



Coleman Supportive Oncology Initiative Palliative Training Module Topic: Pain Management: The Basics

Presenters: Shelly Lo, MD and Joanna Martin, MD

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By the end of this module you should be able to:

- 1. Differentiate different types of cancer pain
- 2. Complete a thorough assessment of pain
- 3. Identify and manage opioid side effects

We suggest you complete the Palliative Training Module #2, "Pain Management: Beyond The Basics," after this module.







"An unpleasant, sensory and emotional experience associated with actual or potential tissue damage, or described in relation to such damage."





Cancer Pain

- Often due to tumor growth
- Is subjective
- Patient feedback is the single most reliable indicator
- Frequency of pain in patients after curative treatment is approximately 33%
- Frequency of pain in patients with metastatic cancer is approximately 64%





Barriers to Optimal Pain Control

- Clinician unfamiliarity with assessment and treatment
- Stoicism among some patients
- Opiate misconceptions among patients, families and clinicians
- Fear of side effects
- Fear of disease worsening
- Concerns about addiction





3 Types of Cancer Pain

Visceral pain

- Direct stimulation of receptors in deep visceral organs (e.g., liver capsule stretching, bowel obstruction, kidney stones)
- Poorly localized or referred pain
- Characterized by deep aching, cramping, pressure or colicky sensation

Somatic pain

- Familiar feeling of pain, what we all have experienced previously
- Direct stimulation of receptors on body surface or deep tissue
- Well-localized
- Soft tissue and bone pain: sharp, throbbing, aching
- Muscle pain: characterized by cramping, gripping, clenching sensation

Neuropathic pain

- Injury to peripheral, spinal or central nervous system tissue
- Peripheral nerves: burning, shooting
- Spinal cord: constant, dull aching with neurologic deficits





Assessing Pain: using "NOPQRSTU" Mnemonic

- Number of pains How many are there?
- Onset When did the pain start?
- Palliates/Potentiates What makes pain better or worse?
- Quality How does it feel? Burning, sharp, dull, aching
- Radiates Does pain travel to another part of the body
- Severity How bad is the pain? (Refer to pain scale)
- Timing How long does the pain last? Day versus night?
- Untoward effects on activity or quality of life -Are there any limitations from pain or pain medication?





Severity: Measuring Pain



Measuring pain is recommended to assess severity, intensity and response to treatment. Using this tool in clinic and by patient/caregiver at home, allows for consistent monitoring of pain intensity. Advise patient/caregiver to contact treatment team member promptly when pain is not managed, experience new pain or any adverse effects.

Dynamic	Tools to Measure Health Outcomes from the Patient Perspective						
PROMIS SF v.1.0 – Pain Intensity 3a							
Pain Intensity – Short Form 3a Please respond to each item by marking one box per row.							
	In the past 7 days	Had no pain	Mild	Moderate	Severe	Very severe	
PAINQU6	How intense was your pain at its worst?	1	2	3	4	5	
PAINQU8	How intense was your average pain?	1	2	3	4	5	
		No pain	Mild	Moderate	Severe	Very severe	
PAINQU21	What is your level of pain right now?	1	2	3	4	5	

Detailed statistical information and development history about PROMIS items and instruments are available for review at nihpromis.org or assessmentcenter.net.

To learn more, contact help@assessmentcenter.net.





Severity: Measuring Pain

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PAIN INTENSITY RATING (1 of 2)

- Pain intensity rating scales can be used as part of universal screening and comprehensive pain assessment. At minimum, patients should be asked about "current" pain, as well as "worst" pain, "average" pain, and "least" pain in the past 24 hours. For each pain intensity rating, use one of the scales below.
- For comprehensive assessment, also include "worst pain in past week," "pain at rest," and "pain with movement." See Comprehensive Pain Assessment (PAIN-C) for more details.

Table 1: Numerical Rating Scale

Numerical rating scale:

- Verbal: "What number describes your pain from 0 (no pain) to 10 (worst pain you can imagine)?"
- Written: "Circle the number that describes your pain."

0 1 2 3 4 5 6 7 8 9 10 No pain Worst pain you can imagine

Categorical scale:

"What word best describes your pain?"

None (0), Mild (1-3), Moderate (4-6), or Severe (7-10)

Table 2: The Faces Pain Rating Scale - Revised 1,2



Instructions: "These faces show how much something can hurt. This face (point to the left-most face) shows no pain. Each face shows more and more pain (point to each face from left to right) up to this one (point to the right-most face)--it shows very much pain. Point to the face that shows how much you hurt (right now)."

