# Document Control

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Symptom Management in Palliative Care Guidelines

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<td>Aug 2014</td>
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| 1.4     | Feb 2017    | Revision | Updated Opioid conversion chart page 9
|         |             |          | Reviewed to include guidance on renal failure pages 29-33 Amended malignant spinal cord     |
|         |             |          | compression guidelines page 45                                                             |
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**Superseded Documents**

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- Medical Director
- North Devon Hospice
- Macmillan Nurses
- Pharmacy
- Medicine for the Elderly
- A+E Consultants
- Devon Partnership Trust
- Mouth Care Specialist
Approval and Review Process
- Drug and Therapeutics Group
- End of Life Group

Local Archive Reference
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Local Path
SPECIALISTPALLIATIVE CARE\Policies and Documents on BOB
Filename
Symptom Management in Palliative Care Guidelines

<table>
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Symptom Management in Palliative Care Guidelines

Contents

1 Introduction
This document sets out Northern Devon Healthcare NHS Trust's best practice guidelines for Symptom Management in Palliative Care.

2 Purpose
The following general principles can be applied in order to improve

- Symptom management in palliative and end of life patients in accordance with best practice guidance.

This guideline is to help community nurses and hospital teams as well as specialist palliative care teams. It aims to provide a checklist for the management of common problems in palliative and end of life care, with some information on drug treatment.

It is designed to guide clinical and medical teams in the provision of current best practice in symptom control for palliative and end of life patients. It is the responsibility of all professionals to exercise clinical judgement in the management of individual patients.

Cautionary note:

Some of the drug usage recommended is outside product licence, either by way of indication, dose or route of administration. However, the approaches described are recognised as reasonable practice within palliative medicine in the UK. If concerned, contact the specialist palliative care team (see section 4).

3 Definitions/ Abbreviations
Please see Appendix B.

4 Contact Numbers for Specialist Palliative Care Advice
- Monday-Friday 0830-1630 (except bank holidays)
  Available for symptom control advice during working hours
  Contact Hospital Specialist Palliative Care Team on:

    | External | Internal |
    |----------|----------|
    | 01271 311642 | ext 3642 |

  For more urgent advice during these times, you can page a member of the team via the switchboard

- Hospice 24 hour advice line
  Available for symptom control advice at any time on:
  01271 347214

5 General Principles of Symptom Management in Palliative Care
This document is to guide clinical and medical staff in the management of symptom control in palliative and End of Life patients. If symptoms persist or do not respond to these measures, please contact the Specialist Palliative Care Team.
5.1 Pain Control in Palliative Care - The WHO Ladder

**Important keys to success include:**
- Accurate evaluation of the pain from history, examination and appropriate investigation to diagnose the cause of the pain
- Explanation to patient and carers with discussion of treatment options
- Individualise drug and non-drug approaches and set realistic goals
- Administer analgesics regularly (and as required for breakthrough pain)
- Regular assessment of pain and any response to treatment
- **Referral** to the Specialist Palliative Care Team if the pain is not progressively relieved
- If eGFR less than 30ml/min talk to specialist palliative care team and use **Pages 29-33** for guidance in opioid use for those dying in renal failure
- For patients in severe pain, consider omitting steps 1 & 2 if appropriate

### WHO Ladder

**Step 1**
Non-opioids
Paracetamol 1g 4 times daily

### Step 2
Weak opioids
- Codeine 30-60mg 4 times daily
- + Paracetamol 1g 4 times daily
- Or Cocodamol 30/500 2 tablets 4 times daily

### Step 3
Strong opioids
Morphine (normal release solution or tablets 4hrly or modified release tablets 12hrly)
Full step 2 equivalent to 30mg oral morphine/24hrs
E.g. MST 15mg 12hrly

**Breakthrough pain**
- Prescribe normal release oral morphine at 1/6th 24hrly morphine dose as required
- Assess 30-60mins after breakthrough dose
- If pain persists – give a 2nd breakthrough dose
- If pain still not controlled – **seek advice**
- Some types of movement-related or episodic breakthrough pain are best controlled with a short acting opioid – **seek advice**
- If multiple breakthrough doses required, consider increasing regular medication – see dose titration

**Dose titration in step 3**
- Increase regular oral morphine dose in steps of about 30% (or according to breakthrough doses) until pain controlled or side effects develop
- If pain not controlled and developing side effects – **seek advice**
- Increase laxative dose as needed
5.2 Adjuvant Analgesics

