

MANAGEMENT OF CHRONIC CANCER PAIN

Most patients with cancer have more than one pain and each pain should be assessed and managed separately. Psychological, social and spiritual elements can influence pain and should be assessed prior to any medication change - analgesics may not be effective if these elements are prominent

Patients may be using traditional, herbal, homeopathic or over-the-counter medication that can interact with prescribed drugs. Advice should be sought from the pharmacist.

SECTION 1 – THE ANALGESIC LADDER

For chronic cancer pain, analgesics should be given **regularly, by-the-clock** whether pain is controlled or uncontrolled. ♦

Step 1 – Mild Pain

A non-opioid such as **paracetamol** should be given regularly 4 times a day. (Max. 4g/ day).

Adjuvants should be given at this stage if appropriate (See Section 2).

Step 2 – Mild to Moderate Pain

A full dose of an opioid such as **Co-codamol** 30/500 must be given regularly 2 tablets FOUR times daily.

Paracetamol should be discontinued when using a combination analgesic, which gives the full daily dose of paracetamol.

It is good practice to use only one step 2 drug and, if it is not effective at full dose, then move to step 3 of the ladder to morphine and **not** horizontally to another opioid for mild to moderate pain.

Adjuvants should be given at this stage, if appropriate. (See Section 2).

Laxatives: senna plus lactulose, or codanthrusate should be given prophylactically unless contra-indicated.

If the patient is in severe pain on presentation, or has difficulty swallowing oral medication step 2 may be omitted but the patient must be given a smaller starting dose of morphine, as it must be used with caution in an opioid-naïve patient.

- The patient must be assessed after the first dose and daily for the first 2-3 days.

Step 3 – Moderate to Severe Pain

Morphine is the opioid of choice for moderate to severe pain. A normal release oral preparation such as morphine sulphate as a liquid or tablet has the advantage of achieving more rapid onset of pain control than controlled release morphine. However, in some situations, it may be appropriate to start with the controlled release preparation if, for example, there were problems with compliance. For all patients a normal release preparation should be provided as “escape” medication for breakthrough pain (see below)

a) Starting doses

1. Adult, not pain controlled on step 2 opioids:

Normal release morphine, 5-10mg 4 hourly (Controlled release morphine 10-20mg 12 hourly)

2. Elderly, cachectic or opioid naïve patients

(missed out Step 2):

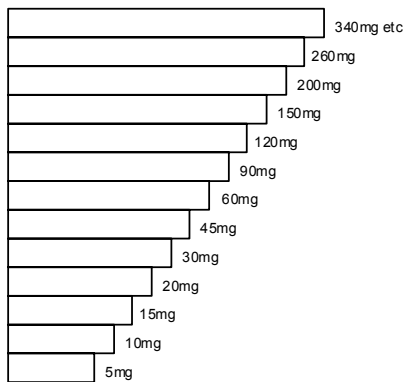
Normal release morphine, 2.5-5mg 4 hourly. If the first dose is inadequate, this may be repeated in 30 minutes. If this is more effective, a higher dose can be given as the next dose if the patient is not too drowsy. Alternatively start on controlled release morphine 10mg 12 hourly.

Giving a normal release preparation 4 hourly, by the clock, means giving 6 doses over 24 hours. The dose during the night, however, may be omitted if patient is sleeping. The patient should also be allowed to take an additional extra dose as required for breakthrough pain.

b) Titration

If pain is relieved to some extent but returns before the next dose is due, the dose can be titrated (daily if necessary for normal release preparations and every 2 days if titrating with controlled release Morphine), according to the following chart. If, however, the patient becomes too drowsy, then reduce dose to the previous dose (or by 30%) and review.

Suggested incremental scale



In the community, the patient should be visited within 24 hours of starting morphine and assessed for sedation or other central effects or nausea and then daily until pain relief is achieved.

Common signs of Opioid toxicity

- twitching
- vivid dreams
- hallucinations
- confusion
- agitation

Respiratory depression is a sign of overdose.

c) Controlled Release Administration

When pain is controlled, add up the total daily dose of normal release preparation and divide this by 2 for the 12 hourly controlled release dose, or give the total daily dose as the 24-hour preparation, to the nearest capsule strength.

d) Breakthrough Pain

For breakthrough pain give normal release morphine at a dose approximately one sixth of the total daily morphine dose. This dose should be increased in line with increases in controlled release morphine dose. If pain is not improved within half an hour of breakthrough medication, the dose of normal release morphine may be repeated. If the patient is still in pain following 2 consecutive breakthrough doses, medical review is indicated. If breakthrough analgesia is required regularly, an increase in controlled release morphine may be indicated (increase by 30-50%).

e) Severe Renal Impairment

In renal failure, controlled release morphine should not be given, as accumulation is likely. The dose/frequency of administration of the normal release preparation may need to be reduced. In this situation an alternative opioid such as transdermal fentanyl may be safer.

f) Unwanted effects – nausea/ vomiting/ constipation

An anti-emetic such as metoclopramide, 10mg three times daily, or haloperidol 1.5mg at night should be prescribed to be taken if required for nausea and reviewed in 7-10 days. This may need to be given parenterally if the patient is vomiting.

