

Assessing & Managing Pain in Older Persons

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Prevalence: Pain in older people

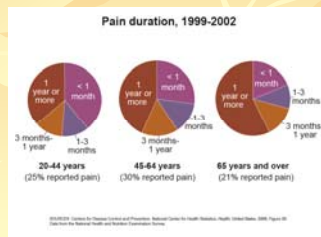
- 25-50% of community dwelling older people have significant pain
 - 1 in 5 take analgesics regularly
 - 63% of those take prescription pain meds for >6 months
- Pain is 45-80% of nursing home residents have substantial pain that is undertreated
 - Prevalence of analgesic use is 40-50%

American Geriatrics Society (2002). The management of persistent pain in older persons. *JAGS* 50:S205-S224.

Pain in Older Persons

- Osteoarthritis
 - 80% are > 65 years
- Myofascial Pain Syndrome
- Chronic Low Back Pain
- Fibromyalgia
- Peripheral Neuropathy
- Post Herpetic Neuralgia
- Post stroke syndrome

Weiner, 2007



Undertreatment...

- Long term care
 - 21,380 LTC residents
 - 49% with persistent pain
 - 25% NO med in prior month
 - < 50% standing orders
 - Acetaminophen @ <1300mg/day
 - 1/3 prescribed high dose NSAIDs as standing order
 - Won et al, *JAGS*, 2004;52
- Hospital
 - 411 cognitively intact
 - 50% mod-severe pain at rest; 83% getting OOB
 - 87% NO standing order for analgesic (all prn)
 - 91% mod-severe pain with PT
 - Morrison et al. *Pain*, 2003; 103.

Undertreatment

- Hospice
 - N=350,000, mean age 75.3
 - Severe pain at least once in >20%
 - Last pain intensity (with 2 or more pain scores) = 26% moderate to severe
 - Strassels et al. *J Pain Symp Mgt*. 2008;32.
- Emergency department
 - 1454 > 65 in ED with hip fracture
 - Mean pain intensity = 7 (severe)
 - 34% no objective assessment of pain
 - 40% NO analgesics ordered
 - Herr, Tittler, *J Emerg Nsg*, in press

THE PRIMARY REASON FOR UNDERTREATMENT IS FAILURE TO ASSESS AND RECOGNIZE PAIN

HERR, K. ASPI ANNUAL MEETING, 2008

Best Practices

**All pain management
is based on
individual response**

Screening & Assessment Challenges

- Multiple sources of pain & many co-morbid conditions
- Clinical manifestations are often complex & multi-factorial
- Pain is often under-reported by older people
- Dementia, sensory impairments and disability complicate assessment & management
 - The older, frailer and more cognitively impaired, the less likely to receive ANYTHING for pain
- Age-related physiologic changes

AGS Guideline: The management of persistent pain in older persons. *J Am Geriatr Soc.* 2002;50:S205-S224.

Reminders: Older People and Pain

- Self-report is the gold standard
 - Tests of cognition can not predict the ability to report pain
- People with chronic (persistent) pain often do not "look" in pain
 - Expressions are even more blunted in the cognitively impaired
- Hearing, vision & cognitive changes make assessment challenging
- We can't tell by simply looking
- Vital signs are not a reliable source of help

Screening, assessment & re-assessment...
the only way to know:

Screening for pain:

If you don't ask, most probably won't tell you

- Routinely for ALL
- Reliable valid rating scale
- Tracked over time
- Rating that requires assessment



Best Practices

**Self-report is
the "gold standard"**

Anything else is a guess

Is Self-report Reliable in Cognitively Impaired Adults?

- No scale of cognitive function (eg, MMSE) can validate the inability to self-report pain
- 83% can use at least one tool
 - Ferrell BA et al. *J Pain Symptom Manage.* 1995;10:591-598.
- Report current pain most accurately

Pain Scale Use Increases Pain Detection

- 305 elders in LTC
 - Grp 1 – “do you have pain”
 - Grp 2 – VAS, Faces, VDS
- Frequency of pain report
 - Grp 1 – 15%
 - Grp 2 – 30%
- Cognitively impaired
 - Grp 1 – 10%
 - Grp 2 – 16%

Kamel et al, 2001.

Which Rating Scale?

0-10 Numeric Rating Scale

Verbal Descriptor Scale

- | | |
|---|----------|
| 0 | None |
| 1 | Mild |
| 2 | Moderate |
| 3 | Severe |



Iowa Pain Thermometer

- Most intense imaginable
- Very severe pain
- Severe pain
- Moderate pain
- Mild pain
- Slight pain
- No pain

Bieri Faces Pain Scale—revised



Closs SJ et al. *J Pain Symptom Manage.* 2004;27(3):196-204.
 Hicks CL et al. *Pain.* 2001;93:173-183.
 Herr K et al. *Pain Med.* 2007;8(7):585-600.

