CPD Article

Pain management in palliative care

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Abstract

Pain is an important and under-treated symptom of life-threatening illness. The problem of pain is described and a framework for assessment presented by this article. Clinical assessment, by history, examination and selected special investigation providing the correct diagnosis, facilitates optimal treatment of the symptom. Correct use of analgesic medication, following the guidelines of the WHO step ladder, with the addition of adjuvant analgesics, should control the pain in nearly all cases. Attention should also be given to other aspects of pain, psychosocial or spiritual; sometimes called "total pain". Aspects of non-pharmacological treatment as well as optimal use of analgesic drugs are discussed, with special attention to the use of strong opioid analgesics, like morphine. Some of the side-effects of morphine are addressed, and careful dose titration is encouraged.

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Introduction

The extent of the problem of poorly controlled pain in advanced illness may be seen in this quote from the Korea Declaration (2005): *"Of patients with advanced cancer, 70% have pain and 70%-90% of those with advanced AIDS have uncontrolled pain ... suffering on this scale is … unnecessary … Every individual has the right to pain relief."*[1]

The late Dame Cecily Saunders articulated the term **"total pain"**, which is *"…the concept that identifies that both pain and suffering components are important for adequate therapy. Total pain encompasses all components contributing to the pain and suffering including the noxious physical stimulus, emotional, social, bureaucratic, financial and spiritual"*.[2]

In 2002, the World Health Organisation adopted a definition of palliative care in which pain is the only symptom that is mentioned specifically. The definition requires *impeccable* care for the whole patient, and for all the symptoms, of which pain is one of the most important. The definition reads as follows: "Palliative care is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and **impeccable assessment and treatment of pain** and other pro-blems – physical, psychosocial and spiritual."[3]

Definition

A definition of pain is important for uniformity of understanding in clinical practice and research, and ultimately for the patient advocacy objective of better care. One definition is: *"an unpleasant sensory and emotional experience, associated with actual or potential tissue damage, or described in terms of such damage"* .[4] A patient-centred approach is served by the simple yet comprehensive *"Pain is what the patient says it is"*.[5]

Pain classification

The variation in response to a similar noxious stimulus from person to person and even in the same person at different times makes the classification, measurement and recording of pain important. Other factors should also be considered, such as mental illness, social isolation and spiritual fear. Classifications should help in at least two ways: first to facilitate understanding and assessment, and then to improve treatment.[5] Figure 1 shows the somatic generators of pain.

Figure 1: Somatic generators of pain

- Nociceptive – peripheral or isceral
- Neuropathic
- Complex regional pain

Assessment of pain

Correct diagnosis is the key to good pain management. A comprehensive history, thorough examination and selected special tests are the tools of clinical medicine in every field, and also in the pain management of palliative care.

History

History taking may be aided by a checklist, an example of which is in Figure 2 below. Each clinician would of course adapt this sort of formula to the setting in which the patient presents. Paediatric practice requires special skill in history taking, as one is often receiving a proxy account of the pain, which should be supplemented by narrative from the child, as well as

behavioural observation. The same sort of approach should be applied to any vulnerable group.[5]

Figure 2: PQRST mnemonic for history taking in pain

- P - precipitating and relieving factors
- Q - quality
- R - radiation
- S - site and severity
- T - timing and treatment

Formal pain assessment tools are most valuable for recording and monitoring the pain and the response to intervention. These tools are important for the multidisciplinary team that attends to the patient at different times. The control of every dimension of the "total pain" is the duty of the whole team, thus each member should record and review their interventions and there should be communication between the members of the team. For the physical pain, the tools may include a numerical rating scale, a verbal descriptor scale or a visual analogue scale.

The clinician should take care to elicit every pain, remembering that patients may have multiple pathologies and that a new pain may indicate disease progression or incidental conditions (like migraine). The meaning of the pain to the patient needs to be considered.

Examination

A thorough physical examination should be done. The 'laying on of hands' is also part of the healing process, especially if the patient has a disfiguring or malodorous condition.