Hicks CL, von Baeyer CL, Spafford P, et al. The Faces Pain Scale - Revised: Toward a common metric in pediatric pain measurement. Pain 2001;93:173-183.
 Ware LJ, Epps CD, Herr K, Packard A. Evaluation of the Revised Faces Pain Scale, Verbal Descriptor Scale, Numeric Rating Scale, and Iowa Pain Thermometer in older minority adults. Pain Manag Nurs 2006;7:117-125.





Treatment Options:

Pain Medications

World Health Organization (WHO) Ladder Around-the-clock administration of:

- · Nonopioids for mild pain
- Mild opioids (codeine) for moderate pain
- Strong opioids

Adjuvant medications

- Drugs not usually thought of as analgesics
- May help relieve pain not fully responsive to opioids

Psychosocial/Behavioral Coping Strategies

Spiritual Intervention

Physical Activity

Massage, Music, Art Therapy

Tender Loving Care (TLC) Treatment

- Keep clean and dry
- Position comfortably
- Provide reassuring words
- Give human touch





Principles of Pain Assessment and Management

- Assess pain level and offer appropriate management
- Re-evaluate pain at each contact to meet patient-specific goals for comfort, function and safety
- Anticipate and treat analgesic adverse effects
- Consider adding adjuvant analgesics for specific pain syndrome
 - For local bone pain consider local RT, nerve block (e.g. rib pain), vertebral augmentation or radiofrequency ablation. Other bone pain considerations: nonsteroidal anti-inflammatory drugs (NSAIDS), acetaminophen or steroids
 - For neuropathic pain: consider gabapentin, pregabalin, tricyclic antidepressants (TCA) or selective serotonin reuptake inhibitors (SSRI)
- Provide psychosocial support, patient and family/caregiver education
- Optimize integrative interventions
 - Psychological and spiritual approaches, massage therapy, meditation, art therapy etc.
- For acute, severe pain or pain crisis, consider inpatient admission to achieve patient-specific goals





Managing Opioid Side Effects (1 of 6)

Nausea

- More commonly seen if there is a history of opioidinduced nausea
- Usually goes away after 3 to 7 days
- Take opioids with food
- Consider an as-needed or around-the-clock antiemetic, which can be later discontinued
 - Prochlorperazine: 10 mg every 6 hrs
 - Metoclopramide: 10 mg every 6 hrs
 - Haloperidol: 0.5-1 mg every 6-8 hrs
- Consider opioid rotation if nausea persists
- Re-assess cause and severity of nausea
- Try non-oral administration





Managing Opioid Side Effects (2 of 6)

Constipation

- Treat aggressively and prophylactically, "patients taking daily opioids almost always require agents for management of constipation".
- Constipation will not improve over time; a regimen should be prescribed when opioids are prescribed
- Regimen must be individualized and continued for duration of opioid therapy
- Maintain adequate fluid intake and exercise, if feasible

Category	Examples
Prophylactic Medications	Senna (1-2 tab daily, maximum 8 tabs/day) Polyethylene glycol (1 capful/8 oz water BID)
As-needed Agents (usually prescribed if no BM in 48 hours)	Magnesium hydroxide (30-60 ml daily) Sorbitol (30 cc q8 until bowel movement or lactulose 15 cc to 30 cc daily) Polyethylene glycol (17 g/8 oz water BID) Bisacodyl suppository or enema





Managing Opioid Side Effects (3 of 6)

Delirium

- More common in patients with renal or hepatic insufficiency, advanced age, dementia, brain metastases or history of alcohol/benzodiazepine withdrawal
- Determine cause of delirium: drugs, infection, hypoxia electrolyte imbalance
- Discontinue other drugs contributing to delirium
- Consider nonopioid analgesic to allow reduction of opioid dose
- Decrease or rotate opioid
- Cautious use of neuroleptics
 - Haloperidol: 0.5-2 mg by mouth or sublingual every 7-8 hrs
 - Risperidone: 0.25 -0.5 mg 1-2x/day
 - Olanzapine: 2.5-5 mg by mouth or sublingual every 6-8 hrs





Managing Opioid Side Effects (4 of 6)

Sedation/Fatigue

Critical to recognize the difference between cancerrelated fatigue and opioid-induced sedation.

