

Pain Management & Wounds

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Certification Review Course

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Objectives

The participant will:

- Define pain
- Identify the proper assessment for pain
- Classify various types of pain
- Describe pain associated with various wounds & pain management:
 - Pharmacological
 - Non-pharmacological

*“Pain has an element of blank;
It cannot recollect
When it began, or if there were
A day when it was not.
It has no future but itself,
Its infinite realms contain
Its past, enlightened to perceive
New periods of pain.”*

--Emily Dickinson
(1830–86). Complete Poems. 1924.

Part One: Life

<http://www.bartleby.com/113/1019.html>

Concept from Baranoski & Ayello, 2016

POP QUIZ



Which of the following statements most accurately defines pain. Pain is:

1. An objective finding based on prolonged elevation of blood pressure and pulse rate
2. A state of discomfort causing lack of sleep
3. A physical consequence of wound care
4. Whatever the patient says it is

Definitions

International Association for the Study of PAIN (IASP & American Pain Society (APS):

“an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.” (Krasner, 2012) “Often undertreated” (WHO, 2007)

“This definition emphasizes that pain is a complex experience that includes multiple dimensions.”
(American Pain Society, Monograph)

Definitions

Patient's perception:

- Based on their cultural, ethnic background, support system, past experience, medical history
- **It is pain because they say it is**

(American Pain Society, Monograph; Dallam et al., 2016; Krasner, 2012)

Definitions

Pain Management - National Advisory Council:

- “The elimination or control of pain, with a goal of restoring comfort, quality of life, and the capacity to function as well as possible given individual circumstances and the source of pain.” (Krasner, 2012)

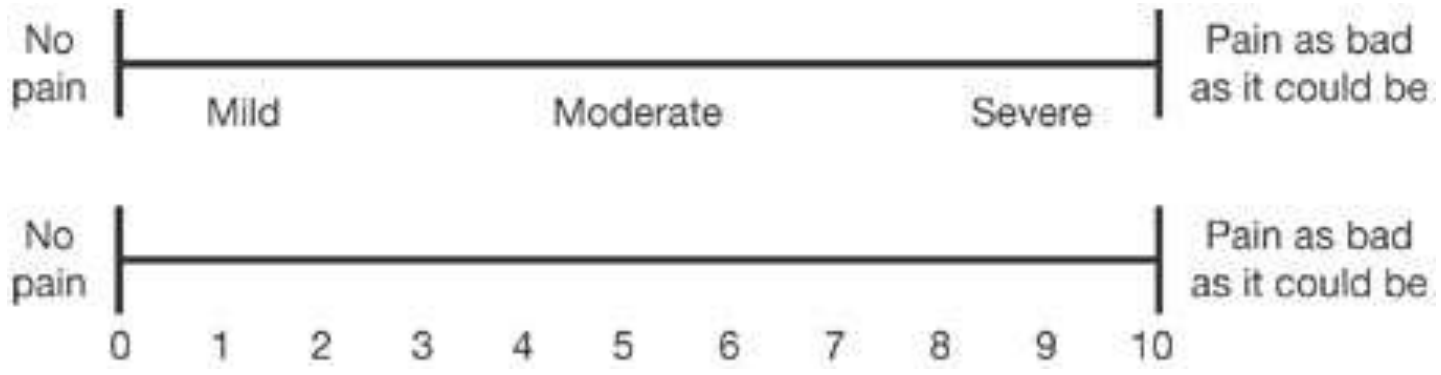
Treatment Approach

- Assess patient: History & physical exam
- Assess pain
- Identify pain type
- Assess patient's pain history
 - Baseline pain experiences
 - Pain relief measures
 - What made it better; what made it worse
 - Specific treatment: Pharmacological vs. nonpharmacological
- Educate: Patients, family, and health care team members
- **Document**

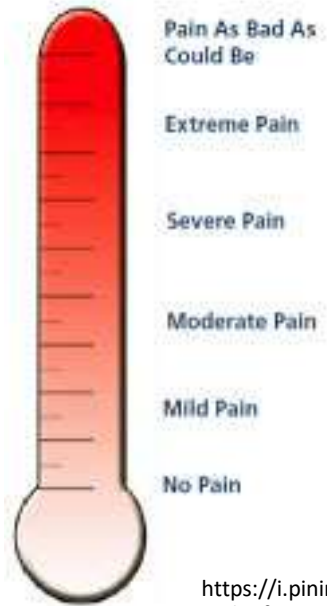
Assessment

- Tools
 - Pain scales
 - Self-Report
 - Generally for acute pain
 - Cognitively intact, verbal
 - Articulate pain
 - Observational
 - Cognitively impaired (if patient not reliable)
 - Cannot articulate pain
 - Nonverbal

Self-Report (Verbal Descriptors)



