



Assessing Pain in Advanced Dementia

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Pain in dementia



- Is it an issue?
- Why might it be difficult to manage pain in this group?
- Current research findings
- The use of behavioural pain and distress assessment tools

Pain in the elderly

- Prevalence between 49-83%
- Often under treated in this group
- Untreated pain can lead to agitation, depression, decreased socialisation and sleep disturbance





The challenges in managing pain in the elderly

- Patients don't (or are unable to) complain about their pain
- Expected consequence of ageing
- Polypharmacy
- Altered pharmacokinetics and pharmacodynamics



Pain in severe dementia

- Usually excluded from most studies of prevalence
- Studies in moderate dementia

- Hip fracture patient studies

Is this due to those with dementia having altered pain experience or is this due to inadequate management?



Evidence around altered pain experience

- Case reports of those with Alzheimer's having less pain
- Age related changes?
- Do the neuropathological changes of dementia affect pain pathways?



Effects of dementia on pain perception

Alzheimer's

- Lateral pathways largely unaffected
- Medial pathways may be, therefore cognitive/evaluative and affective/motivational components potentially affected

Vascular Dementia

- Infarcts could occur anywhere
- Pain from white matter lesions



However....

Cole, L.J. et al. Pain sensitivity and fMRI pain related brain activity in Alzheimer's disease, **Brain** 2006, 129, 2957-2965

- Activity in relation to pain in both medial and lateral pathways was preserved
- Increased activity in dorsolateral prefrontal cortex
- Early stage AD



Other issues

- Research regarding acute and chronic pain
- Placebo response
- Potential for painful complications as condition progresses



Assessing pain in mild to moderate dementia

- Often able to communicate pain
 - Parmalee et al. JAGS 1993, 41, 517-522
- Research regarding self report tools
 - Over 10 studies, different scales preferred, McGill and VDS often rate highly, completion less with reduced cognition
- AGS guidelines
 - Direct questioning
 - Use of Multidimensional pain instrument
 - Allow time
 - Change in activity/behaviour
 - Questions in present tense



Identifying pain in advanced dementia

Pain is what the person says it is.

If they can't communicate, do they have pain?

- Behavioural tools useful approach in those unable to communicate their needs
 - Can observe what is not expressed verbally
 - Behaviours are external markers of internal states



Behavioural tools

- PAINAD
- Abbey
- PACSLAC
- Doloplus
- Noppain
- ADD
- DS-DAT
- PADE
- CNPI



Difficulties with current behavioural scales

2 reviews have cast doubt on published scales

- No behaviours unique to pain
- Behaviours unique to the individual
- Do carers always pick up all behaviours?

(Herr et al. JPSM 2006 31 (2) 170-192 and Zwakhalen et al. BMC Geriatrics 2006, 6(3))



Difficulties in managing pain in those with dementia

- Potentially large problem
- Numerous assessment tools, but how useful are they in practice?
- Pain management difficulties due altered drug handling, swallowing and compliance issues

The assessment of good practice in pain management in severe dementia: a pilot study

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Study outline

- Using 2 different assessment tools (PAINAD and DisDAT) to identify pain in people with severe dementia
- Those identified as having pain, intervention is made and then scales repeated to see if improvement can be picked up

PAINAD

Pain Assessment IN Advanced Dementia PAINAD

	0	1	2	Score
Breathing Independent of vocalization	Normal	Occasional labored breathing. Short period of hyperventilation	Noisy labored breathing. Long period of hyperventilation. Cheyne-stokes respirations	
Negative Vocalization	None	Occasional moan or groan. Low level speech with a negative or disapproving quality	Repeated troubled calling out. Loud moaning or groaning. Crying	
Facial expression	Smiling, or inexpressive	Sad. Frightened. Frown	Facial grimacing	
Body Language	Relaxed	Tense. Distressed pacing. Fidgeting	Rigid. Fists clenched, Knees pulled up. Pulling or pushing away. Striking out	
Consolability	No need to console	Distracted or reassured by voice or touch	Unable to console, distract or reassure	
				TOTAL

DisDAT Chart

Information / instructions	Appearance when content		Appearance when distressed	
<p><i>Ring</i> the words that best describe the facial appearance</p>	<p>Passive Smile Grimace Frightened Other:</p>	<p>Laugh Frown Startled</p>	<p>Passive Smile Grimace Frightened Other:</p>	<p>Laugh Frown Startled</p>



Why DisDAT and PAINAD?

