SYMPTOM MANAGEMENT IN PALLIATIVE CARE

PEARLS & POINTERS

FPON WEBINAR - FEB 15, 2018
DR JULIA RIDLEY - PSMPC VC
Disclosures:

I am prey to the whims of my 3 year old

I have no affiliations with any commercial organizations
OBJECTIVES:

Describe and practice approaches to 5 common symptoms in patients with palliative cancer diagnoses:

- Nausea/vomiting
- Constipation
- Fatigue
- Dyspnea
- Delirium
UTILIZE 2017 GUIDELINES FROM BC-CPC AVAILABLE ONLINE (PDF)

GOOGLE SEARCH BCCPC GUIDELINES (1ST LINK)

HTTP://WWW.BC-CPC.CA/CPC/SYMPOTOM-MANAGEMENT-GUIDELINES/
<table>
<thead>
<tr>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAIN</td>
</tr>
<tr>
<td>FATIGUE</td>
</tr>
<tr>
<td>PRURITUS</td>
</tr>
<tr>
<td>SEVERE BLEEDING</td>
</tr>
<tr>
<td>CONSTIPATION</td>
</tr>
<tr>
<td>NAUSEA &amp; VOMITING</td>
</tr>
<tr>
<td>DYSPHAGIA</td>
</tr>
<tr>
<td>ANOREXIA</td>
</tr>
<tr>
<td>DEHYDRATION</td>
</tr>
<tr>
<td>RESPIRATORY CONGESTION</td>
</tr>
<tr>
<td>DYSPNEA</td>
</tr>
<tr>
<td>COUGH</td>
</tr>
<tr>
<td>HICCOUGHS</td>
</tr>
<tr>
<td>TWITCHING/ MYOCLonus/SEIZURES</td>
</tr>
<tr>
<td>DELIRIUM</td>
</tr>
<tr>
<td>OTHER SYMPTOMS</td>
</tr>
</tbody>
</table>

**B.C. INTER-PROFESSIONAL PALLIATIVE SYMPTOM MANAGEMENT GUIDELINES**

**CONTRIBUTING PARTNERS**

- Fraser Health
- Interior Health
- First Nations Health Authority
- Island Health
- Providence Health Care
- Vancouver Coastal Health
- Northern Health
GOALS OF CARE CONVERSATION:

- **THE FIRST STEP**
- **DETERMINE DISEASE STATE, PROGRESSION**
- **DISCUSS GOALS/FEARS & ACCEPTABLE INTERVENTIONS TO THE PATIENT**
1. Nausea & Vomiting

Worse Than Pain?
## N/V in advanced malignancy

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Impact</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-60%</td>
<td>Decreased quality of life</td>
<td>Needed!!</td>
</tr>
<tr>
<td></td>
<td>Delayed &amp; declined treatments</td>
<td>PQRST+</td>
</tr>
<tr>
<td></td>
<td>Weight loss</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dehydration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrolyte abnormalities</td>
<td></td>
</tr>
<tr>
<td>Mnemonic Letter</td>
<td>Assessment Questions</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------</td>
<td></td>
</tr>
<tr>
<td><strong>O</strong>nset</td>
<td>Whenever possible, ask the patient directly. Involve family as appropriate and desired by the patient. When did it begin? How long does it last? How often does it occur?</td>
<td></td>
</tr>
<tr>
<td><strong>P</strong>rovoking/Palliating</td>
<td>What brings it on? What makes it better? What makes it worse?</td>
<td></td>
</tr>
<tr>
<td><strong>Q</strong>uality</td>
<td>What does it feel like? Can you describe it? Do you vomit or just feel nauseated? Does it change when you change position?</td>
<td></td>
</tr>
<tr>
<td><strong>R</strong>egion/Radiation</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td><strong>S</strong>everity</td>
<td>How severe is this symptom? What would you rate it on a scale of 0-10 (0 being none and 10 being the worst possible)? Right now? At worst? On average? How bothered are you by this symptom? Are there any other symptom(s) that accompany this symptom?</td>
<td></td>
</tr>
<tr>
<td><strong>T</strong>reatment</td>
<td>What medications and treatments are you currently using? Are you using any non-prescription treatments, herbal remedies, or traditional healing practices? How effective are these? Do you have any side effects from the medications and treatments? What have you tried in the past? Do you have concerns about side effects or cost of treatments?</td>
<td></td>
</tr>
<tr>
<td><strong>U</strong>nderstanding</td>
<td>What do you believe is causing this symptom? How is it affecting you and/or your family? What is most concerning to you?</td>
<td></td>
</tr>
<tr>
<td><strong>V</strong>alues</td>
<td>What overall goals do we need to keep in mind as we manage this symptom? What is your acceptable level for this symptom (0-10)? Are there any beliefs, views or feelings about this symptom that are important to you and your family?</td>
<td></td>
</tr>
</tbody>
</table>
FOCUSED PHYSICAL exam:
- NEUROLOGICAL exam (?↑ICP)
- VITALS (FLUID STATUS, ?INFECTION)
- ABDOMINAL exam +/- DRE
- oral exam