Special investigations

The history and examination may provide enough information for the diagnosis and an initial plan, but selected special investigations may be needed.

Management of pain in palliative care

The steps in the management of pain in palliative care are listed in Figure 3.

Figure 3: Steps in pain management[7]

1. Assessment of pain
2. Careful explanation to patient and carers discussing treatment options
3. Correct reversible factors
4. Institute disease-specific palliative treatment, e.g. palliative radiotherapy for bone metastases, ARVs for neuropathic pain
5. Consider non-pharmacological approaches, including heat/ cold, massage, meditation, relaxation, distraction and music therapy
6. Offer psychological and spiritual support, addressing the meaning of the pain to the patient
7. Institute drug therapy – analgesics and **co-analgesics**

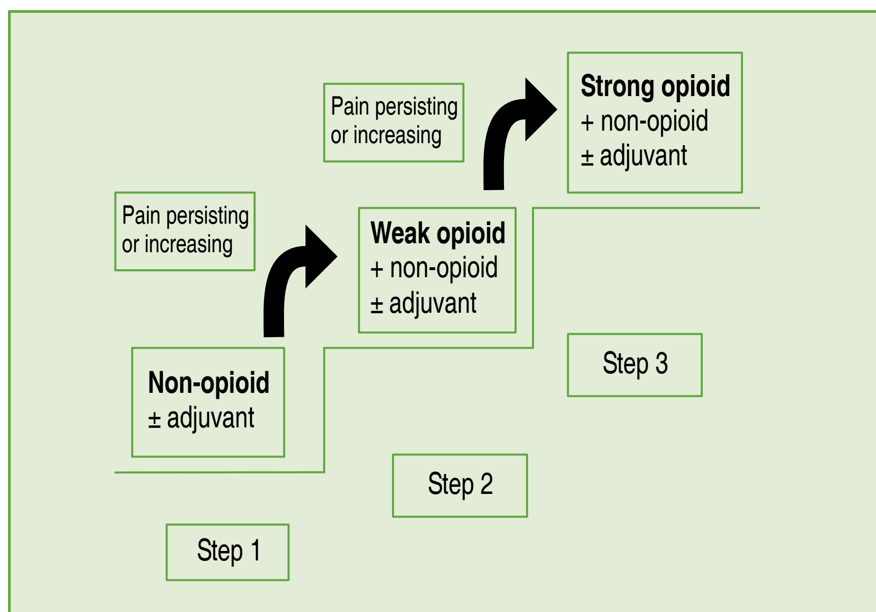
The use of analgesic drugs in palliative care

The principles of the WHO guidelines dictate the use of analgesic medication "by the mouth, by the clock and by the ladder".[7]

- *By the mouth*: use oral medications unless the patient is vomiting or unconscious.
- *By the clock*: for persistent pain, analgesics should be given regularly at a fixed dose on a fixed schedule.
- *By the ladder*: the severity of the pain and efficacy of previous interventions should guide the choice of analgesic potency. Patients should be started on the lowest level possible, the dosage titrated and new agents selected until control is optimal.
- *For the individual*: individual requirements for analgesics vary enormously; the dosage of analgesic must be titrated against the particular patient's pain.
- *Attention to detail*: give precise instructions to the patient and family, verbally and written, and warn about side effects.

The WHO three-step analgesic ladder is illustrated in Figure 4. After careful assessment of the cause and severity of the pain, as well as its clinical characteristics, analgesic medication should be prescribed. This should be used regularly, and administered by the oral route if possible. As is illustrated in the diagram, an increasing dose of analgesia, with or without co-analgesics could be used, depending on the patient and the cause of the pain.

Figure 4: The WHO Three-Step Analgesic Ladder[8]



Non-opioids: paracetamol, NSAIDs
Weak opioids: codeine, tramadol
Strong opioids: morphine, fentanyl, methadone

If a weak opioid ceases to be effective, it is important **not** to switch to another weak opioid in step 2, but to switch to step 3. Do not use a weak opioid and a strong opioid in combination, as they work on the same receptors and the weak opioid therefore will interfere with the action of the strong opioid.

