

Managing adult cancer pain: The latest NCCN guidelines

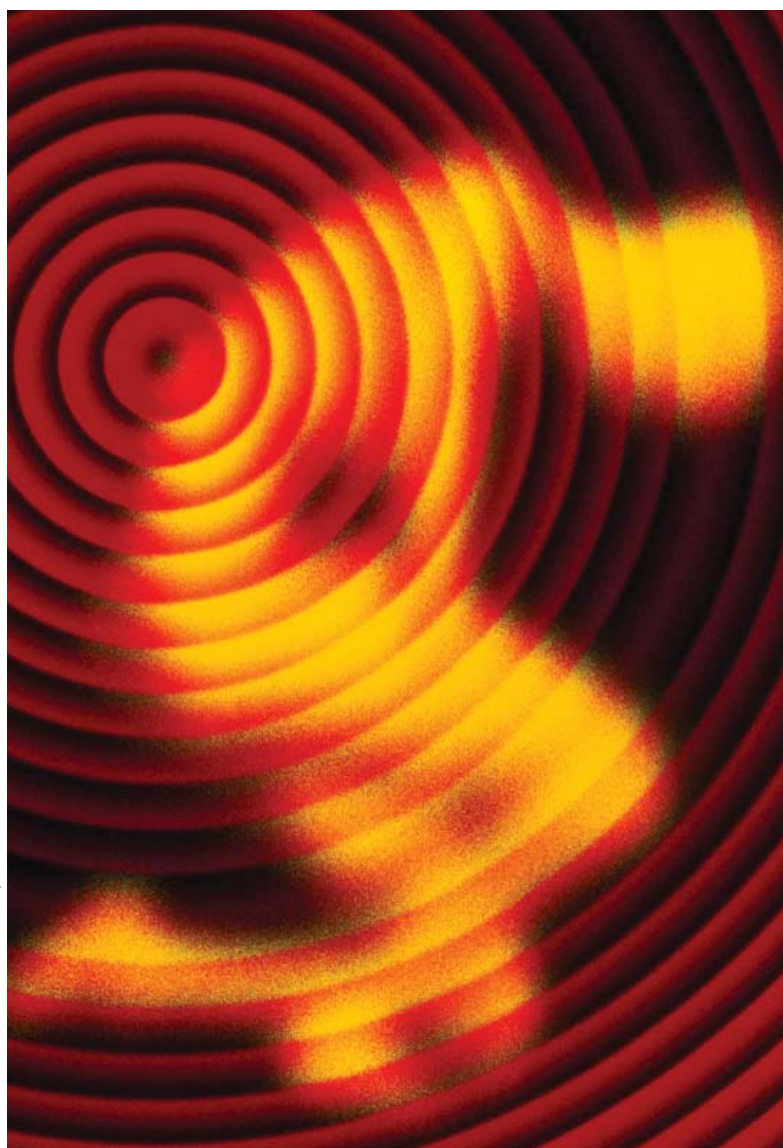
Pain management is important for cancer patients during therapy and sometimes after treatment is completed—not just at the end of life.

BY CARL SHERMAN

Pain is common in cancer—one-third of patients undergoing treatment and three-fourths of those with advanced disease experience it—and pain is among the symptoms patients fear the most. “It is imperative that physicians and nurses caring for these patients be adept at the assessment and treatment of cancer pain,” say the authors of *Adult Cancer Pain*, a practice guideline published by the National Comprehensive Cancer Network (NCCN).

Oncology nurses have an important role here, says Judith Paice, PhD, RN, director of the cancer pain program at the Robert H. Lurie Comprehensive Cancer Center of Northwestern University, Chicago, Illinois, and a member of the panel that issued the guideline. “Nurses see patients more often, and patients are often reluctant to report pain to their physicians because they don’t want to distract them from cancer care. Patients are more inclined to discuss pain with nurses.”

In recent years, “awareness that pain management is not only for end-of-life care has been increasing,” says Dr Paice. “There is a new population of patients who have essentially been cured or who can expect long-term survival but have been left with serious pain issues as a result of treatment. They may be using pain medication for life.” Aggressive pain management is starting earlier in care, she adds, with the realization that such management can make possible effective chemotherapy or radiotherapy



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that might otherwise be cut short because of painful side effects like neuropathy.

COMPREHENSIVE ASSESSMENT

The first step in pain management is one that most nurses (and doctors) neglect, notes Dr Paice. “Instead of making a full assessment, as soon as they hear the patient has pain, they jump to a medication they feel comfortable with.”

