Management of Pain in the Elderly

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WHAT IS PAIN IN THE ELDERLY?

"Pain is whatever the experiencing person says it is,

existing whenever he/she says it does"

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

IASP

WHICH TYPE OF PAIN?

- **Nociceptive Pain**
  - **A**. Somatic Pain
  - **B**. Visceral Pain
- **Nociceptive Pain:** Normal processing of stimuli that damages normal tissues or has the potential to do so if prolonged
- **A.** Somatic Pain: arises from bone, joint, muscle, skin or connective tissue.
- **B.** Visceral Pain:
  - Visceral organs
  - Tumor involvement an organ Capsule
  - Obstruction of hollow viscous

- **Neuropathic Pain**
- **A**. Centrally Generated Pain
- **B**. Peripherally Generated Pain
- **Neuropathic Pain:** Abnormal processing of sensory input by the peripheral or central nervous system
- **A.** Centrally Generated Pain
  - Injury to either the peripheral or central nervous system e.g. phantom pain
  - Sympathetically maintained pain associated with dysregulation of the autonomic nervous system e.g. CRPS
- **B.** Peripherally Generated Pain
  - Pain that is felt along the distribution of many peripheral nerves e.g. diabetic neuropathy.
  - Pain that is usually associated with a known peripheral nerve injury.

Management of chronic pain due to cancer or persistent neuropathic pain is a challenge, especially in the growing population of elderly patients

(McQuay 2002; Foley 2003)

Fact or Fiction?

- Pain is expected with aging.

  Myth

  - Pain is not normal with aging. The presence of pain in the elderly necessitates aggressive assessment, diagnosis and management similar to younger individuals.

- Pain sensitivity and perception decrease with aging.

  Myth

  - Research is conflicting regarding age-associated changes in pain perception, sensitivity, and tolerance. Consequences of belief in this myth may mean needless suffering and under treatment of pain and underlying cause.

- If an elderly person does not complain of much pain, they must not be in pain

  Myth

  - Older individuals may not report pain for a variety of reasons. They may fear the meaning of pain, diagnostic workups, or pain treatments. They may think pain is normal.
- A person who appears to have no functional impairment and is occupied in activities of daily living must not have significant pain

  Myth

  - People have a variety of reactions to pain. Many individuals are stoic and refuse to "give in" to their pain. Over extended periods of time, the elderly may mask any outward signs of pain.

- Narcotic medications are inappropriate for the elderly with chronic non-malignant pain

  Myth

  - Opioid analgesics are often indicated in non-malignant pain.

- Potential side effects of opiod make them too dangerous to use in the elderly

  Myth

  - Narcotics may be used safely in the elderly. Although the elderly may be more sensitive to narcotics, this does not justify withholding narcotics and failing to relieve pain

SCREENING FOR PAIN

- Self-report is the 'gold standard'
- Pain rating scale

Additional Screening Markers (non-verbal, non-cognizant)

- Any change in condition
- Diagnosis of a chronic, painful disease
- History of chronic, unexpressed pain
- Taking medication for > 72 hours
- Distress related behaviours or facial grimaces
- Family/others indicate pain is present

Factors to consider in the assessment and management of pain in the elderly

Factors Influencing a Patient's Response to Pain:

- Past pain experience
- Cultural
- Gender
- Significance of pain
- Depression
- Fatigue
- Altered pain stimulus transmission
- Decrease in inflammatory response

(Ebersole, Hess, 1998)

Misconceptions about the elderly Pain Experience:

- They are not experts about their pain – health professionals are
- They should expect to have pain
- Pathology and test results determine the existence and intensity of pain
- Patients in pain should have observable signs
- Chronic pain in the elderly is not as serious a problem as acute pain
- If they want to report that they are in pain, they will use the term 'pain'

(Ebersole, Hess, 1998).

