Managing Pain in Older Persons: A Focus on Opioid Safety

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Content of this session is adapted from the American Society for Pain Management Nursing’s (ASPMN) Geriatric Pain Management Course

Disclosures

• Advisor, content expert and speaker
  • Genentech non-branded oncology series for case managers and oncology teams

• Advisory Board
  • Mallinckrodt Pharmaceuticals
  • Zogenix

Objectives

1. Select appropriate medications based on efficacy and side effects for older adults with pain.
2. Describe strategies to provide safe multi-modal therapy in older adults with pain.
3. Construct a pain management plan that includes scheduled reassessment of treatment efficacy, tolerability and evaluation of the risks of misuse, abuse and diversion.
Prevalence data vary with setting
- ~50% of community dwelling older adults and 85% of nursing home residents experience persistent pain
- Persistent pain affects more older Americans than heart disease, cancer and diabetes combined

Pain intensity ratings increase with age
Persistent pain is common in older persons and is associated with a number of adverse outcomes
Under-treatment persists in all settings

Consequences of pain in older persons

Pain Perception, Pain Processing and Aging
- The ability to perceive pain is preserved in aging, but there may be a slowed reaction time for pulling away from painful stimuli.
- Pain threshold may increase slightly with aging.
- Slightly higher thermal, pressure & electric stimuli may be needed to feel mild pain.
- May be more sensitive to presence of ischemic pain and less sensitive to visceral pain.
- Pain threshold may be much lower in elders with a history of pain


Cacchione Pzat: www.consultgerirn.org; Gagliese & Farrell, 2005; Gibson & Helme, 2001
Challenges in Older Persons

- Older people have…
  - Limited physiologic reserves and less effective compensatory mechanisms
  - Multiple comorbidities
  - Multiple medications with potential drug-drug interactions
  - Altered pharmacokinetics
  - Atypical presentations, signs and symptoms of pain and often do not exhibit acute pain behaviors

The primary reason for under-treatment is failure to assess and recognize pain…

Screen all patients routinely for pain

Pain Intensity Rating Scales

<table>
<thead>
<tr>
<th>0-10 Numeric Rating Scale</th>
<th>Iowa Pain Thermometer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Descriptor Scale</td>
<td>Most intense imaginable</td>
</tr>
<tr>
<td>0 None</td>
<td>Very severe pain</td>
</tr>
<tr>
<td>1 Mild</td>
<td>Severe pain</td>
</tr>
<tr>
<td>2 Moderate</td>
<td>Moderate pain</td>
</tr>
<tr>
<td>3 Severe</td>
<td>Mild pain</td>
</tr>
<tr>
<td></td>
<td>Slight pain</td>
</tr>
<tr>
<td></td>
<td>No pain</td>
</tr>
</tbody>
</table>

Faces Pain Scale-R

Pain Assessment:
Ask Detailed Questions About...

- Pain
- Pain Relief
- Effects of pain on the person
  - ADLs, Function, Psychosocial factors
- The person
  - Bio-psycho-social factors, support systems, risks, etoh, drugs, smoke, comorbidities, watch in action
- Response to treatment
- History & P/E, diagnostics/labs as needed
- Establish & periodically review written goals of care
- Physical exam and diagnostics as needed
- Screen for pain routinely


Functional Assessment

- To what extent does pain interfere with...
  - Getting up and down from the chair or toilet?
  - Going up and down steps, curbs, etc.?
  - Dressing, grooming or bathing yourself?
  - Your balance. Have you fallen, almost fallen, or do you feel unsteady?
  - Attending school, work, place of worship, social events?
- Do you require help to do things you once did independently?
- Do you avoid doing things you once did?

Hierarchy of Pain Assessment: Cognitively Impaired/Non-verbal Persons

1. Self report is the gold standard
   - Anything else is a guess
2. Diagnoses/procedures that usually cause pain
3. Observation/behavioral assessment tools
   - Vital signs changes least predictable
4. Surrogate reporting
5. Attempt an analgesic trial

Examples of Pain Assessment Tools

**VERBAL PATIENTS**
- McGill Pain Questionnaire
- Brief Pain Inventory
- Edmonton Symptom Assessment Tool-revised
- Pain Assessment & Documentation Tool
- Psychosocial Pain Assessment Form
- Functional Pain Scale

**NON-VERBAL PATIENTS**
- Checklist of Non-verbal Pain Indicators (CNPI)
- Pain Assessment in Advanced Dementia Scale (PAINAD)
- MOBID-2 Pain Scale
- Assessment of Discomfort in Dementia Protocol (ADD)

