"Opium teaches only one thing, which is; that aside from physical suffering... there is nothing real."

André Malraux...MAN'S FATE
Pain Management in the Older Adult
5TH

VITAL SIGN

0
NO HURT

1
HURTS LITTLE BIT

2
HURTS LITTLE MORE

3
HURTS EVEN MORE

4
HURTS WHOLE LOT

5
HURTS WORST
Pain is a common problem in the elderly

• But is it a normal change of aging?

• Myth or fact?
ACUTE PAIN

- RECENT ONSET
- DURATION MEASURED IN DAYS OR WEEKS UP TO 6 MONTHS
- LESSENS OVER TIME AS HEALING OCCURS
- BODY’S WAY OF ALERTING US THAT SOMETHING IS WRONG
- PERSON “LOOKS” LIKE SOMEONE IN PAIN
### CHRONIC PAIN

#### CHRONIC MALIGNANT
- 2\textsuperscript{ND} most common fear after fear of death
- Result of tumor involvement or nerve compression
- Result of treatment
  - Chemotherapy
  - Radiation
  - Surgery

#### CHRONIC BENIGN
- Measured in months and years
- Serves no purpose
- Difficult to treat r/t non-specific cause
- Never “benign”
OTHER CLASSIFICATIONS

LOCATION

Headache

ETIOLOGY

Gout
Breakthrough Pain

• Break through pain (BTP)
  – Flare of moderate to severe pain against the background of persistent pain.
Types of Breakthrough Pain

• Incident/activity related
  – Movement
  – Coughing/sneezing
  – touch

• Idiopathic/spontaneous

• End of dose failure
EFFECTS OF ACUTE PAIN

Neuroendocrine stress response causes the following:

- ↑ metabolic rate and cardiac output
- ↑ production of cortisol
- ↑ retention of fluids
- ↓ insulin response

This may result in...
Pulmonary effects

- Reluctance to move
- Reluctance to take deep breath
- ↑ in fluid retention

Has the potential to:

- Exacerbate preexisting conditions
- Cause pulmonary infections
Cardiovascular effects

- ↑ retention of fluids
- ↑ cardiac output
- ↑ metabolic rate

Has the potential to:

- Exacerbate pre-existing conditions
- Cause thromboembolism—DVT—PE
- Cause cardiovascular disease—MI
Neuroendocrine Effects

• Prolonged pain results in chronic illness
  ➢ Diabetes
  ➢ Cancer
  ➢ Degenerative diseases
  ➢ Depression

• the person no longer “looks” like someone in pain.
THE PAIN EXPERIENCE

- Fatigue
- Anxiety
- Drowsiness
- Shortness of breath
- Loss of appetite
- Insomnia
- Nausea
- Loss of enjoyment
- Functional losses
- Loss of Productivity
THE PAIN EXPERIENCE (cont)

- Loss of ability to participate in life
- Diminished learning capacity
- Ability to have intimacy
- Loss of Self esteem
- Loss of Mobility
THE MEANING OF PAIN

• Cause and Effect
• Punishment
• Part of life is to suffer
• Spells
• Imbalance in body mind and soul
• Imbalance with nature
Age-related Changes

- Decline in renal function has most impact
  - Can increase potential toxicity
  - Volume of drug distribution changes because of decrease in lean body weight
  - Decreased serum protein concentrations
  - Longer duration of action: alterations in drug distribution, metabolism and excretion
  - Increased effect of loading dose
• Drug absorption from GI remains the same
• Some effect from liver:
  – Hepatic metabolism of long acting drugs markedly declines- increasing toxicities
  – Why are long acting opioids utilized?
  – Less blood flow
Bottom Line

• Narrower range in the elderly between therapeutic and toxicity
• Increased sensitivity to drug effects
Older Adult Pain in America

Cognitively intact older adults
• Community Dwelling
  20% to 50% experience persistent pain
• Nursing Home Residents
  50% to 75% experience persistent pain

Cognitively impaired older adults
• Similar 40% to 70% Hartford “Try This” Video Series

OA’s Ages 85 and older received least analgesia

Fact

• Prevalence of pain *increases* with age

• 64-86% of older people suffer with chronic pain
  – (Tsai and Chang, 2004)
• Osteoarthritis most common cause
• Degenerative M/S processes
• CV issues
• Herpes Zoster and post-herpetic neuralgia
• Older adult may be reluctant to report
Presence of pain

- Acute: remains same across life span

- Persistent: increase in prevalence... cumulative effect
Pain in the Older Adult