At the initial screening, ask the patient to rate the intensity of his or her pain using a numerical, categorical, or pictorial scale, and to characterize its quality (Figure 1). Determining whether pain is throbbing, aching, tingling, or sharp may provide useful information about its etiology and helps to direct treatment.

The goal of the full assessment is a “pain diagnosis” to guide an individualized treatment plan. It should include the onset and course of the pain, exacerbating and ameliorating factors, relief measures that have already been tried, and historical information relating to the patient’s overall experience with

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opiates and other pain management strategies. Medical and especially oncologic history (including current and prior chemotherapy, radiation, and surgery), along with medication history, provide an important context for treatment. Physical examination and laboratory findings may identify causes of pain (such as spinal cord compression) requiring specific remedies.

Psychosocial issues—family support and distress associated with pain and disease—should also be evaluated, the guideline suggests. Concern about risk of addiction has come to the fore in recent years: “Ask about the use of recreational drugs and any history of addiction or abuse—including family history,” Dr Paice emphasizes. Trouble in the past “doesn’t mean we withhold medication, but perhaps we provide a different structure and are more attentive to our prescribing patterns.”

CHOOSING AN ANALGESIC

Pain intensity is the key variable in analgesic choice for patients who are not already taking opioids.

- When the patient rates pain as **severe** (for example, 7 on a 10-point scale), a short-acting opioid, titrated rapidly, is the treatment of choice, augmented with other drugs if the patient has neuropathic pain.
- The protocol is similar for patients with more **moderate** pain (4–6 on a 10-point scale), except that titration of the opioid can be slower.
- For pain of **mild** intensity (1–3), NSAIDs and acetaminophen are alternatives to opioid therapy.

Whatever the pain intensity or primary analgesic, the addition of a co-analgesic should be considered when there are indications of a cancer pain syndrome: neuropathic pain, bone pain, or pain associated with inflammation. If the pain is related to an oncologic emergency, appropriate steps (such as surgery, corticosteroids, radiotherapy, or antibiotics) must also be taken. Pain in a patient who is already taking opioids requires an adjustment of dosage, reevaluation for possible underlying causes, and perhaps the addition of co-analgesics.

OPIOID GUIDELINES

The most commonly used short-acting opioids are morphine, hydromorphone, fentanyl, and oxycodone. The guidelines

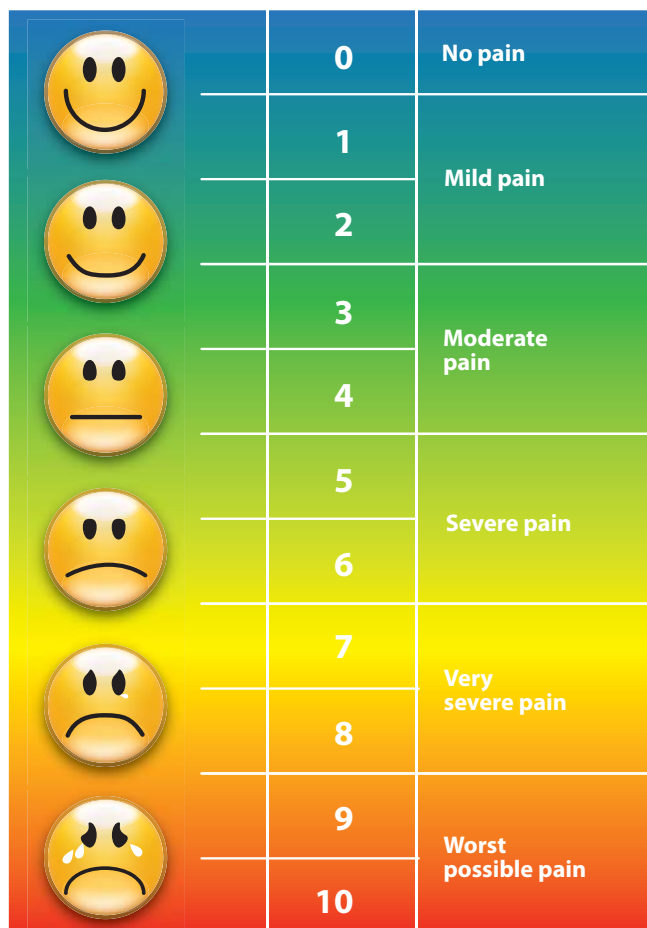


FIGURE 1. An example of a pain scale

advise against meperidine and propoxyphene, particularly for long-term or high-dose use, because of toxicity; they caution that partial agonists and mixed agonist-antagonist preparations are of limited utility in cancer pain and can precipitate withdrawal in opioid-dependent patients. Tramadol is weaker than other opioids but may have some value for mild to moderate pain.

