Getting to the Root of Geriatric Pain

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Chronic pain management in the geriatric population is a challenging problem for physicians. The incidence of chronic pain increases with age. In Canada, the overall prevalence for chronic pain is 29% in the general population. However, the frequency of chronic pain in community-dwelling individuals > 55-years-of-age increases significantly to 39%. Among nursing home residents, chronic pain may be as high as 45% to 80%. Older individuals are at a higher risk of having poor pain control because of their multiple sources of pain as a result of their comorbid medical conditions. There are also barriers from both the patient and staff which can make it difficult to manage the pain (Table 1). Older individuals may suffer from both physical and psychological consequences of chronic pain (Table 2).

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Dora's case

Dora, 75, presents with severe pain in her left knee that has become progressively worse in the past 2 years. The pain feels like an ache that is localized around the knee and does not radiate down the leg. It is slightly better with acetaminophen and rest. It is worse with activity. On a scale of 10, Dora rates the pain as 7.

History

Dora had an elective total left hip replacement due to osteoarthritis (OA) 3 years ago. She was also prescribed NSAIDs 4 years ago and has since developed a GI bleed.

Examination

On physical exam, the knee shows no obvious deformities with no swelling, warmth, redness, or tenderness. There is a decreased range of movement. Pain is reproduced and crepitus is heard. The quadriceps muscle strength is reduced on the left side compared to the right.

Questions

1. What is your diagnosis?
2. What investigations (if any) would you arrange?
3. What would be the appropriate management?

For the answers to these questions, turn to page 61.

Table 1

Common misconceptions of chronic pain

Patient
- Sign of weakness
- Punishment for past action
- Terminal event is impending
- Normal aging
- Labelled as a complainer

Staff
- Higher tolerance for pain
- Unable to accurately self report pain
- More likely to become addicted to pain medications
- Fear of becoming a party to euthanasia
- Attention seeking

Table 2

Consequences of uncontrolled pain

Psychological
- Depression
- Anxiety
- Fear
- Decreased will to live
- Decreased socialization

Physical
- Delayed healing
- Reduced functioning
- Decreased mobility
- Sleep disturbance
- Prolonged hospitalization

Table 3

Goal of pain management is to improve ADL and IADL

Activities of daily living (ADL)
- Eating
- Dressing
- Grooming
- Toileting
- Transferring
- Ambulation

Instrumental activities of daily living (IADL)
- Clean
- Laundry
- Meal preparation
- Shopping
- Medication administration
- Finance

Chronic pain

Osteoarthritis (OA) is the most common cause of nonmalignant chronic pain. It is estimated that > 80% of people > 75-years-of-age have clinical OA and > 80% of those > 50-years-of-age have radiologic evidence of OA.

Goal of pain management

The goal of pain management is to reduce the pain in order to improve the person's ability to function in their environment. Hence, one would see improvements in their activities of daily living and in their instrumental activities of daily living (Table 3).

Pain assessment

The first step to the management of chronic pain is to believe the person when they indicate that they have pain. Many older patients may be reluctant to use the word "pain" but describe their sensation as an "ache," "discomfort," or "hurt." People who are cognitively intact are able to describe the type of pain (Table 4). A common scale used to assess the severity of pain is the zero to 10 verbal pain scale. There are many geriatric patients who cannot relate to this scale. For these people, they may describe their "ache" as slight, mild, moderate, severe, or extreme.

People who are cognitively impaired have a greater difficulty to verbalize the history of their pain. They can explain the pain they currently experience but may have difficulties recalling the pain that has subsided. Nonverbal patients may show their pain by:
- Grimacing
- Moaning
- Agitation

- Depression
- Social isolation
- Decrease in appetite

In geriatric patients with new or intensifying pain, it is important to establish whether pain is due to malignancy, whether it is a worsening of their condition, or if a new event has occurred (Table 5).

Physical exam

A focused physical exam should be done to assess the location and possible referral sites of the pain. The exam should include a review of the muscle skeletal system and neurological system, along with a cognitive test, such as a Mini Mental Status Exam or the Montreal Cognitive Assessment.

