THE A-B-C’s of Pain Management

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Objectives

- Discuss common misconceptions that continue to surround pain and appropriate management.
- Review pain assessment tools for all patient populations.
- Identify medications that are often useful when developing a pain plan of care for hospice and palliative care patients.
- Identify helpful techniques to encourage positive communication between all the health care team.

How can I use the info I am going to learn ??
Current Status of Pain

- One study found that 30% of patients experience pain at the time of diagnosis, 30% to 50% experience pain while undergoing therapy, and 70% to 90% experience pain as the cancer advances.
- A survey of hospice patients in nursing homes found that about 50% had daily pain, which was moderate or worse in about 85%.
- In a survey of Americans with terminal illness living at home, 50% had moderate to severe pain.

- Pain appears to be highly prevalent in people with dementia.
  - Most common neurologic disorder associated with end of life care.
  - Difficultly with assessments.
  - Common w/ advanced dementia: osteoarthritis, contractures, pressure ulcers.
Increase focus to chronic, persistent pain management
- The good, the bad and the ugly!
- Still a long way to go...balance of pain control, increase function, multimodal
- Increased focus to patient satisfaction with pain management

Unique Challenges: US Cancer Survivors
- According to the NCI
  - More than 60% of people diagnosed with cancer will be alive in 5 years
- Chronic, persistent pain is a frequent complication of cancer and its treatment
  - Often underreported, under-diagnosed, undertreated
- Pain is caused by residual tissue damage from the cancer and/or the cancer therapy
- Most common treatment-induced pain syndromes are neuropathies secondary to surgery, radiation therapy and chemo
**Case Study**

62 y/o female, hx. of breast cancer 5 years ago, hx. of severe osteoarthritis, spinal stenosis & cervical disk disease. Admitted with uncontrolled neck pain and probable metastatic disease. 20-yr. hx. of pain in hips, knees, ankles, back, & neck. Hx. 2 previous c-spine surgeries, bilat. knee replacements. Reports severe pain in neck & both shoulders, radiating down both arms with numbness & tingling in fingers. Describes pain as excruciating, interfering with activity & sleep. Constant, 8 to 10/10.

**Meds:**
- Ibuprofen 600mg q6h ATC
- Hydrocodone 5/500 tab. 1-2 tabs q4h prn pain

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**Case Study discussion . . . .**

- Remember **PAIN ASSESSMENTS**!
- Would you continue the NSAID at present dose, d/c, or change to different NSAID?
- What would you recommend regarding the hydrocodone? Need to change to different opioid?
- Medication for neuropathic pain?
- Any topical preparations to consider?
- How would you integrate nonpharmacological into the pain management strategy?
Attitudes & Beliefs = BARRIERS?!

- If someone is sleeping, then they must not have much pain
  - Sleep may be secondary to exhaustion, lack of REM, distraction, etc.

- Patients frequently lie about the intensity of their pain
  - The most common reason for unrelieved pain in the American healthcare system is the failure of staff to routinely assess pain and pain relief. Many patients silently tolerate unrelieved pain, especially if they are not specifically asked about it, (APS, 2003).

- Fear of respiratory depression
- Fear of addiction
- It is better to wait until pain is really severe to take any medication - consider scheduled, ATC (around-the-clock) dosing
- It is better to grin and bear it
  - Pain = huge impact on quality of life, potential physical harm
Medication Review

- **NSAIDS**
- **OPIOIDS**
- **ADJUNCTS**

**National Guideline Recommendations**

- Oral is route of choice when possible/feasible
- Use one immediate-release opioid at a time
- Use one continuous-release opioid at a time
- Fentanyl patch is not recommended as a first-line analgesic
- PRN means “as needed” not “as requested”
- All opioids cause constipation. Obtain order for a routine stool softener/laxative when a patient is receiving opioid analgesics
Nonopioids

- Acetaminophen
  - Does not commonly affect platelet function or cause GI distress
  - Tylenol has very little anti-inflammatory effect
  - May cause liver toxicity. Use with caution in patients that regularly consume alcohol or have liver disease
  - Has an analgesic ceiling
  - Total dose should not exceed 4000mg/day in healthy adults

