# *The Painful Truth About* Chronic Pain

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Based on a CME televideoconference at the University of Calgary

The management of chronic pain has seen great advances in recent years, with the development of chronic pain clinics, greater expertise by family physicians and anesthetists, and more effective drug therapy (particularly opioids).

Chronic pain is part of a vicious cycle. Untreated pain means more pain signals enter the spinal cord, which, in turn, leads to more pain. The goal of pain control is to treat as many pain signals as early and aggressively as possible, to minimize the progression to chronicity.

The two major classes of pain are nociceptive and neuropathic pain (Table 1).

## *How is chronic pain treated?*

With the introduction of opioid analgesia, care must be taken to optimize its use. One fallacy holds that opioids automatically cause addiction and dependence (Table 2). Of course, patient selection is important when considering any opioid prescription.

Opioid use is indicated when there is unrelieved pain by usual analgesic treatments and the quality of life is reduced. The modified World Health Organization (WHO) analgesic ladder is shown in Figure 1 and discussed in Table 3.

### Neil's case

Neil, 42, had an accident and sustained injury to his right knee.

After 12 months of healing, arthroscopy was completed and degenerative changes indicated traumatic arthritis (confirmed after several X-rays). His pain increased with time and non-opioid prescription medication did not relieve his discomfort.

Neil's family physician deemed him a good candidate for opioid therapy and titrated him up to a final prescription of Oxycontin® SR, 50 mg every 12 hours. The pain was relieved and mobility was gained to within normal limits.

Two years later, he is still on the same dose of opioid, is fully compliant, and has even tried to reduce his prescription. He has not developed dependence or tolerance.

**Table 1**

## Characteristics and management of nociceptive and neuropathic pain

| | Characteristics | Management |
|---|---|---|
| **Nociceptive pain** | • Well-localized (more diffuse if deeper structures or involving viscera)<br>• Burning, sharp, stinging, ache<br>• Soft tissue injuries, arthritis, abscess, trauma, and fracture pain | • Specific treatment, where appropriate (*e.g.,* corticosteroids for polymyalgia rheumatica)<br>• Mild to moderate pain: Relieved by acetaminophen, non-steroidal and antiprostaglandins<br>• Moderate to severe pain: Relieved by opioid analgesics |
| **Neuropathic pain** | • Persistent, burning or lancinating pain<br>• Hyperalgesia and/or allodynia manifest<br>• Examples: Complex regional pain syndrome, sciatica, trigeminal neuralgia | • Not relieved by acetaminophen, NSAIDs, or coxibs<br>• Opioid analgesics partially effective; may require higher doses; use in conjunction with neuromodulating agents<br>• Controlled release opioids proven effective<br>v Neuromodulating agents (should be used early<br>• Tricyclics (amitriptyline, nortriptyline, imipramine, desipramine, cyclobenzaprine); starting dose: 10 mg (titrate 5-7 days)<br>• Anticonvulsants:<br>  • Gabapentin: Start at 100 mg qid and titrate by 300-400 mg for 3-4 days<br>  • Lamotrigine or topiramate: 25 mg od and titrate<br>  • Consider small combination doses of newer anticonvulsants (topiramate + lamotrigine + gapapentin)<br>  • Carbamazepine, valproic acid: Watch CBC and liver enzymes |

NSAID: Non-steroidal anti-inflammatory drug
qid: Four times daily
od: Once daily
CBC: Complete blood count

Doses of opioids vary. Table 4 is a guide to equipotent doses of controlled release or long-acting medications.

In Canada, guidelines on opioid use have been in circulation since 1993 and regular updates are produced by renowned bodies, such as:

- the American Association of Pain Management (AAPM),
- the American Pain Society (APS), and
- the American Geriatric Society (AGS).

Some tips for the treatment of chronic pain are listed in Table 5.

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Table 2

## Drug-seeking behaviour and physician defences

### Drug-seeking behaviour

- Refusal or reluctance to present identification
- Apparent allergy to codeine, NSAIDs, or local anesthetics
- Appearance of being in a hurry
- Presentation at times when regular physician cannot be contacted (evenings, nights, and weekends)
- Failure to show up for followup appointments, investigations, or consultations
- Constant eye contact with the physician

### Physician defences

- See new patients by referral only, with identification
- Verify the presenting complaint and observe for drug-seeking behaviours
- Talk to the patient's regular practitioner
- Use safe prescribing guidelines (small doses)
- Prevent prescription forgery (write prescription in words and clear numerals)
- Use "partial fill" prescriptions
- Treat prescription pads like cheque books—keep secure
- Consider non-opioid therapies if suspicious of drug-seeking behaviour

Table 3

## The WHO analgesic ladder

### Goals for chronic pain management

- Decrease pain
- Improve function and, thereby, improve quality of life
- Minimize adverse effects
- Decrease the utilization of health-care resources

### The ideal patient for opioid therapy

The patient should have:

- An internal locus of control
- No history of chemical dependencies
- No history of serious psychiatric problems
- Realistic goals and expectations
- Stable home environment

