9 Steps to Assessing Chronic Pain

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Sam's Case

- Sam, 65, is obese; he has had Type 2 diabetes for 20 years
- Increasingly severe burning pain involving both feet and ankles in a stocking distribution over the last 10 years
- Aching discomfort in both knees and in L hip (worse with weight bearing; better with rest)
- X-rays show changes of moderate bilateral osteoarthritis

Sam's Health History

- Artherosclerotic heart disease
- Hypertension
- Hyperlipidemia
- Three-vessel coronary bypass five years ago

Current medications include:

- Metformin
- Glyburide
- Nitroglycerin
- Acetylsalicylic acid
- Metoprolol
- Lisinopril
- Atorvastatin
- Domperidone
- Pantoprazole

Previously smoked 2 packs/day, but quit before bypass

Previously a "heavy" drinker, but successfully completed an addiction treatment program 20 years ago

Admits to an "occasional" drink "for his heart"

How does this information affect our medication choices, our prescribing pattern? What other information do we need?

The successful ongoing treatment of chronic, non-malignant pain requires a thorough understanding of your patient's physical and psychologic condition.

Patients with this problem may be new to you or may have been prescribed acetaminophen-codeine (Tylenol® 3) or acetaminophen-oxycodone combination to treat short-term pain. When it is clear this patient has chronic pain, a thorough reassessment must be done, covering the following nine steps.

Step # 1

Review all investigations done and ascertain they have been completed; if not, do what is necessary to complete them.

Step # 2

Look at completeness of medication trials, length and dosage achieved. Look at what non-medical therapies have been tried and over what period of time to ensure that potentially useful modalities have not been missed. There is inconclusive evidence for most physical modalities of treatment in chronic pain. Agreed upon among the reviews 2001 to 2004 was the efficacy of exercise in the treatment of chronic pain.

Step # 3

It is important to always check for usage of over-the-counter drugs. Toxicity with some common medications may be a problem.

Pain Management

Previous treatments include:

- Tylenol® 3, 4-6 tablets/day as required and amitriptyline, 25 mg orally at bedtime
- Worked reasonably well for about two years

Current treatment:

- Tylenol 3, 12-14/day, and 2-3 Tylenol Extra Strength some days
- Amitriptyline was stopped as "it seemed to lose its effect"
- Celecoxib, 200 mg twice daily, added recently for his osteoarthritis
- Recently, his blood pressure has been increased and patient complains of mild to moderate swelling of his ankles.

Are there concerns with this current treatment regimen? (See Step #5).

What's the next step?

- Started on sustained-release morphine
- Titrated up to 120 mg per day with some initial success for both foot pain and joint pain
- During next 6-9 months, dose requirement increases to 240 mg/day
- Also requires regular morphine, 10 mg, 8-10 tabs daily, as required for breakthrough pain
- His wife tells you he seems to be more irritable recently and "nods off" often; she notes that he "jerks" frequently at night in bed

What is the problem? Build up of toxic metabolites of morphine.

What options do you have?

Step # 4

A 1 to 10 visual scale may be introduced to clarify intensity of pain. Asking the patient what his "10" pain is allows the creation of a patient-centred scale. Assessing his pretreatment pain level gives a baseline scale from which to assess efficacy of treatment. Quality of pain may differentiate nociceptive from neuropathic.

Neuropathic pain is typically burning and lancinating. It may also be itching and accompanied by hyperalgesia or allodynia. Neuropathic pain can be treated with tricyclics or selected anticonvulsants, though opioids have been shown to be effective as well. Nociceptive pain will be more responsive to anti-inflammatories plus/minus opioids.

Step # 5

It is important to note age and any associated conditions of the patient, as these may affect your choice of treatment. Acetaminophen, for instance, should be used at the Compendium of Pharmaceuticals and Specialties suggested maximum dose (4 g/day) only for the short term, according to the Duke Guidelines.

In healthy patients, 3.2 g/day is the suggested dose for long-term use. In patients with risk factors for acetaminophen toxicity, the long-term suggested dose is 2.6 g/day only.

Non-steroidal anti-inflammatory drugs (NSAIDs) should be used with caution in patients with a history of previous gastrointestinal (GI) conditions. Patients at risk for kidney failure, those with high blood pressure, congestive heart failure or heart disease should use NSAIDs, including cyclooxygenase inhibitors (Cox-2s), with caution. Although Cox-2s are less likely to cause a GI bleed, there is still a slight risk.

