Managing Patient Pain in the Infusion Setting

Carolyn Ruffing, RN, BSN, MS, OCN
Wilmot Cancer Institute
University of Rochester Medical Center
Rochester

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Objectives

- Define and describe types of pain
- Discuss patient pain in the context of Infusion Nursing
- Present oncologic pain and it’s unique characteristics
- Outline pain assessment concepts
- Discuss interventions for pain management

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Types of Pain

Fielding, et. al. provide a summary for types of pain.

1. Neuropathic
   - Occurs with injury to the peripheral or central nervous system
   - Descriptors: burning, electric or shooting
2. Nociceptive

   Pain receptors are activated
   - Somatic pain: well localized. Some descriptors are sharp, throbbing. Arises from skin, bone, muscle.
   - Visceral pain: diffuse. Some descriptors are aching, cramping, caused by pressure on or damage to the organs

Pain is usually a complex mix of neuropathic and nociceptive.

In addition, pain is not only anatomical, especially in oncology patients.

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Patient Pain in the Outpatient/Infusion Setting

- Chronic pain
  - Preexisting pain, caused by chronic conditions
    - Lower back pain, joint pain, fibromyalgia, arthritis, etc.
- Acute pain
  - Injuries, pain related to their condition, such as a sickle cell crisis
- Pain caused by an infusion/injection
  - Injection site- PIV, IVAD, PICC, dialysis fistula
  - Infusion reaction-oxaliplatin, blood products, vesicants
  - Neupogen-injection and side effect of growth factor

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Oncologic Pain (Gallagher, et.al.)

- Chemotherapy-related pain
  - Bony pain, from steroid use
  - Avascular necrosis/osteonecrosis
  - Vertebral compression fractures
  - Chemotherapy induced peripheral neuropathy
- Hormonal Therapy Related Pain
  - Arthralgias
  - Dyspareunia
  - Gynecomastia
  - Myalgias
  - Osteoporotic compression fractures
- Radiation Related Pain
  - Chest wall syndrome
  - Cystitis
  - Enteritis and protitis
  - Fistula formation

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Oncologic Pain (Gallagher, et.al.)

- Radiation pain, continued
  - Lymphedema, Myelopathy
  - Osteoporosis; Osteoradionecrosis and fractures
  - Secondary malignancies
  - Peripheral neuropathies; Plexopathies; brachial, sacral
- Stem Cell Transplantation-Mediated Graft-Versus-Host Disease
  - Arthralgias/myalgias
  - Dyspareunia, vaginal pain
  - Eye pain, oral and jaw pain, trismus
  - Paresthesia's; scleroderma-like skin changes
- Surgical Pain
  - Lymphedema, phantom limb pain, post mastectomy/neck dissection/pelvic floor; etc

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Existential Pain

Current definitions will vary, depending on who you ask:

- Research done by Strang, et. al., was completed in order to assess a correlation between existential suffering and physical pain.
- Three groups were asked to define existential suffering.
    1. Hospital Chaplains define existential pain, exclusively as existential suffering, with an emphasis on existential guilt and unresolved religious questions.
    2. Palliative Care physicians focused on issues of meaning and death anxiety, which can amplify suffering from pain, reducing quality of life.
    3. Pain specialists emphasized the pain of living with never ending suffering, particularly related to chronic pain.

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Physical Pain and Existential Suffering: Is there a connection?

- Strang, et al., concludes that both Palliative practitioners and pain experts, see a connection between existential suffering and pain.
- These experts find great value in asking about existential issues.
- Although there are differing schools of thought about defining pain, suffering is generally viewed as a contributor to overall decreased quality of life.
- To summarize, caregivers note that existential and spiritual issues are part of the whole person and the concept of suffering, regardless of its definition, warrants attention and interventions, to provide relief for the sufferer.

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Assessment, the Foundation of Nursing

- Pain assessment has undergone several critical reviews and position changes in the last 20 years.
  - 2000, JACHO released standards for pain assessment, due to under assessing and under treatment.
  - "the 5th vital sign, was initiated
  - The opioid epidemic has regulators and clinicians reexamining pain treatment
  - The balance is to manage pain while not causing abuse, addiction
- This talk will focus on a comprehensive nursing assessment
- What is causing the pain?
  - Underlying cancer (85%)
  - Antineoplastic therapies (17%)
  - Comorbidities unrelated to cancer (9%)
- The pain exists but the subjective nature of pain and the time required for a comprehensive assessment, can be a challenge.

