Assessing pain in people with cancer

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Cancer pain assessment enables diagnosis of the cause and mechanism of cancer pain and also the impact of the pain on the patient. Sensitive, empathic communication is important for the ongoing relationship between GPs and patients with cancer.

Key points

- **The most common barriers to good pain management are health professional and patient knowledge deficits, inadequate pain assessment and misconceptions regarding pain.**
- **Goals of a comprehensive pain assessment are to determine the cause and mechanism of the pain and the impact of pain on the patient.**
- **Allowing patients to express their fears and having these addressed can be therapeutic for patients, relieving both the pain and the associated distress.**

Pain is common in people living with cancer and the prevalence of pain increases with advanced disease. Cancer survivors also carry a higher pain burden than the general population, with about 30% experiencing chronic pain.[1] At any stage of the disease, 53% of patients with cancer have pain.

Australian guidelines for the assessment and management of people with cancer pain have recently been developed to help practitioners better manage this common and complex problem.[2] People with moderate to severe pain experience interference with all aspects of their daily life, including mood, ability to walk and work, relationships and sleep.[3,4] They are also less able to tolerate anticancer treatments.

Better management of pain has the potential to improve quality of life for people with cancer. It may also reduce healthcare costs by avoiding unnecessary hospital admissions, supporting nonpharmacological approaches and quality use of medicines, and reducing caregiver distress.

Barriers to good pain management

The most common barriers to good pain management are health professional and patient knowledge deficits, inadequate pain assessments and misconceptions regarding pain.[5] These factors are interlinked. A good pain assessment includes identifying patient-related misconceptions about pain.

There are also a number of patient- and caregiver-related barriers to communicating about cancer pain that may need to be overcome.[6] These include stoicism, fear of disease progression, fear of medication side effects and fear of addiction and tolerance. Patients may be afraid that discussing pain may distract the doctor from treating the cancer, they may want to be a viewed as a 'good patient' or they may be fatalistic about the presence of pain.[7,8] Encouraging patients to talk about their pain and discussing the importance of treating pain early will help the overcoming of these barriers.[8]

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Undertaking a pain assessment

The two stages

There are two stages to a pain assessment, as outlined below.

- **Screening.** Given the frequency of pain, the Australian Cancer Pain Guidelines recommend that patients be screened for pain at each clinical encounter (see Box 1 illustrating a numerical rating scale for pain intensity).
- **Assessment.** A comprehensive assessment is recommended for patients if:
  - the pain score is 2 or more on a self-reported numerical rating scale of 0 to 10
  - the pain score is 3 or more on the Abbey Pain Scale
  - there is new pain or a sudden, unexpected change in intensity of pain (see case study example in Box 2).

Goals of a comprehensive pain assessment

The goals of a comprehensive pain assessment are to determine the following:

- cause and mechanism (neuropathic or nociceptive) of the pain to be able to direct pharmacological and nonpharmacological treatment, and
- impact of the pain on the patient.

A comprehensive assessment to determine the patient's pain management needs is outlined in Box 3. More detail on each of the elements is available from the Cancer Council Australia guidelines for cancer pain management in adults.[2]

Use of validated pain tools

Although no pain assessment tool captures all of the elements of a comprehensive cancer pain assessment, the Brief Pain Inventory (BPI) is the tool that the national guidelines recommend.[9] A body chart is also helpful for documenting multiple pains. A pain assessment can be time consuming and is best undertaken by a multidisciplinary team, including the practice nurse. Patients may also complete a pain diary, which allows a health professional to see at a glance the pain severity over time and the number of extra doses of pain relief required for breakthrough pain (pain despite regular pain relief).

1. Numerical rating scale for pain intensity

Verbal. What number describes your worst/least/average pain, where zero is no pain and ten is worst pain you can imagine?

Written. Please circle the number that best describes your worst/least/average pain over the past 24 hours:

0	1	2	3	4	5	6	7	8	9	10
No pain										Worst pain you can imagine

The 'PQRST' method for pain assessment is often used to remember the elements for a pain assessment. This acronym can be used to formulate questions that enable patients to more fully and succinctly describe their pain experience (P = precipitating and relieving factors; Q = quality of the pain; R = radiation; S = site; T = timing).[10] We have identified 'S' from the acronym as referring to site. Some references refer to it as 'severity', but as this is covered in the numerical rating scale, we substitute 'S' for site.

Evidence is emerging that the Leeds Assessment of Neuropathic Symptoms and Signs (LANSS) scale has good accuracy for assessing neuropathic pain.[11] In practice, the presence of neurological deficit (weakness or numbness), painful skin sensation to a normally innocuous stimulus (allodynia) or exaggerated painful response to a painful stimulus (hyperalgesia) are the most helpful clinical indicators of neuropathic pain. Burning, electric shock-like, shooting and tingling symptoms suggest that the pain is neuropathic in character.

Unique features of a cancer pain assessment

Pain associated with fears

As cancer is a serious and often life-threatening illness, pain in people with cancer is associated with fears, which can be distressing. Identifying these in the pain assessment is important because they may be contributing to and exacerbating the pain. Even the process of assessing these fears can be of benefit. As patients tell their story, they begin the process of making sense of their experience. Expressing fears and having these fears addressed can be therapeutic for the patient, relieving both the pain and the associated distress.

Communication

Sensitive, empathic communication is important for the ongoing relationship between general practitioners and patients with cancer. Establishing confidence early will enhance the alliance between the doctor and the patient, which is optimal for good pain control and good care.

