

*The screening, assessment, and management strategies outlined in this summary and accompanying guideline apply to adult patients with active cancer and cancer-related pain of any severity.*

## 1. Screening and Assessment

- An assessment of the patient's pain should include disease trajectory, etiology, manifestations as well as psychosocial and functional impacts on the patient's activities of daily living and risk factors for opioid use.
- The Edmonton Classification System for Cancer Pain (ECS-CP) is the primary classification tool for cancer pain, which is typically conducted as part of pain management (e.g. on admission to a palliative consultation service). The Edmonton Symptom Assessment System Revised (ESAS-r) is the primary assessment tool for patients to rate the severity of their symptoms. Established cutpoints for the ESAS-r are as follows:
  - Mild pain: 1-3
  - Moderate pain: 4-6
  - Severe pain: 7-10
- Patient self-report of pain is a key part of the assessment.

## 2. Pharmacological Management

- Treatment is based on the degree of pain that the patient is experiencing using a step-wise approach that follows the WHO analgesic ladder.
  - Analgesics should be prescribed regularly for continuous pain.
  - Medication for breakthrough pain may also be prescribed, with a plan for follow-up.
  - Laxatives should be prescribed for patients on opioid analgesics unless contraindicated
  - Oral administration is the preferred route of administration in the setting of chronic cancer-related pain. The subcutaneous route is preferred when the oral route cannot be used. Avoid intravenous administration due to unfavourable pharmacokinetics.
  - Adjuvant drugs should be considered at all steps of the analgesic ladder, with drug class chosen based on type of pain.
- Hospital admission and/or referral to a pain specialist may be beneficial for patients with acute, severe pain that is refractory to conventional treatment.
- Non-opioid medications may be considered at each stage of the WHO analgesic ladder:
  - If acetaminophen is used chronically, a daily maximum of 3 g should be adopted to reduce the risk of inducing hepatic toxicity. A daily maximum of 2 g is recommended for older adults with hepatic impairment or history of alcohol abuse.
  - NSAIDs should be used with caution in cancer patients due to risk of renal, GI and cardiac toxicities, as well as thrombocytopenia and bleeding disorders.
- There is weak evidence supporting the use of corticosteroids in cancer pain. Dexamethasone is often the steroid of choice as it has less mineralocorticoid activity than other alternatives.

- Bone modifying agents such as bisphosphonates and denosumab can also have an analgesic effect with long-term use in patients with metastatic bone pain from a variety of tumours.
- Specific antidepressants and anticonvulsants could be considered in patients who have neuropathic pain, with careful monitoring of side effects:
  - Duloxetine and venlafaxine are the first-line options for neuropathic pain.
  - Tricyclic antidepressants are also considered first-line alternatives for neuropathic pain.
  - Nortriptyline and desipramine are less effective but more tolerated than amitriptyline and imipramine.
  - Gabapentin and pregabalin are the first-line anticonvulsants used for neuropathic pain.
- Ketamine is a controversial agent that could be considered as an analgesic in select patients when traditional agents have failed to provide adequate relief. The use of ketamine should be supervised by a specialist in pain relief or palliative medicine.
- Cannabinoids should only be considered as a last-line option for patients with cancer pain that is refractory to opioids, non-opioids and adjuvant analgesics.
- Opioid Drugs:
  - For **mild to moderate pain**, a step 2 opioid may be given with or without a non-opioid analgesic.
  - For **moderate to severe pain**, oral morphine, hydromorphone, or oxycodone are recommended as first-line options.
  - The oral route should be used for administration of opioids, if practical and feasible.
  - Immediate-release opioids are normally administered every 4 hours around-the-clock. Longer-acting opioid formulations should be considered for patients with stable daily opioid requirements.
  - Breakthrough opioids may be given as often as every 1 hour.
  - Patients with **moderate or severe breakthrough pain** should receive breakthrough analgesia.
- Recognizing that two thirds of cancer patients are surviving  $\geq 5$  years after diagnosis, clinicians should assess the potential risks and benefits of long-term use of opioids. A universal precautions approach is recommended to minimize abuse, addiction, and adverse consequences of opioid use such as opioid-related deaths. Patients and family members should be educated regarding the risks and benefits of long-term opioid therapy and the safe storage, use, and disposal of controlled substances. If patients with moderate to high risk of misuse are prescribed opioids, adherence monitoring should continue for the duration of treatment. If opioids are no longer warranted, clinicians should taper the dose to avoid abstinence syndrome.
- Opioid-induced adverse effects include nausea/vomiting, constipation, pruritus, neurotoxic events, endocrinopathies, and respiratory depression. With the exception of constipation, most opioid-induced adverse effects are transient and improve over time. Non-pharmacologic and non-opioid pain interventions should be maximized to allow for reduced dosing of opioids, and opioid rotation may be considered if adverse effects persist.

### 3. Non-Pharmacological Management

- For information on radiotherapy to relieve pain in patients with bone metastases, please refer to the [AHS Palliative Radiotherapy guidelines](#).
- Vertebroplasty and kyphoplasty may provide sustained pain relief in patients with metastatic bone pain. Patients with bone pain from malignant vertebral collapse proving difficult to control by pharmacological means should be referred for consideration of vertebroplasty where this technique is available.
- Interventions such as celiac plexus block and neuraxial opioids should be considered to improve pain control and quality of life in patients with difficult to control cancer pain.
- Patients with difficult-to-control pain despite optimal management of systemic/oral therapy may benefit from assessment by an anesthetist with expertise in pain medicine, for consideration of an appropriate intervention.
- Consultation with an orthopedic specialist may be warranted for patients with impending pathologic fractures to determine optimal strategies for surgical pain management.

### 4. Supportive Care

- Effective multidisciplinary teamwork is required to achieve adequate cancer pain management and maximize function.
- Comprehensive cancer pain assessment should include routine screening for psychological distress, which should be carried out using a validated tool.
- Patients should receive education about the range of pain control interventions available to them.
- Comprehensive cancer pain assessment should include routine screening for the functional impact of cancer pain. Consider need for rehabilitation medicine support, walking aids, and other medical equipment, therapeutic/conditioning exercises, activity/pacing/joint protection education, and determining the necessity for immobilization or support to painful areas (e.g. splint, sling, back brace, cushioning). Also consider nutritional/speech therapy interventions related to intake/appetite (e.g. ability to prepare meals independently, ability to chew/swallow related to pain). Consider arrangements for home care/personal care assist/caregiver training as required to optimize patient safety and function.
- Cognitive behaviour therapy should be considered as part of a comprehensive treatment program for those with cancer-related pain, and resulting distress and disability.
- Cognitive modalities to consider include mindfulness-based stress reduction, distraction training, relaxation training, active coping training, graded task assignments, patient's abilities with medication management and understanding of treatment schedule/dosing, caregiver support and education needs, and the patient's ability to report their status and participate in assessment of pain.