Pain is modified by individual experiences,
concurrent medical conditions,
genetics, cultural beliefs, cognitive state,
expectations, emotions and memory,
making the approach to pain management unique for each individual.
Atypical Presentation

• Altered perception of pain
• Decreased pain threshold
• Decreased pain symptoms in certain conditions: MI, abd pain, cancer, post op
PAIN AND THE ELDERLY

American Geriatrics Society Recommendations for Choosing Medications

• Use the least invasive route to give medication.
• Start low and go slow.
• Nonsteroidal anti-inflammatory drugs should be used with caution due to side effects.
• Opioid analgesics are effective for relieving moderate to severe pain.
• Pharmacologic therapy is most effective when combined with nonpharmacologic therapy.
GOALS

- Pain Management
- Activity
- Sleep
- Performance of ADL’s
- Mobility
- Return to Usual Activities
- Relationships
- Communication
- Self esteem
- Spiritual peace
- Enjoyment of life
I. Nociceptive Pain: Normal processing of stimuli that damages normal tissues or has the potential to do so if prolonged; usually responsive to nonopioids and/or opioids.

A. Somatic Pain: Arises from bone, joint, muscle, skin, or connective tissue. It is usually aching or throbbing in quality and is well localized.

B. Visceral Pain: Arises from visceral organs, such as the GI tract and pancreas. This may be subdivided:
   1. Tumor involvement of the organ capsule that causes aching and fairly well-localized pain.
   2. Obstruction of hollow viscus, which causes intermittent cramping and poorly localized pain.

II. Neuropathic Pain: Abnormal processing of sensory input by the peripheral or central nervous system; treatment usually includes adjuvant analgesics.

A. Centrally Generated Pain
   1. Deafferentation pain. Injury to either the peripheral or central nervous system. Examples: Phantom pain may reflect injury to the peripheral nervous system; burning pain below the level of a spinal cord lesion reflects injury to the central nervous system.
   2. Sympathetically maintained pain. Associated with dysregulation of the autonomic nervous system. Examples: May include some of the pain associated with reflex sympathetic dystrophy/causalgia (complex regional pain syndrome, type I, type II).

B. Peripherally Generated Pain
   1. Painful polyneuropathies. Pain is felt along the distribution of many peripheral nerves. Examples: diabetic neuropathy, alcohol-nutritional neuropathy, and those associated with Guillain-Barré syndrome.
   2. Painful mononeuropathies. Usually associated with a known peripheral nerve injury, and pain is felt at least partly along the distribution of the damaged nerve. Examples: nerve root compression, nerve entrapment, trigeminal neuralgia.
MIXED CATEGORY PAIN

• Caused by a complex mixture of nociceptive and neuropathic factors.

• An initial nervous system dysfunction or injury may trigger the neural release of inflammatory mediators and subsequent neurogenic inflammation.

• Migraine headaches probably represent a mixture of neuropathic and nociceptive pain.

• Myofascial pain is probably secondary to nociceptive input from the muscles, but the abnormal muscle activity may be the result of neuropathic conditions.

Steven Richeimer, M.D.
• Click on the link to view the website then click the browser “Back Arrow” to return to the PowerPoint presentation
MECHANISM OF PAIN

BEWARE!
MISEREY IS MY MISSION!!

CPT. PAIN
Pain Activates the Descending Control System

which sends in...

THE ENDOGENOUS OPIOID SQUAD!!

ENDORPH-MAN!

ENKEPH-WOMAN!

SO YOU THINK YOU CAN BRING ME TO JUSTICE? HA!!

CPT. PAIN
THEY LEAP INTO ACTION!

ENDORPH-MAN

ENKEPH-WOMAN
I’LL SHOW YOU!
I HAVE FRIENDS!
LT. NOCICEPTIVE &
LT. NEUROPATHIC!
OUR HEROES ALSO HAVE ALLIES!!

OPIOID-MAN
Works in Central Nervous System

ADJUVENT GIRL
Works in Descending CNS

BIOFEEDBACK- GIRL
Works in Descending CNS

NSAID-GUY
Works in Peripheral Nervous System

JUST TO NAME A FEW...
CURSES!

JAIL

Ascending nociceptive fibers

Spinal local anesthetics (−)
Nonsteroidal anti-inflammatory agents (−)

Topical anesthetics (−)
Non-nociceptor

Ice, heat, rubbing (+)
Inflammation (−)

Epidural opioids (+)

“Gate” or inhibitory interneuronal fiber

Excitatory effect
Inhibitory effect

Descending control system

Massage (+)
Distraction (+)
Placebo (+)
Systemic opioids (+)
Depression (−)
Anxiety (+/−)