Pain in Older Adults
Mechanisms & Management
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Special Thanks – Angela Formanik, SPT

Pain: Through the Life Course
Elaine Wethington – IAGG 2017

Understanding Long Term Consequences to Pain; Impact of Contextual Factors
Developmental Mechanisms: 
- Environment + Genetics
- Individual trajectories to pain later in life
- Age-related changes and their determinants


EPIDEMIOLOGY OF PAIN OVER LIFESPAN

- Increase in prevalence over age peak @ 60-80yrs (increases with age)
- But lifespan prevalence varies across body regions

Pain Assessment
- Chronic pain prevalence: IASP
- Chronic pain prevalence: IASP

Stephen Gibson – IAGG 2017, IASP
https://www.iasp-pain.org/GlobalYear/PaininOlderPersons
**Pain Mechanisms: Age Related Changes**

**Changes in Periphery**
- Reduction of peripheral afferents
- Reduction of myelination
- Inflammation causing pain
- Loss of serotonin and opiate receptors

**Change to Neuropathic Pain**
- Impairment of descending modulatory systems
- Decreased opiate receptors and efficiency of opiate receptors.
- Diabetes, Stroke, Post herpetic Neuralgia

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**Pain and Cognition**

Reduced pain inhibition is associated with reduced cognitive inhibition in healthy aging

- N = 23 (56-75 years old)
- Marouf R, Caron S, Lussier M, Bherer L, Piché M, Rainville P.

- Facial expressions less influenced by cognitive decline than pain ratings
- Facial expression needed in pain exam

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**Pain Measurement**

- For Persons with Cognitive Problems
  - Abbey Pain Scale
  - PAINAD
  - Wong-Baker FACES Scale
  - Wong-Baker FACES Pain Rating Scale

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**References and Resources**

- The American Academy of Pain Medicine
  - http://www.painmed.org/2014posters/abstract-211/

- https://faculty.washington.edu/chudler/sout2.html

- https://pbs.twimg.com/media/CgmUojCVEAAR1ok.jpg
Managing Pain in Older Adults

Pharmacological Management - IASP
- Falls and Fractures are higher with Opioid analgesia
- Comorbidities and diseases considered
- Acetaminophen for mild to moderate pain
- NSAIDs and Cox 2 used with caution

Non Pharmacological Management
Cory Reid, MS, PhD - AGS

Specific Recommendations

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<tr>
<th>Exercise</th>
<th>MM</th>
<th>NM</th>
<th>NP</th>
<th>MA</th>
<th>H2</th>
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<td>NM</td>
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AGS- American Geriatrics Society, AFS - American Pain Society, AOA - American Osteopathic Association, OAC - Orthopaedic Association of Canada, \( \text{H2} \) - Heartburn Management

Benefits most likely to accrue with:
- Multimodal approach
- 3 or more supervised sessions/wk
- Those with severe vs mild/moderate OA received same benefit

Pain: Exercise

Exercise and Movement-based Therapies in Geriatric Pain Management:
- All types of exercise positively impact
- Address patient barriers for compliance
- Fear
- Beliefs about need
- AGS consensus document states that
  - 80% of 1 RM for resistance training and
  - 60% of max heart rate/O2 uptake are safe for older adults with OA pain
- Must screen and progress appropriately

Luben et al, Benson E, Chronic Disease, November 2015;63(11):751-62

Take Home Messages
- Older adults are more vulnerable
- Exam needs to document impact of persistent pain
- Combine pharmacological and non-pharmacological
- Pain and cognition are linked
- Movement decreases Pain

How to keep fit like the Queen?
1. Moderation in all things.
2. Royal walkabouts
3. Be outdoors as much as possible.
4. Take the stairs.

http://news.prdev.gsu.edu/files/2016/09/ladies.jpg

http://www.macleans.ca/society/how-to-keep-fit-like-queen-elizabeth-ii/
References