When taken therapeutically, opioids have never been shown to cause organ damage.

Step # 6

Addiction screening is necessary if opioids are being considered. Risk versus benefit of opioids must be considered and one must understand which patients

Additional Options

- Sustained-release morphine dose gradually tapered to 160 mg/day
- Improvement in drowsiness and jerking
- Burning foot and ankle pain and joint pain become much more severe

What do you need to do?

Then What?

- Started Oxycontin, 20 mg twice daily
- Titrated up to 60 mg twice daily
- Sustained-release morphine dose is gradually tapered by 30 mg every 3-4 days and eventually discontinued
- Mental status is much improved
- Joint pains are much better 4-5/10
- Burning foot pain still 7-8/10
- Started on gabapentin, 300 mg at bedtime
- Titrated every 3 days to a maximum tolerated dose of 600 mg twice daily (any more causes persistent drowsiness)
- Only a minor benefit for his burning pain
- Gabapentin stopped
- Started on topiramate, 25 mg at bedtime and titrated by 25 mg weekly to a maximal tolerated dose of 150 mg twice daily
- Burning pain is reduced by 50% and diabetic control is significantly improved
- Sam is able to continue to live independently.[1]

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will require more structure when prescribing. Addiction is characterized by behaviours that may include one or more of the following:

- impaired control over use,
- compulsive use,
- continued use despite harm and
- craving.

No single event is diagnostic of an addictive disorder. The diagnosis is made in response to a pattern of behaviour over time. Addiction is not defined solely by tolerance, withdrawal or high dosage of medication.

Screen with a detailed history of alcohol and drug use. Look for genetic predisposition and effect of substance use on the individual's function; personal, medical, relationships, work and legal areas. Verify this information with the significant other at the second interview. Review of charts can verify the information. If an individual has been or is a narcotics addict, prescribe opioids with great care. Methadone is often my drug of choice in these individuals.

Step # 7

The individual's lifestyle and goals for medication use must be examined. Reasonable goal-setting for both the individual and the medication is vital. At this point, the patient and doctor must review how, after the pain-causing insult, fear of harm has led to inactivity, pain and isolation. These allow both the patient and doctor to look at how, after the pain causing insult, fear of harm has led to inactivity, pain and isolation. It is vital the patient understand his or her part in ongoing pain and, more importantly, his or her part in breaking out of the pain spiral. Changes in behaviour, however small, must occur simultaneously with the initiation of the appropriate therapy.

Depression can also be assessed at this time; left untreated, it can certainly sabotage patient improvement, as can disordered personality. The physician must be aware of the "benefits" of ongoing illness to the patient, family or pending financial claims and factor these impressions into whether and how to treat and monitor.

Key Learnings

- Non-steroidal anti-inflammatory drugs can cause increased blood pressure and fluid retention in some patients.
- Opioid responsiveness can vary from one opioid to another.
- Opioid rotation is often necessary to achieve optimum pain relief.
- Diabetic neuropathy often requires polypharmacy.

References
1. Jovey R (Ed.), Managing Pain, 2002.

Further references available—contact *The Canadian Journal of CME* at **cme@sta.ca**.

Step # 8

Directed physical exam may verify history, see if there are any potentially reversible conditions and clarify nociceptive versus neuropathic pain.

Step # 9

At the second assessment visit, if opioid medications are under consideration for use, it is important to request the individual's significant other attend the appointment. Review and corroborate addiction history and make clear the parameters under which opioids will be prescribed. Each item of the patient agreement must be understood and agreed to. Whether a formal signing occurs or not, chart notation on each should be made.

This agreement includes understanding that there will be one prescriber, that medications must be taken exactly as prescribed, that there is potential for impairment when medication is initiated or dosage changed and driving prohibition will occur during those times. It also includes potential for physical dependence; small potential for addiction, responsibility of patient for secure storage of the medication and finally understanding that this is a "trial" of therapy and it may be stopped if necessary

Detoxification may also begin for any benzodiazepine the individual has been using. Together, opioids and benzodiazepines can worsen cognitive impairment. It is also necessary to remind the patient not to break the capsules or tablets. This is an opportunity for the significant other and the patient to discuss concerns they might have regarding opioid therapy. At that time potential side-effects may also be discussed and treatment can begin prophylactically. When this is complete, opioid therapy may be initiated.