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Teaching Course 8

Medical management issues of dementia – Role of the neurologist (Level 2)

Management of pain in dementia

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MANAGEMENT OF PAIN IN DEMENTIA

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- Nothing to disclose

MANAGEMENT OF PAIN IN DEMENTIA topic overview

- prevalence
- characteristics
- diagnostic & management approaches
- key messages

DEMENTIA & PAIN

- very common conditions
- often under recognized
- often under assessed
- often not optimally/appropriately managed
- diagnostic challenge
- ageing very important risk factor
- impaired quality of life

Physiological changes, high comorbidity and drug interactions

PAIN RESULTS in..

- considerable discomfort

as well as being

- PHYSICAL
- EMOTIONAL
- SOCIAL BURDEN

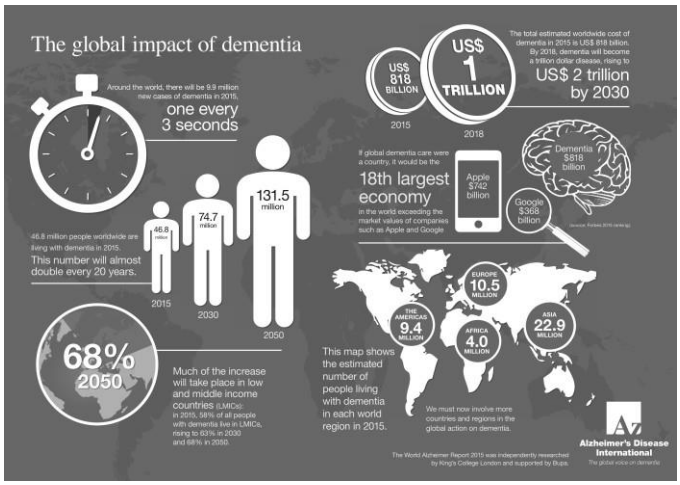
for a person with and without cognitive impairment

NEURODEGENERATIVE PROCESS

- may impact pain processing pathways in different ways depending on the type, extent and locations of lesions.

- Age related physiological changes + dementing illness + comorbid disease burden

complex situation



CHRONIC PAIN

- A persistent and recurrent pain that is perceived over a pre-defined period of time, commonly 3 or 6 months after onset or,
- according to a broader definition involving no arbitrarily fixed duration, pain that extends beyond the expected healing period

THE WORLWIDE PREVALENCE OF CHRONIC PAIN

- estimated to be between 25% and 50% in older people living in the community
- up to 83% in those living in nursing homes

The prevalence of chronic pain increases with age, reaching a plateau at around 70–75 years

Treede RD et al., Pain. 2015;156(6):1003–7.

International Pain Summit Of The International Association For The Study Of Pain. J Pain Palliat Care Pharmacother. 2011;25(1):29–31.

SOURCES OF PAIN IN OLDER PEOPLE

- Degenerative joint disease
- Spinal stenosis
- Fractures
- Pressure ulcers
- Neuropathic pain
- Urinary retention
- Post-stroke syndrome
- Improper positioning
- Fibromyalgia
- Cancer pain
- Contractures
- Postherpetic neuralgia
- Oral/dental sources
- Constipation

CONSEQUENCES OF UNRELIEVED PAIN

- Sleep disturbance
- Functional decline
- Depression, anxiety,
- Polypharmacy
- Malnutrition
- Prolonged hospital stay
- Challenging behaviors
- Increased healthcare utilization

PAIN RELIEF

- Pain relief may be difficult to achieve without unacceptable SE
- Assessment of pain reduction
- Assessment of potential adverse effects from analgesic treatment may be difficult

