Complex Pain Management in Older People

Andrew Severn
British Geriatrics Society 2015
Andrew.severn@mbht.nhs.uk
Learning objectives

• Celebrate what we have in common as professionals
• Consider the basis of the biopsychosocial model of pain and its application to the elderly
• Consider the evidence base for pain management in the elderly
• How do we understand pain reporting in the frail and cognitively impaired?
• Consider current therapy in the light of recent advances in pain management
Pain Medicine and Geriatrics: a common view?
Common ground
Everyone else is specialising….

Geriatric Medicine and Pain Medicine retain the centre ground as ‘generalists’

Advantages:

Wide range of case mix, in depth involvement with human stories, good relationship with families etc etc

Disadvantages:
The ‘cinderella syndrome’
Feeling that real improvement in service and resources is a temporary illusion
Left out of the discussion by the ugly sisters
Biopsychosocial model of chronic pain and disability (Waddell et al., 1993)
A holistic model of care as practised by specialists in the care of the elderly

Diagram:
- Social Environment
  - Illness Behaviour
    - Affective
      - Cognitive
        - Sensory
IMMPACT consensus on reporting outcomes for chronic pain (2005, 2008)

• Outcomes should be reported in terms of
  – Pain and
  – Physical functioning
  – Emotional functioning
  – Participant rating or improvement & satisfaction
  – Symptoms & adverse events
  – Participant disposition

• VAS – decrease of 2.0 to 2.7 required to be significant

• Not just a ‘medical’ improvement, but a psychosocial and functional one is required
Age bias in pain research
lessons from NSAID trials 1980s -1990s

- 83 RCT of NSAID 10000 patients
- 203 (2%) patients were over 65 years,
- 0 patients were over 80
- are NSAID safe in the elderly?
  - age is an independent risk factor!
  - we have learnt this the hard way
Care of the elderly: an evidence free zone?

*British Medical Journal*

2000;321:992-993

Unjustified exclusion of elderly people from studies submitted to research ethics committee for approval

Bayer A, Tadd W

225 applications to research ethics committee

![Pie chart showing the distribution of studies on older people.](image)
Are we now doing it better?

Buprenorphine transdermal to 2010

Age distribution of 975 patients investigated with transdermal buprenorphine: controlled trials

- Under 65: 60%
- 65-75: 37%
- Over 75: 3%

Are we now doing it better?
Anaesthesia and the ‘evidence problem’

Clinical Research published in the British Journal of Anaesthesia 2009
Evidence and observational studies

Transdermal Buprenorphine in OA: observational studies

- 3911, 43%
- 2801, 30%
- 2519, 27%

Age groups:
- <65
- 65-75
- >75
What Pain Medicine Specialists need to know about geriatrics

Immobility
  painful arthritis

Incontinence
  codeine and constipation

Intellectual impairment
  anticholinergics
  opioids
  ?NSAID
  depression

Instability
  anticonvulsants
  opioids
NSAID and cognitive impairment

• Is there a protective effect of NSAID on the development of dementia?

• Spurious??
  – Demented patients don’t get given NSAID

• In vitro inhibition of beta amyloid

• Possible protection of dementia in patients with APO e4 gene.
Principles of pain management in the elderly (or indeed in any age group)

- Recognise there may be a pain problem
- Attempt to provide a site/tissue diagnosis
- Assessment of severity
  - Assessment of response to treatment
- Assessment of biopsychosocial domain
  - Limit harm from treatment side effects
  - Manage other aspects eg depression
- Specific drugs
  - Non-opioids
    - paracetamol/NSAID
  - Opioids
    - Oral
    - Transdermal
- Specialist techniques
- Surgery
The problem of back pain

- Thoracic disc bulge and cord indentation
- Multilevel lumbar disc degeneration
- Loss of vertebral body height
The problem of back pain

- Thoracic disc bulge and cord indentation
- Multilevel lumbar disc degeneration
- Loss of vertebral body height
- Multiple brain infarcts
- In pain and miserable
- Is a specific diagnosis relevant?
Arthritis, pain, surgery and preop assessment

Is preoperative assessment as it is currently practised well suited to the sensible and humane choices required to make a decision in surgery?

What does ‘preop’ do?

Debate at the Age
Anaesthesia Congress 2011:
50% of delegates felt that unfair decisions could be made
Pain management and arthritis

• 87 year old man
• OA hip
• Surgery or pain management?
• No obvious CVS disease
• ‘a bit slow’
• No obvious clinical neurological deficit
• Geriatric assessment confirmed slow walking speed
  – Impression of being ‘frail’
• CT consistent with multi-infarct process
• Surgery or pain management?
principles of pain assessment

What do you do when verbal reporting is unreliable?

Use patient reporting to identify discomfort using a rating scale

Make a proxy assessment

Rating scales

Self assessment tools

86 % of cognitively impaired can describe pain location with reference to a diagram or model or their own body
Assessment of pain in cognitively impaired

? Self rating or objective signs in cognitive impairment?

8 studies comparing two types of rating:

McGuire 2013:
poor corelation between verbal reporting and observed behaviour

behavioural rating scores may underestimate suffering

observed pain behaviours alert staff to needs: with increased medication usage the behaviours are extinguished

McGuire J, Severn AM
Oxford Textbook of Anaesthesia for the elderly patient
Pain and facial expression in severe cognitive impairment

How valuable is it? Is it specific for pain?

Is it pain, or the discomfort of hunger, thirst, frustration, loneliness....?

Facial expressions during expected painful procedures do change if analgesia is being used....

Cultural determinants of facial expression

Disinhibition in frontal lobe dementia

Muted facial expression in other dementia cases

Copyright A Severn and G Forster
Analgesia and agitation

352 patient in 60 centre study

Stepwise increase in analgesia while keeping antipsychotic medication the same, based on assessment using a validated pain score for severe dementia

The reduction in agitated behaviour was as good as that obtained by risperidone

Husebo, Ballard et al
BMJ 343 (2011)
Analgesia and agitation

352 patient in 60 centre study

Stepwise increase in analgesia while keeping antipsychotic medication the same, based on assessment using a validated pain score for severe dementia

The reduction in agitated behaviour was as good as that obtained by risperidone
Analgesia and agitation

352 patient in 60 centre study

Stepwise increase in analgesia while keeping antipsychotic medication the same, based on assessment using a validated pain score for severe dementia.

The reduction in agitated behaviour was as good as that obtained by risperidone.
Analgesia and agitation

352 patient in 60 centre study

Stepwise increase in analgesia while keeping antipsychotic medication the same, based on assessment using a validated pain score for severe dementia.

The reduction in agitated behaviour was as good as that obtained by risperidone.

Agitated behaviour may be untreated pain.
Simple pain interventions for complex problems

- 82 year old amateur snooker player
- Playing at top club level
- Single needle intervention to cervical spine
- Playing
- Socialising
- Walking three miles a day

- Pain management is about transforming lives and enhancing the quality of those last years.
acknowledgments

Jo McGuire, Furness General Hospital, Barrow

The Giants of Geriatrics

Jed Rowe
Brian Payne