Palliative Care Update for the 2014 NMNPC:

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April 10, 2014

Objectives

- Explain the scope of palliative care practice.
- Introduce a case study with palliative care needs.
- Identify mechanisms of and treatment strategies to control nausea in the case study.
- Review principles of management of chronic malignant pain.
- Identify basic principles of conducting an effective family meeting.
- Using the case study observe and critique a role play presentation of a family meeting.

What is Palliative Care?

- "Palliative care
  - Is specialized medical care for people with serious illnesses. This type of care is focused on providing patients with relief from the symptoms, pain, and stress of a serious illness – whatever the diagnosis.
  - The goal is to improve quality of life for both the patient and the family. Palliative care is provided by a team of doctors, nurses, and other specialists who work with a patient's other doctors to provide an extra layer of support. Palliative care is appropriate at any age and at any stage in a serious illness, and can be provided together with curative treatment.

2011 Public Opinion Research on Palliative Care
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Hospice care vs. palliative care vs. "comfort only" care

- Hospice: A health care benefit
  - Medicare benefit (Part A) since 1983; many private insurances have a "hospice benefit"
  - Two MDs certify prognosis $\leq$ 6 months if "disease runs its usual course"
  - Focus is on comfort and relief of suffering, not life prolongation
  - Interdisciplinary team provides care
  - It is not a place; primarily home based, can be in a facility

Hospice care vs. palliative care vs. "comfort only" care

- Palliative care
  - Can be provided in **conjunction** with life prolonging treatment (i.e. no need to choose between treatment plans)Does *not* take the place of curative care!
  - No prognostic requirement; no age requirement; not limited to any specific diagnosis; not just "actively dying"
  - Services can be delivered in a hospital, clinic , or via home visits; Inter-disciplinary Team
  - **The goal is not to hasten nor prolong death**
- A medical subspecialty (Hospice and Palliative Medicine) since 2006, board certification required for physicians.

Palliative care vs. hospice care vs. "comfort only" care

- "Comfort Only" Care: A type of care…
  - …in which the sole goal of the treatment is to provide comfort; all treatment options are framed in terms of "does this provide comfort?

  - *All hospice care is palliative care (philosophy of care); Not all palliative care is hospice care….*

Palliative Care programs have shown improvements in:

- Physical and psychological symptom management
- Patient and family satisfaction and quality of life
- Lowering costs for hospitals/payers by reducing hospital ICU LOS and direct (such as pharmacy) costs
- Increasing compliance with Joint Commission hospital quality and pain standards
- Providing continuity to more appropriate settings such as home hospice, in-pt hospice or nsg home and increasing hospice/nursing home referrals
- Helping patients and families with difficult decisions

UNMH Palliative Care

- **Current staff:**
- 2.0 FTE MD;
Several part-time MDs; 2 FTE APNs; Program Manager; Arts in Medicine; Social Worker

- **Palliative Medicine Fellowship Program**

- **Main reasons for consultation:**
  Goals of care
  Pain and symptom management

When To Call For A Consult

- Complex pain/Sx mgmt in pts with serious illnesses
- Prognostic uncertainty, declining function, and decision-making
- Pt-Family-MD conflicts over goal-setting
- Help with advanced care planning/DNR disputes
- Pt +/or family support + support for family meetings
- Disposition assessment for seriously ill /dying patients
- Pts with frequent admissions + poor function, more than one trip to ICU during same admission dementia, advanced CA, ESLD, ESKD, TBI, Neuro-Mus Dz

Case Study – Ms Ginny Jones

- Ms Ginny Jones is a 32 yo white woman who developed triple negative stage IIB breast cancer. Patient is s/p lumpectomy with sentinel node dissection, completed adjuvant chemotherapy regimen 3 months ago.
- She presents to the ED with severe headache, increasing 8/10 thoracic spine pain and new diffuse upper GI pain. Few days before admission she starting vomiting and today the nausea and vomiting woke her up from sleep. No BM in 3 days. Patient is extremely anxious and crying.