NSAIDs

- Indicated for pain that involves inflammation
- Can be used alone or in combination with opioids or adjuvants
- Have a ceiling effect
- Do not produce dependence
- Patients vary in response – if one doesn’t work it may be worthwhile to try another
- Don’t use if patient has aspirin allergy
- Celebrex is a COX-2 that may be used in combination with anticoagulants as it does not affect platelet aggregation
Toradol

- Only parenteral NSAID
- Should only be used for 72 hours
- Don’t use with anticoagulants, other NSAIDs or aspirin
- DOES affect platelets
- Loading dose only recommended for single dose therapy (like in the ED)
- Oral Toradol should only be used following parenteral therapy

Adverse Effects of NSAIDs

- Interfere with platelet aggregation
- Can interact with anticoagulants & cause bleeding
- Can produce adverse GI effects ~ GI bleeding risk increases with age and in patients with a history of bleeding
- Risk of CV events are higher in patients with cardiac co morbidities
- Not recommended for patients with renal impairment, liver disease, CHF or aspirin allergy
**Opioids: Divided into two groups**

**Group one: Mu Agonists**

- **Mu agonists** are a type of opioid that includes morphine and other opioids that relieve pain by binding to the mu receptor sites in the nervous system. This term is used interchangeably with full agonist, pure agonist and morphine-like drugs. Mu agonists are the mainstay of analgesia for acute pain and cancer pain.

- National guidelines recommend use of **ONE** mu agonist by **ONE** route of administration whenever possible.

**Mu agonists - examples**

- Morphine
- Dilaudid
- Fentanyl
- Oxycodone
- Hydrocodone
- Methadone
- Codeine
- Vicodin
- Lortab
- Percocet
Onset & Duration of Opioids

- **ORALS:** Most immediate-release oral opioids like Vicodin, & Percocet have an onset of approximately 30-60 minutes and last 4 – 6 hours
  - Long acting oral analgesics like Oxycontin and MS Contin slowly release with a duration of 8-12 hours.
  - There are now formulations like Avinza and Kadian with a duration of up to 24 hours

- **TRANSDERMAL:** Fentanyl patch takes approximately 12 hours to obtain a therapeutic level with initial application and has a 48-72 hour duration

- **PARENTERAL:** With IV administration of Morphine and Dilaudid, the onset is within a few minutes with duration of 3-4 hours. Fentanyl has a much faster onset of 1-5 minutes with a duration of <1 hour

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**Equianalgesic Table**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Oral</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>30mg</td>
<td>10mg</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>7.5mg</td>
<td>1.5mg</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>20mg</td>
<td>-</td>
</tr>
<tr>
<td>Meperidine</td>
<td>300mg</td>
<td>75mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not recommended</td>
</tr>
<tr>
<td>Methadone</td>
<td>10mg</td>
<td>5mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dosing differs for high dose &amp; chronic use</td>
</tr>
</tbody>
</table>
Breakthrough Pain

Choose dose based on the long-acting or basal infusion dose

- **PO**
  - 10 – 20% of long-acting / 24 hours
- **IV / SQ**
  - 50 – 100% of hourly rate

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Adjuvant medications

- **Steroids** – need to consider with all brain/bone mets
- **Tricyclic antidepressants** – amitriptyline (Elavil), nortriptyline (Pamelor)
- **Second generation antidepressants** – Cymbalta, Savella, Wellbutrin, Effexor
- **Anticonvulsants** – gabapentin (Neurontin), pregabalin (Lyrica)
- **Cutaneous anesthetics** – lidocaine 5% patches (Lidoderm), topical capsaicin
“Start Low and Go Slow”: Using Medications in Older People

- Implications:
  - Choose drug with short half-life
  - Choose drug with fewest side effects
  - Start initial dose 25-50% lower than younger adults
  - Titrate up more slowly than with younger adults
  - Consider increasing dosing interval
  - Monitor for efficacy and adverse events

Ideas to Advocate

- Consider ATC vs. PRN-only
- Consider sustained-release
- Procedural Pain
  - give analgesic before procedure
  - remember meds that have analgesic and effects and those that don’t
PRN Analgesics

- PRN means “as needed”. It does not mean that the patient must ask for their PRN analgesic. When a patient has ongoing or predictable pain, we should offer their PRN analgesic around-the-clock (ATC) unless they are experiencing adverse effects.