**Principles of use:**
- All principles of pain management apply for the use of adjuvant analgesics
- Many of the drugs classified as adjuvant analgesics were developed and released for clinical indications other than pain
- Ensure the first line adjuvant analgesic is at its pharmacologically effective dose level and interval before changing to/adding second line drugs
- If dose limited by side effects, review its value and consider stopping
- If not getting progressive pain control – seek advice

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### Adjuvant step ladder – Neuropathic pain
(Alongside WHO ladder)

<table>
<thead>
<tr>
<th>Step 1</th>
<th><em>Corticosteroid</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Tricyclic Antidepressant Or Anti-epileptic</td>
</tr>
<tr>
<td>Step 3</td>
<td>Tricyclic Antidepressant And Anti-epileptic</td>
</tr>
<tr>
<td>Step 4</td>
<td>NMDA-receptor-Channel-blocker (seek advice)</td>
</tr>
<tr>
<td>Step 5</td>
<td>Spinal analgesia (seek advice)</td>
</tr>
</tbody>
</table>

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### Specific adjuvant therapies

- **Amitriptyline** (neuropathic pain)
  - Tricyclic antidepressant
  - 10-25mg at night
  - Titrate up every 3 days to 75mg at night according to side effects
  - E.g. sedation, confusion, dry mouth

- **Gabapentin** (neuropathic pain)
  - Anti-epileptic
  - Starting dose 300mg/day
  - Titrate up by 300mg/day up to 1800mg/day
  - Slower titration in elderly and frail

- **NSAID** (e.g. Diclofenac)
  - May be useful adjunct in many pains
  - Consider for bone pain, liver pain, soft tissue infiltration, inflammatory pain
  - Consider PPI if risk of GI side effects

- **Corticosteroids** (e.g. dexamethasone)
  - Raised intracranial pressure (8-16mg/day)
  - Nerve pain (8-16mg/day)
  - Liver pain (4-8mg/day)
  - Give before mid afternoon
  - Reduce to lowest effective dose

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### Additional measures (including specific pains)

- Skeletal muscle cramp – consider benzodiazepines, e.g. diazepam
- Smooth muscle spasm/colic – consider antimuscarinics, e.g. buscopan
- Raised intracranial pressure – consider corticosteroids, e.g. dexamethasone
- Bone pain – consider bisphosphonates, NSAIDs, radiotherapy
- Additional measures – TENS, nerve block, radiotherapy

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* A trial of corticosteroid is important when neuropathic pain is associated with limb weakness
5.3 Opioid Prescribing in Palliative Medicine (NICE clinical guideline 140)

1. Communication – Provide verbal and written (leaflet on BOB/in pharmacy – Strong opioids for palliative patients) information on:
   - When and why strong opioids are used for pain, their likely effectiveness and how to take them (short and long-acting agents)
   - Side effects and signs of toxicity
   - When offering treatment with strong opioids, ask about concerns such as:
     - Addiction and tolerance
     - Side effects
     - Fears that they imply final stage of life
   - Offer patients access to frequent review of pain control and side effects
   - Give information about who to contact OOH, safe storage and follow up arrangements

2. Starting and Titrating
   - Offer regular MST with oramorph for breakthrough pain
   - Suggested starting dose:
     - MST 10-15mg BD with Oramorph 5-10mg PRN
   - Adjust dose to achieve balance between pain control and SEs
   - If more than a few adjustments needed – seek specialist advice
   - Offer frequent review during titration
   - Seek specialist advice for those with moderate to severe renal or hepatic impairment

3. First line and maintenance
   - Oral morphine (avoid offering fentanyl patches when oral opioids are suitable)
   - If oral opioids not suitable
     - Only use fentanyl patches for stable patients with stable pain (see page 10)
     - Diamorphine is the first line SC opioid and appropriate for unstable pain
   - If pain inadequately controlled despite optimising 1st-line maintenance, review strategy and consider specialist advice

4. Preventing and managing side effects
   - Inform patients of side effects of constipation, nausea, drowsiness & toxicity symptoms
   - Explain self-management and sources/indications for help and advice as appropriate

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**Constipation**
- **Prescribe regular laxative for all patients**
- Tell patients that laxatives take time to work, how to titrate & importance of adherence