Screening for risk factors of opioid misuse

Do pain treatments differ if the pain is due to background nonmalignant causes or the cancer? There has been a view that opiates can be more freely used in the cancer pain setting as the short prognosis means risk of misuse is low and the need is greater. However, cancer is now, in many cases, a chronic disease.

Problems with opioid misuse in the cancer population are emerging in the USA. Therefore, screening for risk factors for opioid misuse (this predominantly involves history of previous substance abuse, psychiatric history or family history of either) should become routine in people with cancer pain, as it is in those with chronic pain.[12,13] Opioid addiction, when opioids are used appropriately for people with cancer pain, remains rare and should not be a clinician barrier to adequate analgesia.

There is evidence that pain is undertreated in people with past and current substance abuse, and practitioners should be aware of this risk.

2. Case study: a man with prostate cancer experiencing new onset back pain

Mr D, a 66-year-old man with metastatic prostate cancer, presented with recent onset back pain. A CT scan carried out three months previously, before starting chemotherapy, showed low volume bone metastases with small lesions in the vertebral bodies of L3 and L4.

Mr D reported a two-week history of increasing low back pain and worsening numbness in his feet (present previously from chemotherapy-related peripheral neuropathy). He described the pain as constant and aching in nature, worse when lying in bed, and with a severity up to 7 out of 10. It was relieved slightly by the paracetamol and ibuprofen that he was taking intermittently. He reported some radiation with a burning quality, down his buttocks and into his upper thighs when coughing or sneezing. He had not been able to use the stairs at his workplace over the past few days due to a feeling of his knees 'giving way'. He denied any change in bowel habit or urinary symptoms.

On examination he had reduced power on knee flexion and ankle dorsiflexion bilaterally and was unable to walk on his heels. He had reduced sensation to vibration, temperature and pinprick in the anterolateral right thigh and knee and to a lesser extent in the feet bilaterally. The right knee jerk was diminished. On digital rectal examination, sphincter tone was normal.

Given the likely diagnosis of cauda equina syndrome or spinal cord compression, Mr D was given an immediate dose of 8 mg oral dexamethasone and was referred for an urgent MRI of the spine. This demonstrated extensive disease throughout the lumbar and sacral spine, with a soft tissue component causing compression on the cauda equina at L4 level. Due to extensive bony involvement, he was not deemed to be an appropriate candidate for surgery. He was commenced on intravenous dexamethasone 8 mg in the morning and at midday and was treated with a course of urgent radiotherapy to L3 to L5 with a total dose of 37.5 Gy in 15 fractions.

Mr D was very distressed at the prospect of worsening mobility and becoming dependent on others for assistance with his instrumental activities of daily living. He said he felt he had 'purpose' while he was still able to enjoy his work but was very fearful that he would not be able to do this in the future. He was prescribed short-acting 5 mg oral morphine liquid every four hours, but he was worried this would affect his concentration and mental acuity and that he would become addicted to it. Mr D was given a sensitive and careful explanation of the benefit of pain relief and informed that many people do not have impaired concentration on stable pain relief and if concentration is impaired then an alternative opioid can be tried. He was also reassured about the low risk of addiction when pain relief is used appropriately for pain and told that the dose of opioid could be reduced and possibly ceased after radiotherapy with associated reduction in pain. Mr D agreed to commence morphine in addition to regular paracetamol and also pregabalin for his burning neuropathic pain.

Mr D's analgesic requirement reduced significantly within a week of commencing the radiotherapy and he was admitted to a palliative care unit for rehabilitation. He regained full lower limbs strength over a period of three weeks and was able to manage stairs independently on discharge from the unit. He has since been able to return to work in a part time capacity, and has commenced treatment with abiraterone. He continues on regular paracetamol and a weaning dose of sustained-release morphine 10 mg orally twice daily. Pregabalin has been ceased and he has minimal breakthrough analgesic requirements.

3. Comprehensive pain assessment[2]

All the following should be routinely assessed and/or performed to determine the individual's pain management needs.

- Disease status and treatment
- Pain severity (detailed assessment)
- Pain experience (using a validated tool, such as PQRST – Precipitating and relieving factors, Quality of the pain, Radiation, Site, Timing)
- Current and previous management of pain and other symptoms
- Other associated symptoms
- Pain meaning for the person and their beliefs and knowledge
- Psychosocial assessment
- Cognitive assessment
- Physical examination and consideration of further investigations
- Functional status
- Risk factors for poorly controlled pain or opioid misuse
- Patient preferences (goals and expectations for comfort, advance directives)
- Factors suggesting an oncological emergency

Conclusion

People with pain and cancer have the same background pain prevalence (20%) as the general community plus the pain associated with the cancer and its treatment.[14] A pain assessment in people with cancer is complex and involves determining which pains may be due directly to the cancer and amenable to treatment with anticancer therapy. A pain assessment also enables accurate determination of the cause and mechanism of cancer pain and the implication of the pain for the patient.

Cancer pain is not static and so regular review of the patient and a high index of suspicion for serious complications are important. Pain can be the first signal of disease progression and can precede imaging evidence of disease. Allowing patients to tell the story of their experience fosters the clinician–patient relationship and can be therapeutic in its own right. Evidence-based treatments are available to treat cancer pain effectively. **PMT**

References

A list of references is included in the website version (www.medicinetoday.com.au) of this article.

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