These tools and others available at: http://prc.coh.org

Risks for Falls in Older People

- Advanced age
- Recent falls
- Specific co-morbidities: Dementia, hip fracture, Type II diabetes, Parkinson’s disease, arthritis and depression
- Functional disability: use of assistive device
- Use of high risk meds
- Alteration in level of consciousness or cognitive impairment
- Gait, balance, visual impairment
- Urge urinary incontinence
- Physical restraint use
- Bare feet or inappropriate footwear
- Osteoporosis or anticoagulation

Tools to Screen for Fall Risk

- The Hendrich II Fall Risk Model
  - For acute care settings, using gender, mental & emotional status, symptoms of dizziness, and known categories of medications increasing risk
- Morse Fall Scale
- St. Thomas Assessment Tool in Falling Elderly Inpatients (STRATIFY)
Reassessment: Routinely scheduled

- The 5 A’s plus one
  - Analgesic efficacy
  - Adverse effects and tolerability
  - ADLs
  - Aberrant behaviors
  - Affect
    - Achieving goals of care
- Adherence to the plan
- Risks of misuse, abuse and diversion

Managing Pain in Older Persons: 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
- Counseling and support
- 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

Plans of Care...Medications

- An effective pharmacological approach to treating pain requires accurate and ongoing assessment
- Outcomes are maximized when clinicians are knowledgeable about pain medications and regularly monitor for adverse effects
- Comfort and functional goals must be mutually established and regularly evaluated

AGS, 2009
### Drug Rationale Recommendation

<table>
<thead>
<tr>
<th>Drug</th>
<th>Rationale</th>
<th>Recommendation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amitriptyline</td>
<td>Highly anticholinergic, sedating and causes orthostatic hypotension</td>
<td>Avoid</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>Increased sensitivity in older persons, ♦ metabolism</td>
<td>Avoid any type for treatment of insomnia, agitation or delirium</td>
</tr>
<tr>
<td>Non-Cox selective NSAIDs</td>
<td>♦ Risk of GI bleed/peptic ulcer disease</td>
<td>Avoid chronic use unless other tx are ineffective and patient can take gastroprotective agent</td>
</tr>
<tr>
<td>Meperidine</td>
<td>Better alternatives available</td>
<td>Avoid</td>
</tr>
<tr>
<td>Ketorolac</td>
<td>♦ Risk of GI bleed – see NSAIDs</td>
<td>Avoid</td>
</tr>
</tbody>
</table>

*A list also includes strength of evidence and recommendations

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### Selecting Medications

#### POLYPHARMACY
- The use of drug combinations that are irrational and less effective and/or safe than combinations with fewer or different agents
- Multiple agents from the same class, each at subtherapeutic doses

#### MULTIMODAL
- Rational combinations of two or more classes of medications targeting different pain mechanisms in peripheral or central nervous system to achieve optimum pain control. Results in lower doses of each drug with fewer adverse effects
- Example:
  - Opioid plus
  - A non-opioid plus
  - An adjuvant medication
  - All at therapeutic doses

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### Selecting Pain Medications 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

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Pasero & McCaffery, 2011

Medication Safety & Efficacy Concerns in Older People

- Pharmacodynamics - affect efficacy
- Pharmacokinetic changes - affect safety
- Absorption: gastric pH, motility, irritation
- Distribution: lean body mass, total body water, body fat, serum protein, especially with malnutrition
- Metabolism: hepatic blood flow
- Elimination: renal blood flow will affect excretion
- Risk side effects, toxicity, falls & deaths


Increasing Medication Safety

- Due to age-related altered pharmacokinetics (absorption, distribution, metabolism, elimination)…
  - Medications may have a prolonged therapeutic effect and/or increased toxicity
- THEREFORE:
  Use rational selection of medications
  Start low, go slow, but GO!!
  Eliminate medications that are ineffective
  Plan closer and more frequent monitoring

A Focus on Opioids: Achieving a Balance

Effective and timely pain management Prevent of misuse, abuse, and diversion
Definitions

- Addiction
  - Primary chronic disease of brain reward, motivation, memory and circuitry...
  - Inability to Abstain
  - Impaired control over Behavior
  - Craving
  - Diminished recognition of problems
  - Dysfunctional Emotional response

- Physical dependence
  - State of adaptation manifested by a drug-class specific withdrawal syndrome produced by abrupt cessation, rapid dose reduction, decreasing blood level or administration of an antagonist. Normal physiologic response to medication. Taper medication to manage. By itself, this is NOT addiction.