<http://www.nature.com/nrrheum/journal/v3/n11/images/ncprheum0646-i2.jpg>



Wong-Baker FACES™ Pain Rating Scale



https://www.google.com/search?q=ACES+pain+assessment+scale&tbm=isch&imgil=PcSwHUV2cPm5VM%253A%253BmEaodzGK9XP8SM%253Bhttps%25253A%25252F%25252Fpeerj.com%25252Farticles%25252F37%25252F&source=iu&pf=m&fir=PcSwHUV2cPm5VM%253A%252CmEaodzGK9XP8SM%252C_&usg=__U bGCvqJJOsN56cCHMnSw3CEY0IY%3D&biw=1536&bih=752&ved=0ahUKewj-9PaatafLahWGGD4KHfSBxgQyjcIPQ&ei=_LLZVv6GIlax-AH0g47AAQ#imgrc=PcSwHUV2cPm5VM%3A


<https://i.pinimg.com/originals/22/09/7a/22097ad81f2c48059040eef1b8b05c1d.jpg>

Observational Scales

- FLACC (2 months-7 years)
 - Face, Legs, Activity, Crying, Consolability
- PAINAD
 - Pain Assessment in Advanced Dementia



Using Pain Tools

- Be consistent
- Adjust as patient's situation changes
 - e.g., sedated  alert
- Older adults do better with verbal descriptor scales
- Consider impairments, e.g., visual, cognitive
- When the individual is able to respond reliably---
ALWAYS ask the patient

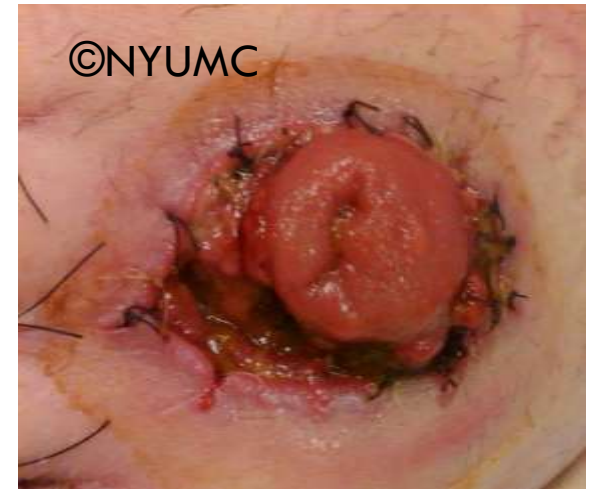


Types of Pain: From the Wound Perspective

- Classifications:
 - Based on wound type and underlying etiology
 - e.g., lower leg pain from claudication, ischemia, neuropathic
 - Before considering approach to pain management (pharmacologic &/or non-pharmacologic), type of pain and source needs to be determined

(Krasner, 2012)

Types of Pain



- Nociceptive (Acute) Pain
 - Indicates the degree of tissue injury
 - Typically localized, constant, and time limited
 - Characteristics: aching or throbbing
e.g., operative, procedural, & background
(prolonged until healing occurs)

Types of Pain

Nociceptive (Acute) Pain

- Treated with opioids (severe) or non-opioids
- Nociceptive (Acute) Pain: Issue



Types of Pain

- Neuropathic Pain
 - Damaged or malfunctioning nerve fibers
 - Characteristics: burning, “pins & needles/electric shock-like”
 - Origin:
 - Visceral-from organs or GI tract
 - » Diffuse, gnawing, cramping, poorly localized
 - » e.g., appendicitis, MI, gastric ulcers
 - Somatic-from bone, joints, muscles, skin, connective tissue
 - » Wound pain usually somatic

Types of Pain

- Neuropathic Pain
 - Chronic-Pathologic process not fully reversible; continuous
 - Characterized by Hyperalgesia and Allodynia:
 - Hyperalgesia-increased response to painful stimuli (Primary & Secondary)
 - Allodynia-pain from stimuli that does not normally provoke pain (e.g., wound cleansing/periwound care)
 - Treated with antiseizure & antidepressant

Types of Pain

- Mixed
- Nociceptive & Neuropathic Pain
 - Tissue injury resulting from malfunction triggers=inflammatory mediators
 - Example: Venous Ulcers
 - Treated with pharmacologic (polypharmacy) and non-pharmacologic (compression)

Dallam et al., 2016; Krasner, 2012; WHO, 2007



Venous stasis ulcer with Lipodermatosclerosis
<http://www.wocn.org/page/ImageLibrary>

Pain & Wound Types



Venous stasis ulcer with Lipodermatosclerosis
<http://www.wocn.org/page/ImageLibrary>

Pressure Injury Pain



- Intrinsic-pain may depend on stage:
 - Ischemic necrosis
 - Noxious chemicals from damaged tissue
 - Erosion of tissue with destruction of nerve terminals
 - Regeneration of nociceptive nerve terminals
 - Infection
 - Dressing changes including cleansing
 - Debridement
 - Extrinsic factors: pressure, shear, friction, moisture

