

Principles of pain control in palliative care for adults,

GUIDANCE PREPARED BY A WORKING GROUP OF THE ETHICAL ISSUES IN MEDICINE COMMITTEE OF THE ROYAL COLLEGE OF PHYSICIANS

ABSTRACT: Specialist palliative care is now widely available and there are many good textbooks of palliative medicine. But some patients still suffer pain needlessly. Clinicians may not know how to use analgesia appropriately or may be anxious about giving an adequate dose of strong opioids such as morphine. This brief outline is intended to make the principles of pain control readily available to all clinicians who look after terminally ill patients. It applies to patients with non-malignant disease as well as to those with advanced cancer.

Some doctors worry that they may unintentionally shorten life in the process of alleviating pain, or have their motives misinterpreted. Discussions of the principle of double effect have tended to focus on the use of morphine in dying patients. The principles of using morphine are identical to those for many other drugs, such as cytotoxic drugs, which also have potentially life-threatening side effects. The risk of serious adverse effects must always be weighed against the potential benefit of good pain relief in each individual. Correctly used, morphine and other opioid analgesics are very safe, and so allow doctors to relieve pain and ensure a comfortable death without shortening life.

Patients themselves may not always be able to make choices about their treatment, because of their illness. But the care of dying patients involves their family and all the members of the multidisciplinary team. Difficult decisions about drug treatment, particularly near the end of life, should always be made in discussion with the family and with the other members of the team. Their knowledge of the patient, and their assessment of his or her situation, can be used to help to make the decision in the way the patient would probably have wished.

Is my patient dying?

Many patients become aware that they are dying before the clinicians caring for them. It is always difficult to predict when death will occur, but in the absence of an apparently reversible cause, those patients with incurable illness will usually have a short prognosis who show

- progressive weight loss
- profound weakness
- drowsiness and reduced cognition
- diminished intake of food and fluids
- difficulty swallowing medication.

What are the aims of management?

When dying becomes a factor in a patient's illness, it is important that this is recognised by everyone caring for the patient. The goals of management of a dying patient are

- to control the patient's symptoms
- to make the quality of life as good as possible
- to enable the patient to do what he or she wants to do.

Should we talk about dying?

If the patient feels able to acknowledge that death is inevitable, even though it may still be some time off, we should discuss with the patient and his family

- what his or her main aims are
- what realistic goals he or she wishes to achieve
- how he or she wishes to be treated in the future.

The majority of patients want, above all, to retain their dignity, and remain as much in control of their situation as they can. They want to know that they will not be abandoned, and that their wishes will be paramount when decisions need to be made.

Do I need to continue all the patient's normal drugs?

Because the main aim of treatment should be symptom control, only medications which will control or prevent distressing symptoms should be given. Many drugs for long-term conditions, such as antihypertensives, can be discontinued.

How common is pain?

Approximately two thirds of terminally ill patients experience pain, whatever the underlying diagnosis. Many people fear dying in pain almost more than death itself. All clinicians who care for dying patients should have the skills necessary to enable pain to be controlled in the majority of patients. They must be willing to seek appropriate specialist advice and support when the pain proves complex or difficult to control. Multidisciplinary specialist palliative care teams are available for patients in both community and inpatient settings. They can offer educational input to colleagues in other specialties, and advise on the management of individual patients.

How do I start?

As in all clinical situations, start with a careful assessment. This should determine the likely reason for the pain, and whether there is a cause which can be relieved. However, many terminally ill patients need regular pain medication to achieve pain control.

The WHO analgesic ladder is a helpful guide when adjusting analgesia to match the patient's pain.

Step 1: non-opioid analgesia, eg paracetamol

Step 2: opioid for mild to moderate pain,
eg dihydrocodeine

Step 3: opioid for moderate to severe pain, eg morphine

If the patient's pain is not controlled on Steps 1 or 2, he or she needs to climb to the next step of the ladder.

Can I use morphine before the very last days of life?

Opioids, and particularly morphine, are the mainstay of management of severe pain in terminally ill patients. Many doctors and patients are anxious about using morphine. When used to treat severe pain, morphine

- is not addictive
- is safe when titrated against the patient's pain
- has not been shown to shorten the life of dying patients.

Although patients do not become addicted, as with many other drugs there may be symptoms if morphine is withdrawn abruptly. These have to be anticipated and managed.

When introducing morphine for the first time, there are straightforward principles for its use.

- Always start with immediate release morphine (morphine IR) so that you can adjust the dose frequently
- Most patients new to morphine will need a starting dose of 5–10mg every 4 hours, unless they have been on high doses of another opioid such as dihydrocodeine
- Give morphine IR regularly every 4 hours. A double dose can be given at bedtime so that the patient can sleep undisturbed
- The same dose of morphine IR should be given in addition, between the regular doses, if the patient is in pain ('rescue' or 'break-through' analgesia). Do not alter the regular schedule, even though an extra dose has been given
- If the pain is not controlled, add up the total morphine taken in the previous 24 hours, and increase the dose by 30–50%
- Once the pain is controlled, and you know the patient's

- Give morphine 4-hourly
- Use rescue doses in addition
- Titrate dose upwards by 30–50%
- Treat side-effects with laxative and anti-emetic
- When pain is controlled, convert to SR form
- Always have morphine IR available for rescue

24-hour morphine requirement, a modified release preparation can be used

- Morphine IR should always be available for rescue analgesia when needed. If certain activities, such as a wound dressing, can be predicted to cause pain, it is sensible to give rescue analgesia before beginning the activity
- The predictable side effects of morphine, particularly constipation and nausea, must be treated at the same time.