Constipation should be anticipated and laxatives prescribed prophylactically and titrated according to need; a stimulant, plus a softener are required. Danthron preparations should not be given if patient is faecally incontinent. It may cause a red rash between buttocks and top of legs.

g) Syringe Driver

If unable to take oral medication, start a syringe driver with diamorphine at a dose one third of the total daily oral morphine intake. This should be delivered subcutaneously over 24 hours.

SECTION 2- USE OF ADJUVANTS

1. Bone Pain

NSAIDs e.g. Diclofenac, Ibuprofen, Naproxen.

NSAIDs can be useful where there are bone metastases (local tenderness), although a referral to oncology for radiotherapy or hormonal treatment may be appropriate. Consider using bisphosphonate in breast cancer or multiple myeloma.

Due to the risk of gastrointestinal haemorrhage, NSAIDs should be used with caution particularly in the following patients:

- Frail elderly
- History of previous gastric ulceration or dyspepsia
- Concurrent corticosteroids or warfarin medication.

Consider gastro protection with a proton pump inhibitor.

For the following:

- 2. Liver capsular pain,**
- 3. Headaches due to raised intracranial pressure,**
- 4. Nerve compression pain,**

Corticosteroids may be of benefit.

Dexamethasone (8mg daily) is useful for liver capsular pain \diamond . Headaches, usually occurring in early morning and resulting from raised intracranial pressure may require 16mgs Dexamethasone daily. Steroids can be given as a single daily dose and should be given before 2pm. Dexamethasone should only be given for a short time (2-4 weeks) and then reduced by 2mg weekly until discontinued. If, during the dose reduction period the symptoms return, increase the dose to the previous level for a short period before starting to reduce again. If, after starting steroids, there is no improvement in the symptoms, the steroids should be discontinued after a few days.

Urine should be checked weekly for glycosuria and blood sugar checked when glycosuria is present. Patients with diabetes may experience poor control of blood sugar and should be monitored as appropriate. The mouth should be checked for oral thrush daily, and, if present, a systemic agent such as Fluconazole 50mgs – 100mgs given daily for 7-10 days.

5. Neuropathic pain due to disease, surgery or radiotherapy

This is common in the axilla with breast carcinoma, or over the chest wall after pneumonectomy. This pain may not be completely opioid sensitive and several different drugs may need to be tried. The skin over the affected area may be painful to light touch or numb, indicating a sensory change.

a. Tricyclic Antidepressants

e.g. Amitriptyline (start with 10mg at night and titrate to 75mg at night, if required) \diamond . Should be used with caution in patients

who are frail, elderly and especially those with heart disease.

b. Anticonvulsants e.g. Gabapentin

Starting dose 100 – 300mg at night. If tolerated increase to 3 times a day and gradually titrate up to a maximum of 900mg 3 times daily. Review the day after commencement for side effects e.g. drowsiness, GI upset.

Sodium Valproate given as a single dose at night as an alternative with monitoring patient's LFT's. Anticonvulsants may be used alone or in combination with a tricyclic antidepressant.

6. Muscle Spasm (sometimes over a bone metastasis)

Diazepam 2-5mg three times daily. This can also be helpful if anxiety contributes to pain.

7. Colic

Hyoscine Butylbromide 40mg-100mg over 24 hours, either subcutaneously or orally.

8. Bladder Spasm

Oxybutynin 2.5mg up to four times daily may help. Use a lower dose (2.5mg twice a day) in the elderly

Alternative opioids

Changing from one opioid to another may be indicated when morphine is ineffective or causes significant side effects. Dose conversions given are only a guide and may not be appropriate in some patients. **Advice should be sought before a switch is made.**

Transdermal Fentanyl can be a useful alternative for treating stable pain in patients who have difficulty swallowing, unacceptable toxicity from morphine, persistent nausea and vomiting, intractable constipation, compliance difficulties and in gastro-intestinal obstruction. Refer to fentanyl algorithm. The transdermal patch has a lag time of 6-12 hours to onset of action and a time of 36-48 hours before steady state drug levels are achieved making titration slow. Each patch should be left in place for 72 hours then removed and a new patch applied to a new site. Patients require careful explanation of how to use the patches and dispose of them safely.

Oxycodone is available in normal and controlled release preparations and should be considered as an alternative in patients unable to tolerate morphine. The oxycodone : morphine dose conversion ratio is 1 : 2.
(5mg oral oxycodone is approximately 10mg oral morphine)

Oxycodone is also available as a subcutaneous injection.
The conversion of oral oxycodone to SC oxycodone is 2 : 1

(5mg SC oxycodone is approximately 10mg oral oxycodone)

Hydromorphone (non-formulary in Glasgow) is available in normal release and controlled release preparations. It can be considered as an alternative opioid when morphine is causing adverse effects. Hydromorphone is approximately 7.5 times as potent as morphine.

(1.3mg hydromorphone is approximately 10mg morphine).