Pain Assessment

is a process,
 not just a tool or pain rating

Assessment: Ask Detailed Questions About...

- | | |
|---|--|
| <ul style="list-style-type: none"> ■ Pain <ul style="list-style-type: none"> ■ Intensity rating ■ Pain language ■ Relief <ul style="list-style-type: none"> ■ Relief rating ■ Effects of pain on the person ■ The person | <ul style="list-style-type: none"> ■ Side effects ■ Physical findings ■ The plan ■ Response to treatment |
|---|--|



Types of Pain

- Nociceptive, neuropathic, mixed
- Acute, persistent, persistent with acute episodes
- Flare, breakthrough
- Mild, moderate, severe

Look at the Whole Person

- Targeted physical exam
 - Watch in action
 - s/s de-conditioning
 - Poor posture, gait abnormalities
 - Splinting, self-restriction
 - On opioids?
 - Check bowels
- Other symptoms
 - Depression, anxiety, sleeplessness, etc.
- Meaning and understanding
- Accommodate for vision, hearing, cognitive changes

Identify Specific GOAL for Relief

- Mutually established with patient & provider
 - Functional goal
 - Acceptable quality of life
 - Ability to engage in activities
 - SMART goals
 - Number on the scale
- Reassess to measure progress in reaching goal
- DOCUMENT progress

With Sensory Alterations or Language Difficulties

- Sensory alterations:
 - Larger print/pictures
 - Clear contrast between print and background colors
 - Non-glare paper, buff, yellow or orange
 - Patient's vision and/or hearing aids
- Speak clearly, directly to patient
- Minimize background noises
- Language difficulties
 - Use a professional translator whenever possible
 - Avoid medical jargon
 - "What will you tell ...about this when you get home?"

Pain Assessment in the Nonverbal Person

With dementia

- Behavioral problem?
- Change in behavior, activity, mood, appetite, function etc?
- Think "pain" before "psychosis"
- Use analgesics before antipsychotics

In acute care

- APP (assume pain present)
- Watch for pain behaviors

Barriers

- Patients unable to articulate pain
- Behaviors from other issues & pain can all look the same
- Much inherent affective distress in dementia
- Desensitization: "she's always like that"
- Reluctance to use opioids
- Psychotropics may mask symptoms

Hierarchy: Is Pain a Possibility?

1. Patient's self-report
 1. Show & tell, persist with rating scales
2. Search for a cause
 1. Conditions/diagnoses that usually cause pain
 2. Procedures that usually cause pain
 3. P.E. – consider the whole person – watch in action
3. Pain behaviors
 1. Select an appropriate behavioral assessment tool
 2. "She/he's a hitter, biter, screamer..."
4. Report from family or other close caregivers
 1. Is pain a possibility? Develop a plan to treat it.
5. Response to analgesic trial

Herr K et al. Pain Manage Nurs. 2006;7(2):44-52.
Hadjistavropoulos et al. Interdiscip Expert Consensus Statement. Clin J Pain. 2007

When they can't use a scale or tell you if they have pain...

Use behavioral observation & understand what it does/doesn't show

Detecting Discomfort in Dementia:
Focus on Behaviors.
www.trc.wisc.edu

Common Discomfort Behaviors

Facial expressions

- Frown, sad, frightened
- Grimacing, wincing
- Wrinkled forehead, furrowed brow
- Clenched teeth and jaw
- Rapid blinking
- Any distorted expression

Vocalizations

- Sighing, moaning, groaning
- Crying, whining
- Grunting, chanting, calling out, mumbling
- Asking for help
- Verbally abusive

Common Discomfort Behaviors (Cont.)

Body movements

- Rigid, tense, guarding, restricted, bracing
- Massaging body part/area
- Fidgeting
- Increased pacing, rocking
- Gait or mobility changes

Interpersonal interactions

- Aggressive, combative, resistant
- Decreased social interactions
- Disruptive, inappropriate
- Withdrawn

Common Discomfort Behaviors (Cont.)