Pressure Injury Pain

- Described as: Mild, moderate, severe, or nonexistent
- Treatment
 - Pharmacological-opioids, topical anesthetics (periwound)
 - Especially with dressing changes (allow patient to decide)
 - Non-pharmacological
 - Turning & positioning off pressure injury
 - Use proper repositioning techniques
 - Support surfaces
 - Debride (topical/local anesthetics)
 - Address infection
 - Use of appropriate dressing materials/topical treatments



Arterial Ulcer Pain

- Cause:

- Intermittent claudication-Exercise induced ischemia
- Rest-nocturnal pain
- Aggravated by leg elevation



NPUAP e-learning website

Arterial Ulcer Pain

- Described as: Burning, numbness, constant, intense
- Treatment
 - Pharmacological-Opioids
 - Especially with dressing changes
 - Non-pharmacological
 - Stop smoking
 - Exercise regimen
 - Address vascular risk factors
 - Address infection
 - Positioning of lower extremities
 - HBOT
 - Debride (topical/local anesthetics)
 - Use of appropriate dressing materials/topical treatments



NPUAP e-learning website

Venous Ulcer Pain



- Cause:

- Edema
- Inflammation of veins
- Inflammation of woody fibrosis—
lipodermatosclerosis
- Bacterial damage

- Described as:

- Mildly annoying pain, dull ache, sharp/deep muscle pain
- More intense at the end of day

Venous Ulcer Pain

– Treatment

- Pharmacological – opioid, antiseizure & antidepressant
 - Especially with dressing changes
- Non-pharmacological
 - Elevate lower extremities
 - Compression/stockings
 - Debride (topical/local anesthetics)
 - Address infection
 - Use of appropriate dressing materials/topical treatments

Venous stasis
ulcer with
Lipodermatoscl
erosis
<http://www.wocn.org/page/ImageLibrary>



Neuropathic Ulcer Pain



– Cause:

- Osteomyelitis
- Acute Charcot joint changes

– Described as:

- Burning, “pins & needles/electric shock-like,”
“falling asleep”

Neuropathic Pain



– Treatment

- Pharmacological – NSAIDs alone (control inflammation); if strictly pain – e.g., gabapentin before starting opioids; antidepressants, antiepileptics
 - Especially with dressing changes
- Non-pharmacological
 - Debride (loss of sensation but may have referred pain)
 - Address infection
 - HBOT (Wagner Grade III or higher)
 - Use of appropriate dressing materials/topical treatments
 - Patient education
 - TENS (PT)

Burn Pain

– Cause:

- Chemical
- Thermal
- Electrical
- Infection

Described as:

– Varies: depends on phase, type/degree of burn, procedures



Burns



– Treatment

- Pharmacological – Opioids, Nonsteroidal anti-inflammatory, anxiolytic agents
 - Especially with dressing changes
 - Address “itching” sensation (sets off a neurogenic inflammatory response with direct fibroplastic effect)
- Non-pharmacological
 - Surgical (e.g., debridement, graft, flaps)
 - Address infection
 - Use of appropriate dressing materials/topical treatments
 - Diversion, imagery, etc.
 - Psychosocial intervention

Pharmacological vs. Non-pharmacological Management

- Pharmacological
 - Administer regularly and in appropriate dose
 - Allow for patient dictated “time-outs”
 - Non-pharmacological
 - Employ in conjunction with pharmacological choices
- Always incorporate patient/family centered choices and educate

