"Symptom Management from Strollers to Walkers and Everything in Between"

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Presenters disclosed no real or perceived conflicts of interest that relate to this presentation.

Objectives

1. List 5 of the most common symptoms.
2. Discuss the use of morphine for both pain and dyspnea.

Patient with advanced cancer

Dyspnea
Pain
Anxiety and….
Symptoms of end stage cancer

What have you seen?

Dyspnea

George has acute lymphocytic leukemia, his hgb is 5.7 this am, he complains of dyspnea as well as fatigue. His type and crossmatch reveal numerous antibodies so his blood transfusion is hours away. His o2 sats are 91% on 4 liters of nasal o2. He appears tired and slightly anxious. No accessory muscles being used, breath sounds clear.

What other assessment information do you need?
So what do you do now?

- Potential treatment(s)
  - Medication intervention
  - Non Medication interventions

Dyspnea

The sensation of air hunger. May be exhibited by gasping, accessory muscle involvement in breathing, tachypnea, discomfort.

1. Complete respiratory assessment
2. If oxygen sats <90% give oxygen 2L/min.
3. Check hemoglobin and transfuse if consistent with care goals established on signout.
4. Complains of dyspnea
5. Bronchospasm with audible wheeze
   - If mild CHF (crackles on exam), with respiratory distress
     - Furosemide 40 mg PO/IV for one dose
     - Monitor for improvement.
     - Consider MD consult
   - Fentanyl nebulizer 25 mcg in 2.5 ml of NS every 2 hours prn
   - Albuterol 2 inhalations every 4 hours prn or 3 ml nebulized every 2 hours prn
6. The sensation of air hunger. May be exhibited by gasping, accessory muscle involvement in breathing, tachypnea, discomfort.
7. If no relief, consider adding oxygen 2 liters/min
8. Reassess every 2 hours
9. If no relief, Consider Morphine 10 mg PO every 2 hours prn or 3 mg subcutaneous or IV; monitor respirations
10. If no relief, lorazepam 0.5 mg every 4 hours prn.
11. Monitor respirations
12. If relief, continue lorazepam prn
13. MDD 10 mg/day
14. If no relief, add oxygen 2 liters/min and ipatropium 1-2 inhalations every 4-6 hours prn or 2.5 ml nebulized every 4 hours prn
15. If no relief, add fentanyl nebulizer 25 mcg in 2.5 ml NS every 2 hours prn.

George develops fevers, delirium, and agitation

- What would be part of your assessment

How would you treat these symptoms?
Fever
A temperature of over 101.4°F (oral), 100.4°F (axillary), or 100.4°F in patients with known neutropenia.

Symptomatic Fever or Rigors
Refer to signout to see goals of care.

Workup needed?

Source of infection is suspected by history or exam

Treat symptomatically, especially end stage disease

MD/RN/Rx consult for workup and possible antibiotic therapy.

Acetaminophen 650 mg PO/PR every 4 hours scheduled x 24 hours if yes.

If no relief, try Baytril 625 mg or levofloxacin 750 mg every 8 hrs x 24 hrs.

If no relief, consider MD/RN/Rx consult.

Palliative Care Algorithms
These are to be used as general guidelines. They do not replace the traditional nurse-doctor-patient relationship. Please review carefully before using. Please note the PO route is always the initial route when possible.

Agitation
Excessive physical or mental restlessness. An symptom that is generally not purposeful and associated with anxiety.

Evaluate for reversible causes, including delirium and treat the underlying causes if possible. Positional control may be improved with sedation. Work up.

Haloperidol 0.5 mg PO/IV/SC every 4 hours as needed.

Evaluate for continuous, deep or no relief.

No relief after first dose of Haloperidol.

Haloperidol every 12 hrs scheduled.

Evaluate to continue, taper or discontinue.

Consult half dose of Haloperidol.

Haloperidol 1 mg PO/IV/SC every 12 hrs until effect is achieved (1mg, 2 mg, 3 mg, etc).

MDD 30 mg.

Lorazepam 0.5 mg PO/IV/SC every 1 hour as needed.

MDD 12 mg.

Consult half dose of Lorazepam.

Evaluate regularly to taper or discontinue.

Physician/Nurse/Pharmacist consultation.

What do we know about symptoms at the end of life?

