Managing symptoms at end of life

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Symptom Management

• No typical death
• Anticipate patient decline
  – Reduce polypharmacy
  – Change medication routes as necessary
  – Decrease analgesia as body shuts down

Physical Comfort

• Manage according to patient’s priority/goals
• Handle gently with respect
• Assess signs of discomfort in the non-verbal patient

Dyspnea

Mechanoreceptors
  - Stretch receptors
Chemoreceptors
  - pH, pO2, pCO2

Palliation of Dyspnea

✓ Mechanisms of dyspnea
➢ Treat reversible causes
• Palliation of refractory dyspnea
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**Opioids for refractory dyspnea**

- Systemic opioids (oral, iv, sc) found effective in systematic reviews & meta-analysis
- Relief by small doses (MS Contin 10 mg/d)
- Recommended by guidelines from
  - American College of Chest Physicians
  - American College of Physicians
  - American Thoracic Society
  - National Comprehensive Cancer Network

**Non-effective pharmacologic therapies**

- Oxygen
  - 9 RCTs (O2 vs air)
    - primary or met lung CA
    - heart failure
    - no benefit except in some hypoxic terminally ill patients

**Non-pharmacologic therapies**

- Blowing air on face / in nose

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Viola et al. Support Care Cancer 2008; 16:329-337
Currow et al. J Pain Symptom Manage 2011;42:388

Jennings et al. Cochrane Database Syst Rev 2010(1) CD002066
Mahler et al. CHEST 2010;137:674-691

J Clin Oncol 2008; 26:2396-2404
Lancet 2010; 376:784-93

J Clin Oncol 2008; 26:2396-2404
Support Care Cancer 2008; 16:329-337
### Non-pharmacologic therapies

**Palliative NIV**

**Proposed Benefits to**
- Reduce SOB and WOB
- Maintain wakefulness by reducing the amount of opioids needed to maintain comfort
- Prolong life to meet a patient’s short-term goals
- Manage an episode of acute, reversible respiratory failure

**Adverse effects**
- Discomfort – mask tolerance, noise
- Aspiration risk with AMS
- Equipment cost
- Need for nursing, RT, and provider support
- Potential prolongation of dying

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**Dyspnea**

- Distinguish from normal change in breathing pattern
- Change in position – elevate head of bed
- Relaxation
- Fan or open windows to facilitate air movement
- Oxygen if hypoxemic
- Opioids
- Lorazepam (Ativan®) if anxiety
- Bronchodilators and steroids

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**Delirium (Agitation, Anxiety)**

“Disorder characterized by an acute, fluctuating cognitive disturbance and change in mental status that can be associated with a known medical illness”

**Clinical presentation**
- Hyperactive Delirium
  - Increased psychomotor activity
- Hypoactive Delirium
  - Decreased psychomotor activity
- Combination of above
- May take weeks to resolve if at all – necessary to keep goals in mind

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**Delirium (Agitation, Anxiety)**

- Reduced level of consciousness
- Acute or subacute symptoms that tend to wax and wane throughout the day
  - Perceptual disturbances – hallucinations, paranoia, illusions
  - Memory loss
  - Disorientation to person, place or time
  - Disturbance in sleep-wake cycle
Is it depression, anxiety, delirium, or depression?

<table>
<thead>
<tr>
<th>DEPRESSION</th>
<th>ANXIETY</th>
<th>DELIRIUM</th>
<th>DEMENTIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflects an attitude of resignation and hopelessness</td>
<td>Denial or resistance to life changes resulting in physiological and emotional stress</td>
<td>Acute onset Labile emotional response</td>
<td>Slow onset Speech loss</td>
</tr>
</tbody>
</table>

| HALLUCINATIONS                  |

Delirium/Agitation/Anxiety

Non-pharmacological Treatment

- Allow patient to verbalize
- Consider causes

Delirium (Agitation, Anxiety)

Non-pharmacological Treatment

- Drugs (especially psychotropics)
- Electrolyte or glucose abnormality
- Liver failure
- Ischemia or hypoxia
- Renal failure
- Impaction of stool
- Urinary tract (or other) infection
- Metastases to the brain

Delirium/Agitation/Anxiety

Pharmacological Treatment

- Neuroleptic agents for delirium (haloperidol, IV, SQ, IM, PO; risperidone and olanzapine come in orally disintegrating tablets)
- Benzodiazepines for anxiety (lorazepam, IV, PO, SL, buccal)
Anxiety

• Anxiety is a subjective feeling of apprehension, tension, insecurity, and uneasiness, usually without a known specific cause.

