Pain control

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Abstract

Pain is one of the most feared symptoms of advanced, progressive disease and dying. It is a common but not universal experience in both advanced malignant and non-malignant conditions. A patient-centred approach involving systematic and thorough assessment, management and regular review can provide pain relief for most patients. Even in advanced disease, it is important to identify the underlying cause of the pain. Pharmacological management must be structured around the analgesic ladder, and clear guidance provided. Particular emphasis is given to the safe and effective use of strong opioids, including the patient's information needs and the management of unwanted effects. A range of adjuvant drugs is also available, as are interventional techniques and non-pharmacological interventions. Guidance is provided on the reassessment of pain that has not responded adequately to the usual measures and on indications for specialist referral.

Keywords analgesic ladder; bone pain; cancer; morphine; neuropathic pain; nociceptive pain; opioid analgesics; pain assessment; pain management; palliative care

What's new?

- Pain management in advanced disease must be patient-centred but the limitations of the wider healthcare economy must be considered. Morphine remains the first-line strong opioid. Although other strong opioids can confer particular advantages, their cost should be considered as part of the decision-making process
- Dementia is currently a priority for health research. Research is examining many aspects of pain in advanced dementia, including pain perception and management strategies
- More people are surviving previously rapidly life-limiting conditions such as cancer as treatments for such conditions are becoming increasingly sophisticated. However, they may consequently experience the long-term unwanted effects of the treatments they receive. Thorough assessment and identification of the cause of pain are particularly important in this group

Introduction

Pain is 'an unpleasant sensory and emotional experience'.[1] It usually results from an underlying physical pathology causing nerve stimulation or injury.[2] Pain is a common symptom, experienced by more than half of patients with many advanced and progressive diseases,[3] most severely in cancer,[4] and adversely affects quality of life.[1] Pain perception is modified by psychological, social and spiritual factors.

Approach to the consultation

This should be patient-focused. It is important to understand the patient's ideas, concerns and expectations,[5] particularly in the palliative setting, where the pain experience will be affected by fear of the cause and meaning of the pain. In addition, the association of commonly used analgesics with death and addiction[6] will influence the acceptability of and concordance with the management plan if the issue is left unaddressed.

Assessment

This must be thorough and directed towards identifying the type (Table 1) and underlying cause of the pain. Where possible, addressing the cause may treat the pain most effectively, even in very advanced disease. A common example is abdominal pain caused by constipation:[4] treating the constipation will relieve the pain whereas many analgesics will exacerbate this cause.

History and examination

Information must be sought on the patient's underlying condition, its management and any co-morbidities. Particular consideration should be given to the previous treatment history of the underlying condition. Increasingly sophisticated interventions improve survival but may result in long-term unwanted effects including pain. The pain must be explored in detail (Table 1), and the examination should be focused and thorough.

Investigations

The potential benefit of any investigations, particularly whether and to what extent the findings may influence the management plan, should be weighed against the potential burden to the patient in terms of time, inconvenience, energy expenditure and discomfort.

Management

Goals

It is important to negotiate and agree goals for management. Although there has been limited research on what patients want from their pain management, a recent qualitative study suggested that the ability to perform activities and maintain relationships is important.[7] Relief of moderate to severe pain can be achieved for most cancer patients,[2] but it may not be a realistic goal for them to be pain-free all the time.

Frequent review is essential, particularly when disease is progressing.

Treatment of the underlying cause

Examples include fixation of a pathological fracture, radiotherapy to a painful bony metastasis or antimicrobial therapy for bladder pain caused by infection. As the patient's frailty and dependency increase, positioning and regular pressure area care become increasingly important.