Case Study – Ms Ginny Jones

- W/u by Med Onc reveals presumed metastatic spread:
  - CT Chest/Abd/Pelvis positive for 3 metastatic lesions in the right lobe of the liver and increased stool in the colon.
  - MRI of brain and T-L spine shows 3 cm left frontal lesion and multiple thoracic vertebral lesions with no evidence of spinal cord compression.

Case Study Ms Ginny Jones

- PMH: neg except for breast cancer
- Allergies: NKDA
- Home Meds:
  - lorazepam 1 mg HS po prn – anxiety, sleep
  - Oxycodone –5 mg 1 q6h prn pain, but keeps vomiting
- Spiritual History: Christian
- Social Hx – Divorced, 2 small children, trying to work part-time as a waitress. Partner Jake, father of her youngest child will move in soon. He and pt's mother visit daily and help in the pt's and children's care.

Case Study – Ms Ginny Jones

- Treatment Plan:
- 1. dexamethasone - 6 mg q6h po for presumed brain mets.
- 2. lorazepam stopped due to concern for confusion
- 3. ondansetron 8 mg q8h po prn for nausea
- 4. oxycodone 5 mg q6h po prn for pain
- 5. scheduled biospy of a thoracic lesion
- 6. Fluid and lyte replacement, daily labs
- 7. Clear liquids

Case Study – Ms Ginny Jones

- Urgent clinical documents (code status note, AD, Living Will, Surrogate Decision-maker Note) None in the EMR, pt is presumed full code and has no advanced directives.
- Request for palliative care consult. On Day 2 of admission the in-pt PC team is consulted for:
- 1. pain management
- 2. management of nausea and vomiting
- 3. discussion about goals of care (Rx, code, AD)
- 4. pt/family support in young mom w/ bad cancer

Case Study – Work-up/Tx Plan

- Thoracic vertebral biopsy – positive for metastatic triple negative (ER-, PR-, Her2/neu-) breast cancer
- Treatment plan (not yet shared with patient)
  - Radiation oncology consult: whole brain XRT or gamma knife for brain mets and XRT for thoracic metastases.
  - Continue dexamethasone for reduction of tumor edema, assist with relief of nausea and pain
  - Medical oncologist consult: consider new chemo regimen after radiation

Address Symptoms - Nausea and Vomiting

- Nausea – unpleasant, wavelike feeling in the back of throat and/or epigastrium that may result in vomiting
- Vomiting – forceful expulsion of contents of stomach, duodenum or jejunum through oral cavity.

- Classifications common in patients with cancer:
  - Acute – within 24 hours of chemotherapy
  - Delayed – > than 24 hr after highly emetic treatment
  - Anticipatory – response to conditioned stimuli - chemo
  - Chronic – associated with multiple etiologies

Nausea and Vomiting

- Causes (not inclusive)
  - Anxiety, Stress, Increased ICP, Brain tumors
  - Vestibular – Motion Sickness, Dizziness
  - Visceral Dysfunction - Gastric Stasis, Constipation Bowel Obst, Mechanical Causes, Inflammation
  - Toxins – Medications, Infection, Uremia, Hypercalcemia, Excessive Pulmonary Secretions, Other Metabolic/Chemical/Biochemical Causes

Common Mechanisms that Stimulate the Vomiting Center

- CTZ – No BBB, so metabolites, meds, toxins can access it, area has receptors to opiod, D_2, $5HT_3$, Ach, SubP neuro-transmitters
- Cerebral cortex –anxiety triggers receptors, meningeal mechanoreceptors react to high ICP (tumors, edema)
- Vestibular – changes in movement, ear diseases trigger Ach or H_1 receptors
- Gut + serosal visceral surfaces – gut $5HT_3$ receptors react to meds, XRT, exotoxins. Mechanical distortion in gut + visceral surfaces stimulates H_1 + Ach receptors
- Pharyngeal irritation – vagus activation causes gag

- Neuro-transmitters - D_2 - dopamine2, $5HT_3$ -5-hydroxytryptamine3 (serotonin), Ach-acetylcholine, H_1-Histamine1, SubP-Substance P