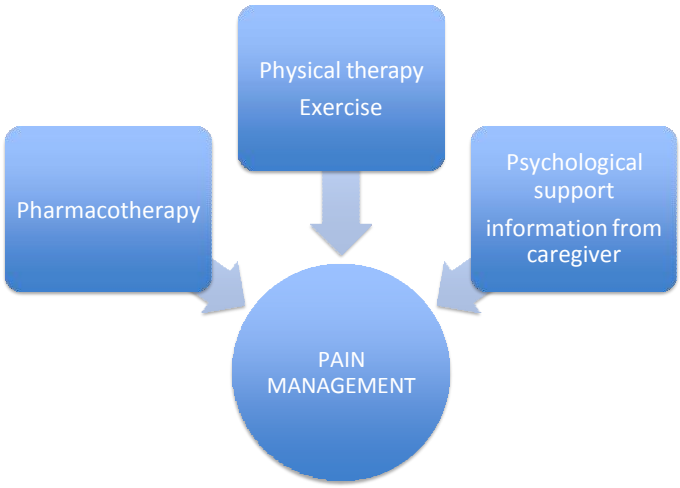
REPORT ON PAIN-PATIENT-PROFESSIONAL-CAREGIVER

- Cognitively impaired are less likely to report pain
- Cognitively impaired are no less likely to experience pain
- Professional caregivers underestimate pain severity
- Family members tend to overestimate pain

PAIN IN ADVANCED DEMENTIA

- self-report becomes impossible
- necessary to rely on pain behaviors and facial expressions
- Abrupt changes in behavior and function might be the best indicators of pain
  - Family members and frequent caregivers can aid in obtaining this information

MULTIMODAL APPROACH



IDENTIFY CAUSE(s) OF PAIN

Review person's:

- Current and past medical conditions and surgeries
- Current and previous medications
- Physical examination
- Relevant laboratory and diagnostic tests

PAIN ASSESSMENT

Assess for unmet needs:

- eg. hunger, thirst, elimination, emotional needs

Rule out other possible causes of pain:

- eg. infection, constipation, wound, undetected fractures, UTI

PHYSICAL EXAM

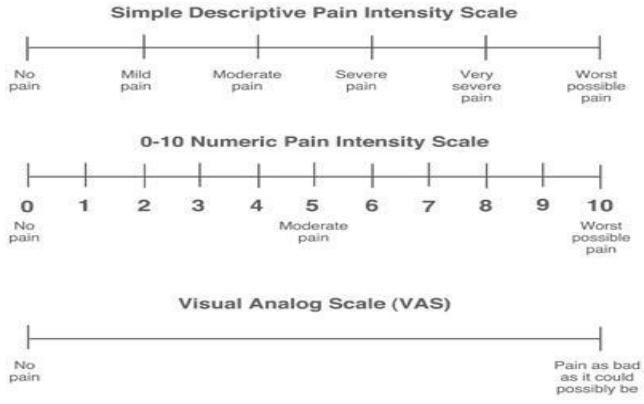
- Overall impression/appearance
- Facial expression
- Body position and movement
- Areas of redness, swelling, warmth
- Palpation, tenderness
- Focused assessment:

eg. chest pain

DISSCUSING CHARACTERISTICS OF PAIN AT BEDSIDE

- ask a variety of qualifiers:
- **"Are you aching?**
- **Hurting?**
- **Having discomfort?**" to identify the patient's preferred pain terminology.
- more than 80% of cognitively impaired persons are able to reliably complete a pain scale.
- give simple and clear explanations, and provide examples whenever possible.
- give the patient time to process the information and formulate a response.
- Possibly need to have instructions repeated a few times before understandingof the task.
- possibly need to wear glasses or hearing aids when completing the pain scale.

ONE-DIMENSIONAL PAIN SCALES



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NONVERBAL PAIN INDICATORS

- Facial expressions: grimacing
  - Less obvious: slight frown, rapid blinking, sad/frightened, any distortion
- Vocalizations: crying, moaning, groaning
  - Less obvious: grunting, chanting, calling out, noisy breathing, asking for help
- Body movements: guarding
  - Less obvious: rigid, tense posture, fidgeting, pacing, rocking, limping, resistance to moving

NONVERBAL PAIN INDICATORS

- Changes in interpersonal interactions

  Combative, disruptive, resisting care, decreased social interactions, withdrawn
- Changes in mental status

  Confusion, irritability, agitation, crying
- Changes in usual activity

  Refusing food/appetite change, increased wandering, change in sleep habits

ASSESSING PAIN: NONVERBAL MODEATE TO SEVERE DEMENTIA

- Presence of nonverbal pain behaviors?
  Assess at rest and with movement
- Timely, thorough physical exam
- Ensure basic comfort needs are being met (eg, hunger, toileting, loneliness, fear)
- Rule out other causative pathologies (eg, urinary retention, constipation, infection)
- Consider empiric analgesic trial