The introduction of morphine

The introduction of morphine often follows disease progression or pain breakthrough, which needs counselling and support of the patient and family. The myth that the use of morphine signifies that hope has been given up should be addressed and corrected.

Oral morphine syrup is a useful formulation to commence strong opioid therapy because it is flexible and inexpensive. In the opioid-naive patient, commence with 2.5 to 10 mg every four hours, depending on the weight of the patient and the severity of the pain.

Side effects of opioid analgesics should be anticipated routinely. Suitable medication and non-drug measures should be instituted to treat the expected side effects of:

- **Constipation**: use lactulose 15 to 30 ml daily (may need to add a stimulant like senna at intervals)
- **Nausea**: haloperidol 1.5 mg to 5 mg in divided doses or metoclopramide 10 mg three times daily
- **Drowsiness**: Usually wears off after a few days

Doses of analgesic drugs may be titrated upwards for better pain control or downwards to reduce side effects, providing that there is continuity of analgesia.

Increasing dose:

- Increase in increments of 30 to 50% percent of dose, (e.g. 5 mg →10 mg → 15 mg →20 mg → 30 mg →45 mg → 60 mg→ 90/100 mg→120/160 mg)
- There is no ceiling (maximum) dose of morphine. The dose of morphine is titrated to the patient's pain control requirement

Review the patient regularly:

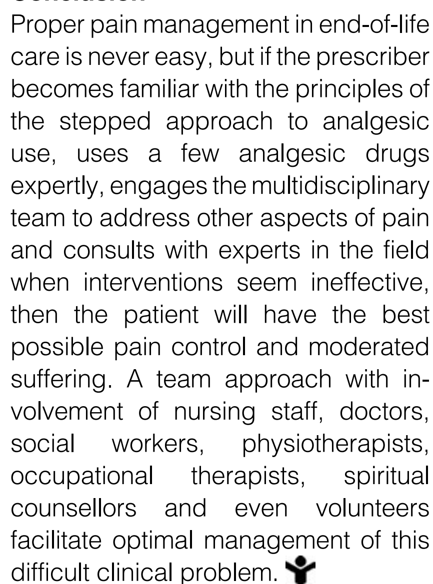
- Severe pain: dose can be increased twice a day. If less severe, increase every one or two days to minimise side effects.
- Once tolerant, a double dose can be given at bedtime to avoid waking for 2 am dose.
- For ease of administration, consider converting to MST once pain is controlled.

Breakthrough doses:

- Breakthrough doses may be used when pain is not controlled on the regular dosing schedule (e.g. a patient on morphine syrup 20 mg four hourly will receive 10-20 mg morphine syrup stat).

Adjuvant drugs act to promote the analgesic effect of simple or opioid analgesics. They can be added at any stage of management to improve pain control and are especially useful in so-called "difficult pain", such as peripheral neuropathy or bowel obstruction. Amitriptyline is useful at low doses (10 to 25 mg) and anti-epileptic agents such as carbemazepine are useful for neuropathic pain. Hyoscine butylbromide is both antispasmodic and anti-secretory, which is helpful in the pain of intestinal obstruction. Drug interactions should be considered when engaging in this planned poly-pharmacy.

Conclusion



Proper pain management in end-of-life care is never easy, but if the prescriber becomes familiar with the principles of the stepped approach to analgesic use, uses a few analgesic drugs expertly, engages the multidisciplinary team to address other aspects of pain and consults with experts in the field when interventions seem ineffective, then the patient will have the best possible pain control and moderated suffering. A team approach with involvement of nursing staff, doctors, social workers, physiotherapists, occupational therapists, spiritual counsellors and even volunteers facilitate optimal management of this difficult clinical problem.

See CPD Questionnaire, page 42

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