Pain In Primary Care

Dr. Chris Frank
Dr. John Puxty
Deanna Abbott-McNeil, GiiC Consultant
Susanne Murphy, GiiC Consultant
Outline

- Definition of pain
- Prevalence and significance
- Causes
- Assessment and management strategies for Primary Care: “Identify, Prepare, Evaluate, Action”
What is Pain?

- “an unpleasant sensory and emotional experience” (AGS, 2002)
- “it is a complex phenomenon” that is “modified by individual memory, expectations and emotions”
- It is associated with actual or potential tissue damage and is not a psychopathology
Is Pain a Common Problem in the Elderly?

- Community-living elderly: 25-50%
- LTC: 45-80%
- Analgesic use: 24-50%
- Risk factor for inadequate pain management is **AGE, COGNITION**
Acute vs. Persistent Pain

**Acute Pain**
- Stops without treatment or responds to simple measures such as rest +/- analgesic use

**Persistent (or Chronic) Pain**
- “a painful experience that continues for a prolonged period of time that may or may not be associated with a recognizable disease process”. (AGS, 2002)
Consequences of Persistent Pain

- Left untreated persistent pain may result in:
  - Depression
  - Anxiety
  - Decreased socialization
  - Sleep disturbance
  - Impaired ambulation
  - Increased healthcare utilization and costs
  - Negatively impacting pre-existing conditions

(AGS, 2002)
Why Treating Pain is Important

- The presence of pain has a negative impact upon perceived health and participation in daily activities.
- A 25% reduction in pain can result in a 50% increase in function.
- The more intense pain is the more significant the impact upon performance of daily activities.
- Up to 40% of depressed elderly have pain.
What are Causes of Pain in the Older Patient?

- OA
- Post-herpetic neuralgia
- Diabetic neuropathy
- Cancer
- Osteoporosis
- Spinal stenosis
- ?Fibromyalgia
Organizing the Types of Pain

- Nociceptive pain
- Visceral pain
- Neuropathic pain
- Complex regional pain syndromes
Understanding Nociceptive Pain

Normal sensory function

Noxious stimulus → Nociceptors → Dorsal horn neuron → To brain → Pain sensation
Quick Examples...

- Burns
- Cuts/lacerations
- Liver metastases
- Skin ulcers

All have the potential to become neuropathic!
Visceral Pain

- Often poorly localized
- May present “atypically” – delirium, stupor, depression, incontinence
Peripheral & Central F/X

Sensory function after nerve injury with spontaneous firing along axon

No stimulus → Sodium channels → α--adrenoceptors → Pain sensation

Sensory function after nerve injury with spontaneous firing of dorsal horn neurons in spinal cord

No stimulus → Pain sensation
What are some Causes of Neuropathic Pain?

- **Metabolic**: diabetes, B12 deficiency
- **Ischemia**
- **Medications**: chemotherapy
- **Nerve compression**: cancer, sciatica
- **Infectious**: post-herpetic neuralgia
- **Traumatic**: direct nerve injury
Complex Regional Pain Syndromes

- continuous, intense pain out of proportion to the severity of the injury
- gets worse rather than better over time
- often affects one of the arms, legs, hands, or feet
- features include dramatic changes in the color and temperature of the skin over the affected limb or body part, accompanied by intense burning pain, skin sensitivity, sweating, and swelling
- sympathetic nervous system may play an important role in sustaining the pain
How do you know they’re in Pain?

- Ask them!!
- Ask their families
- Pain assessment tools
- Functional assessment
- Behaviours
- Depression
How can you assess Pain in the Cognitively Impaired?

**Behavioural observations**
- **Facial expressions**
  - Frown, sad, fear, grimace, closed eyes, blinking
- **Verbalizations**
  - Sighing, moaning, noisy breathing, “Help”
- **Interpersonal**
  - Resistive to care, aggressive, withdrawn
- **Body movements**
  - Restless, pacing, mobility
How can you assess Pain in the Cognitively Impaired?

Behavioural observations
- Change in patterns or routines
  - Refusing food, increase in rest periods, wandering
- Mental status changes
  - Crying, irritability
Assessment of Pain in Primary Care Algorithm

Consider Issue of Pain

- Does patient complain of pain?

  YES

  Assess for pain:
  - Type, site & possible causes.
  - Consider treating symptoms as appropriate from assessment.

  NO

  Is there an impact upon:
  - physical function
  - psycho-social function
  - or any other aspects of quality of life?

  YES

  comprehensive Pain Assessment

  History, physical exam, labs, mood, coping, social supports, cognitive functioning:
  "if individual has moderate to severe dementia, and/or is non-verbal, practitioner should attempt to assess pain via direct observation or history from caregivers and follow algorithm for assessing pain in cognitively impaired person. (see figure 2)."

  NO

  Does patient present with non-specific features of pain??

  YES

  Treat Causative Pathology

  - Consider Empirical Analgesic trials.
  - Consider referral to interdisciplinary team for further assessment & intervention (OT, PT, RN, SW, Psych., Dietician)

  NO

  Does patient’s behavior or gestures suggest pain?