Anti-emetic Agents

- The basis of multiple therapies is neurochemical control of vomiting by competitively blocking receptors of neurotransmitter substances.
- These agents include:
  - Dopamine antagonists – Phenothiazines (prochlorperzine), Butyrophenones (haloperidol), Benzamides (metochlopramide)
  - 5-HT3 antagonists – ondansetron
  - Substance P antagonists – aprepitant
  - Antihistamines – promethazine, hydroxyzine

Anti-emetic Agents

- Anti-cholinergics – scopolamine
- Corticosteroids – action not understood, used in combo, may improve mood, decreases tumor edema
- Benzodiazepines – adjuncts treat anxiety and produce anxiolytic, sedative, amnesic effects - Lorazepam Olanzepine blocks multiple neurotransmitters - $$$$$
- Cannabis – targets cannabinoid receptors, CB-1, CB-2 dronabinol, nabilone
- Other management – hydrate, correct electrolytes, don't use oral route until patient can tolerate.

Assessment and Management of Nausea/Vomiting in Case

- Assessment – Few days before admission she starting vomiting and day of admit the nausea and vomiting woke her up from sleep. No BM in 3 days. Day 2 in the hospital having frequent emesis despite:
  - IVF NS 100 ml/hr
  - On-going correction of electrolyte imbalances
  - Dex - 6mg q6h po, ondansetron 8mg, q8h po prn – 4 x

1. What is wrong with this plan?
2. What are the potential causes of n and v in Ms Jones?
3. How will you treat these causes?

Assessment and Management of Nausea/Vomiting in Case

- What's wrong – meds are po need IV or topical route, need scheduled anti-emetic
- What are the possible causes?
  - Increased ICP and brain tumor
  - Pain – thoracic and diffuse upper GI pain.
  - Anxiety
  - Toxins and inflammation associated with liver mets
  - Constipation

Treatment of Nausea/Vomiting in Case – How will you treat?

- Increased ICP and brain tumor – dex dose is SOC, change to IV for now, may get XRT or gamma knife
- Pain – thoracic and diffuse upper GI pain – next section
- Anxiety – pt is not confused, is very scared, found lorazepam helpful in past. Schedule 1 mg q8h IV, reassess
- Toxins and inflammation associated with liver mets – dex will help with inflammation, change ondansetron to IV prn, and schedule prochlorperazine 10 mg IV q6h or haldol 1 mg IV q6h
- Constipation –imaging is positive for increased stool in colon , start with a suppository

Address Symptoms – Review of Pain Management Principles

- Assessment
- PE
- Types –
  - Nociceptive pain is stimulation of peripheral nerve fibers that respond to harmfully intense stimuli
    - 1. visceral eg liver mets
    - 2. deep somatic eg bone mets
    - 3. superficial somatic eg minor wounds or burns
    - Neuropathic pain is from damage or disease to nervous system
      - PN – DM, VZV, meds, cancer nerve infiltration

Pain Management Principles

- Determine realistic goals for pain control with patient and limits of treatment for specific diagnoses
- Institute diagnosis specific therapy if possible–
  - **To name a few:**
    - Radiation, gamma knife, chemotherapy, kyphoplasty
    - Surgery, paracentesis, thoracentesis, medications
    - Electro-physiology, blocks, ERCP

Pain Management Treatment

- Consider non-opiate pain meds as adjuncts –
  - Primary analgesics - NSAIDs
  - Anticonvulsants – gabapentin/pregabalin
  - Anti-depressants– venlafaxine, duloxitene, amitriptyline
  - Muscle relaxants – baclofen, cyclobenzaprine, benzos
  - Topicals – NSAIDs, lidocaine 5% patch, capsaicin cream
  - Steroids - dexamethasone
- Consider non-pharmacological treatments –
  - Massage, acupuncture, imaging, journaling, meditation, music