American Society of Addiction Medicine, 2011; APS, ASAM, AAPM, Consensus Statement, 2001

Risk Evaluation and Mitigation Strategies (REMS)

- Immediate release transmucosal fentanyl (TIRFs)
  - Required provider and patient education/counseling
  - Required provider and patient registry
  - Required pharmacy and distributor registry
  - Required medication guides

- Controlled-release/long acting opioids
  - Provider and patient education and counseling – voluntary participation
  - Required medication guides with each prescription


Persistent Pain:
Are Opioids the Right Choice?

- Are other interventions as effective?
- Are opioids appropriate for this condition & patient?
- Is the patient or others at home at risk to abuse opioids?
- Are opioids a part of a multi-modal plan?
- Balance the risk v. benefit
- Are there written individual goals?
- Treatment agreement?
- Initiate a trial with an exit plan
- Does the patient improve with opioids?
When Opioids are Indicated...

- Develop a comprehensive pain management plan with written, measurable therapeutic goals, opioids as a trial and an exit plan
- Screen for risk and structure treatment commensurate with risks
  - Higher risk = > structure of the plan
- Weigh risks and benefits
- Opioids are only one component of a multimodal plan

Adapted from: Portenoy RK. www.thelancet.com 377: June 25, 2011

Opioid Therapy:
Universal Precautions

1. Patient evaluation, diagnostics as needed
   - History of pain & substance abuse, P.E. & diagnosis
   - Psycho-social assessment
   - Risk evaluation for misuse/abuse
2. Risks/benefits of treatment, informed consent
3. Written treatment agreement with clear goals
4. Assessment of pain intensity & function pre and post intervention
5. Initiate an appropriate trial of medications with an exit strategy


Universal Precautions (cont’d)

7. Scheduled reassessment
   - Analgesia, ADLs, aberrant behavior, adverse effects, affect
   - Progress toward specific goals
   - Communicate and educate
8. Periodic review of diagnosis, including addictive disorders
9. Referral and/or consultation as needed
10. Accurate and complete documentation
11. Compliance with laws and regulations

Opioid Therapy & Persistent Pain: Risk Management Tools

*PMP: Prescription Drug Monitoring Programs; also known as PMP

Opioid Risk Screening: Selected Tools

Initial screening
- CAGE-AID
  - 4 questions about alcohol and drug use
- SOAPP-r (Screener & Opioid Assessment for People with Pain – revised)
  - 24 item written survey used to determine monitoring levels
  - Patient self report, clinician observation
- ORT (Opioid Risk Tool)
  - 5 areas of questioning re: past history, age, psychological distress
- DIRE Score
  - 4 areas of questioning diagnosis, intractability, risk and efficacy score

During therapy
- COMM (Current Opioid Misuse Measure)
  - 17 item self-assessment tool for patients currently taking opioids for persistent pain

Prescription Drug Monitoring Programs (PDMPs or PMPs)

- Statewide electronic databases
  - Collect prescribing & dispensing data on controlled substances dispensed in the state
  - Access open to only those authorized by state law – health care providers, pharmacists, regulatory bodies & law enforcement
- Can access the prescriptions YOUR patients are receiving in the State
  - Use at start of therapy & periodically
  - Be aware of errors in data entry
- Some State programs allow cross-communication among States
- Check before prescribing. Periodically and for aberrant behavior
  - Some State laws require checking the PMP with each prescription
### Stratify Risk: Opioids & Persistent Pain

<table>
<thead>
<tr>
<th>Low Risk</th>
<th>Moderate Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care</td>
<td>Primary Care with Specialist Support</td>
<td>Specialty Care</td>
</tr>
<tr>
<td>- No history of substance abuse or untreated psychopathology</td>
<td>- Past history of substance abuse (not prescription opioid abuse)</td>
<td>- Active substance abuse problem, active untreated psychopathology</td>
</tr>
<tr>
<td>- Minimal risk factors</td>
<td>- Significant risk factors such as current/past psych disorder</td>
<td>- History of opioid substance abuse</td>
</tr>
</tbody>
</table>


### Treatment Agreements: Common Elements

- Obtain informed consent to treat
- Partnership between patient and provider
  - A communication tool, not a “got you!” punitive tool
- Agreement – common elements:
  - Risks and benefits of therapy
  - Clear written goals of care
  - Expectations for participation in other therapies
  - Ongoing evaluation plan
  - Toxicology screening & random testing requirements