Changes in patterns and routines

- Refusing food, appetite change
- Change in sleep, rest patterns
- Sudden cessation of normal routines
- Increased wandering

Mental status changes

- Crying, tears
- Increased confusion
- Agitated, restless
- Irritability, distress

Best Rated Tools

1. DS-DAT
2. NOPPAIN
3. ADD Protocol
 - Renamed Serial Trial Intervention
4. CNPI
5. Doloplus 2
6. PACSLAC
7. PAINAD

Herr K et al. State of the art review of tools for assessment of pain in nonverbal older adults, 2006. www.prc.coh.org

Additional Tools

- Certified Nurse Assistant Pain Assessment Tool (CPAT)
Cervo FA et al. *Am J Alzheimer's Dis Other Dement*. 2007;22:97-98.
- Elderly Pain Care Assessment 2 (EPCA-2)
Morello R et al. *Pain*. 2007;133(1-3):87-98.
- Mobilization-observation-behavior-intensity-dementia pain scale (MOBID)
Husebo BS et al. *J Pain Symptom Manage*. 2007;34:67-80.
- Discomfort Behavior Scale (DBS)
Stevenson KM et al. *Ris Nurs Health*. 2006;9(6):576-587.

PAINAD scale

- Facial expression (sad, frightened, etc.)
- Noisy breathing
- Body language
- Negative vocalization
- Consolability
- Each leveled on a 0-2 point scale for intensity

Warden, Hurley, Volicer(2003). Development & psychometric evaluation of the pain assessment in advanced dementia (PAINAD) scale. *J. Am Med Dir Assoc*: Jan/Feb 9-15.

Checklist of Nonverbal Pain Indicators

Indicator	With Movement	At Rest	Total Score
Verbal Expressions: Moans, groans, grunts, cries, sighs, gasps, says ouch			
Vocal Expressions: Swears, says ouch, that hurts, stop, that's enough			
Facial Expression: Winces, grimace, furrowed brow, tight lips/jaw			
Bracing: Clutches, holds side rails, bed, table, or area of pain			
Restlessness: Shifting position, hand movements, unable to keep still			
Rubbing: Touching, holding, rubbing or massaging affected area			
Felt, 2000	TOTAL:		

*Check each box if behavior observed at rest then with movement. Total each line (0-2)

Do the Tools "Assess"?

- Tools help to screen for pain, or to identify situations where there is a high index of suspicion
- Assessment is inferred by exam, history, and response to treatment
- A rating on a behavioral scale can NOT be stated as a pain rating

Clinical Wisdom

If in doubt, assume pain is present

Empiric Analgesic Trial (n=1)

- With doubt, analgesic trial may be diagnostic
- Treat behavioral symptom with pain med first
 - Fewer side effects than with psychotropics
 - Psychotropics may sedate & obscure pain indicators
 - If pain treatment is unsuccessful, proceed to psychotropics
- Acetaminophen 650 mg tid (titrate to 3-4 g/day)
 - When to add an opioid? Titration?
 - When to decide pain is not the etiology?

AGS, 2002; AMDA, 2003; Buffum et al, 2004; Chibnall et al, 2005; Kovac, 2002

Empirical Evidence

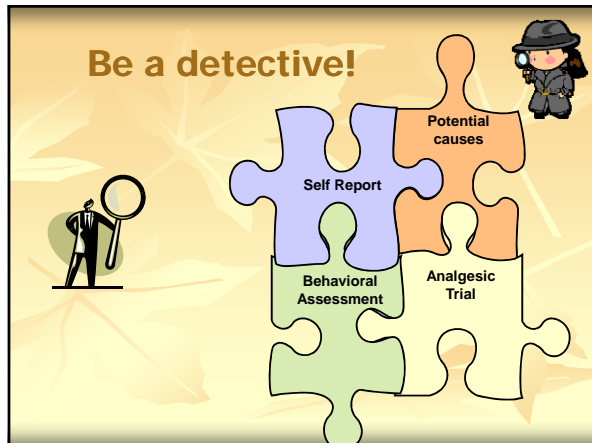
- 10 residents with "difficult" behaviors were treated with acetaminophen TID
- 5 of 10 showed ↓ in behavioral episodes
- Psychoactive meds ↓d in 6 people

Douzijian M et al. Ann Long Term Care. 1998;6:174-179.

Reassessment

- Measure progress by reassessing
 - Changes in behavior, function, mood, appetite etc.
 - Improvements on behavioral scales
 - LOOK at the person
 - Adjust the plan
 - Continue to screen

Be a detective!



Best Practices

**All pain management
is based on
individual response**

Managing Pain

HELP!