CONSIDERATION BEFORE PRESCRIPTION

For patients with dementia is essential:

- regular and structured medication reviews to assess the use,
- efficacy
- and side effects of analgesics

KNOWLEDGE/STUDIES on the topic

- Only 14 randomized controlled trials including people with dementia
- no large-scale observational safety studies focusing on people with dementia exist

Erdal A et al.Expert Opinion on Drug Safety,2019 18:6, 511-522,

ACETAMINOPHEN

- generally safe and well tolerated in people with dementia,
- evidence is sparse
- the risk of liver damage during long-term use has not been determined

Erdal A et al.Expert Opinion on Drug Safety,2019 18:6, 511-522

NONSTEROIDAL ANTI-INFLAMATORY DRUGS (NSAIDs)

- Use appears to be associated with increased risk of gastrointestinal and cardiovascular AE

some drugs within this class may also cause hepatic and renal damage.

- The safety and appropriateness of short-term NSAID therapy for pain in people with dementia have not been investigated

Erdal A et al.Expert Opinion on Drug Safety,2019 18:6, 511-522

TRENDS IN OVERALL USE OF ANALGETSICS in dementia

Denmark ;observational study

- the first to study opioid use in an entire elderly population, eliminating problems of selection bias.
- patients with dementia and nursing home residents were the most frequent users of opioids.
- clinical trials of analgesics have never included patients with dementia and nursing home residents, representing the frailest patient group

Jensen-Dahm C et al. Alzheimers Dement. 2015;11 (6):691–699.

OPIOID ANALGESICS

In Norway, a study combining data from four cohorts collected in 2000, 2004, 2009, and 2011 found that the use of opioid analgesics in nursing home patients increased from 11% in 2000 to 24% in 2011, with a substantial increase in the use of strong opioids from 1.9% to 17.9%

In the 2011 cohort, the same study found

- The OR for use of strong opioids in nursing home patients with dementia did not differ significantly compared to those without dementia

Sandvik R et al. Age Ageing. 2016;45(1):54–60

PAIN MEDICATION AND COGNITION

- Opiates - sedation, delirium
- NSAIDs - delirium
- Anticonvulsants - sedation, cognitive effects
- Tricyclics - anticholinergic effect and sedation

TREATMENT & ADVERSE EVENTS

- most studies that include people with advanced dementia rely on proxy-rated symptoms, the detection AE is more difficult
- Mild AE may not cause directly observable symptoms
- symptoms may be attributed to comorbid disease.
- BPSD in addition to cognitive symptoms may be difficult to distinguish from AE.
- reports are highly prone to observer bias.

Erdal A et al.Expert Opinion on Drug Safety,2019 18:6, 511-522,

CHRONIC PAIN IN OLDER PEOPLE with cognitive decline

1. Make a correct diagnosis of pain in patients with cognitive impairment
2. Use validated and standardized tools for pain assessment
3. Self-assessment pain scales are indicated for patients with mild to moderate cognitive impairment and observational scales for those unable to understand the scale instructions
4. Consider non-pharmacological interventions for the treatment of chronic pain

Cravello L et al, Pain Ther (2019) 8:53–65

CHRONIC PAIN IN OLDER PEOPLE with cognitive decline-2

- Avoid using inappropriate and potentially dangerous drugs to treat pain in frail people
- In choosing analgesic drugs, take into account clinical variables and comorbidity of elderly patient with cognitive decline
- According to severity of pain, start therapy with nonopioids and, if necessary, consider opioids later
- Make a gradual titration of pharmacological treatment for pain (start low, go slow)

Cravello L et al, Pain Ther (2019) 8:53–65

CHRONIC PAIN IN OLDER PEOPLE with cognitive decline-3

- Avoid using neuroleptics and benzodiazepines as pain killers
- Use antiepileptic drugs with care
- Consider SNRI as adjuvants and/or an alternative to NSAIDs and opioids

Cravello L et al, Pain Ther (2019) 8:53–65

KEY MESSAGES

- timely recognition of pain for people with dementia is important to ensure effective management
- reduce adverse effects of medication

FUTURE DIRECTIONS

- Further high- quality, longitudinal research is essential to examine the management of pain
- to identify the most effective pain management strategies for people with dementia throughout the progression of disease