Barriers in assessing and treating pain in the elderly

- Under reporting of pain
- Choosing to suffer in silence
- Perception of pain by others
- Cognitive functioning
- Fear of losing self-control
- Fear of addiction
- Inability to swallow pills

ASSESSMENT TOOLS

- Visual Analogue Scale (VAS)
- Numeric Rating Scale (NRS)
- Verbal Scale
- Faces Scale
- Behavioural Scale

Mnemonics

(can be helpful to structure a baseline assessment of pain)

PQRST:

P – provoking or precipitating factors

Q – quality of pain (patient's description)

R – radiation of pain

S – severity of the pain (intensity 1-10)

T – timing (occasional v.s. constant)

- **PAINED**

P – place – location(s) of the pain

A – amount –refers to pain intensity

I – intensifiers- what makes the pain worse

N – nullifiers - what makes the pain better

E – effects of pain on = quality of life

D – descriptors – of the quality of pain (aching, burning, throbbing etc.)

- **OLD CART**

O – onset – when did the pain start?
L – location – where is your pain?
D – duration – persistent, periodic?
C – characteristics – what does it feel like?
A – aggravating factors - what makes the pain worse?
R – relieving factors – what makes the pain better?
T – treatment – what medications work for you ? - do you have adverse effects from your medications?

Consequences of Unrelieved Pain

- Alteration in quality of life
- Depression and hopelessness
- Muscle tension
- Delayed gastric and bowel function
- Decreased mobility
- Shallow breathing and cough suppression
- Pneumonia
- Skin breakdown

MANAGEMENT OF PAIN

- PHARMACOLOGICAL
- **STEP I:**
  - Acetaminophen (Paracetamol)
  - Non- steroidal anti-inflammatory (NSAIDS) – e.g. ibuprofen
  - COX-2 inhibitors – (Celecobix)

  (Remember PPI)

- PHARMACOLOGICAL, Cont..

- **STEP II:**

  - Weak opioids, Codeine, Oxyodone, Tramadol, Tapentadol (Nucynta, Palexia, Zyntap)

  (Remember antiemetic)

  +/- Adjuvant analgesics

- PHARMACOLOGICAL, Cont..

- **STEP III:**

  - Strong opioids, Morphine, Buprenorphine, Hydromorphone, Methadone, Fentanyl

Adverse effects of opioids

- **COMMON**
  - Constipation
  - Nausea
  - Sedation
  - Dry Mouth

LESS FREQUENT:

- Urinary Retention
- Pruritis
- Severe Myoclonus
- Confusion
- Agitation
- Respiratory Depression
- Allergy

Other factors to consider in selecting opioids

- Pain pattern
- Presence of renal, gastrointestinal or cognitive dysfunction
- Lifestyle
- Existing medications
- Specific type of pain (*Duloxetine* = Cymbalta is SNRI) for PDNeP

Optimizing Pain Relief for Opioids:

- Timing according to duration of action, peak effect, and half-life
- Dose titration
- Breakthrough pain is treated promptly
- Alternate routes of administration, place for the Patches
- Equianalgesic table is used when switching analgesics

(RNAO, 2007)

Equianalgesic Doses for Opioid Analgesics Used for the Treatment of Chronic Pain

Drug	Dose (mg) Equianalgesic to Morphine 10 mg IM[a]		Half-Life (hr)	Duration (hr)	Comment
	PO	IM			
Morphine	20-30[b]	10	2-3	2-4	Standard for comparison
Morphine CR	20-30	10	2-3	8-12	Various formulations are not bioequivalent
Morphine SR	20-30	10	2-3	24	
Oxycodone	20		2-3	3-4	
Oxycodone CR	20		2-3	8-12	
Hydromorphone	7.5	1.5	2-3	2-4	Potency may be greater (eg, IV hydromorphone:IV morphine = 3:1, rather than 6.7:1 during prolonged use)
Methadone	20	10	12-190	4-12	Although a 1:1 ratio with morphine was used in a single-dose study, there is a change with repeated administration, and a large dose reduction (75%-90%) is needed when switching to methadone
Oxymorphone	10 (rectal)	1	2-3	2-4	Available in rectal and injectable formulations
Levorphanol	4	2	12-15	4-6	
Fentanyl			7-12		Can be administered as a continuous IV or SubQ infusion; based on clinical experience, 100 mcg/hr is roughly equianalgesic to morphine 4 mg/hr
Fentanyl transdermal system			16-24	48-72	Based on clinical experience, 100 mcg/hr is roughly equianalgesic to morphine 4 mg/hr. A recent study indicates a ratio of oral morphine:transdermal fentanyl of 70:1 (the recommended converting ratio was 100:1).

