Principles of Highly Effective Pain Managers

This guide presents important principles of pharmacologic pain management and highly effective ways for the clinician to put these principles into practice when treating pain caused by malignant or nonmalignant conditions.

Assessment

Principles:
“The process of assessment is aimed at preventing pain if possible, identifying it immediately should it occur, and then monitoring it as interventions are selected and implemented.”

In Clinical Practice:
Ask the patient specifically, “Are you feeling pain now?” “Have you had any pain today?” Many patients silently tolerate unrelieved pain if not specifically asked about it.

Believe the patient. The patient’s self-report should be the primary source of pain assessment. Even when their pain recall is unreliable, patients with mild to moderate cognitive impairment are able to report pain reliably at the moment or when prompted.

Chart the pain. Assess the pain with easily administered rating scales and document the efficacy of pain relief at regular intervals, including after starting or changing treatment, as well as with any new report of pain or change in pain pattern. Documentation forms should be readily accessible to all clinicians involved in the patient’s care. Patients and caretakers should be taught how to use these pain rating scales.

Individualized Treatment

Principles:
In using medications to manage pain, it is essential to individualize the route, the dosage, and the schedule to the patient. “The simplest dosage schedules and least invasive pain management modalities should be used first.”

In Clinical Practice:
Oral is optimal. “The oral route is often the optimal route for chronic treatment because of its convenience, flexibility, and the relatively steady blood levels produced.”

For patients who can not swallow tablets, many analgesics — including opioids — are available in liquid form.

Dose by the ladder. The World Health Organization (WHO) Three-Step Ladder is a simple, effective method for titration of therapy.

Step 1. Use APAP, ASA or another NSAID for mild to moderate pain. “Even though NSAIDs are effective in relieving mild pain and are opioids paring for moderate to severe pain, patients who take them, especially if elderly, should be monitored carefully for adverse effects.”

Step 2. When pain persists or increases, add an opioid to the NSAID. “Opioids are the major class of analgesics used in the management of moderate to severe pain because of their effectiveness, ease of titration, and favorable risk-to-benefit ratio.”

Step 3. The full-agonist opioids morphine, oxycodone, and hydromorphone — which do not have a ceiling to their analgesic efficacy — are commonly used. Patients who have moderate to severe pain when first seen by the clinician should be started at the second or third step of the ladder.

Dose by the clock. Medications for persistent pain should be administered on an around-the-clock (ATC) basis, with additional “as-needed” doses, because “regularly scheduled dosing maintains a constant level of drug in the body and helps to prevent a recurrence of pain.”
**Anticipate breakthrough pain.** A PRN order for a supplementary opioid dose between regular doses is an essential backup. The optimal analgesic dose varies widely among patients. In all age groups, there is enormous variability in doses of opioids required to provide relief, even among opioid-naive patients with identical surgical lesions. This great variability underscores the need to write analgesic orders that include provision for supplementary doses to provide rapid relief of severe pain.³ (See TITRATION section.)

**Adjuvants can help.** Adjuvant drugs to enhance analgesic efficacy, provide independent analgesic activity in certain situations, or treat concurrent symptoms that exacerbate pain may be used at any step on the Three-Step Ladder. Among the adjuvants commonly used are corticosteroids, anti-convulsants, antidepressants, neuroleptic agents, hydroxyzine, bisphosphonates, and calcitonin.⁴

**Titration**

**Principles:**
Analgesic doses should be adjusted in each patient to achieve pain relief with an acceptable level of adverse effects. Dosage typically requires adjustment over time. There is no ceiling or maximal recommended dose for full opioid analgesics, such as morphine and oxycodone.⁴

Controlled-release preparations are “among the most important recent innovations in analgesic treatment because their long duration of action lessens the severity of end-of-dose pain and often allows the patient to sleep through the night.”⁵

**In Clinical Practice:**
*Treat persistent pain persistently.* Administer analgesics regularly (ATC, not PRN) if pain is present most of the day. “Once the optimal dose requirements for a 24-hour period have been established by titration, the analgesics can be administered on a scheduled, around-the-clock basis with fewer side effects.”⁶

**Designing a regimen.** One strategy for designing a controlled-release (CR) regimen is to treat the patient with an immediate-release (IR) analgesic for 48 hours to learn the average daily dose requirement.⁶ (It is preferable to use the IR form of the intended CR analgesic.)

- Use half (or less) of the average daily dose requirement as the q12h dose of the CR preparation. Orders should also provide for supplementary doses of IR analgesic.
- To titrate a q12h CR analgesic, increase the dosage by 25% to 50%; do not increase the dosing frequency.
- Manage breakthrough pain with IR medication at 1/4 to 1/3 of the 12-hour dose.

- Titrate the next q12h CR dose upwards if more than two doses of IR medication are required per day, using the supplemental dosage as a guide to titration.

**CR preparations should never be used as a PRN medication, because of the time they take to attain peak analgesia.³**

**A fair trial.** Before switching to another drug, give each analgesic an adequate trial by dose titration — that is, by increasing the dose up to the appearance of limiting side effects.⁵

**Managing Side Effects**

**Principles:**
Individuals vary greatly in their reactions to medication and in the development of side effects. Clinicians should monitor for side effects and proactively treat some inevitable ones. Because of worries about unmanageable side effects, patients may stop taking their analgesic medication, often without their physicians’ knowledge. The goal is to manage or prevent common side effects before they discourage compliance. Tolerance usually develops to such side effects as nausea, sedation, and respiratory depression, but not to constipation.⁶

**In Clinical Practice:**

- **Constipation** should be prevented. It is the most common opioid side effect and should be aggressively managed.
  All patients on ATC opioids should be directed to take ATC laxatives prophylactically.⁶
- **Nausea** may be caused by opioid analgesics directly, or it may be the result of opioid-induced constipation. Alleviating constipation often alleviates nausea. Patients should be provided with a prescription for an antinauseant and advised how to use it should the need arise. Prophylactic use is not recommended because of possible side effects.⁶
- **Transitory sedation** and/or confusion may occur during the first 24 to 48 hours after the initiation of opioid therapy or after a significant dose increase. Remember that relief of long-standing pain may permit uninterrupted sleep, while patients catch up on needed rest. CNS stimulants such as caffeine, dextroamphetamine, pemoline, or methylphenidate may be taken to increase alertness. Persistent confusion may be treated with low doses of haloperidol.⁶