INVESTIGATIONS:
- CBC, ELECTROLYTES, renal/LIVER function, calcium, glucose
- URINE CULTURE +/- OTHERS
- ABDOMINAL, CNS IMAGING
- ↑ENDOSCOPY
<table>
<thead>
<tr>
<th>Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemical</strong></td>
</tr>
<tr>
<td>- Opioids/Drugs</td>
</tr>
<tr>
<td>- Toxins</td>
</tr>
<tr>
<td>- Electrolytes</td>
</tr>
<tr>
<td>- Hormones</td>
</tr>
<tr>
<td>- Cytokines/Infection</td>
</tr>
<tr>
<td><strong>Cortical</strong></td>
</tr>
<tr>
<td>- Fear/memory</td>
</tr>
<tr>
<td>- Anxiety</td>
</tr>
<tr>
<td>- Pain</td>
</tr>
<tr>
<td>- Smells</td>
</tr>
<tr>
<td><strong>Cranial</strong></td>
</tr>
<tr>
<td>- ICP</td>
</tr>
<tr>
<td>- CNS XRT</td>
</tr>
<tr>
<td>- Meningeal irritation</td>
</tr>
<tr>
<td><strong>Vestibular</strong></td>
</tr>
<tr>
<td>- Tumor</td>
</tr>
<tr>
<td>- Motion</td>
</tr>
<tr>
<td>- OR/XRT</td>
</tr>
<tr>
<td><strong>Visceral/Serosal</strong></td>
</tr>
<tr>
<td>- Obstruction</td>
</tr>
<tr>
<td>- Constipation</td>
</tr>
<tr>
<td>- Dysmotility</td>
</tr>
<tr>
<td>- Bleed</td>
</tr>
<tr>
<td>- Irritation</td>
</tr>
<tr>
<td><strong>Gastric Stasis</strong></td>
</tr>
</tbody>
</table>
Nausea & Vomiting Mechanisms

(adapted from a University)
non-pharmacologic

- Decrease smells
- Hydration
- Peppermint
- Ginger
- Citrus
- Cold, lightly carbonated drinks
- P6 Pressure Point
Treatments

