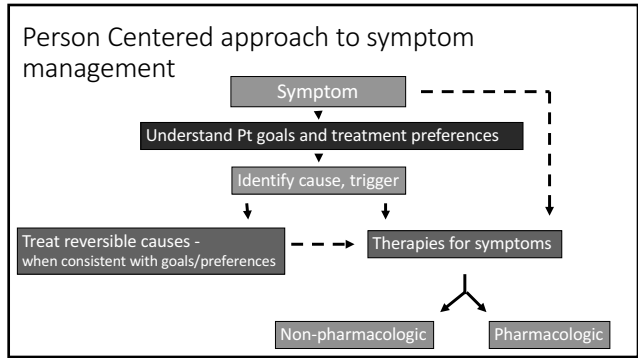
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- ### Symptoms
- Nausea/vomiting
  - Dyspnea
  - Anorexia
  - Delirium

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### Patient Case

ES – 56 yo woman with ovarian cancer.

- Increasing abdominal pain despite IR oxycodone 5-10 mg q 4 hr prn (used 50 mg/d).
- Oncologist added ER oxycodone 20 mg q 12 hr 3 days ago. She uses NSAID 2x daily at least. She was having moderate bowel movements every 2-3 days until earlier this week.
- In the last 2 days she developed significant nausea and has begun vomiting, including pill fragments.
- Last chemo 1 week ago.
- Work up has shown partial obstruction.




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## Patient Case

Based on the patient's presentation what would be your first choice to initiate management of her nausea and vomiting?

- a. Prochlorperazine 5-10 mg IV
- b. Promethazine 25 mg suppository
- c. Metaclopramide 5 mg IV
- d. Ondansetron 8 mg ODT

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## Pathophysiologic based nausea/vomiting management



- Several known mechanisms induce vomiting, different neurotransmitter systems are involved.
- Treating based on mechanism can control most episodes of nausea.

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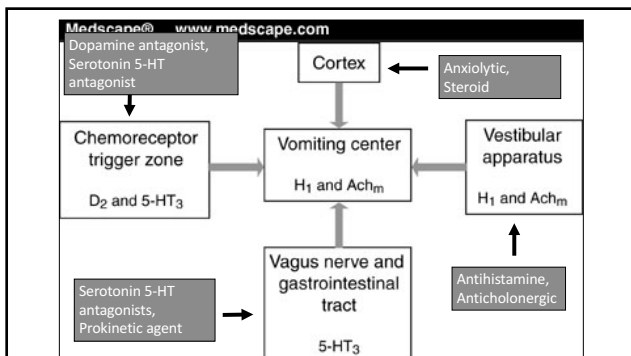
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### Additional nausea/vomiting mechanisms

- NK1 receptors – Aprepitant for delayed post chemo N/V
- Cannabinoid - Dronabinol

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### Non-pharmacologic management N/V

- Prevention of constipation, manage pain
- Small frequent meals; bland
- Acupuncture, acupressure
- Cool room
- Distraction
- Music therapy
- Hypnosis
- Ginger root
- Aromatherapy

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### Patient Case

Based on the patient's presentation what would be your first choice to initiate management of her nausea and vomiting?

- Prochlorperazine 5-10 mg IV
- Promethazine 25 mg suppository
- Metaclopramide 5 mg IV
- Ondansetron 8 mg ODT

Target the most likely mechanism with drug selection.  
If severe consider targeting multiple mechanisms.  
Schedule dosing.  
Add other agents (steroid, dronabinol)

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## Patient Case

- ES resolved her partial obstruction. Over time her cancer progressed. She required intermittent paracentesis due to malignant ascities with distention. She became weaker and had an episode of pneumonia which was treated.
- She developed increasing shortness of breath over a few weeks. It was episodic, and worse with activity and began to prevent her from leaving her home.
- As the dyspnea worsened she became moderately anxious.
- Work up revealed normal CXR, and pulse ox of 92% on room air without desaturation during walking. Other VS normal.
- Bronchodilators were not helpful.

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## Patient Case

Based on patient presentation what would be part of your initial orders to manage her dyspnea?

- a) Oxygen, paracentesis, alprazolam
- b) Hand-held fan, morphine 5 mg po q3-4 hr prn, RT to support breathing techniques
- c) Oxygen, oxycodone 5-10 mg po q 3-4 hr prn, alprazolam
- d) Furosemide, RT to support breathing techniques, inhaled bronchodilator

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## Dyspnea: symptom – not a sign



A complex perception influenced by work of breathing, chemical signaling (including hypercapnia and hypoxia), and neuromechanical dissociation.

Afferent signals from chemoreceptors, mechanoreceptors sent to respiratory center in brainstem and from there to cortex.

In cortex afferent information integrated with other cognitive and affective input to create perception.

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## Emerging model of understanding




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## Non-pharmacologic management

- Reposition patient – upright
- Air-flow across face
- Avoid strong odors, smoke
- Companion, spiritual support
- CBT
- Relaxation techniques – breathing techniques, hypnosis
- Breath training – pulmonary rehab




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- Great for hypoxic patients
- Expected by patients and families
- In non-hypoxemic patients – benefit uncertain, not obviously different from pumped air
- British Thoracic Society recommends eval for oxygen vs fan therapy for non-hypoxemic palliative patients with dyspnea

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## Opioids

- First line therapy to manage non-specific dyspnea in patients with advanced disease – American College Chest Physicians
- Relevant mechanisms of action uncertain
  - Decreased chemoreceptor response to hypercapnia
  - Decrease cardiac preload through peripheral vasodilation
  - Decrease anxiety – changing perception of dyspnea.
  - Potentiate effect of endorphins
- All opioids act similarly
- Decrease breathlessness about 10%

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## Benzodiazepines

- Do not help with sensation of breathlessness

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## Putting it together – development of multidisciplinary breathlessness clinics

Breathing	Thinking	Functioning
Breathing Techniques	Cognitive behavioral therapy	Pulmonary rehabilitation
Handheld fan	Relaxation	Activity promotion
Airway clearing techniques	Mindfulness	Walking aids
Inspiratory muscle training	Acupuncture	Pacing
Chest wall vibration		Neuromuscular electrical stimulation
Non-invasive ventilation		

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## Patient case

Based on patient presentation what would be part of your initial orders to manage her dyspnea?