**Drowsiness**
- May occur at initiation and following an increase or after a PRN dose
- Usually self-limiting
- May affect their ability to drive

**Nausea**
- Consider PRN or regular anti-emetic
- Usually self-limiting

**Moderate-severe CNS side effects**
- Look at guidance on overdose (pages 11&12)
- Consider renal function
- Consider adjuvant analgesics
- Consider dose reduction if pain controlled
- Consider opioid switching if pain not controlled (seek specialist advice before switching)
5.4 Opioid Conversion Charts and Fentanyl Patches

The conversions below are approximate and vary between individuals. At higher doses these variations require the consideration of a reduction in the dose when converting from one strong opioid to another to avoid sedative side effects.

N.B. Morphine is the strong opioid of choice. Alternative opioids are generally used when there are unacceptable side effects with morphine. Each has its own advantages and disadvantages. If considering an opioid switch – seek advice from the specialist palliative care team.

**Oral weak opioids**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Max daily dose</th>
<th>Equi-analgesic dose of oral morphine per 24hrs to max daily dose of preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine phosphate</td>
<td>240mg</td>
<td>30mg</td>
</tr>
<tr>
<td>Dihydrocodeine</td>
<td>240mg</td>
<td>30mg</td>
</tr>
<tr>
<td>Cocodamol (30/500)*</td>
<td>8 tablets/capsules</td>
<td>30mg</td>
</tr>
<tr>
<td>Tramadol</td>
<td>400mg</td>
<td>40mg</td>
</tr>
</tbody>
</table>

*Contains paracetamol 500mg per tablet/capsule

Buprenorphine and tramadol are rarely used in palliative medicine, but some patients may come in on these. If this is the case, continue them and, in the event that they need to be altered – **seek advice**

**Indications for fentanyl patches**

- **Must** have stable, controlled opioid-responsive pain
- Swallowing difficulties
- Alternative opioid route for some patients with nausea and vomiting
- Concordance issues
- Renal failure
- Consider for some difficult, opioid induced constipation

**Additional considerations**

- When converting from oral morphine to a fentanyl patch – The first fentanyl patch needs to be applied at the same time as the last dose of MST. For normal release morphine, patients will usually require 3 x 4hrly doses until the subcutaneous depot has built up
- When converting from a fentanyl patch – wait 12 hours before the first dose of oral opioid
- Breakthrough normal release morphine should be prescribed with transdermal fentanyl (see chart above for dose)
- In terminal phase, if a patient has a fentanyl patch in place, continue with the patch and change as normal. If extra pain control is required, the patch can be topped up with subcutaneous opioid (usually diamorphine). As required doses of opioid in this situation need to take both patch and SC medication into consideration. If in doubt – **seek advice**
- Remember to **check for patches** in the unwell palliative patient – they forget to mention these in their tablet list
- Remember absorption may be increased if the patient is **pyrexial**, leading to possible toxicity problems – will need more careful monitoring in this situation
### Prescribing in Palliative Care: A Guide to Equivalent Doses for Opioid Drugs

This is to be used as a guide rather than a set of definitive equivalences. It is crucial to appreciate that conversion ratios are never more than an approximate guide (comprehensive data are lacking, inter-individual variation). The advice is always to calculate doses using morphine as standard and to adjust them to suit the patient and the situation. Some of these doses have by necessity been rounded up or down to fit in with the preparations available, including adjustment of doses for liquid and injectable medications in order to optimise ability to dispense accurately.

**Please seek specialist advice if you are uncertain about what to prescribe and/or patient needing escalating opioid doses.**

<table>
<thead>
<tr>
<th>Oral Morphine</th>
<th>Subcutaneous Morphine</th>
<th>Subcutaneous Diamorphine</th>
<th>Oral Oxycodone</th>
<th>Subcutaneous Oxycodone</th>
<th>Approximate T/D Fentanyl patch micrograms/hr</th>
<th>Subcutaneous Alfentanil</th>
<th>Subcutaneous Fentanyl</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hr dose (mg)</td>
<td>12 hr S/R dose (mg)</td>
<td>24 hr Total dose (mg)</td>
<td>4 hr dose (mg)</td>
<td>24 hr Total dose (mg)</td>
<td>4 hr dose (mg)</td>
<td>24 hr Total dose (mg)</td>
<td>4 hr dose (mg)</td>
</tr>
<tr>
<td>5</td>
<td>15</td>
<td>30</td>
<td>2.5</td>
<td>15</td>
<td>1</td>
<td>10</td>
<td>1</td>
</tr>
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<td>10</td>
<td>30</td>
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<td>5</td>
<td>30</td>
<td>3</td>
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<td>480</td>
<td>40</td>
<td>240</td>
<td>40</td>
<td>120</td>
<td>20</td>
</tr>
</tbody>
</table>