Oral administration is best, as it is usually the easiest form of delivery. For patients not already taking opioids, the drug should be initiated at the equivalent of 5 mg to 15 mg of morphine sulfate orally, or 2 mg to 5 mg intravenously, and titrated to a level sufficient to relieve pain throughout the dosing interval without causing intolerable adverse effects. For breakthrough pain during opioid therapy, administer 10% to 20% of the 24-hour dose orally, or 10% intravenously.

Efficacy and side effects should be reassessed every 60 minutes (15 minutes after intravenous administration). If moderate to severe pain remains unchanged or has increased, raise the dosage by 50% to 100%; if severe pain has become moderate, repeat the same dose and reassess an hour later. When pain has been relieved or reduced to mild levels, consider converting to an extended-release agent or a non-opioid analgesic, providing short-acting “rescue medication” as needed.

Managing side effects is a key component of opioid therapy. Constipation is a problem best prevented by a bowel regimen, initiated along with the drug, that includes a stimulant laxative and stool softener. If constipation develops, increase

Managing common side effects such as nausea, constipation, and motor and cognitive impairment is a key component of opioid therapy.

the stool softener-laxative (after ruling out bowel obstruction), or consider reducing the opioid dosage and adding a nonopioid analgesic.

Nausea may respond to prochlorperazine, haloperidol, or metoclopramide. Consider an antiemetic prophylactically for a patient who has a history of opioid-induced nausea. Pruritus is best treated with an antihistamine.

Motor and cognitive impairment usually resolve spontaneously within 2 weeks of stable opioid administration. Sedation may require a dose reduction, more frequent administration to reduce peak concentration, or the addition of caffeine, a psychostimulant, or modafinil. Respiratory



The NCCN Web site

depression and acute changes in mental status, although rare, can be addressed immediately with a reversing agent such as naloxone.

The efficacy/side-effect ratio for the individual patient may differ among drugs, so opioid rotation—switching to an equivalently dosed different agent—is an option when side effects are difficult to control at therapeutically necessary levels.

NSAIDs AND ACETAMINOPHEN

Acetaminophen or an NSAID may be used instead of an opioid for mild pain or as a co-analgesic to reduce opioid dosage. NSAIDs can also be added to the opioid for pain associated with inflammation.

NSAIDs should be given with caution to patients who are at increased renal, gastrointestinal (GI), or cardiac risk or who have bleeding disorders. If NSAIDs are prescribed over the long term, monitor blood pressure, blood urea nitrogen, creatinine, complete blood count, and fecal occult blood every 3 months. Concurrent proton pump inhibitor therapy may forestall GI problems. Switching to a different agent or a COX-2 inhibitor may make continuation of effective NSAID therapy possible when GI toxicity is troublesome but not serious.

Chronic acetaminophen therapy is not without risks. The safety of the 4-g maximum daily dose has not been definitively established over the long term, Dr Paice notes. Problems may arise with cachectic patients, she points out: “the metabolic breakdown of acetaminophen depends on enzymes that may not be released without eating. These people are at greater risk from toxic by-products of acetaminophen.”

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With NSAIDs and particularly acetaminophen, the risk of overdose is raised by the cumulative impact of hidden sources. “It’s embedded in so many over-the-counter preparations—sinus medicines, sleep medicines. Most people don’t read the label that carefully,” she says.

CANCER PAIN SYNDROMES

Co-analgesics may be required for cancer pain of certain etiologies, alone or in combination with opioids.

For neuropathic pain, antidepressants and anticonvulsants are first-line drugs of choice. Tricyclics (imipramine, desipramine) are the best validated and most commonly prescribed among the antidepressants. A low initial dose with gradual titration will optimize tolerability. Anticholinergic adverse effects (dry mouth, sedation, urinary hesitancy) are common, however, particularly with the more effective tertiary amines imipramine and amitriptyline. Other antidepressants, including duloxetine, venlafaxine, and bupropion, may be better tolerated by some patients, but less evidence supports their efficacy for neuropathic pain.