  YES

  Treat Causative Pathology

  - Consider Empirical Analgesic trials.
  - Consider referral to interdisciplinary team for further assessment & intervention (OT, PT, RN, SW, Psych., Dietician)

  NO

  Pain unlikely. No further pain assessment required.
Assessment of Pain in Primary Care
Algorithm : Non-verbal Patient

- Presence of pain behavior during movement?
  - Consider:
    - Pre-medication prior to provocative movement.
    - Strategies to alter pain-inducing movement.
    - Providing reassurance for fear-related behavior.
  - If yes, continue to be vigilant for behavioral changes that indicate pain.
  - NO: Consider empirical analgesic trials.
  - NO: Consider referral to interdisciplinary team for further assessment & intervention (OT, PT, RN, SW, Psych., Dietician).

- Presence of non-movement specific behavior suggestive of pain?
  - NO: Consider diagnoses of potential causes (e.g., agitation, reclusiveness, insomnia, diminished appetite).
  - YES: Are basic comfort needs being met?
    - YES: Consider empirical analgesic trials.
    - NO: Consider referral to interdisciplinary team for further assessment & intervention (OT, PT, RN, SW, Psych., Dietician).

- Is there evidence of pathology that may be causative?
  - NO: Consider diagnoses of potential causes (e.g., infection, constipation).
  - YES: Treat causative pathology.
Identify, Prepare, Evaluate and Action Framework

1. Identify = Casefinding / screening for pain in patients/clients in your practice with

2. Prepare = Self-report and directed enquiry to engage individual and elicit info re: impact and possible causes, goals of treatment (history of pain, pain diary)

3. Evaluate = Structured targeted assessment to determine probable cause of pain

4. Action = Initial management in primary care, interprofessional care plan (referral for specialty evaluation and management), follow-up
Screening of Pain in Primary Care

Pain may present through:
- Geriatric Periodic Health Exam - Self report form or clinician assessment
- Episodic visit or encounter
- As a problem related to a specific event or health issue (e.g. post-fall, post herpetic neuralgia)
Determining if Pain is Present

Clinicians should use a variety of terms when asking about pain in the older patient (e.g. aching, soreness, heaviness, it hurts, etc.)

- A change in function or behaviour may be an indicator of pain in seniors, especially if they have dementia

- Signs of pain in patients with dementia may include:
  - Facial expressions
  - Verbalization/vocalizations
  - Body movements
  - Changes in interpersonal interactions
  - Changes in activity
  - Mental status changes
Patient Self-Report Tools

Geriatric Periodic Health Exam – Patient Self-Report
Pain History Questionnaire
Pain Diary
Evaluation of Pain in Primary Care

1. **Take a good history of the pain**
   - The **PQRST** approach may be useful.
   - Involve the family/caregivers when appropriate.

2. **Use the appropriate tools**
   - Colour Visual Analogue Scale
   - Present Pain Intensity / Verbal Descriptor Scale
   - Facial Grimace Scale
   - Numeric Rating Scale
PQRST

**Provoking** - clarify provoking, precipitating and relieving factors

**Quality** - get the patient's description of the nature of the pain (e.g. burning, stabbing, shooting, etc.)

**Radiation** - where is the location of each type of pain and does it radiate?

**Severity** - use the appropriate tool, even with dementia patients

**Timing** - how long has it gone on for?; how long does it last?; how often does it happen?; has it changed?; include whatever timing questions are appropriate
1. Colour Visual Analogue Scale (VAS)

Description:

- It is a continuum scale that provides a visual alternative to the Numeric Rating Scale (NRS)

- It should be explained to patients as follows: the light coloured area at the bottom is no pain at all and the dark red colour at the top is the worst pain imaginable

- Ask the patient to point to the part of the scale that best describes their pain at rest “R” and with activity “A”

- Document the score
The Tools (Cont’d)

2. Present Pain Intensity (PPI)/Verbal Descriptor Scale (VDS)

Description:
May be used with patients who find the NRS difficult to use
- It is a six-point fixed interval scale that measures pain intensity
- The patient should be asked to listen to the anchor words and indicate which word best describes their pain, at rest “R” and with activity “A.”
- Document the score corresponding to the descriptor

3. Facial Grimace Scale (FGS)

Description:

- The scale has been developed to assess pain in adults who are cognitively impaired and are unable to communicate using the other tools.
- Caregivers or clinicians can rate pain based on patient’s facial expression.
- Clients/patients who can understand this scale can use it also.