### The physician's role

- Make an objective diagnosis of moderate to severe pain
- Ensure a reliable, compliant patient
- Demonstrate the ability to adapt to limitations

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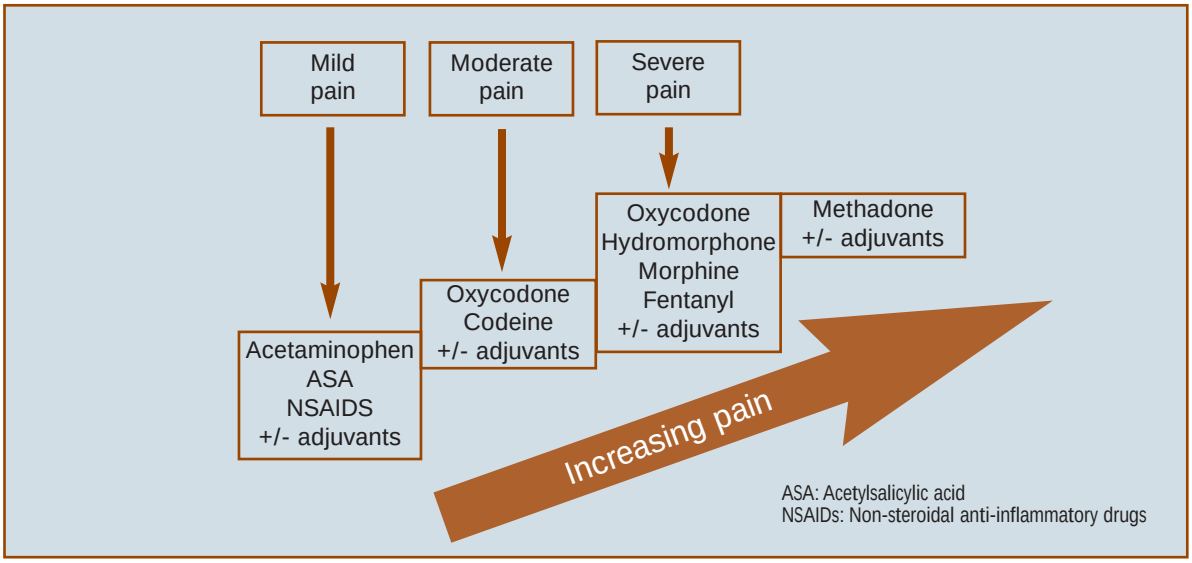


Figure 1. Modified WHO analgesic ladder.

## Test your knowledge!!

**1.** Which of the following medications are useful in relieving neuropathic pain (one or more answers)?

a. Opioids
b. Coxibs
c. NSAIDs
d. Tricyclics
e. Anticonvulsants

**2.** The WHO analgesic ladder suggests using opioids +/- adjuvants for severe pain.

a. True
b. False

**3.** Which of the following are characteristic of drug-seeking behaviour?

a. Appearance of being in a hurry
b. Failure to show up for followup appointments
c. Avoiding eye contact with physician
d. Reluctance to present identification

**4.** Opioids automatically cause addiction and dependence.

a. True
b. False

Answers: 1-a,d,e; 2-a; 3-a,b,d; 4-b

**Table 4**

### Equipotent doses of opioids

| Opioid & receptor | Oral dose (mg/day) | Dosing interval (hours) |
|---|---|---|
| Morphine (M + M6G) | 30-60 | 12-24*** |
| Codeine (M) | 180-240 | 12 |
| Hydromorphone (M) | 4-6 | 12-24*** |
| Oxycodone (M + K) | 15-30 | 12 |
| Methadone (M + NMDA) | * | 6-12 |
| Fentanyl TD patch (M + M6G) | ** | 48-72 |

**Variable, individualized dosing*
***45-60 mg morphine/day = 25 µg/hour patch*
****Depending on formulation*

M: Morphine receptor
TD: Transdermal

Based on dose titration studies performed in healthy volunteers.
Adapted from: Breitbart W, Chandler S, Eagel B, et al: An alternative algorithm for dosing transdermal fentanyl for cancer-related pain. Oncology 2000; 14(5):695-705.

**Table 5**

### 10 tips for treating chronic pain

1. Obtain good pain history
2. Screen for risk factors of addiction (SISAP, CAGE)
3. Complete relevant physical exam
4. Have a working diagnosis and differential diagnosis
5. Ensure rational polypharmacy
6. For constant pain, use scheduled CR opioids dosed to effect
7. Manage opioid-related side-effects
8. Plan regular followups and complete documentation
9. Decrease drug diversion by careful prescribing practices
10. Higher risk prescribing requires extra care and monitoring

SISAP: Screening Instrument for Substance Abuse Potential
CAGE: Cut down, Annoyed by criticism, Guilty about drinking, Eye-opener drinks
CR: Controlled release

References available—contact *The Canadian Journal of Diagnosis* at **diagnosis@sta.ca**. Dx