

Symptom Management in End-of-Life Care

April 2015

Home Health VNA
Merrimack Valley Hospice
HomeCare, Inc.



The Leaders in Home Health and Hospice Care

Objectives

- ▶ Review three common non-pain symptoms in dying people
 - Dyspnea
 - Nausea/vomiting
 - Agitated delirium
- ▶ Understand the “normal” dying process
 - Syndrome of Imminent Death

Breathlessness (dyspnea) ...

- ▶ **May be described as**
 - shortness of breath
 - a smothering feeling
 - inability to get enough air
 - suffocation

Assessment

- ▶ What makes your breathlessness worse?
- ▶ What makes it better?
- ▶ How often does it occur? How long does it last?
- ▶ How severe is it?
- ▶ Do you have:
 - a cough?
 - a fever?
 - chest pain?
 - swelling in your legs or abdomen?
- ▶ Explore life stresses, worries, fears

Physical Exam

- ▶ **Vital signs**
- ▶ **Appearance**
 - Color, expression, posture, use of accessory muscles, ability to speak
- ▶ **Heart: rate, rhythm, murmurs, gallops**
- ▶ **Abdomen: size, masses, fluid**
- ▶ **Extremities: edema, perfusion**
- ▶ **Lung exam:**
 - Stridor: upper airway obstruction (trachea)
 - Rhonchi: upper airway obstruction (large bronchi)
 - Wheezes: lower airway obstruction (bronchioles)
 - Crackles: fluid in lower airway (alveoli)
 - Absent breath sounds: pleural effusion, PTX

Causes of Breathlessness

- ▶ Anxiety
- ▶ Airway obstruction
- ▶ Bronchospasm
- ▶ Hypoxemia
- ▶ Pleural effusion
- ▶ Pneumonia
- ▶ Pulmonary edema
- ▶ Pulmonary embolism
- ▶ Thick secretions
- ▶ Anemia
- ▶ Metabolic
- ▶ Family / financial / legal / spiritual / practical issues

Treatment of Dyspnea

- ▶ Treat the underlying cause!
- ▶ Symptomatic management
 - oxygen
 - opioids
 - bronchodilators
 - anxiolytics
 - nonpharmacologic interventions

Oxygen

- ▶ Pulse oximetry not always helpful
- ▶ Potent symbol of medical care
- ▶ Expensive
- ▶ Fan may do just as well

Opioids

- ▶ Relief NOT RELATED to respiratory rate
- ▶ No ethical or professional barriers
 - Growing evidence base → opioids are standard of care for palliation of dyspnea
- ▶ Small doses
- ▶ Central and peripheral action

Nonpharmacologic Interventions

- ▶ Reassure, work to manage anxiety
- ▶ Behavioral approaches, eg, relaxation, distraction, hypnosis
- ▶ Physical therapy → breath & energy conservation

Nonpharmacologic Interventions

- ▶ Limit number of people in the room
- ▶ Open window
- ▶ Eliminate environmental irritants
- ▶ Keep line of sight clear to outside
- ▶ Reduce the room temperature
- ▶ Avoid chilling the patient

Nonpharmacologic Interventions

- ▶ **Introduce humidity**
- ▶ **Reposition**
 - elevate the head of the bed
 - move patient to one side or other
- ▶ **Educate, support the family**

Assessment Nausea/Vomiting

- ▶ Review hospice diagnosis, comorbidities
- ▶ When did your nausea begin?
- ▶ What makes it worse/better?
 - Related to food, position?
- ▶ What other symptoms do you have with it?
- ▶ Sick contacts?
- ▶ What medications have you tried?
- ▶ Have you vomited?
 - How often?
 - Blood (bright red or coffee grounds) or bile?
- ▶ Are you moving your bowels?
- ▶ Explore life stressors, family conflicts, fear/worry

Physical Exam

- ▶ **Vital signs**
- ▶ **Appearance**
 - Color, signs of distress
- ▶ **HEENT**
- ▶ **Heart & lungs**
- ▶ **Skin turgor**
- ▶ **Abdomen**
 - Bowel sounds, masses, organomegaly, distention, ascites
- ▶ **Rectal exam**
 - If suspect constipation
- ▶ **Extremities**
 - Edema, perfusion

