Guidelines for Management of Chronic Non-Malignant Pain

The College of Physicians and Surgeons recognizes the important role served by physicians in relieving pain and suffering. While endeavouring to offer the best care possible, one is also compelled to do no harm. In no area of the practice of medicine is this dichotomy more plainly faced than in the assessment and management of chronic non-malignant pain.

The scope of the problem of chronic non-malignant pain is staggering; the cost of annual lost productivity due to chronic pain in North America is measured parameters such as failed marriage or poor quality of life underscore the gravity of the situation.

The chronic non-malignant pain patient population is heterogeneous. A rational understanding for the likely mechanisms of pain is a requisite for developing an effective clinical approach. Comprehensive evaluation of such patients should provide reasonable clinical hypotheses about the pathophysiological processes that are contributing to the pain (nociceptive, neuropathic and/or psychologic.) For example, chronic back pain in some patients may be associated with spondylolisthesis, osteoporotic collapse or some other discrete organic lesion, and in other patients may be associated with clearly demonstrable organic disease on imaging procedures while not fulfilling criteria for a discrete diagnosis.

In some patients the important therapeutic issues relate to the identifiable organic process and in others, to the degree of disability and associated psychological issues. There is a large group of patients with a form of chronic non-malignant pain which is best described as idiopathic, i.e. pain that is perceived by the clinician to be excessive for the degree of organic pathology evident. Some of those patients may have a primary psychologic cause for the pain, but unless a strong case for this can be made, the patient's pain is best termed idiopathic and the potential for possible organic processes left open.

Impeccable management of post-surgical acute pain or acute pain
following accidents, will not only reduce immediate patient morbidity, but will also lower the risk of the patient developing a chronic non-malignant pain syndrome. Guidelines for the management of acute surgical pain have been published, most recently by the US Department of Health and Human Services. Further information can be obtained from this office.

There is usually no easy solution to offer to patients with chronic non-malignant pain. Standard advice in management includes the following:

1. **Take a complete pain history and physical examination.** Assessment of physical function and evaluation of disability are important.

2. **Assess for the possibility of co-existent depression, sleep disorder, personality disorder, poorly developed coping skills, and level of social function.** These issues are addressed as separate from the medical condition causing the pain; sometimes pain cannot be changed, but a person's response to a difficult situation can be.

3. **Obtain all relevant documentation concerning prior investigations and consultations.** Consider whether a new diagnosis may be present (e.g. newly extruded disk in a patient with chronic back pain), and arrange any further tests or consultation needed to assess the condition. The goal is to complete the evaluation in order to help the patient focus on getting better.

4. **Consider in what way the patient can become empowered to get better.** The treatment of chronic non-malignant pain is dedicated to two goals: Enhanced function (broadly defined to include physical, psychological and social function), and improve comfort.

The appropriate therapeutic paradigm for most patients with non-malignant pain is derived from a rehabilitative model, rather than an acute medical model. Once it is clear that pain will not be eliminated by treatment of an underlying cause, clinicians should no longer draw out the evaluation or repeatedly attempt useless trials of primary therapy; the emphasis of intervention is towards the goals of functional restoration and symptomatic relief.

Non-medical analgesic intervention can include a regular exercise program and weight loss for back pain, or improved sleep or dietary habits in chronic daily headache. Other non-medical interventions can include psychologic interventions such as behavioral or cognitive approaches, TENS (available through a physiotherapist), or guidance in carrying out daily functions (available through an occupational therapist). Even when there is limited therapy for the disease or the pain, patients are often comforted by the offer to continue care and support. Functional improvement is defined as fewer days off work, return to work, greater social interaction, improved marital relations, or amelioration in other clearly definable activities.
5. **Long-term treatment with analgesic medication should be administered if analgesics result in relief of pain, functional improvement, or both.** If relief of pain without functional improvement occurs, the former benefit should clearly exceed any identifiable adverse effect in order to justify long term analgesic use. Analgesic medications should initially include the non-opioid analgesics or the adjuvant analgesics. Long term therapy with one or more agents within these two general categories continues to be the preferred pharmaco-therapeutic approach in patients with chronic non-malignant pain (in contrast to those with cancer pain). Long term use of non-pharmacologic analgesic approaches should be considered, and these include anaesthetic, neuro-stimulatory, and other approaches.