- Target the cause
  - ICP
  - Bowel obstruction/constipation
  - Hypercalcemia
- Choose by mechanism
  - Gastric stasis
  - Motion-induced
  - Chemotx
- Avoid overlapping mechanisms
<table>
<thead>
<tr>
<th>Drug</th>
<th>Mechanism</th>
<th>Dosing (starting typical standing dose)</th>
<th>Indications</th>
<th>Side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metoclopramide (=Maxeran)</td>
<td>DA₂ antagonistic Prokinetic</td>
<td>10mg q6hr PRN → 10mg sc/iv/po TID or 30 mins before meals &amp; at hs</td>
<td>Opioid induced, GI dysmotility</td>
<td>CTZ / ↑QTc, diarrhea, EPS, may increase appetite *renal excretion, start with 5mg per dose if low GFR **Black box warning due to ↑QTc, max 40mg/day</td>
</tr>
<tr>
<td>Domperidone</td>
<td>Prokinetic</td>
<td>10mg q6hr PRN → 10mg po TID (AC meals)</td>
<td>Opioid induced, GI dysmotility</td>
<td>↑QTc, diarrhea, minimal EPS risk **Black box warning due to ↑QTc, max 40mg/day</td>
</tr>
<tr>
<td>Haloperidol (=Haldol)</td>
<td>DA₂ antagonistic Mild prokinetic</td>
<td>0.5mg sc/po q4h PRN → 1mg sc/po BID</td>
<td>Opioid induced, CTZ</td>
<td>↑QTc, EPS</td>
</tr>
<tr>
<td>Prochlorperazine (=Stemetil)</td>
<td>DA₂ antagonistic</td>
<td>10mg iv/po q6h (usually used just PRN)</td>
<td>Opioid induced, CTZ</td>
<td>↑QTc, EPS</td>
</tr>
<tr>
<td>Methotrimeprazine (=Nozinan)</td>
<td>DA₂ antagonistic Anticholinergic (mild)</td>
<td>5mg sc/po qhs PRN → titrate to required dose, max 75mg/day</td>
<td>Opioid induced, CTZ, anxiety, insomnia</td>
<td>↑QTc, EPS, paroxysmal delirium in *5%, sedation</td>
</tr>
<tr>
<td>Olanzapine (=Zyprexa)</td>
<td>DA₂ antagonist, SHT₂ antagonist</td>
<td>2.5mg sc/po q4hr PRN → 2.5mg qAM, 5mg qhs</td>
<td>Opioid induced, CTZ, anxiety</td>
<td>↑QTc (mild), EPS (mild), some sedation, increases appetite</td>
</tr>
<tr>
<td>Ondansetron (=Zofran)</td>
<td>SHT₂ antagonist</td>
<td>4-8mg po/iv/sc q8hr PRN → 8mg po/iv BID</td>
<td>Chemo/Radiation therapy induced, resistant n/v, CTZ</td>
<td>↑QTc, constipation, headache</td>
</tr>
<tr>
<td>Granisetron (=Kytril)</td>
<td>SHT₂ antagonist</td>
<td>1mg po/iv/sc q8hr PRN → 1mg po/iv BID</td>
<td>Chemo/Radiation therapy induced, resistant n/v, CTZ</td>
<td>↑QTc, constipation, headache</td>
</tr>
<tr>
<td>Dimenhydrinate (=Gravol)</td>
<td>Anti-histamine Anticholinergic DA₂ antagonist</td>
<td>25-50mg sc/iv/pr/po</td>
<td>Acute symptoms, sedation desirable</td>
<td>Sedation, delirium</td>
</tr>
<tr>
<td>Scopolamine (=Transderm V patch)</td>
<td>Anticholinergic</td>
<td>1 patch q3 days</td>
<td>Motion induced nausea</td>
<td>Anticholinergic (postural hypotension, delirium, dry mouth etc)</td>
</tr>
<tr>
<td>Dexamethasone (=Decadron)</td>
<td>Anti-inflammatory</td>
<td>4-12mg in single or divided dose po/sc</td>
<td>Bowel obstruction, intracranial disease, resistant n/v/vomiting</td>
<td>Corticosteroid ‘shopping list’ if used long term (high sugars, edema, muscle wasting, AVN, etc)</td>
</tr>
<tr>
<td>Nabulone (=Cesamet)</td>
<td>Cannabinoid</td>
<td>1mg po BID</td>
<td>Chemotherapy induced, in combination</td>
<td>Confusion, sedation, euphoria, increased appetite</td>
</tr>
<tr>
<td>Medical Marijuana</td>
<td>Cannabinoid</td>
<td>?? Usually Rx is for 1-3 grams/day</td>
<td>Chemotherapy induced, in combination for resistant n/v</td>
<td>Confusion, sedation, euphoria, increased appetite</td>
</tr>
<tr>
<td>Octreotide (=Sandostatin analogue)</td>
<td>Somatostatin analogue</td>
<td>100-300mcg SC TID</td>
<td>Bowel obstruction, diarrhea (chemo, not infection induced)</td>
<td>Decreased bowel motility</td>
</tr>
<tr>
<td>Aprepitant/ Fosaprepitant (=Emend po/iv)</td>
<td>NK-1 Antagonist</td>
<td>PO = 125mg or 80mg OD IV = 150 or 115mg OD</td>
<td>Highly emetogenic chemotherapy</td>
<td>Fatigue, hypotension, constipation</td>
</tr>
</tbody>
</table>