- More common in patients with renal or hepatic insufficiency, advanced age, dementia or brain metastases
- Usually subsides in 2-5 days
- Discontinue other medications contributing to sedation
- Decrease or rotate opioid
- May also occur due to very advanced cancer assess full clinical situation





Managing Opioid Side Effects (5 of 6)

Myoclonus

- Twitching or jerking of muscles
- Due to accumulation of toxic metabolites of morphine or hydromorphone
- More common in patients receiving high dosages of opioids
- Worsened by renal failure, electrolyte abnormalities and dehydration
- Consider rotating to another opioid or lower dose if possible





Managing Opioid Side Effects (6 of 6)

Pruritus

- Usually the result of mast cell destabilization that lead to histamine release.
 - Can be managed by the routine administration of long-acting, nonsedating antihistamines or mast cell stabilizers
 - Antihistamines to consider:
 - Diphenhydramine: 25-50 mg orally every 6 hrs
 - Promethazine: 12.5-25 mg orally every 6 hrs
 - Fexofenadine: 60 mg orally BID
 - Consider rotating to another opioid
- Assess for other causes





Summary of Points Covered

In this training module we addressed:

- What cancer pain is
- Barriers to optimal pain control
- Different types of cancer pain
- How to assess pain
- Common opioid side effects and their management





Next Steps

For more detailed training on this topic, you can go to the following resources:

National Comprehensive Cancer Network® (NCCN®)

- NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Adult Cancer Pain Version 2.2105
 - http://www.nccn.org/professionals/physician_gls/pdf/pain.pdf
- NCCN Guidelines® for Palliative Care Version 1.2016 http://www.nccn.org/professionals/physician_gls/PDF/palliative.pdf

Education and Training for Health Professionals, EPEC-O

The EPEC™-O Project, Module 2 – Cancer pain Management
http://www.cancer.gov/resources-for/hp/education/epeco/self-study/module-2





Faculty Bio for Shelly Lo, MD

Shelly Lo, MD is an associate professor of medicine at Loyola University Medical Center. As a medical oncologist, she specializes in treatment of breast and GI malignancies and is director of Loyola's Cancer Risk Assessment and Prevention Clinic. She is an associate medical director for Loyola Hospice. She is board certified in Medical Oncology and Hospice and Palliative Care.

For more information:





Faculty Bio for Joanna Martin, MD

Joanna Martin MD is board certified in Internal Medicine, Geriatrics, and Hospice and Palliative Medicine. She is a palliative care physician at the Jesse Brown VA and a Health Systems Clinician at Northwestern Memorial Hospital. Dr. Martin was previously employed by Horizon Hospice and Palliative Care and Presence St. Joseph Hospital in Lincoln Park from 2006 through 2015. She was medical director of Horizon Hospice and Palliative Care and the Director of Palliative Care at Presence St. Joseph Hospital from 2007 through 2015.

As a clinician educator, Dr. Martin has experience educating all levels of learners in geriatrics and palliative care in the home and hospital setting. She is currently serving as a Design Team Leader for the Coleman Supportive Oncology Initiative, a multi-hospital initiative to improve access to supportive oncology services. Dr. Martin attended medical school at the University of Minnesota Medical School in Minneapolis and completed an Internal Medicine residency and two year Geriatrics Fellowship at the University of Chicago.





References

Bates, B. P., Bates, B. R., Northway, D. I. PQRST: A Mnemonic to Communicate a Change in Condition. JAMDA. 2002; Jan–Feb; 3(1):23–25.

Mercadante S. Pathophysiology and treatment of opioid-related myoclonus in cancer patients. Pain. 1998 Jan;74(1):5-9.

National Cancer Institute at the National Institute of Health. (2013) EPEC™-O, Education In Palliative And End-Of-Life Care For Oncology, Self-Study Module 2: Cancer Pain Management. Available at http://www.cancer.gov/resources-for/hp/education/epeco/self-study/module-2/module-2-pdf

National Comprehensive Cancer Network®. NCCN Guidelines® for Adult Cancer Pain Version 2.2017. Available at: http://www.nccn.org/professionals/physician_gls/pdf/pain.pdf.

National Comprehensive Cancer Network®. NCCN Guidelines® for Palliative Care Version 2.2017. Available at: http://www.nccn.org/professionals/physician_gls/pdf/pain.pdf.

Revicki, D. A., Chen, W-H., Harnam, N., Cook, K., Amtmann, D., Callahan, L. F., Jensen, M. P., & Keefe, F. J. (2009). Development and psychometric analysis of the PROMIS pain behavior item bank. Pain, 146(1–2), 158–69. (PMCID: PMC2775487)

World Health Organization, (2009). WHO's Pain Relief Ladder. Available at: http://www.who.int/cancer/palliative/painladder/en/.