- Identify early
- Prevent pain
 - Schedule meds and non-drug interventions
- **Use multi-modal approaches**
 - Combine non-pharmacologic interventions with meds as appropriate for each individual
 - Know about the medications you prescribe
 - Regularly monitor the person for adverse effects
- Re-evaluate regularly
- Include patient/resident and family in planning

Use a multimodal approach

- **Basic needs**
 - Clean, dry, comfortable
 - Positioning
 - Hunger, thirst
 - Counseling, support, distraction
- Assistive devices
- Physical therapy
- Relaxation/imagery
- Music therapy
- Activities therapy
- Other non-pharmacological interventions
- Medications - treat the whole person and be specific for the pain!
 - Non-opioid
 - Opioid
 - Adjuvants for neuropathic pain
- Schedule for persistent pain – NOT PRN
- **Document, document, document**

Principles for using medications

- By the clock for persistent continuous pain - not PRN
- Based on individual problem
- By mouth whenever possible
- Adjusted to individual response
- Anticipate and manage side effects
 - prophylactic bowel management program for all taking opiates
 - anticipate and manage other sides at initiation of therapy

Aging and the body...

- ↑ Body fat
- ↓ Lean body mass
- ↓ Heart, kidney, liver function
- ↓ Muscle mass
- ↓ Gastric pH, ↓ motility, ↑ irritation
- ↓ serum protein, esp. with malnutrition

Therefore:

- Due to age-related altered pharmacokinetics,
 - Medications may have a prolonged therapeutic effect and/or increased toxicity
- Start low, go slow, **but GO!!**
- Plan closer and more frequent monitoring

Using Meds in Older People

- Select med. based on individual problem – beware long term NSAID use
 - Start at the lowest effective dose
 - Titrate slowly after steady state is reached
 - Short-acting analgesics first, extended release after titration
 - Choose short half-life & fewest side effects
 - Rotate med if not effective/not tolerated/discontinue ineffective
- Monitor & treat side effects; enhance function
- As feasible, use the oral route – avoid IMs
- For continuous pain, schedule the medications – not PRN
- With potential hepatic/renal dysfunction
 - Lower dose, longer intervals, slower titration

AGS Panel. J Am Geriatr Soc. 2002;50:S205-S224
AGS Panel. J Am Geriatr Soc. 2009;57:1331-1348

Non-opioids, Persistent Pain & Older Persons

- Acetaminophen: recommended as 1st line therapy, mild pain
 - Monitor acetaminophen doses
 - NO > 4 G/day with healthy liver, *less* for frail; avoid with liver impairment; some evidence of renal impairment with long term use
- NSAIDs - after acetaminophen trial, short term use
 - Select lowest effective dose for shortest time
 - Beware & monitor for side effects with long term use
 - Renal, GI toxicity, Platelet function
 - Avoid with renal impairment, may worsen HTN, CHF
 - ? Benefits of co-administration of proton pump inhibitor
 - NSAID risk for older adults
 - Drowsiness, confusion, dizziness
 - > risk for gastritis
 - Topical NSAIDs appear safe for short term use (< 4 weeks)

AGS Guidelines. Pain in older persons, JAGS. 2002, 2009.
Strassels et al. Clin Geriatr Med. 2008;24:275-298

Persistent Pain - Older Adults: Recommendations

AGS, 2009

Drug	Recommended starting dose	Comments
Acetaminophen	325mg -500mg q4h or 500-1000 mg q6h	↓ 50-75% with liver co-morbidity Maximum daily dose = 4 g
Celecoxib	100 mg daily	Gastroprotection if ASA used
Naproxen sodium	220 mg bid	May be less cardiotoxic
Ibuprofen	200 mg tid	May counteract ASA cardioprotection
Nabumetone	1 g daily	Long half life; little platelet effect
Choline magnesium trisalicylate	500-750 mg q8h	Dosed 1-2 times daily. Minimal anti-platelet effect
Salsalate	500-750 mg q12h	✓ salicylate levels w hepatic/renal compromise. Min. anti-platelet effect
Diclofenac sodium	50 mg bid: 75 mg E.R.	May have higher cardiovascular risk
Ketorolac	-	Not recommended. High risk of GI and renal toxicity – No long term use!