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Frequency</th>
<th>Symptom treated</th>
<th>Treatment successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue</td>
<td>97%</td>
<td>18%</td>
<td>3%</td>
</tr>
<tr>
<td>Pain</td>
<td>82%</td>
<td>76%</td>
<td>28%</td>
</tr>
<tr>
<td>Dyspnea</td>
<td>82%</td>
<td>64%</td>
<td>17%</td>
</tr>
<tr>
<td>Poor Appetite</td>
<td>82%</td>
<td>38%</td>
<td>4%</td>
</tr>
<tr>
<td>Nausea/vomiting</td>
<td>58%</td>
<td>38%</td>
<td>10%</td>
</tr>
<tr>
<td>Constipation</td>
<td>51%</td>
<td>42%</td>
<td>10%</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>42%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Constipation</td>
<td>51%</td>
<td>42%</td>
<td>10%</td>
</tr>
</tbody>
</table>

J. Wolfe, Boston, 2000
Symptom Management

General Guidelines:
• Evaluation
• Treat underlying causes if possible
• Drug treatment must always be combined with supportive management
• Focus on child’s quality of life

Brittany, 4 year old with metastatic cancer
• Returned home after trip to Disney land
• Now is short of breath, sore tummy, not eating and tired
• What do we do first?....

Dyspnea

For Brittany... and others
• Assessment
• Scales – 0-10
• Treat underlying cause, when possible and feasible, e.g.
  – Anemia, Anxiety Ascites
  – Pulmonary emboli, pleural or pericarial effusion or pain,
  – Secretions- too thick? Too Many? Too dry?
  – Volume overload- did we cause it?
Non Pharmacologic

- Supportive Therapy
  
  \textit{Calm the nurse}

- Comfortable position for child
- Environment: music, temperature, humidity
- Fan on face
- Promote relaxation
- Aroma therapy

Pharmacology

\textbf{Titrated Opioid therapy:}

- Morphine IV, SL, SC R (0.15mg/kg oral q2hrs)
- Fentanyl Intra nasal - IV

\textbf{Titrated Benzodiazepines:}

- Lorazepam (IV, SL, O R, (e.g. 0.05 mg/kg/dose oral q6hours)
- Midazolam IV

Oxygen - compressed air (research)

\textit{Wrede- Seaman 2005}
Nausea/Vomiting

Causes
- Anxiety
- Pain
- Smells
- Drugs
- Uremia
- Hypercalcemia
- Movement
- Cough
- Tumor
- Blocked shunt

For Brittany...

Treat cause as able.
- Anxiety
  - Common sense
  - Remove triggers
  - Avoid perfumes
  - Small meals as allowed

Non drug

- Acupressure
- Distraction
- Aroma therapy
- Self Hypnosis

Pharmacology

Lorazepam (0.05 mg/kg/dose SL, O GT q 4-6 hrs)
- Zofran
- Steroids
- Benadryl (1mg/kg/dose q 8hrs)
- Metaclopramide - Reglan (use with care due to side effects)
  - Combination products-
    - BDR – gels, rectal dosage varies.
    - BAD (IV, R, TD, O)
    - LBHM

Waha Saarav 2005 Cochrane review, 2000, Cassileth 2009
Loss of Appetite

Rule out treatable causes
• Pain
• Anxiety
• Nausea/vomiting
• Oral thrush
• Drugs
• Depression
• Medical nutrition and hydration

For Brittany...

Underlying cause may not be curable, but still treatable...

Non Pharm

• SFS - Small frequent Snacks
• Anything goes
• Guilt and expectations

Pharmacology

• Drugs to think about:
  – Steroids
  – Periactin
  – Megace
Constipation

What is the norm?

History -

Look at the causes:

• ? Lack of fiber, fluids or food?
• Lack of bowel regimen for the drugs – opioids
• Pain
• PLAN TO PREVENT

For Brittany...

Non Pharm

• Massage
• Yoga
• Positioning

Pharmacology – MUSH AND PUSH

Mush

• Lubricant
  – Mineral oil
• Surfactants
  – Docusate
• Osmotics
  – Lactulose
  – Miralax

Push

• Prune juice
• Pear juice
• Senna
  – (Tea, Liquid pills)
• Bisacodyl (O/R)
• Milk of Magnesia

Wrede slamali 2005
Fatigue
Brittany...
- Multidimensional – QOL, symptoms
- Assessment:
  - cause
  - contributing factors
  - measurement e.g. FACT-G scale, 0-10 Scale

Non drug
- PT
- Physical activity
- Counseling
- Behavioral
- Cross word puzzles, memory prompts, gardening, (cognitive fatigue)

Pharmacological treatments
For Brittany
- Analgesia
- Anemia-erythropoietin
- Anti-depressants
- Psycostimulants, e.g. Methylphenidate ("Ritalin")
- Steroids
Conclusions

- Children do suffer at the end of life and we can do a better job of helping them!
- We have reviewed the most common symptoms at the end of life
- Key thoughts:
  - Evaluate
  - Treat underlying if possible
  - Drug treatment always combined with non-drug approaches
  - FOCUS ON CHILD’S QUALITY OF LIFE

Questions from the Audience
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- Cassideth B. Complementary therapies, herbs and other OTC. Oncology. 2009; Sept 23 (10):904.


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