CTZ = Chemosensitive trigger zone; NK-1 = Natural Killer receptor; S-HT = Serotonin; DA2 = Dopamine receptor
2. Constipation
This poo shall pass
assessment

- Normal Bowel Habit
- Current Frequency and BPS
- Medications
- Hydration
- GI Tract Status
<table>
<thead>
<tr>
<th>BPS Score</th>
<th>Constipation</th>
<th>Diarrhea</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>Impacted or Obstructed ± small leakage</td>
<td>-4</td>
</tr>
<tr>
<td>-3</td>
<td>Formed Hard with pellets</td>
<td>Delayed ≥3 days</td>
</tr>
<tr>
<td>-2</td>
<td>Formed Hard</td>
<td>Delayed ≥3 days</td>
</tr>
<tr>
<td>-1</td>
<td>Formed Solid</td>
<td>Pt's Usual</td>
</tr>
<tr>
<td>0</td>
<td>Formed Soft</td>
<td>Pt's Usual</td>
</tr>
<tr>
<td>+1</td>
<td>Unformed Soft</td>
<td>Usual or Frequent</td>
</tr>
<tr>
<td>+2</td>
<td>Unformed Loose or Paste-like</td>
<td>Frequent</td>
</tr>
<tr>
<td>+3</td>
<td>Unformed Liquid ± mucus</td>
<td>Frequent</td>
</tr>
<tr>
<td>+4</td>
<td>Unformed Liquid ± mucus</td>
<td>Frequent</td>
</tr>
</tbody>
</table>

**Characteristics**
- **Constipation**
  - Impacted or Obstructed ± small leakage
  - Formed Hard with pellets
  - Formed Hard
  - Formed Solid
  - Formed Soft
- **Diarrhea**
  - Unformed Soft
  - Unformed Loose or Paste-like
  - Unformed Liquid ± mucus
  - Unformed Liquid ± mucus

**Pattern**
- **Constipation**
  - No stool produced
  - Delayed ≥3 days
  - Pt's Usual
- **Diarrhea**
  - Delayed ≥3 days
  - Pt's Usual
  - Usual or Frequent
  - Frequent
  - Frequent

**Control**
- **Constipation**
  - Unable to defecate despite maximal effort or straining required to defecate
  - Major effort or straining required to defecate
  - Moderate effort or straining required to defecate
  - Minimal or no effort required to defecate
- **Diarrhea**
  - Minimal or no effort required to control urgency
  - Moderate effort required to control urgency
  - Very difficult to control urgency and may be explosive
  - Incontinent or explosive — unable to control or unaware

*Downing, Watson, Carter (© Victoria Hospice Society)*
OPIOID-INDUCED (OIC)

- Up to 90% of patients on opioids endure constipation
- More likely with other risk factors:
  - Older
  - Reduced PO intake
  - Immobility
  - Anticholinergics
Treatment

- Review medications and comorbidities
- Get things moving ...then... keep them going
- Lactulose, enema, opioid antagonist ...then... senna, PEG routinely
- Educate patient and family
TIPS & TRICKS

★ IF ON OPIOIDS, AVOID BULKERS AND SOFTENERS AS FIRST LINE AGENTS -
  - STIMULATE!
  - SENNA!

★ RULE OUT OBSTRUCTION - CLINICALLY (AND RADIOLOGICALLY IF INDICATED)

★ PEG IS GREAT BUT NOT COVERED...