- a) Oxygen, paracetamol, alprazolam
- b) Hand-held fan, morphine 5 mg po q3-4 hr prn, RT to support breathing techniques
- c) Oxygen, oxycodone 5-10 mg po q 3-4 hr prn, alprazolam
- d) Furosemide, RT to support breathing techniques, inhaled bronchodilator

Titrate opioid similarly as you would for pain

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## Patient Case

ES has had progression of her ovarian cancer.

- She has lost weight – over 5% of her body weight.
- She becomes full after just a few bites.
- Nausea is again a problem and she had abdominal bloating with some pain. No obstruction.

Her husband has asked about artificial nutrition as he is concerned that she is starving.

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## Anorexia-cachexia

- Anorexia is common – resulting from metabolic, neuroendocrine and cytokine cascade that often leads to cachexia.

- Cancer cachexia - a multifactorial syndrome with ongoing skeletal muscular loss not reversible with nutritional supplementation, and leading to progressive muscular impairment.

- Not due to a reduction in nutritional intake



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## Anorexia

- A – aches and pains
- N – nausea and GI dysfunction
- O – oral candidiasis
- R – reactive (or organic) depression/anxiety
- E – evacuation problems
- X – xerostomia
- I – iatrogenic (radiation, chemo, other drugs)
- A – acid related problems



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## Anorexia – cachexia

### Non-pharmacologic

- Education –
  - part of disease process
  - not starvation (lack of needed calories)
  - force feeding/ANH – does not lengthen lifespan, may cause harm
  - allow patient to guide
  - easy to swallow foods
  - relax restrictive diets
  - assist family to find other ways to connect

### Pharmacologic

- Megestrol – ▲ water and fat retention, 15% gain > 5% weight, mixed QOL data.
- Olanzapine – ▼ nausea. Combination with megestrol 800 mg improved weight gain, appetite, nausea, QOL.
- Corticosteroid - ▲ temporary in appetite, no change in body mass.
- Cannabinoids – dronabinol FDA approved in HIV/AIDS. Mixed evidence.
- Others with potential – Eicosapentaenoic acid, Thalidomide, Anamorelin (ghrelin agonist)

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## Artificial nutrition/hydration

- Not helpful in patients with advancing illness in terms of extending lifespan
- Feeding tubes do not help in patients with advancing dementia
  - no increase lifespan, QOL
  - do increase bedsores, risk for aspiration
  - Choosing Wisely Campaign

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## Patient Case

- Evaluate the patient for reversible causes of anorexia, consider metoclopramide
- Discuss with husband
  - difference between anorexia and starvation
  - information re risks of ANH
  - review goals of care (consider discussing prognosis)
  - encourage patient directed oral intake and non-food oriented family time
  - consider time limited therapeutic trial of appetite stimulant

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## Patient Case

- ES has become more ill.
- Not getting out of bed.
- Pain is adequately controlled.
- In last 2-3 days more confused:
  - fluctuating consciousness
  - day-night reversal
  - tangential in conversation – easily distracted



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## Delirium

- Common in all healthcare settings studied; estimated that 90% will become delirious prior to death. Poor prognostic sign.
- Multifactorial
- Behavioral subtypes
- Discussion of goals with family is important with consideration of expected lifespan, other conditions.

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## Delirium evaluations – potentially reversible

- Medications – anticholinergics, opioid, benzodiazepine, steroid, antibiotic, etc, etc
- Change in medications – w/d
- Infection
- Constipation/urinary retention
- Pain
- Electrolyte disturbance
- Anemia
- Dehydration
- Sensory impairment



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## Delirium management

### Non-pharmacologic

- Prevention first
- Family education
- Manage environment – reduce stimulation, day/night cycles, family present
- Reduce/rotate opioids and other meds – benzodiazepines, anticholinergics
- Consider trial hydration
- Manage hypoxia, constipation, urinary retention, hypercalcemia

### Pharmacologic

- Hypoactive vs hyperactive
- Goals – identify behaviors
- Psychotropic management
  - Haloperidol 0.5-1 mg q 2-4 hr prn, titrate to effect up to q 1 hr
  - Risperidone 0.25 – 0.5 mg 2-3x/d, titrate up to 6 mg/d
  - Quetiapine 12.5 – 200 mg/d, if more sedation SE is desired
- Benzodiazepines – ongoing restlessness
  - Lorazepam 0.5-2 mg multiple routes, titrate

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## Patient case

- Physician felt that ES is near the end of her life; expected lifespan days to a few weeks.
- Discussions with ES husband indicated that now goals of care should be focused on comfort and safety. Current delirium unlikely to be reversed given where she is in disease trajectory.
- A comfort-focused care plan was developed, including medications to manage restless/agitated behaviors r/t delirium with haloperidol initially.

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## Questions/comments



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