Pain Management – Opioids for Moderate to Severe Pain

- Oral route preferred
- Use long acting formulation for constant pain
- Have breakthrough short acting available, 10-15% of 24 hour long acting dose
- Have bowel protocol available if using opioids
- Short acting opioid duration usually <4 hours
  - **Opioids (morphine is prototype)**
    - All produce pain relief via interaction with opioid receptors in the brain/spinal cord and peripheral opioid receptors
      - The *mu* receptor is the dominant analgesic receptor, plays a role in analgesia for certain opioids

Opioid Equivalency Table

Short acting	Dose (mg) IV/ SQ	Dose (mg) Oral	Duration (hours)
Morphine	10	30	2-4
Hydromorphone	1.5	7.5	2-4
Oxycodone		20	2-4
Fentanyl	0.1		30-60 minutes

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Pain Management – Case Study

- Non-opiate treatments
  - Brain mets (neuropathic and somatic) – radiation, dex
  - Thoracic mets (somatic and neuropathic) – XRT, dex,
    - Muscle spasms - ativan
  - Liver mets (visceral)– control nausea,
    - Dex - shrink lesions
    - Chemo – kill cancer
  - Existential suffering and pain – anxiolytic - ativan, advance care planning, counseling, anti-depressant – methylphenadite, duloxitene

Pain Mgmt – Opioid Rx in Case

- Start with IV morphine PCA pt administered bolus dose. Based on 24 hr use add basal hourly dose.
- **Rationale** – patient's nausea not under control. IV route allows faster titration according to pt needs. Pt can self-administer med for more immediate relief.
- Once pain well controlled on fairly stable doses of basal and bolus doses and patient is eating transition to oral route.
- Calculate 24 hour IV amount. If changing opioids multiply times 25-50% for incomplete cross tolerance.

Pain Mgmt – Opioid Rx in Case

- Use one long-acting opioid for steady control and one short-acting oral opioid for breakthrough pain.
- For example - after conversion from IV morphine to oral morphine, Ms Jones 24 hour po morphine requirement is 90 mg.
  - Her q12h dose of long-acting morphine is 45 mg.
  - Her breakthrough dose = 10-15% of her 24 hour dose q1-4 hours = 10 mg immediate release morphine q3h prn.
  - Titrate prn, expect XRT to kick in so can reduce opioids

Advanced Directives

- Name a decision maker(s) in the event patient becomes unable to make decisions in the future
- Describe agent's authority
- State when agent's authority becomes effective
- Give instructions on how patient wishes to be cared for at end of life
  - Address code status or life prolongation
  - Address artificial nutrition and hydration
- SW can help in assessing needs/filling out forms

New Mexico Uniform Healthcare Decisions Act

If a patient has been determined to lack capacity and no agent or guardian has been appointed, the following descending order shall be used to determine a decision maker:

1. Spouse unless divorced or legally separated
2. An individual in a long-term relationship (opposite or same sex)
3. An adult child
4. A parent
5. An adult brother or sister
6. A grandparent
7. An adult who has exhibited special care or concern

Family Goal Setting Conference

- Prepare – goals, pt Hx, pt decisional?, who is coming, no agenda
- Proper setting – private, quiet, tissues, sit down
- Introductions, goals of mtg, who is decision-maker
- Pt/family understanding of pt's condition
- Medical review – lots/little? No jargon, answer ??
- Silence, respond to emotional reactions

Family Goal Setting Conference

- Prognostication – use ranges
- Decision-making – options, consensus- summarize + confirm, no consensus –time trial, time-limited goals
- Goal setting – what are pt/family goals? Review planned interventions – more aggressive Rx, artificial feeding/fluids, code status. If appropriate make clear recommendations.
- Summarize – decisions, goals, next steps
- Document, discuss with team members, follow-up

Family Goal Setting Conference for Ginny Jones

- Purpose:
  - goals of care
  - advance care planning to establish a decision-maker, complete advanced directives and confirm code status
- Setting:
  - Hospital conference room
- Participants:
  - Patient and family
  - Members of the Palliative Care team and Med Onc team
- Time allotted: 10 minutes

References

2011 Public Opinion Research on Palliative Care Commissioned by the Center to Advance Palliative Care or capc

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Thank you