★ CONSIDER METHYLNAALTREXONE/NALOXEGOL
3. Fatigue

Beyond Sleep Hygiene
Fatigue

- Up to 90% of those with cancer
- Most common symptom
- Most debilitating symptom
- Easy tiring, impaired concentration, generalized weakness, reduced endurance - often poor memory and emotional lability
- Expected as disease advances
Fatigue

Education
Support
Pacing
SX MGMT

Disease

Symptoms
Mood
Sleep
Social

Treatment

Review meds
B/W: HB, LYTES,
Blood Sugar, Renal
FCN, Liver FCN, TSH
& R/O Infection
PHARMACOLOGICAL TX

- **CORTICOSTEROIDS**
  - Dexamethasone 2-4mg/day
  - Methylprednisolone 16mg BID
  - SHORT TERM BENEFIT (<2/52)

- **METHYLPHENIDATE**
  - FOR OPIOID-INDUCED OR DEP’N RELATED FATIGUE
  - AVOID IF TACHYARRHYTHMIA
  - 5mg OD START (MAX 20mg/day)

- **MODAFINIL**
  - BENEFIT IN THOSE WITH SEVERE FATIGUE (<7/10)
  - 200mg OD (NOT COVERED!)
TIPS & TRICKS

★ Check for reversible causes but **warn** patients/families that fatigue is often disease related and expected.

★ Pacing

★ Allow rest

★ Community support services, equipment

★ Consider pharmacologic trial
4. Dyspnea

Not Just O₂
Dyspnea

- **Subjective**
- Impacts quality of life, functional status
- Distinguish dyspnea from hypoxia esp. on exertion
- Consider progressive course (?rapid onset)
Dyspnea

Dyspnea on exertion

Physical Disconditioning

Discomfort, frustration, anxiety/panic

Decrease in activities
POSSIBLE CAUSES:

- Pulmonary
- Cardiac
- Neuromuscular
- Psychological
- Fluid

Consider bloodwork and imaging
Treatment

- Pacing, breath controls (e.g. pursed lip)
- Positioning & equipment
- Relaxation techniques
- Cool blown air
- Opioids (low dose vs. pain)
- Corticosteroid (trial)
- Benzodiazepine (with caution)
TIPS & TRICKS

★ Oxygen only available if SaO2 < 88%

★ Forced air as beneficial if not hypoxic

★ Parenteral opioids may be best benefit, used preemptively

★ Corticosteroids sometimes helpful

★ Most common reason for palliative sedation
5. Delirium

Work it up & settle it down
Delirium

- Hyperactive: 30%
- Hypoactive: 48%
- Mixed: 22%

- Terminal Delirium
  - Huge impact to family experience & memories
RISK FACTORS

- Older
- Dementia
- Decreased hearing or visual acuity
- Immobility
- Malnutrition
- Substance use
- Polypharmacy
- Comorbidities
- Hospitalization
- Restraints
workup

Disease trajectory
- reversibility?
- burden of workup/treatments

Drugs - review, minimize, rotate

Infection - UTI*, pneumonia, cultures/imaging

Metabolic - renal, electrolytes, liver, calcium*

Structural change - examine-->image

Consider other changes in status
OPIOID ROTATION

- Consider Fentanyl, Methadone
- Methadone exemption for analgesia in palliative care: methadone4pain.ca
- Free, takes ~1HR, CPD accredited!
treatments

- Daylight
- Reminders of Self
- Companionship
- Reorienting
- Circadian Rhythm
treatments

- Avoid antipsychotics, opioids
- Consider methylphenidate, trazodone, melatonin
- Avoid benzodiazepines unless goal is sedation
- If patient, family or caregivers at risk/distressed, consider haloperidol (low dose), methotrimeprazine, midazolam
- May need to consider sedation
TIPS & TRICKS

★ Consider and discuss that delirium may be terminal

★ Workup as appropriate

★ Treat during workup if moderate/severe

★ Consult if needed for severe cases, sedation
Thank you!

Questions?

JRidley@Bccancer.bc.ca