Non-pharmacological therapy

Many patients can benefit from non-pharmacologic therapies for chronic pain management. These interventions can be arranged into three categories (Table 6):

- Physical intervention
- Cognitive intervention
- Emotional intervention

Pharmacotherapy

Acetaminophen is the analgesic of choice for most types of mild-to-moderate pain. Scheduled dosing improves efficacy for the treatment of chronic pain compared to as-needed dosing. The maximum recommended total daily dose of acetaminophen is 4,000 mg. In patients with renal, hepatic, or harmful alcoholic use, a dose reduction of 50% to 75% is recommended.

NSAIDs should be considered when acetaminophen, at the maximum safe doses, does not

Dora's case cont'd...

Diagnosis

Dora has OA of her knee which is confirmed by x-rays. Radiography is used only to confirm the clinical diagnosis of symptomatic knee OA. Radiographs are insensitive at the early stages of knee OA, but the absence of a positive radiographic finding should not be interpreted as confirming the absence of arthritis.

Management

Dora is educated on proper exercise, weight loss, the use of a cane and supportive footwear. She is started on a low dose of a short-acting opioids that she uses as needed. Dora uses 2 dosages in a 24 hour period. In 3 days, she is able to stand long enough to wash her dishes and vacuum her carpet.

Table 4

Pain characteristics

Provocation, Palliation
Quality
Radiation
Severity
Timing

Table 5

Red flags for malignancy

- Severe and rapidly intensifying pain
- Poor response to analgesics
- Nighttime pain
- Radicular pain
- Constitutional symptoms
- Previous treatment for malignant disease

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Table 6

Non-pharmacological therapy

Physical intervention	Cognitive intervention	Emotional intervention
Exercise	Relaxation	Peer support
TENS	Distraction	Humour
Acupuncture/pressure	Diversion	Music
Heat and cold	Imagery	Art
Massage	Meditation	Spiritual counselling
Supports (*e.g.*, collars, slings)	Cognitive counselling	Religious rituals
Bathing	Education	Forgiveness
Positioning/movement		Reminiscence

TENS: Transcutaneous electrical nerve stimulator

adequately control pain. NSAIDs should be used with caution in elderly patients especially if there is a documentation of:

- Renal insufficiency
- Peptic ulcer disease
- Concurrent use of anticoagulants, antiplatelet agents, or corticosteroids
- Bleeding diatheses

Misoprostol and proton pump inhibitors should be considered if the patient is on NSAIDs to reduce the risk of developing peptic ulcer disease. Misoprostol is not well tolerated in the elderly population due to diarrhea. NSAIDs that are enteric coated, sustained release, controlled release and suppository formulation have been found to be associated with the same degree of endoscopic lesions as other formulations of NSAIDs.

Take-home message

- The goal of managing geriatric pain is to improve the function of the patient
- The assessment should inlcude a history, physical exam and non-verbal cues
- Scheduled dosing improves efficacy for the treatment of chronic pain compared to as-needed dosing

Opioid analgesic medications may help relieve moderate-to-severe pain. Opioids should be started with a low dose and titrated to a dosage where the patient's pain level is decreased, so that their function improves. Episodic pain should be treated with as-needed medication. If more than three as-needed medications are required in a 24-hour period, then it is suggested to use a scheduled dosage of opioids as it actually uses less opioids and provides better pain management. For continuous pain, scheduled short-acting medications are titrated and switched to long-acting or sustained release opioids. Dx

Resources

1. Moulin DE, Clark AJ, Speechley M, et al: Chronic Pain in Canada: Prevalence, Treatment, Impact and The Role of Opioid Analgesia. Pain Res Manage 2002; 7(4):179-84.
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3. AGS Panel on Persistent Pain in Older Persons. The Management of Persistent Pain in Older Persons. J Am Geriatr Soc 2002; 50(6 Suppl):S205-24.
4. McCarber BH: Rheumatic Diseases in the Elderly: Dealing with Rheumatic Pain in Extended Care Facilities. Clin Geriatr Med 2005; 21(3):543-61.
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7. Gloth FM 3rd: Pain Management in Older Adults: Prevention and Treatment. J Am Geriatr Soc 2001; 49(2):188-99.

For additional resources, please contact **diagnosis@sta.ca**