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Nursing Assessment

- Location- where is the pain, is there more than one site, point to site
- Intensity-classic 0-10 scale, Faces Scale, non verbal ques
- Quality-neuropathic, nociceptive (somatic or visceral); descriptors
- Timing-when does it occur, how long does it last
- Aggravating/alleviating factors-what makes it worse, what makes it better
- Psychosocial issues-stressors, perception of others, psychiatric history, addiction
- Impact of pain on functionality, wellbeing –social isolation, limiting life activities
- Meaning of the pain to the individual- acceptable or life altering

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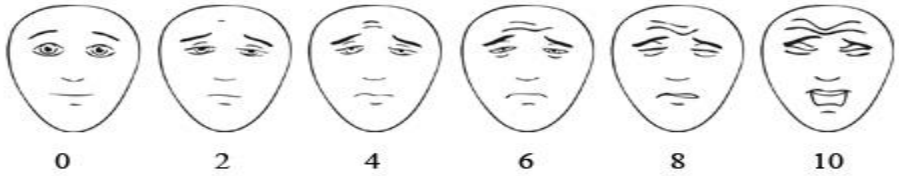
"It's our new method for determining who we should treat first. We take people in order of how loud they scream."

Assessment tools

- 0-10 scale; 0 meaning no pain, 10 being the worst pain ever
- Faces Pain Rating Scale



- Brief Pain Inventory
  - Pain rating and degree to which pain interferes with their lives
  - Two versions, a 9 and 17 question survey

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Assessment tools, continued

- Patient-Reported Outcomes Measurement Information System (PROMIS)
  - Survey that measures self-reported consequences of pain on relevant aspects of a patient's life.
- McGill Pain Questionnaire
  - Multidimensional measure of cancers pain and quantifies neurophysiologic and psychological domains of pain

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Barriers to effective Assessment

- Non verbal patients
  - Non verbal pain scales and physical ques can be utilized
  - *Agitation, irritability, restlessness, grimacing*
- Dementia, cognitive impairment
  - Patterns of behavior can be monitored, to interpret potential pain
  - *Changes in mood, perseverating, picking, pacing*
- Patients with a history of addiction
  - Complex issues with assessment and traditional pain scales
  - Assessment tools are available from the Journal Of the National Comprehensive Cancer Network (JNCCN)
  - Narcotic patient contract can be used
- Limitations to the pain scale
  - One dimension of pain assessment
  - Confusion on Patient's part as to what the numbers represent
  - Over estimation/underestimation
- TIME, TIME, TIME

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"You have to learn about thousands of diseases, but I only have to focus on fixing what's wrong with ME! Now which one of us do you think is the expert?"

Pain Interventions

- Recent review presented by Scarborough, et al., states that 64% of patients with advanced or metastatic cancer report pain
  - 59% receiving treatment report pain
  - Close to a third of patients report continued pain after treatment is complete
- Despite increased understanding and proactive clinical management, patient pain continues to be undermanaged
- Why? Per Scarborough, et al., factors include:
  - Societal attitudes towards pain management
  - System and regulatory barriers
  - Clinician barriers
  - Patient barriers
  - Racial and socioeconomic disparities in assessment and management of pain

Pain Interventions

- Pharmacologic
  - Narcotics
    - Dosing is based on Patient's reported response to current analgesic dosing.
    - Dose is determined by duration of effect, i.e. two to four hours.
    - When prn doses increase in frequency, a long acting narcotic can be added
    - For breakthrough pain, prescribe 10-20% of the long acting dose, as a prn.
    - Oxycontin & oxycodone; fentanyl & dilaudid or oxy.
    - Methadone
  - Non Narcotic medications
    - Taken alone or in combination with a narcotic, non-narcotic's tend to have less side effects and a variety of efficacies
    - Generalized pain
      - Ibuprofen, naproxen, tramadol
      - Tylenol
      - Anti depressents
      - Anxiolytics

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Pain Interventions

- Neuropathic Pain
  - Gabapentin
  - Pregabalin (Lyrica)
  - Sterioids
- Radiation-treatment for site specific pain
- Integrative Therapies
  - Mindfulness/Meditation
  - Medical Marijuana

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Pain Interventions

- Massage therapy, for relief of physical manifestations of stress.
- Reiki, or energy work, for alleviation of stress and feelings of powerlessness
- Acupuncture-for specific symptom control and overall physical pain relief
- Music Therapy-life review, purposefulness
- Chaplaincy-for spiritual guidance and referral

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Pain Interventions

- Radiation to specific areas of metastasis
- Meditation/distraction- allows Pt to change their focus related to the immediate circumstances
- Guided Imagery-use of apps or other tools to also provide a distraction
- Journaling- keeping a record of their pain and what works/what doesn't, history, successes, life review
- Social Work-an invaluable resource for talk therapy and referral to support services; psychiatry, support groups, caregiver support, financial services, housing, etc.

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Patient Education

- Three most frequently reported patient-related barriers to pain are
  - Poor knowledge and misconceptions about pain medication and side effects
  - Non-adherence to treatment regimes
  - Lack of communication between patients and providers
- Oldenmenger, et. al.'s systemic literature review, found that there is statistically significant data supporting the effectiveness of Patient Education.
- Nurses are on the front lines of education

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Education

- Assisting patients with realistic pain goals
- Side effect review and management
- Importance of adherence
- Dosing with narcotics, OTC's and non-opioids, integrative therapies
- Clarifying dependence, abuse and addition concepts
- Pain journaling

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Conclusion

- The nursing process is crucial in the partnership of pain management
- Assessment, communication and education are key components of the outpatient care environment
- Questions?

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