### Common Elements of Treatment Agreements (cont’d)

- Medication taken as prescribed
  - One prescriber, one pharmacy for pain meds
  - No escalation of dose (includes change in frequency of dosing), sharing, altering medications (chewing)
  - No early refills, on weekends/off hours
  - No illicit substances
  - Pill/patch counts as requested

Urine Drug Testing (UDT)

- Assesses current adherence to pharmacotherapy, tests for illicit substances
- Identifies potential drug-drug interactions
- Helps guide future treatment plans
- Frequency
  - At initiation of therapy
  - Ongoing & randomly for all patients
  - More frequently for higher risk/concerns
  - According to individual State requirements
- Must know what to order and how to interpret results

Urine Drug Testing (cont’d)

- Screening UDT – Immunoassay
  - High rate of false positive and false negatives results
  - Non-specific - does not identify individual medications
  - “Opioid screen” may only show morphine and morphine derivatives (e.g.: codeine, heroin), not other opioids.
  - Unexpected results require confirmatory testing
- Confirmatory UDT
  - Gas chromatography-mass spectrometry (GC-MS)
  - High performance liquid chromatography (HPLC)
  - Specific for each drug
- Caveat
  - Clinicians must know what to order and how to interpret results.
  - Unexpected results should generate conversation with the patient for possible explanations.
  - May result in closer monitoring or decision to continue treatment without opioids as part of the plan

Opioid Dosing

- Dose based on patient’s risks, medical condition, and response to previous opioids
- Opioid naïve or tolerant?
- Conservative initial dosing
- Careful monitoring during titration
- Start low, go slow!
- Adjust based on function, responses to therapy
- Anticipate and manage expected side effects

Opioids: Risks in Older Adults

Some risks can be minimized by drug/dose selection

- **Neurological:**
  - Sedation, dizziness, ataxia
- **Respiratory:**
  - Depression (lowers CO2 drive)
  - Caution w/ respiratory co-morbidity
  - Asthma
  - Sleep apnea
- **GI**
  - Nausea, vomiting at initiation of therapy
  - CONSTIPATION – prevent
- **GU**
  - Urinary retention
- **Behavioral**
  - Anxiety
  - Delirium
  - Depression
  - Cognitive impairment
  - Misuse, abuse and diversion

AGS, 2009; Arnstein, Clinical Coach for Effective Pain Management, 2010

Decreasing Risks with Opioids in Older Adults

- Add a non-opioid for dose-sparing effect
- Select agents without potentially toxic metabolites
  - e.g.: oxycodone, hydromorphone, fentanyl, oxymorphone
- Use controlled-release drugs only after short-acting dose requirement is established
- Titrate with a frequency matching the drug’s duration
- Taper when discontinuing if used for > 1 week

AGS, 2009; Arnstein, 2010

Sources Where User Obtained Drugs for Non-medical Use, 2010-2011

[Graph showing sources of drug use]

www.samhsa.gov/data/NSDUH/2k11Results/NSDUHresults2011.htm#1.1
Additional Concerns

- Safe use of medications
  - Adherence to medication regimens
  - Written schedule, calendar, timers, drug boxes etc.
  - Clear, concise instructions
- Safe storage
  - Secure storage with control of medications at all times
  - Do not leave meds on counter, at bedside
  - Locked boxes, safes
- Safe disposal
  - Take-back programs
  - Appropriate instruction for household disposal
- Prevention of misuse, abuse and diversion
  - The person and those around him/her

Patient & Family Education

- Risks of unrelieved pain
- All components of the pain treatment plan
- Safe environment for older persons
- Importance of taking medications as instructed
- What to report and to whom
- Risks of opioid therapy
  - Self and others
- Safe storage of medications
- Safe disposal of medications

Summary

- Unrelieved pain remains a significant problem for older persons.
- Ongoing comprehensive assessment and reassessment are essential components of treatment planning and implementation.
- Age-related physiologic changes require a “start low, go slow” approach to pharmacologic management.
- When opioids are indicated for persistent pain, implement universal precautions and risk reduction strategies that include safety for the older person, those around them, and the community.
- “Failing to treat pain brushes perilously close to intentionally inflicting it” (David Morris, The Culture of Pain)
Funding for this initiative was made possible (in part) by Providers’ Clinical Support System for Medication Assisted Treatment (1U79TI024697) from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

PCSSMAT is a collaborative effort led by American Academy of Addiction Psychiatry (AAAP) in partnership with: American Osteopathic Academy of Addiction Medicine (AOAAM), American Psychiatric Association (APA) and American Society of Addiction Medicine (ASAM).

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8/21/2014