Around-the-Clock Dosing (ATC)

- Maintains a stable analgesic blood level and requires consistency in dosing from nurse to nurse
- Provides effective pain management
- Maintains a lower pain intensity that allows the patient to accomplish functional/quality life goals with relative ease

Source: Pasero & McCaffery, 2011
ATC dosing vs. PRN dosing

Pasero (p. 313, 2011) states, “It is important for nurses to recognize that PRN-prescribed analgesics may be administered ATC within the parameters of the PRN prescription and that this is the preferred dosing method for patients with continuous pain. Because there are so many disadvantages to PRN dosing, the appropriateness of its use should be carefully evaluated in all cases.”

So . . . . . . . .

- Are range order doses adequate?
- Do we have a prn breakthrough med?
- Is incident pain being anticipated and activities being planned related to dosing?
- Does dosing need to be titrated?
- Do adjunct medications need to be added?
- Remember p.o. analgesics take 30-45 minutes to take effect.
- Are we conveying to the patient that their pain management is very important to us?
- Communicate, communicate, communicate!!!!!!!!!!
NON-PHARMACOLOGICAL INTERVENTIONS

- Heat / Cold
- Physical Therapy
- Relaxation
- Distraction
- Music Therapy
- Biofeedback
- and the list goes on . . .

ASPMN – American Society for Pain Management Nursing

- http://aspmn.org/
- Pain Nurse Certification
  - ASPMN + ANCC
- Position Statements
- Many resources
Case Study

82 y/o male, history of lung cancer 3 years ago, treatment included surgery, radiation and chemo.
Other history: Type II diabetes for 12 yr., poorly controlled. Experiencing burning on bottoms of feet, numbness & tingling in legs. Pain during the day is usually 3 to 4/10, in the evening and at night is usually 7 to 8/10.

What may be done to decrease his pain?

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Case Study

- Mr. Jones is a 76-year-old with Alzheimer’s disease. He has a history of diabetes and cardiovascular disease. Over the past 72 hours he has been restless, wandering, and up and down at night. He strikes out when transferred or approached for cares. Today, he has spent the entire day in a chair and refuses to move.
On assessment, you find his lungs are clear, he had a bowel movement last shift, urine is clear, blood glucose is within normal limits. You note the bilateral stocking distribution of discoloration in his lower extremities from chronic venous status and an area of erythema around his left lateral ankle. You contact his physician who orders antibiotics (for assumed cellulitis) and acetaminophen 325-650mg q6h PRN.

How would you measure his pain?
What other analgesic orders would you consider requesting and why?
What non-pharmacologic approaches might be appropriate?
How would you assess whether the acetaminophen was effective?
If you determined that the acetaminophen was ineffective, how long would you wait before calling the MD back?
How would you communicate the plan of care and issues about this case to other members of the staff?
Case Study

- A 76-year-old man is in a home hospice program with end stage metastatic prostate cancer and severe COPD. He complains of back pain secondary to multiple bony metastases. He rates the pain at 9/10; it severely limits his movement.
- **Current meds:**
  - Extended release morphine 80 mg q8h
  - Oxycodone 5mg/acetaminophen 325mg 1-2 tabs q4h PRN
  - Ibuprofen 600 mg q6h.

The patient understands his condition is "terminal" and wants maximal pain relief. He does not wish to return to the hospital for any further tests or procedures since he has already had the maximum doses of radiation, chemotherapy, and hormonal therapy.

**What are your ideas??**

The home hospice nurse contacts the primary physician and asks to have the opioid dose increased, the physician agrees - the new order is for extended-release morphine 100 mg q8h with short-acting oral morphine 15 mg q4h for breakthrough pain. Two days later the nurse calls the physician to report that the increased dose has not reduced the severity of pain and the dose of breakthrough morphine is not effective either. The nurse suggests further increasing the morphine dose but also states the patient is having increasing difficulty swallowing pills. The physician explains to the nurse that due to COPD the patient is at great risk for opioid-induced respiratory depression and that nothing more can be done except to admit the patient to the hospital for “terminal” IV sedation.

**NOW WHAT??**
Be a Patient Advocate for Pain Management!

Resources

- American Chronic Pain Association: www.theacpa.org
- American Geriatric Society: http://www.americangeriatrics.org/
- Pain Guidelines – American Pain Society: www.ampainsoc.org
- Partners Against Pain: http://www.partnersagainstpain.com/