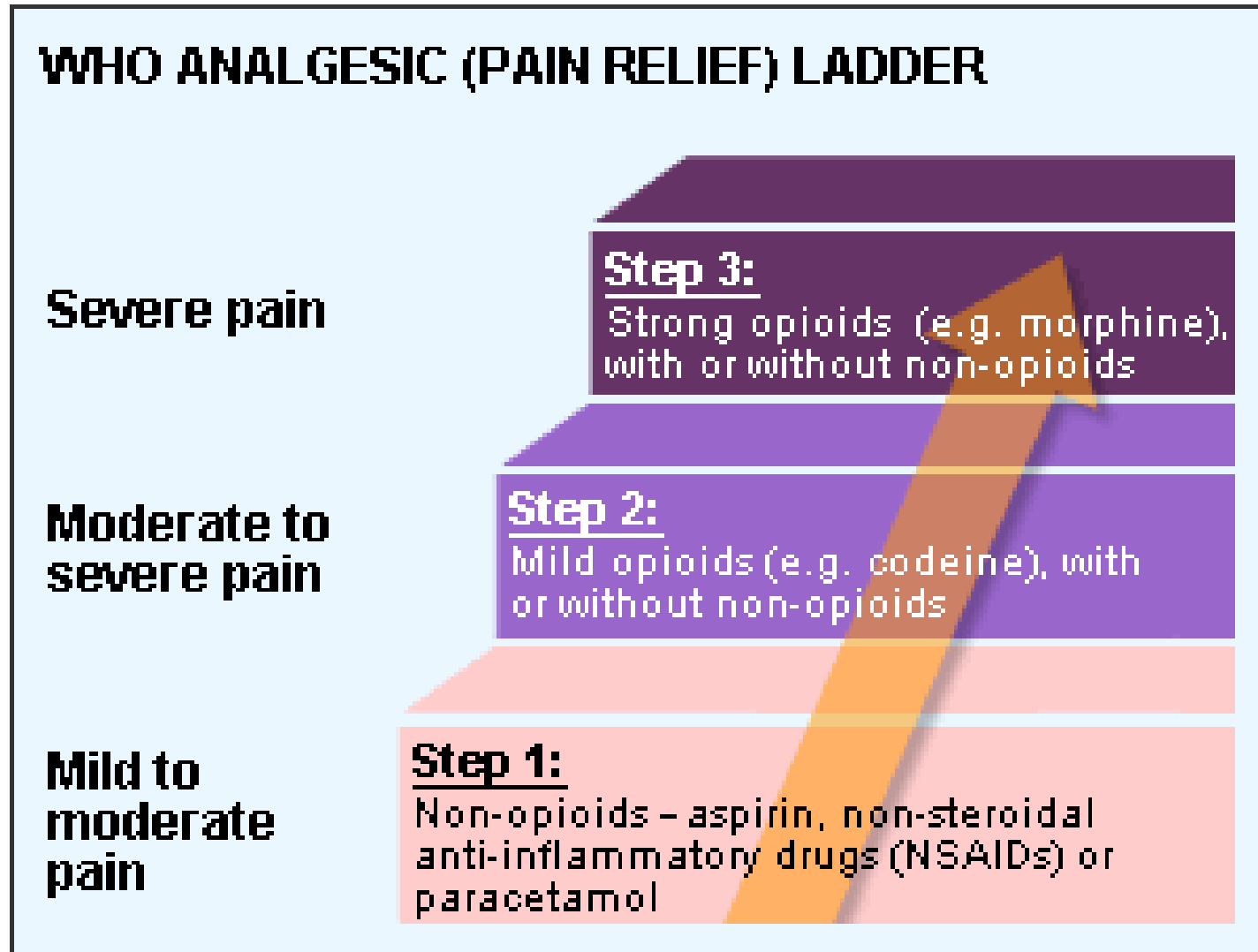
POP QUIZ



According to the WHO analgesic ladder, which medications should you use initially for mild pain relief?

1. None
2. Nonopioid with or without an adjuvant
3. Opioid with or without an adjuvant
4. Opioid

WHO Ladder of Pain



Opioid Analgesics Examples

Combination or Weak Opioids

- Acetaminophen with Codeine (Tylenol # 3)
- Hydrocodone with Acetaminophen (Vicodin)
- Oxycodone with Acetaminophen (Percocet)

Opioids: Morphine and Morphine-like Agents

- Morphine
- Dolophine
- Fentanyl Patch (**caution with fever/hypothermia changes distribution & absorption of meds**)
- Levorphanol
- Oxycodone

Analgesic Agents - Non-Opioids Examples

Adjuvant Agents

- Drug Classes:
 - Tricyclic Antidepressants
 - Amitriptyline
- Anticonvulsants
 - Gabapentin
 - Valproic Acid
- Systemic Local Anesthetics
 - Lidocaine
 - Mexiletene
- Topical Anesthetics
 - Capsaicin
 - EMLA
 - Lidocaine Gel, 1% 4%

NSAIDs & other Non-Opioids

- NSAIDs:
 - Ibuprofen
 - Celecoxib
 - Ketorolac
 - Rofecoxib
 - Diclofenac
- Other Non-Opioids:
 - Acetaminophen
 - ASA
 - Tramadol

Non-Pharmacological Examples

- Acupuncture
- Psychological
- Rehab therapy
- Conducive Environment
- Distraction
- Music
- OTC creams
- Herbals
- Imagery
- Therapeutic Touch/Reiki

POP QUIZ



Which of the following best describes a self-report type of pain scale?

1. FLACC
2. Wong-Baker FACES™
3. PAINAD
4. A decision tree for determining which medication to give a patient experiencing pain.

POP QUIZ



What is the best approach to treating pain from a mixed etiology-Nociceptive and Neuropathic pain?

1. An opioid with a non-pharmacologic option
2. Non-pharmacologic options only
3. Pharmacologic options with non-pharmacologic options
4. Pharmacologic options only

Objectives Revisited

The participant has:

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