Opioids & Older Persons

- For moderate to severe pain
 - Start with a trial...evaluate efficacy & goals
- Opioid-naïve – start low, go slow
 - Titrate no more than daily for frail elderly
- Select opioid agents without toxic metabolites
 - Oxycodone, hydromorphone, fentanyl
 - Tramadol & methadone with caution
- Use opioid-sparing multi-modal approaches
- For renal impairment, try fentanyl (biliary excretion)

AGS Guidelines -pain in older persons, JAGS. 2002, 2009.
Strassels et al. Clin Geriatr Med. 2008;24:275-298

Recommended Opioids (AGS, 2009)

Drug	Recommended starting dose	Comments
Hydrocodone	2.5-5 mg q 4-6h	Dose limited by non-opioid in combination – dose varies by product
Oxycodone		
Immediate release	2.5-5 mg q4-6h	CR usually used after initial dose determined by IR or opioid rotation. May need q8h dosing or q24h
Controlled release	10 mg q12h	
Morphine		
Immediate release	2.5-10mg po q4h	SR scheduling is product specific. Usually started after initial dose determined by IR. Toxic metabolites may limit usefulness with high dose
Sustained release	15mg q8-24h	
Hydromorphone	1-2 mg po q3-4h	
Methadone		Use ONLY by experienced clinicians
Oxymorphone		Significant interactions with food & etoh
Immediate release	5 mg q6h	
Extended release	5mg q12h	
Transdermal fentanyl	12-25 mcg/h patch q72h	After dose determined by IR. Peak is 18-24h. Duration 48-96h

Constipation

Begin bowel regimen when an opioid is started!

- Incidence:
 - Expected effect of opioid therapy
 - Tolerance usually does not occur
- Treatment:
 - Prevention, prevention, prevention!!!
 - Goal: comfortable and complete bowel movement at least every other day while taking opioids
 - Dietary changes, exercise
 - **Stool softeners PLUS laxatives on a schedule**

Med. Options: Neuropathic Pain

- Select based on side effect profile
 - Antiepileptics
 - Gabapentin – good efficacy, monitor side effects
 - Pregabalin –often better tolerated
 - Safer profile than older options
 - Antiarrhythmics
 - Lidocaine patch 5%
 - SSNRIs – good efficacy, but watch drug interactions
 - Duloxetine, Venlafaxine
 - Tricyclic antidepressants - watch side effects
 - Nortriptyline, desipramine

AGS, 2002, 2009

Other Options (AGS, 2009)

- Dual mechanism drugs
 - Tramadol
 - Opioid & norepinephrine/serotonin reuptake inhibitor
 - Tapentadol
 - Opioid & norepinephrine reuptake inhibitor
- Topical analgesics
 - Lidocaine patch, capsaicin, corticosteroids, topical NSAIDs (Diclofenac, Aspirin), bisphosphonates

Patient Differences: Medications

- We are physiologically different and use medications differently
- Because of wide & variable individual differences...
 - The right amount of pain medication is the amount that works for each person
 - The right medication is the one that works for each person
 - 6-10 fold or > difference in doses needed
 - Different drugs work or don't work for different people

Don't Even Go Here!

- Propoxyphene, Meperidine, Codeine
- IM injections
- Anti-anxiety meds or sedatives for pain
 - Sedatives for sedation only – do not treat pain
- Ignoring pain reports
- Assume sleep = relief
- Placebos

AGS Panel. *J Amer Geriatric Soc.* 2009;57:1331-1346.

Key Points

- Appropriate assessment and management of pain is a patient right
- Pain is always subjective
- Physiologic and behavioral signs are not sensitive nor specific for pain
- Pain can exist when no physical cause is found
- Pain differs for each individual, even when stimulus is similar
- Unrelieved pain has significant physical and psychological consequences
- People with persistent pain may be more sensitive to pain than others.
- Cognitive impairment makes accurate assessment a challenge

What's the difference?

Polypharmacy

- Multiple meds from the same family at sub-therapeutic doses
- Medications not discontinued
 - Why was it originally prescribed?
 - Does the problem still exist/need treatment?
 - Have the goals of therapy been achieved?

Multi-modal therapy

- Each medication selected for a specific purpose
- Each medication has a different mechanism of action
- Non-pharmacologic interventions included
- Plan for monitoring & follow-up

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 - The right medication is the one that works for each person
 - 6-10 fold or > difference in doses needed
 - Different drugs work or don't work for different people

Best Practices: References

- American Pain Society Guidelines
 - Use of analgesics, 2008
 - Cancer pain, 2005
 - Arthritis pain, 2002
 - Sickle cell disease pain, 1999
 - Fibromyalgia, 2005
 - www.amspain.org
- American Geriatrics Society Guideline
 - Persistent pain in older people, *JAGS*, 2002
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 - www.trc.wisc.edu
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 - Core curriculum, 2010
 - Position statements
 - Certification review materials
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- American Society of Anesthesiologists
 - Practice Guidelines for Acute Pain Management in the Perioperative Setting. *Anesthesiology* 2004.
 - www.asahq.org

Additional references

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