6. **Opioids are not first line drugs in management of chronic non-malignant pain but are occasionally helpful.** One must carefully weigh the benefit and potential problems associated with such medications when used long-term. The College acknowledges the difficulty inherent in dealing with chronic non-malignant pain. The purpose of the various prescription monitoring programs are to prevent patients from seeking opioids from multiple physicians, and they should not discourage physicians from their usual practice of quality medical care. In highly unusual circumstances, physicians may elect not to prescribe opioids regardless of the situation. In other settings, however, the College strongly endorses the appropriate use of opioid analgesics, according to the judgement of the attending physician.

7. A multidisciplinary team approach is optimal.

**GUIDELINES FOR OPIOID USE IN CHRONIC NON-MALIGNANT PAIN**

1. The underlying medical diagnosis causing the pain should be established, and the pain should appear to be commensurate with the diagnosis. For example, the physician should determine whether the painful process is somatic in origin (e.g. chronic osteomyelitis), visceral (e.g. chronic pancreatitis), or neuropathic (e.g. post-herpetic neuralgia). Patients with idiopathic pain are not excluded from a trial of opioids. Rather, the clinician should exercise particular caution in those patients whose pain is idiopathic or appears to be primarily determined by psychologic factors.

2. A history of **recent or remote** substance abuse is a relatively strong contradiction; the available evidence suggests that chronic opioid therapy should be considered only under the most extraordinary circumstances in such patients.

3. An adequate trial of non-opioid analgesics and adjuvant analgesics should have been carried out without success.

4. One physician only should prescribe opioids.
5. In order to start a patient on an opioid, the principles of the World Health Organization "analgesic ladder" should be employed. Patients first should be started on opioids in combination with non-steroidal anti-inflammatory drugs or acetaminophen. Opinion concerning opioid therapy is evolving and the decision to rely on combination products or other products prior to considering trials of morphine or similar opioids is arbitrary and based on convention, rather than pharmacologic principles. Fixed combinations of acetaminophen with oxycodone (Percocet) or codeine (Tylenol #3) are commonly used. No greater than 12 tablets of the above preparations may be taken per day because of risk of acetaminophen toxicity. Fixed combination preparations may be taken per day because of risk of acetaminophen toxicity. Fixed combination preparations are fairly safe, but usually need to be administered every four to six hours.

The role for agonist-antagonist or partial agonist opioids, e.g. Pentazocine (Talwin), is less clear. Experience with long-term opioid therapy, as conducted in the cancer population, has been almost exclusively with pure agonist opioids, and on this basis they are preferred over agonist-antagonist or partial agonist opioids.

Meperidine (Demerol) has relatively poor oral bioavailability, is short-acting, and can be associated with accumulation of a toxic metabolite, normeperidine. Anileridine (Leritine) is chemically related to meperidine. The use of these two opioids in management of chronic pain syndromes is not recommended.

6. Treatment of pain with opioids is actually a treatment trial, and like all therapeutic trials, may be effective or ineffective. Effective therapy may be defined as identification of a dose associated with meaningful partial analgesia and no adverse effects severe enough to compromise comfort or function. This dose must be one at which the clinician can comfortably maintain the patient given the clinicians level of experience and training. Opioids almost always need to be titrated upwards, and effective doses are commonly higher than the starting dose. Personal discomfort by the physician at the apparent level of opioid requirement is a valid reason not to proceed, and may warrant the referral of the patient to a physician who has more expertise in chronic pain management.

7. If a fixed combination preparation of an opioid and non-opioid analgesic is not satisfactory, then the patient may be tried on oral morphine. The syrup preparation is convenient for titration purposes, and is recommended. We advise starting at 10 mg by mouth every four hours. The dose should be increased once or twice weekly by 25-50%. Increased doses should be accompanied by increased analgesic effect, although doses of oral morphine (or its equivalent) above 300 mg daily are unusual, but not contra-indicated in chronic non-malignant pain.