Nausea/Vomiting

▶ Nausea

- subjective sensation
- stimulation
 - gastrointestinal lining, CTZ, vestibular apparatus, cerebral cortex

▶ Vomiting

- neuromuscular reflex

Causes of Nausea/Vomiting

- ▶ Metastases
 - ▶ Meningeal irritation
 - ▶ Movement
 - ▶ Mental anxiety
 - ▶ Medications
 - ▶ Mucosal irritation
 - ▶ Mechanical obstruction
 - ▶ Motility
 - ▶ Metabolic
 - ▶ Microbes
 - ▶ Myocardial
- 

Management of Nausea/Vomiting

- ▶ **Dopamine antagonists**

- Haloperidol (Haldol), prochlorperazine (Compazine), droperidol

- ▶ **Antihistamines**

- Diphenhydramine (Benadryl), meclizine

- ▶ **Anticholinergics**

- scopolamine

- ▶ **Serotonin antagonists**

- Ondansetron (Zofran)

- ▶ **Prokinetic agents**

- Metoclopramide (Reglan)

- ▶ **Antacids**

- Includes H₂ blockers, proton pump inhibitors

Treatment (continued)

- ▶ **Cytoprotective agents**
 - Misoprostol, sucralfate
- ▶ **Other medications**
 - Steroids (dexamethasone)
 - THC
 - Benzodiazepines (lorazepam)
 - octreotide
- ▶ **Bowel regimen**
- ▶ **If obstruction, consider venting gastrostomy tube**
- ▶ **If dehydration, consider IV or SC fluids**
- ▶ **If large-volume ascites, consider paracentesis**
 - Indwelling Pleurex catheter

“Terminal Agitation”

- ▶ A Symptom or Sign: thrashing or agitation which may occur in the last days or hours of life
- ▶ Broad differential, including:
 - Pain
 - Anxiety
 - Dyspnea
 - Delirium

Delirium

- ▶ **Disturbance in consciousness**
 - Attention
- ▶ **Change in cognition**
 - eg: memory, orientation, language
- ▶ **Develops over a short period of time**
- ▶ **Caused by the direct physiological consequences of a general medical condition**

Clinical Subtypes

- ▶ **Hyperactive**
 - Confusion, agitation, hallucinations, myoclonus
- ▶ **Hypoactive**
 - Confusion, somnolence, withdrawn
 - More likely to be under-diagnosed
- ▶ **Mixed**

Delirium is Common

- ▶ Up to 80% of people experience delirium during the final week of life
- ▶ 15 – 20% hospitalized cancer patients experience some delirium
- ▶ Delirium can be reversible in ~50% of episodes (*Lawlor et al. Arch Intern Med 2000;160:786–94*)
 - Medication-induced, dehydration

Differentiating Delirium from Dementia

Features	Delirium	Dementia
<i>Onset</i>	Acute	Insidious
<i>Course</i>	Fluctuating	Progressive
<i>Duration</i>	Days to weeks	Months to years
<i>Consciousness</i>	Altered	Clear
<i>Attention</i>	Impaired	Normal except in severe dementia
<i>Psychomotor changes</i>	Increased or decreased	Often normal
<i>Reversibility</i>	Usually	Rarely

Recognizing and Naming
delirium is the first step in
its appropriate management

Confusion Assessment Method

Feature 1: Acute Onset and Fluctuating Course	This feature is usually obtained from a family member or nurse and is shown by positive responses to the following questions: Is there evidence of an acute change in mental status from the patient's baseline? Did the (abnormal) behavior fluctuate during the day, that is, tend to come and go, or increase and decrease in severity?
Feature 2: Inattention	This feature is shown by a positive response to the following question: Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?
Feature 3: Disorganized thinking	This feature is shown by a positive response to the following question: Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?
Feature 4: Altered Level of consciousness	This feature is shown by any answer other than "alert" to the following question: Overall, how would you rate this patient's level of consciousness? (alert [normal]), vigilant [hyperalert], lethargic [drowsy, easily aroused], stupor [difficult to arouse], or coma [unarousable])

The diagnosis of delirium by CAM requires the presence of features 1 and 2 and either 3 or 4.