○ DisDAT

- No specific pain behaviours therefore better to look at distress
- Specific to the patient
- However not used in this population before

○ PAINAD

- Derived from DS-DAT
- Quick and simple to use
- Scores reduced when pain treated in a small sample

Interesting to compare approaches

Sites for research





Results

- 79 participants with severe dementia recruited from 4 nursing homes
- 16% were found to be in pain
- 33% scored significantly on the PAINAD scale but were not felt to be in pain
- 51% were not in pain and had low scores on the PAINAD scale
- Pain not associated with specific types of dementia, age, disease progression

Analysis of pain group after 1 month ~ Wilcoxon signed ranks

	First rest DisDAT-1 month rest DisDAT	First rest PAINAD -1 month rest PAINAD	First eat DisDAT -1 month eat DisDAT	First eat PAINAD -1 month eat PAINAD	First intervention DisDAT-1 month intervention DisDAT	First intervention PAINAD-1 month intervention PAINAD
Z score	-0.367	-0.530	-1.897	-0.990	-2.670	-2.653
Asymp Significance	0.714	0.596	0.058	0.322	0.008	0.008



Causes of pain



- Acute ~ DVT, toothache, cellulitis
- Chronic
 - Known diagnoses ~ arthritis, contractures
 - New diagnoses ~ contractures, weight loss leading to pressure problems

Management

- Specific therapy
- Regular analgesia
- Changes to nursing practice



Causes of false positive results

- Not understanding leading to
 - Fear or anxiety
 - Anger or frustration
- Distress from environment
 - Disturbed by other residents
 - Sadness at situation
- Other causes ~ low mood, boredom, hallucinations



Bill

- 83 years old, Vascular dementia diagnosed 4 years ago
- Very agitated at bath time
- “Always been difficult to manage”
- High scores using both scales
- Initially not clear what the cause of the agitation was



Bill

- Bathed whilst sitting on hard bath hoist, would be on a pressure relieving cushion at other times
- Showered on chair that could be padded with towels
- Agitation visibly reduced, scores lowered



Keith

- 80 years old, VD for 2 years
- Known arthritis of hips
- Fractured pelvis and NOF whilst in hospital
- Very poor short term memor
- Fear of falling
- Shouts, hyperventilates, groans during transfers, worst early morning
- Anxious about falling? Fear of anticipated pain? In pain?



Keith

- Probably all three!
- When calm can often say what's wrong
- On Tramadol QDS, medication not lasting?
- Switched to SR and much calmer
- Other therapies might help?




Conclusions from research

- The proportion of those identified to be in pain was less than expected
- PAINAD scores greater than 2 were seen in all those in pain, but also in a proportion who were not in pain
- Therefore behavioural pain tools may over estimate pain



Conclusions from research

- Both the pain and distress scale could assess the effectiveness of interventions for pain
- Management has been either changes to nursing practice or simple regular analgesia
- What is the role for behavioural pain assessment scales?
 - Regular assessment, at time of review?
 - When a change has been made to evaluate response



How do we assess and manage pain in advanced dementia?

- Knowing the individual well is vital
 - Behaviours of distress
 - Underlying medical conditions
- Evaluate the situation
- Are they in pain? Can they tell you?
- Non pharmacological option
- Trial of medication
- Evaluate the response



Thank you for listening