If the short-acting morphine preparation is useful and there are no features suggesting abuse, the patient should then be switched to a long-acting (q8h or q12h) morphine preparation.
The physician should watch for apparent drug-related behaviours. Behaviours which could be used to label a patient as an abuser exist in a continuum, and pain-relief seeking behaviour can be mistaken for drug seeking behaviour. The clinician will need to monitor carefully for evidence of psychological dependency and drug abuse. Some behaviours which provide compelling evidence of abuse include the selling of prescription drugs, covertly obtaining prescription medications from more than one physician, concurrent abuse of related illicit drugs, repeated unsanctioned dose escalations despite warnings, and events such as prescription "loss". Other signs of compulsive drug use may be more subtle, including the use of the opioid to treat symptoms other than pain, frequent visits to emergency rooms, and hoarding of drugs obtained from routine prescriptions. Relapse after withdrawal is a feature of addiction that is difficult to interpret in the context of chronic non-malignant pain, as relapse of pain (and the re-institution of opioid therapy) can be rationally anticipated to occur sometimes.

8. Parenteral dosing of opioids to treat chronic non-malignant pain should be strongly discouraged, and daily IM injections abhorred.

9. There should be an agreement between the patient and the prescribing physician which clearly delineates that there is to be no unsanctioned dose escalation, no selling of opioids, no injecting of opioids, no seeking of opioids from another physician and no hoarding of opioids. This contract should clearly define consequences of violation, which include a non-negotiable end to the prescribing relationship between the physician and the patient. If the patient sees another physician to obtain opioids for any reason (such as when the primary physician is not available), then the primary physician should be informed by the patient at the first reasonable opportunity. If warranted, this contract should be in writing. Otherwise, documentation of a verbal agreement in the physician's records is sufficient.

10. The patient should be seen and assessed at least every 9 weeks and more frequently if needed (e.g. if there is a history of previous substance abuse). The clinician should specifically evaluate the patient for several distinct aspects of therapy at each visit, including:
   - analgesic efficacy
   - adverse pharmacologic events,
   - function (physical and psychological), and
   - the occurrence of apparent drug abuse related behaviours (see above).

Documentation is very important with this therapy and physicians should keep careful records that include reference to these various aspects of therapy. Once a regular dose of opioid is established, the patient should not request a refill of the prescription earlier than the established duration for the prescription.
11. Flares of pain can be treated with small extra doses of opioid by mouth; each monthly prescription should include a few extra doses for this purpose.

The goal of chronic opioid therapy is not the elimination of pain (which may be impossible), but rather to control pain to a tolerable level; there is a clear emphasis on level of function of the patient in his social, work, and personal life.

Addiction is quite distinct from tolerance and physical dependence; true addiction resulting from appropriate medicinal use of opioids is extremely uncommon. The clinician must monitor for the possibility that opioids are contributing to disability, impaired function directly, or producing adverse pharmacologic affects that lead to impaired function.

a. **Addiction** is a state where a person takes a medication for its psychic effect, not for its pain relieving effect, and is characterized by a loss of control, compulsive drug use, and continued drug use despite its harm. Tolerance and physical dependency are different phenomena and can develop in patients who consume opioids chronically, are also part of the symptom complex of addiction, but of themselves are not pathognomonic of addiction.

b. **Tolerance** is a poorly understood phenomenon characterized by the need for higher doses to maintain opioid effects. Clinical experience in patients with chronic non-malignant pain managed with long term use of opioids indicates that tolerance does occur initially, but tends to be less of an issue over the course of many years.

c. **Physical dependence** is a response to a drug characterized by the occurrence of an abstinence syndrome on abrupt dose reduction or administration of an antagonist.

More frequently seen is chronic pain syndrome, whereby a patient takes a large variety of medications with questionable benefit, and uses drugs inappropriately as part of the behavioral disturbances that characterise this state. Other behavioral traits of chronic non-malignant pain syndrome include physical inactivity, inability to work, and social isolation. Analgesic medications should only be used in this setting as part of a carefully controlled overall pain management program.

These guidelines are intended as a framework for medical decision-making in the treatment of chronic non-malignant pain, and as an overview of current management rationale for this difficult medical problem.

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