CR = controlled-release; IM = intramuscular; IV = intravenous; PO = oral; SubQ = subcutaneously; SR = sustained-release.

[a] Studies to determine equianalgesic doses of opioids have used morphine by the IM route. The IM and IV routes are considered to be equivalent and IV is the most common route used in clinical practice.

[b] Although the PO:IM morphine ratio was 6:1 in a single-dose study, other observations indicate a ratio of 2-3:1 with repeated administration.

Adapted from reference 29.

MONITORING

"Evaluate the effectiveness of pain relief with analgesics at regular intervals and following a change in dose, route or timing of administration"

(RNAO, 2007, pg. 62)

ADJUVANT MEDICATION

- Tricyclic Antidepressants
  - Amitriptyline
  - Nortriptyline
  - Desipramine
- Anticonvulsants
  - Carbamazepine
  - Valproic Acid
  - Gabapentin
  - Lamotrigine
  - Topiramate
  - Pregabalin

ADJUVANT

- Alpha-2-agonists
  - Clonidine
- Benzodiazepines
  - Tizanidine
  - Clonazepam
- Muscle Relaxants
  - Baclofen
  - Cyclobenzaprine
- Topical Agents
  - Topical lidocaine
  - Topical capsaicin
  - Topical diclofenac/ Ibuprofen

Intervention

- Injection: DOTPs, Joints, Epidural
- RF
- Infusion: Phenytoin, Lignocaine, Mag.
- Intrathecal devices: Baclofen & Opiod pump

NON-PHARMACOLOGICAL

- Heat/Cold
- Massage
- TENS
- Acupuncture
- Biofeedback
- Distraction
- Relaxation, meditation, and imagery
- Hypnosis

Conclusion

- Chronic pain treatment in the elderly is multidimensional
- Includes noninvasive as well as invasive therapies
- Invasive therapies include pharmacological therapies with nonopioid, opioid, and adjuvant medications
- New routes of administration of drugs have opened up new treatment options for the treatment of chronic pain in the elderly

We all must die

But if I can save Him from days of

Torture, that is what I feel is my great and

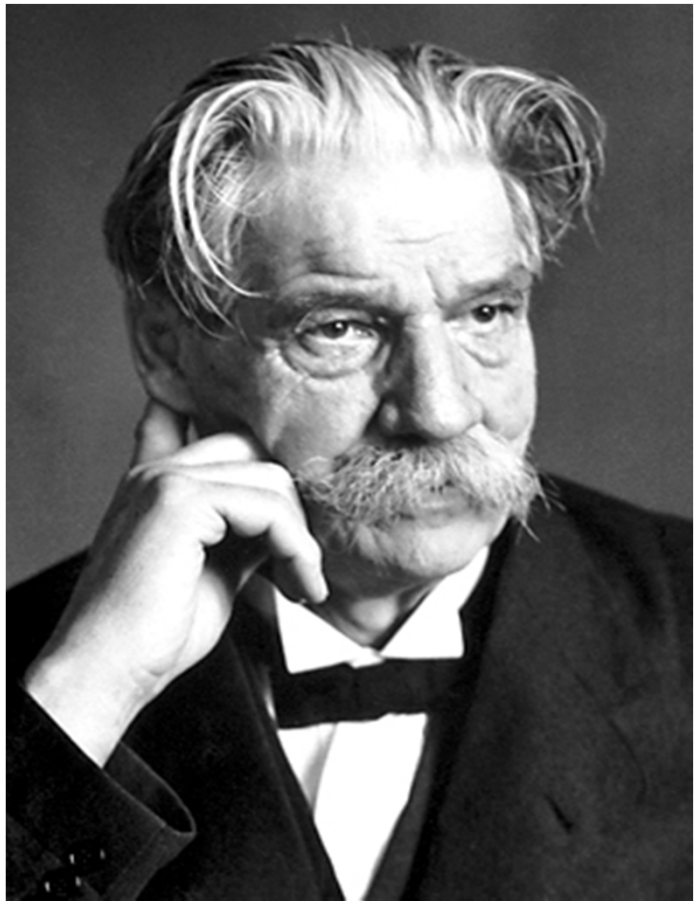
Ever new privilege

Pain is a more terrible lord of mankind

than

Even death himself

Albert Schweitzer



Thank You