Adapted with permission from Grey Bruce Palliative Care/Hospice Association Manual Guidelines for Developing a Pain Management Program. 2000; 2nd edition
4. Numeric Rating Scale (NRS)
Description:

- The scale should be explained to patients as follows:
  - 0 = NO PAIN AT ALL
  - 10 = WORST PAIN IMAGINABLE
- “What number is your pain (when you are still) (when you move)?”
- Ask the patient to assign a number to their pain both at rest “R” and with activity “A”
- Document the score
Assessing Persistent Pain

Other Factors to consider:

- Impact on function (e.g. mobility, sleep, social interactions, leisure/recreation, dressing/bathing/meal preparation)
- Clarify what the patient has tried in the past. What has or has not been helpful?
- Consider the psycho-social impact of pain
- Consider the possibility of depression and consider using a screening tool such as the GDS or BASDEC. Pain can cause depression and depression can worsen pain!
- Explore the meaning of the pain for the patient there are socio-cultural influences to pain that should not be ignored
- Assess the emotional impact of pain (e.g. fear, frustration, anxiety, anger, losses, behavioural changes)
- Identify potential barriers to treatment (e.g. previous experiences with pain, beliefs about pain or medications)
Documentation of Pain

- Possible cause and/or mechanism of pain
- Which assessment tool is used and the score
- Psychological/spiritual or medical co-morbidities
- Factors contributing to pain and relevant to treatment
- Non-pharmacological and Pharmacological treatment plans
- Possible role for rehabilitation and referral to other disciplines and/or practitioners
Action Framework For Identified Causes / Modifiable Risk Factors

Identify  Prepare  Evaluate  Action

1. Initial management – primary care
2. Secondary management - specialists
Treating Persistent Pain in Primary Care
WHO Pain Ladder

Basic principles for treating persistent pain:

- BY THE MOUTH
- BY THE CLOCK
- BY THE LADDER
Following some more Principles

- “Start low & go slow”
- Take a careful drug history
- Beware of interactions
- Know how aging affects the medication
- Regularly review the treatment
- Remember: **Drugs may cause illness!**
Managing Nociceptive Pain

Use the ladder:
- Acetaminophen
- NSAID’s
- ASA
- Codeine
Is plain Tylenol helpful?

- Use for non-inflammatory pain
- Use q4h for chronic pain
- Caution with:
  - EtOH
  - Liver disease
  - ?Coumadin
Codeine: The #1 drug !!!

- 1/12th as potent as morphine
- Usually in combination with non-opiate
- Constipating as morphine
- Other common side effects:
  - N&V
  - Confusion
Are NSAID’s safe?

- Increased risk of:
  - GI bleeding
  - renal failure
  - CHF
  - Drug interactions

- “Cytoprotection”? 
If you need stronger Opiates?

- Morphine & hydromorphone (Dilaudid)
- 1:5 ratio of potency
  
  5mg morphine = 1 mg Dilaudid

- Similar side effects
- Dilaudid more $$$
Reviewing the stronger Opiates

**Myths:**
- Addiction
- Only needed at end of life
- Bowel effects cannot be treated
- Starting early will “leave nothing” to try if pain worsens
- Respiratory depression is common
Remember some other Opiate Options

- Fentanyl patch
- Long-acting preparations
- Pumps
- Su-fentanyl
- Methadone
Treating Neuropathic Pain

- History & mechanism may guide Rx
- In general:
  - shooting pain $\Rightarrow$ carbamazepine
  - constant/burning/dysesthesia $\Rightarrow$ TCA
Specific Conditions...

- Post-herpetic neuralgia $\Rightarrow$ TCA
- Trigeminal neuralgia $\Rightarrow$ Valproic acid
- Diabetic neuropathy $\Rightarrow$ TCA
What are the Neuropathic Rx Side Effects?

- **Carbamazepine** *(Tegretol)*
  - Liver function
  - Blood disorders
  - Rash

- **TCA** *(Nortriptyline)*
  - EKG changes
  - Anticholinergic side effects
Other Options?

✚ Capsacin cream:
  ▪ Local burning sensation very common
  ▪ Needs long treatment time

✚ Gabapentin:
  ▪ Mimics inhibitory neurotransmitter in spinal cord
  ▪ $$$

✚ Pregabalin
  ▪ ??faster onset
• Consider referral to Geriatrician if pain combined with multiple medical co-morbidities
• Consider referral to other specialist services as appropriate acute pain service, neurology and/or neurosurgery
• Consider referral to interdisciplinary services (PT, OT, SW, Psychology, Nutrition, RN)
• Consider interdisciplinary pain management program as appropriate
Considering Systemic Barriers

Barriers that impact assessment and treatment of persistent pain:

- limited diagnostic facilities
- limited staff education and variable responsibilities
- limited access to other disciplines
- limited routes of administration
- limited research on epidemiology and assessment
Summary & Take Home Messages

1. Identify pain in the older patient
2. Identify the nature of pain
3. Identify the cause
4. Proper choice of analgesic
5. Follow principles of Rx for the older patient
6. Monitor for side effects
7. Review the medications regularly
Multidisciplinary Approach to Pain

Role of

- Physiotherapy (PT)
- Occupational Therapy
- Social Work
- Nurse/APN/NP
- Pharmacy
- Nutritionist
- Psychology
Toolkit Resources

- Algorithms
- Clinician Forms
  - History and Physical Exam
  - Flow Chart for Persistent Pain Management
- Patient Forms
  - Pain History
  - Daily Pain Diary
  - Persistent Pain Follow-Up Questionnaire
- Patient Handouts
  - Using Medications
  - Living Well
  - Managing Constipation
  - Treating Pain Without Pain Pills
Where to Go

- Resources
- Websites
- Organizations
- Assessment and Treatment Programs
References