Among anticonvulsants, gabapentin and pregabalin are most often used. Of the two, pregabalin is more efficiently absorbed and can be titrated more quickly. Topical agents,



“Most patients require education about how to use rescue medication for breakthrough pain.”

—Judith Paice, PhD, RN

such as the lidocaine patch or diclofenac gel, can augment systemic pharmacotherapy.

Glucocorticoids are effective for **acute pain related to inflammation or nerve compression** and for **bone pain**, but their extended use carries the risk of significant adverse effects. Bone pain may also benefit from an NSAID; a trial of bisphosphonates, hormone therapy, or chemotherapy; or from physical therapy.

PROCEDURE-RELATED PAIN

Diagnostic and therapeutic maneuvers common in cancer care (arterial or central lines, injections, bone marrow aspiration, lumbar puncture, skin biopsy) are sufficiently uncomfortable and anxiety-producing for many patients

to merit preemptive analgesic treatment. The guidelines advocate a multimodal approach with an emphasis on local anesthetics such as lidocaine, prilocaine, or tetracaine, delivered via creams, iontophoretic devices, or subcutaneous injection (allow sufficient time for anesthetic onset). Sedation, systemic analgesia, even general anesthesia may be indicated. Nonpharmacologic approaches (such as massage, heat or ice, ultrasound, or relaxation training) frequently have a role as well.

“Patients usually tolerate procedures better when they know what to expect,” the authors say. Providing full explanations with ample time for patients to assimilate information and have questions answered can reduce anticipatory anxiety.

PSYCHOSOCIAL SUPPORT AND EDUCATION

Patients and families need to be reassured that steps can and will be taken to manage pain and its accompanying distress and will most likely involve oral medication only. They will benefit emotionally from the simple acknowledgment that pain is a problem and that the clinician will work together with them and remain available until they gain relief.

Talking through the issues surrounding pain—its meaning to the patient and the fears that surround it—can be enormously helpful. In progressive disease, “it’s a wonderful opportunity to address advance care planning,” Dr Paice emphasizes.

Psychosocial support may include teaching coping skills that reduce the impact of pain and give the patient some measure of control. These include relaxation and distraction techniques, guided imagery, and cognitive strategies to maximize comfort and limit stress. CDs and other resources are widely available and can be quite helpful, says Dr Paice.

Relaxation and guided imagery may be particularly valuable for breakthrough pain, during the interval before rescue medication begins to work, she says. “It can keep muscle tension down and keep pain from escalating while waiting for the immediate-release medication to work.”

Depression is closely linked to pain and may become more evident as physical symptoms are brought under control. Refer patients to a mental health professional when indicated.

Patient and family education should include full explanation of why medications are prescribed, what they can be expected to do, and how best to use them. “Most patients require education about how to use rescue medication for breakthrough pain,” adds Dr Paice. Cautions surrounding controlled substances (safeguarding them in the home, for example) and the impact of sedating medication on driving and other activities are important to discuss.

OTHER INTERVENTIONS

Physical modalities are often valuable adjuncts to pharmacotherapy. Physical therapy might be indicated, for example, for disuse syndromes that accompany and compound chronic pain; a therapist's guidance in gait, posture, and movement can help minimize pain after surgery. Application of heat, cold, ultrasound, and electrical stimulation often substantially reduce muscle pain. Massage can be extremely useful when there is significant muscle involvement and for general relaxation.

Alternative and complementary modalities, such as acupuncture and acupressure, are highly acceptable to some patients.

Medical interventions such as nerve block are worth considering for certain types of cancer pain, after surgery, or when adequate analgesia is not otherwise possible without intolerable side effects. These generally require consultation with a pain specialist or referral to a specialty clinic.

Among commonly used procedures are epidural, intrathecal, and regional plexus infusions of opioids, local anesthetics, or other medications using an external or implanted pump. Neurodestructive procedures can be very useful

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for well-localized pain syndromes. For example, celiac plexus block can relieve the pain of pancreatic cancer, and superior hypogastric plexus block can be used for midline pelvic pain. Neurostimulation may be indicated for neuropathy and radiofrequency ablation for painful bone lesions.

THE NCCN CANCER PAIN GUIDELINES

The full text of the National Comprehensive Cancer Network's *Clinical Practice Guidelines in Oncology: Adult Cancer Pain*, is available online at: www.nccn.org/professionals/physician_gls/PDF/pain.pdf. Registration (which is free) is required for access. ■

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