• Classified as mild, moderate or severe

Anxiety and depression at End of Life

• Uncertainty about:
  – Dealing with difficult treatments and side effects
  – Family conflicts
  – Financial concerns
  – Facing mortality
  – Becoming dependent on others

Non-Pharmacologic interventions

• Acknowledge patient concerns using open ended questions
• Provide reassurance and support
• Information can help alleviate fears
• Promote autonomy and control
• Encourage participation in cares
• Reminiscence and Life Review
• Draw on strengths

Oral Secretions/ Noisy Respirations

• Pt too weak to swallow/handle oral secretions
• Medication routes need to be changed
• Reposition patient to upright position
• Avoid deep suctioning
• Atropine drops SL
• Hyoscyamine tabs/liquid
• Glycopyrrolate injection
• Scopolamine patch

Decreased Oral Intake

• In most cultures, food and fluids mean comfort
  – nutrition as basic need
  – lack of food equals suffering
  – lack of food tantamount to abuse or neglect
  – very difficult for families to watch their loved ones lose a day or two of food and fluids
  – fear that the patient will starve to death
  – families may think dehydration makes the patient uncomfortable

Nutrition/Hydration

• Avoid fluid overload
• Comfort is provided when dehydrated
• Small sips for conscious patients
• Mouth care
• Provide family support
• Tube feedings – avoid
• Emphasis on providing as much food and fluid as patient wants
**Benefits of Dehydration**

- Increased production of ketones
- Decreased GI fluid
- Increased endorphin levels
- Hypernatremia and uremia
- Decreased lung secretions

**Risks of Dehydration**

- Potential for dry mouth
- Feeding symbolic of nurturing
- Feeding considered 'basic' nursing care
- Nursing Interventions
  - Use humidification in the room
  - Apply lip lubricant
  - Rinse mouth with small amounts of water if patient tolerates

**Tube Feed or Not Tube Feed**

- Prolongs life in
  - ALS
  - Permanent vegetative state
  - Short-bowel syndrome
  - Short-term critical care
  - Proximal GI cancer
  - Head & neck cancer

**Tube Feed or Not Tube Feed**

- Tube feeding will not:
  - Prevent decubitus ulcers
  - Improve quality of life
  - Prevent aspiration
  - Improve functional status
- Complications:
  - Infection, drainage, bleeding, skin breakdown
  - Confused patient pulls tube out, needs restraints

**Elimination Management**

- Absorbent pad/adult protection/ brief
- Moisture barrier
- Consider indwelling catheter
- Assess for underlying causes of fecal incontinence

**Skin Integrity**

- Reposition frequently
- Medicate prior to movement
- Special mattresses prior to decline
Circulatory Changes

- No treatment of hypotension during active dying
- Changes that occur are useful in predicting when death is imminent
- Keep blankets loose and untucked

Nausea

| A | Anxiety, anticipatory | Lorazepam |
| V | Vestibular | Scopolamine |
| O | Obstructive, Opioids | Haldol, metoclopramide |
| M | Medications, Metabolic | Compazine |
| I | Infection, Inflammation | Dexamethasone |
| T | Toxins | Ondansetron |

Nausea: assessment

- Bowel History
- Abdominal exam
- Review of Medications

Constipation: Causes

- Medications – Opioids, antidepressants, antacids, chemo drugs
- Hypercalcemia
- Intestinal Obstruction
- Dehydration
- Depression > inactivity
- Inactivity, reduced privacy, change in daily pattern

Constipation: treatment

- PREVENTION IS KEY
- Prophylactic and scheduled use of stool softeners/stimulants
- Goal for bowel movement every 72 hrs regardless of intake
Constipation: treatment

- Begin laxatives with any opioid
  - Colace 100 mg BID
  - Senna 2 tablets at HS, increase by 2 tablets a day until effective (4 tabs BID is max)
  - MOM 30 ml
  - Sorbitol
  - Magnesium Citrate 120-300 ml
  - Bisacodyl 10-15 mg
  - Enemas

Palliative Sedation

- Definition: Sedation in the imminently dying, using higher doses of sedatives to relieve extremes suffering
- Goal: to produce unconsciousness to relieve suffering, not to end life.

Palliative Sedation

- Opioids
- Benzodiazepines (lorazepam)
- Antipsychotics (haloperidol chlorpromazine/ Thorazine)
- Barbituates (Phenobarbital)

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