MANAGING PAIN IN PALLIATIVE CARE
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DISCLOSURES
NONE 😊
OBJECTIVES

1. Define Pain
2. Describe the different types of pain
3. Describe a step-by-step approach to assessing pain
4. Discuss an approach to managing pain in the palliative care patient

WHAT IS PAIN

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

TYPES OF PAIN

Nociceptive
- Somatic
  - Well localized
- Visceral
  - Less localized, may be referred

Neuropathic
- Dysthesia/Paresthesia
- Hyperalgesia
- Allodynia

Inflammatory
- Result of activation and sensitization of the nociceptive pain pathway by a variety of mediators released at a site of tissue inflammation


CICELY SAUNDERS’S CONCEPT OF TOTAL PAIN

- Total pain: The suffering that encompasses all of a person's physical, psychological, social, spiritual, and practical struggles
- Palliative care seeks to address total pain while addressing whole person care
- Interdisciplinary team.

PAIN IS PREVALENT IN PALLIATIVE CARE

Advanced cancer – prevalence of 75%
CHF – prevalence of 20-78%
COPD – prevalence of 21-77%
Chronic renal failure – prevalence of 21-64%
Stroke – prevalence of 68%

EVALUATION OF PAIN

Comprehensive History
• PMH, PSH, PFH, Social, Allergies, Medications
• Diagnosis/Prognosis

Specific pain history
• OPQRST
• LOCATES
• Validated tools such as the Brief Pain Inventory or numerous others

Physical Exam

EVALUATE EFFECTIVENESS OF CURRENT PAIN REGIMEN

- What medication
- Start date
- Dosage and schedule and if taking as directed
- Effectiveness
- Side effects
- Past/present adherence to treatment regimen
- OTC medications, alternative therapies, herbal regimens, supplements, and vitamins
- Nonpharmacological interventions (current and past) including PT, psychotherapy, heat, ice, etc.


WHO PAIN LADDER

ADJUVANT TREATMENTS

- Antidepressants – helpful in neuropathic pain
  - TCAs
  - SNRIs
- Antiepileptic drugs – helpful in neuropathic pain
  - Gabapentin, pregabalin
- Corticosteroids - helpful when inflammation is the leading cause of pain
  - Bone pain, tissue edema, spinal cord compression, increased ICP
- Bisphosphonates
  - Bone pain, multiple myeloma, breast cancer, osteoporosis with fracture
- Muscle Relaxants
- Anesthetics


NON-OPIOID PAIN MEDICATIONS

- Acetaminophen
  - Works centrally and has no anti-inflammatory action
  - First pharmacologic step if pain level is mild
  - Often used in conjunction with opiates (hydrocodone, oxycodone)
  - Caution if liver or kidney disease
- NSAIDs (ibuprofen, naproxen, celecoxib, meloxicam, diclofenac, etc.)
  - Anti-inflammatory
  - May help in pain due to bone metastases, musculoskeletal, or skin pain
  - Use limited by potential side effects

OPIATES

• Weak
  • Codeine
  • Tramadol


OPIATES

• Strong
  • Morphine
  • Hydrocodone
  • Hydromorphone
  • Oxycodone
  • Oxymorphone
  • Fentanyl
  • Meperidine
  • Methadone

Opiate equivalency tables
Numerous versions are available
Calculators also available
Limitations
Keep your patient in mind

Equianalgesic Opioid Dosing

<table>
<thead>
<tr>
<th>Drug</th>
<th>Parenteral (mg)</th>
<th>Oral (mg)</th>
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</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>0.3</td>
<td>0.4 (pt)</td>
</tr>
<tr>
<td>Codeine</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>0.1</td>
<td>NA</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>1.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Meperidine</td>
<td>130</td>
<td>300</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Tramadol</td>
<td>10</td>
<td>120</td>
</tr>
</tbody>
</table>

Note: Limited to 400 mg/day for adults and 100 mg/day for children.

CALCULATING TOTAL DAILY DOSE OF OPIOIDS FOR SAFER DOSAGE

Higher Dosage, Higher Risk.

Higher dosages of opioids are associated with higher risk of overdose and death—even relatively low dosages (20-50 morphine milligram equivalents (MME) per day) increase risk. Higher dosages haven’t been shown to reduce pain over the long term. One randomized trial found no difference in pain or function between a more liberal opioid dosing strategy (average final dosages in excess of 350 MME) and maintenance of current dosage average final dosage 40 MME.

WHY IS IT IMPORTANT TO CALCULATE THE TOTAL DAILY DOSAGE OF OPIOIDS?

Patients prescribed higher opioid dosages are at higher risk of overdose death.

In a national sample of Medicare Health Administration-Medicare patients with chronic pain receiving opioids from 2004-2008, patients who died of opioid overdose were prescribed as average of 650 MME/day, while other patients were prescribed an average of 40 MME/day.

Calculating the total daily dose of opioids helps identify patients who may benefit from closer monitoring, reduction or tapering of opioids, prescribing of non-opioids, or other measures to reduce risk of overdose.

HOW MUCH IS 50 OR 90 MME/DAY FOR COMMONLY PRESCRIBED OPIOIDS?

50 MME/day:
- 50 mg of hydrocodone (10 tablets of hydrocodone 5/300)
- 30 mg of oxycodone (3 tablets of oxycodone sustained-release 10 mg)
- 32 mg of methadone (1 tablet of methadone 5 mg)

90 MME/day:
- 95 mg of hydrocodone (19 tablets of hydrocodone 5/300)
- 45 mg of oxycodone (5 tablets of oxycodone sustained-release 10 mg)
- >50 mg of methadone (14 tablets of methadone 5 mg)


HOW SHOULD THE TOTAL DAILY DOSE OF OPIOIDS BE CALCULATED?

1. Determine the total 24-hour opioid dosage for each patient.
2. Convert each opioid to its morphine equivalent (MME) using the conversion factors provided.
3. Add the converted doses together to determine the total daily dose.

CAUTION:
Do not use the calculated dose in MMEs to determine dosage for converting one opioid to another—the new opioid should be based on individual patient characteristics and individual difference in opioid pharmacokinetics. Consult the medication label.

USE EXTREME CAUTION:
- Methadone: the conversion factor increases at higher doses.
- Fentanyl: delayed in onset and duration of action, and it is affected by diet and other factors.

HOW SHOULD PROVIDERS USE THE TOTAL DAILY OPIOID DOSE IN CLINICAL PRACTICE?

- Use caution when prescribing opioids at any dosage and prescribe the lowest effective dose.
- Use site-specific guidelines when prescribing to Asian-Americans, etc.
  - Monitor and assess pain and function more frequently.
  - Discuss reducing dose or tapering and discontinuing opioids and benefits do not outweigh harms.
  - Consider offering naloxone.
  - Keep or carefully justify prescribing dosages in excess of 90 MME/day.

1 These dosage recommendations are based on evidence that chronic pain opioid use is associated with increased risk of death, but lower intensity of opioid use is not associated with increased risk.
COMMON PITFALLS

• Lack of communication
• Unrealistic expectations
• Side effects
  • Constipation
  • Nausea/vomiting
  • Itching
  • Neurotoxicity
  • Hyperalgesia

IN SUMMARY

• Pain is common in the palliative patient
• Not all pain is the same or should be treated the same
• Know your patient’s history and what type of pain they are having
• Tailor your pain regimen to their specific needs
• There is no one right answer for pain management
• Keep taking great care of your patients!
QUESTIONS?

THANKS!