Different patients may need widely varying doses of morphine. Provided higher doses produce better pain control, and not intolerable side effects, the dose should be increased progressively, with frequent and regular reassessment by the multidisciplinary team, until the pain is adequately controlled.

All strong analgesics have side effects which good pain control seeks to minimise by careful dose titration and the use of anti-emetics, laxatives etc. Patients' preference must be respected regarding the balance between pain relief and side effects.

What do I do if morphine doesn't seem to be working?

There are three not uncommon situations which you may encounter.

1. *Increasing the morphine dose does not improve the pain, but does produce worse side effects.*
 - Hypercalcaemia of malignancy
 - Bone/joint pain, particularly movement related
 - Neuropathic pain

There are a number of possible reasons (see box) which you should consider.

- Skin pain, eg pressure sore
- Gut colic

Treatment is likely to involve adding an adjuvant drug, such as a NSAID for bone pain, or an anti-depressant or anti-epileptic drug for neuropathic pain. Cancer patients may respond to radiotherapy. Specialist help may well be required to decide on the best combination of approaches, which may also include nerve blocks or spinal analgesia.

2. *Increasing the morphine dose does improve the pain, but the side effects, even when specifically treated, are intolerable.*

Delirium may be the most distressing side effect of opioid treatment. Other reversible causes of confusion should also be looked for.

Switching to an alternative opioid, with specialist advice if appropriate, may lead to a reduction in side effects so that analgesia can be achieved.

3. *The patient seems in total pain, because other problems make the patient distressed, and unable to deal with the pain.*

The problems may be psychological or spiritual, or may be physical

- other physical symptoms, eg nausea or a sore mouth, should receive equally careful assessment and management
- depression or extreme anxiety can be missed in the setting of severe physical illness but should be appropriately treated
- difficulties with family relationships or spiritual anxieties may cause great distress and appropriate support should be offered.

It is beyond the brief of this document to offer treatment guidelines for other symptoms. *The British National Formulary* has helpful guidance. Excellent short text books are also available. Specialist palliative care services locally are always willing to give advice.

When do I need to move away from the oral route?

Many patients become unable to swallow medication in their last hours or days of life.

Some illnesses impair swallowing at a much earlier stage. There may be other reasons why patients need their opioid by another route (see box). Doctors must be familiar with non-oral routes for administering opioids. Unless intravenous access is in place for another reason, the intravenous route should not be first choice, because

Non-oral routes may be used in

- Severe dysphagia
- Intractable vomiting
- Intestinal obstruction
- Malabsorption
- Inability to comply with an oral regimen

- it means an uncomfortable, invasive procedure
- it is not as easy to manage out of hospital.

Alternatives include

- *transdermal*, eg fentanyl, which is useful for patients with stable analgesic requirements who have difficulty swallowing over prolonged periods of time or intractable nausea
- continuous *subcutaneous infusion*, usually of diamorphine, which allows certain other drugs to be administered through the same syringe and is a convenient method of administration in the last days of life
- *rectal*. Although less commonly used it can be helpful, particularly if the patient dislikes pumps or similar machinery.

Continuous subcutaneous infusion of analgesia

This is a very common method of controlling symptoms in the last hours or days of life, when patients can no longer swallow. Battery-operated syringe drivers are widely available, reliable and simple to operate. All doctors who care for dying patients should be familiar with their use. A wide range of drugs can be used (although in many cases outside their licensed routes or indications); the most common are

- Diamorphine. The equivalent dose is **one third** of the oral morphine requirement over 24 hours
- A sedative, usually a benzodiazepine such as midazolam
- Hyoscine or glycopyrronium for 'death rattle'
- An anti-emetic. If the patient also needs a sedative, levomepromazine (methotrimeprazine) can fulfil both functions.

Ideally, no more than two drugs should be mixed in the same syringe, although three are occasionally used.

The syringe driver is set to run over 24 hours. If the diamorphine dose is not adequate for pain control it should be increased by 30–50% in a fresh syringe, again set to run over 24 hours. Intermittent subcutaneous injections can be given if the patient needs rescue analgesia.

When should I seek advice or help from a specialist team?

Careful opioid titration is likely to produce good pain control in about 80% of patients. However, if the pain is complex or proving difficult to control, or the patient needs adjuvant treatments, you may well need specialist help to find the optimal regimen.

We all have a professional obligation to seek specialist advice when we reach the limits of our own skills. The introduction of Clinical Governance has placed even more emphasis on being sure that patients receive the right care in the right setting.

Further reading

Hanks GWC, Cherny N. Opioid analgesic therapy. In: Doyle D, Hanks GWC, MacDonald N, eds. *Oxford Textbook of Palliative Medicine*. Oxford: Oxford University Press, 1998.

Changing Gear – Guidelines for managing the last days of life in adults 1997.

National Council for Hospice and Specialist Palliative Care Services. 1st Floor, 34–44 Britannia Street, London WC1X 9JG. Telephone 020 7520 8299, Fax 020 7520 8298

Twycross R. Palliative care physicians always have their patients' best interests in mind. *Brit Med J* 1999;319:639.

British National Formulary: *Prescribing in palliative care*.

Hospice and Palliative Care Services Directory (published annually)
The Hospital Information Services at St Christopher's,
51–59 Lawrie Park Road, London SE26 6DZ.
Telephone 020 8778 9252, Fax 020 8776 9345

Principles of pain control in palliative care for adults

**NEW
TITLE**

This text is available in laminated format for easy use on wards. Price £10.00 for a pack of 5. Please send a cheque to:
The Publications Department, Royal College of Physicians, 11 St Andrews Place, London NW1 4LE