Causes of Delirium

- ▶ Medication side effect
- ▶ Infection
- ▶ Pain
- ▶ Constipation
- ▶ Urinary retention
- ▶ Dehydration
- ▶ Drug overdose/withdrawal
- ▶ Metabolic causes
- ▶ Hypoxia
- ▶ Cardiac event
- ▶ Environmental causes
- ▶ Emotional, spiritual, psychosocial stress
- ▶ Terminal delirium

Delirium: Goals of Care

- ▶ Are the patient and caregivers safe?
- ▶ Does the patient appear in distress?
- ▶ What are the benefits and burdens...
 - Of labs and tests to search for “reversible” causes of delirium?
 - Of possible treatments for:
 - The underlying cause (antibiotics, Foley catheter, oxygen & many others)
 - The symptoms (antipsychotics, anxiolytics and others)

Delirium: Treatment of Symptoms

- ▶ Look for underlying cause
- ▶ Calm, quiet, familiar environment
- ▶ Education, reassurance of caregivers
- ▶ Keep patient safe
- ▶ Correct hearing, visual impairments
- ▶ Beware of medication overuse → can CAUSE and/or make delirium WORSE!
- ▶ Goal: find minimum effective dose to calm patient but avoid side effects

Treatment (continued)

► Antipsychotics:

- Typical (older):
 - Haloperidol (Haldol) → drug of choice
 - Chlorpromazine (Thorazine)
- Atypical (newer):
 - Quetiapine (Seroquel)
 - Risperidone (Risperdal)
 - Olanzapine (Zyprexa)

► Anxiolytics:

- AVOID → may worsen delirium
- Lorazepam (Ativan), etc.

► Last resorts:

- Phenobarbital PR
- Midazolam (Versed) SC/IV infusion
- Propofol IV infusion

Follow-up: Paul

- ▶ No bowel movement x 1 week → disimpacted & started on daily regimen
- ▶ UTI dx'ed and treated with liquid Abx
- ▶ Had multiple doses of Ativan 2 mg q4 hrs prn → weaned to 0.5 mg q4-6 hrs prn

Follow-up (continued)

- ▶ Created a calmer environment
- ▶ Allowed Paul to express/use his energy safely
- ▶ Haloperidol 0.5–1 mg SL q4–6 hrs prn
- ▶ In 2–3 days, Paul back to his baseline

Syndrome of Imminent Death

- ▶ There are many physiologic changes in the last hours and days of life.
- ▶ We need to understand the underlying pathophysiology in order to manage symptoms.

Common Signs & Symptoms

► Decreasing appetite and food intake

- Most dying patients lose their appetite.
- Families and staff sometimes worry the patient is “starving to death.”

The body is unable to absorb and use nutrients.

Anorexia and resulting ketosis can lead to a sense of well being.

Common Signs & Symptoms

▶ Decreasing fluid intake and dehydration

- Most dying people lose their sense of thirst, but complain of dry mouth.
- Dehydration may stimulate endorphin release that promotes the patients sense of well being.
- Excess IV fluids can lead to pulmonary edema & dyspnea; ascites; anasarca; incontinence & skin breakdown

Common Signs & Symptoms

▶ Cardiac dysfunction and renal failure

- As cardiac output and intravascular volume decrease there will be diminished peripheral blood perfusion.
- Tachycardia, hypotension, peripheral cooling, peripheral and central cyanosis and mottling of the skin are normal.
- Venous blood may pool along dependent skin surfaces.
- Urine output will fall as perfusion of the kidneys diminishes. Oliguria or anuria is normal and IV fluids will not reverse the circulatory shut down.

Common Signs & Symptoms

- ▶ **Loss of ability to swallow**
 - Build up of secretions may lead to gurgling sounds
- ▶ **Loss of sphincter control**
 - Incontinence of urine, stool
- ▶ **Changes in breathing patterns**
 - Periods of apnea and/or Cheyne–Stokes

Caring for Loved Ones

- ▶ “Active dying” phase can last for days, week
- ▶ Experience suggests dying people have awareness
- ▶ Rituals, prayer, celebrations of person’s life may help transition & ease grief