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The pain history

	Question to ask	Notes
	'Tell me about the pain'	Always start with open questions
Site	'Where is the pain?'	Nociceptive pain (pain due to stimulation of nerve endings) is typically localized
Onset	'When did it start and how has it changed?'	Progressive back pain (particularly thoracic) should raise a suspicion of spinal cord compression
Character	'What is it like?'	Aching/throbbing/gnawing pain is typical of nociceptive pain Shooting/burning pain is typical of neuropathic pain (pain due to nerve damage or infiltration) Cancer pain is often a combination of both
Radiation	'Does it go anywhere else?'	Neuropathic pain may follow a nerve or dermatomal distribution Pancreatic pain radiates to the back due to coeliac plexus involvement
Associated symptoms	e.g. 'Does the pain interfere with your sleep?'	Always ask about bowel and bladder function and limb weakness and numbness if there is a concern about spinal cord compression
Temporal factors	'Is it there all the time or does it come and go?'	Pain that arises shortly before the next dose of slow-release morphine is due suggests that the dose of slow-release morphine may need to be increased
Exacerbating and relieving factors	'What makes it better and what makes it worse?'	Explore the response of the pain to analgesics and other interventions, including those previously tried Ask about unwanted effects of analgesics Clarify the dose of current analgesics and whether analgesics are being taken regularly or as required
Severity	'How bad is it?', 'Does it stop you doing anything?'	Ask the patient to give a score out of 10 at the time of assessment, when the pain is at its worst, when it is at its best and after analgesia Explore the impact of the pain on the patient's activities of daily living and lifestyle

Table 1

Pharmacological management

The analgesic ladder: the World Health Organization analgesic ladder (Figure 1) is the established structure for the management of cancer pain. Its application to non-malignant conditions in the palliative care setting is also advocated and practised,[8] although not thoroughly tested.

The underlying principles are that analgesia is administered:

- regularly
- by mouth
- with progression up the ladder if adequate analgesia is not achieved.[2]

The role of adjuvants, which can be added in on any step of the ladder, is discussed in more detail below.

Step 1 — Non-opioids — *paracetamol* (1 g 4-hourly, maximum 4 g in 24 hours) is generally well tolerated, although a decrease in dosage is necessary if the patient has a reduced body weight or risk factors for hepatotoxicity.[9]

Non-steroidal anti-inflammatory drugs are mainly used for pain associated with inflammation, a common element of cancer pain.[9] This type of pain can also predominate in some non-malignant conditions. Relative contraindications including renal impairment, and potential risks including gastrointestinal, renal and cardiovascular toxicity, must be individually balanced against the anticipated benefits.[9]

Step 2 — Weak opioids — weak opioids such as codeine (30—60 mg 4-hourly) or tramadol (50—100 mg 4—6-hourly) are added if adequate pain relief has not been achieved. Adverse effects should be managed as for step 3 (below). Step 2 should not delay progression to step 3 if the pain is severe: if adequate pain relief is not achieved at step 2, progression should be up the ladder and not to another drug within the step 2 class.

Step 3 — Strong opioids — the National Institute for Health and Care Excellence (NICE) has published guidance on the initiation of opioids in palliative care.[6]

Oral morphine is the recommended first-line opioid. Treatment can be initiated with either regular sustained-release or immediate-release preparations depending on the patient's preference. For example, 10—15 mg sustained-release morphine 12-hourly is a typical starting dose for a patient with normal hepatic or renal function. Oral immediate-release morphine 5 mg should be available as required[6] as a rescue medication to treat pain occurring between doses of regular analgesia (Table 2). Such pain is often referred to as 'breakthrough pain'.

Regular review and dosage adjustment are necessary, taking account of the additional rescue medication the patient has required when calculating the new dosage of slow-release opioid. Titration should occur until 'a good balance exists between acceptable pain control and adverse effects' (Table 2).[6] There is no maximum dosage of strong opioids. However, continued upward titration should be avoided in the absence of analgesic benefit. Table 3 outlines guidance should the response to analgesia be inadequate.

Clear explanation supported by written guidance must be provided on:

- how to take the medication, including rescue medication and medication to control unwanted effects
- arrangements for review and interim contact information
- how to obtain further prescriptions.