- Two thirds of palliative care patients need <180mg/24hrs of oral morphine.
- The dose conversion ratio of morphine to oxycodone is approximately 1.5-2:1. For the purposes of this guidance we have adopted a 2:1 ratio.
- The dose conversion ratio of SC diamorphine: SC alfentanil is from 6-10:1. It is prudent to use the more conservative ratio when switching from one to the other e.g. if switching from diamorphine to alfentanil, use dose conversion ratio 10:1 so that 10mg diamorphine = 1mg alfentanil. If switching from alfentanil to diamorphine use dose conversion ratio 6:1 so that 1mg alfentanil = 6mg diamorphine.
- The dose conversion ratio of SC alfentanil: SC fentanyl is approximately 4-5:1.
## Transdermal (TD) Opioid Patches

<table>
<thead>
<tr>
<th>Fentanyl TD patch micrograms/hr</th>
<th>Approximate oral Morphine mg/24hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>30-45</td>
</tr>
<tr>
<td>25</td>
<td>60-90</td>
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<td>37</td>
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<td>50</td>
<td>120-180</td>
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<tr>
<td>175</td>
<td>420-630</td>
</tr>
<tr>
<td>200</td>
<td>480-720</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Buprenorphine TD micrograms/hr</th>
<th>Approximate oral Morphine mg/24hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>10-20</td>
</tr>
<tr>
<td>10</td>
<td>20-30</td>
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<tr>
<td>15</td>
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<tr>
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</tr>
<tr>
<td>52.5</td>
<td>120-130</td>
</tr>
<tr>
<td>70</td>
<td>160-180</td>
</tr>
</tbody>
</table>

- A PO morphine: transdermal fentanyl dose conversion ratio of 100-150:1 is used (PCF5 & BNF 100:1, Public Health Education Opioids Aware Resource 150:1) resulting in a dose range of oral morphine per patch strength e.g. Fentanyl TD 25mcg/hr patch approximately = 60-90mg oral morphine/24hrs.
- It is suggested that for conversions from oral morphine to fentanyl patches, the lower doses of fentanyl should be used for patients who have been on oral opioids for just weeks and the higher doses for people who have been on a stable and well tolerated oral opioid regimen for a longer period.
- Transdermal fentanyl patches are changed every 3 days (72 hours).
- A PO morphine: transdermal buprenorphine dose conversion of 100:1 is used (PCFS).
- A variety of transdermal buprenorphine patches are available, changed either every 3, 4 days or 7 days. Check carefully before prescribing & instructing the patient.

Resources: Palliative Care Formulary 6th Edition (PCF6)
BNF
UK Medicines Information: How should conversion from oral morphine to fentanyl patches be carried out?
Updated November 2018 / Review November 2021
Dr Sarah Human, Dr Jo Sykes and Dr George Walker, Consultants in Palliative Medicine, Rowcroft Hospice, South Devon in collaboration with Hospiscare, Exeter, St Luke’s Hospice, Plymouth and North Devon Hospice, Barnstaple.
5.5 Management of opioid overdose in palliative care

Strong opioids are used commonly to control pain in palliative medicine. By using opioids in a balanced way to control pain, naloxone is very rarely required in the palliative care setting.

Features of opioid overdose include drowsiness and respiratory depression. Patients nearing the end of their life are also drowsy and experience breathing changes (e.g., cheyne-stokes breathing) due to the advanced stage of their illness. This makes differential-diagnosis difficult at this time. In this setting the incidence of life threatening respiratory depression due to opioids is extremely rare.

The use of naloxone at the end of life can cause a pain crisis resulting in poor symptom control and agitation for the patient and extreme distress to their family witnessing this. This significant burden needs to be factored into any treatment decision in this setting.

Naloxone needs to be used with great care in patients who are on longer-term opioids for pain control or who are physically dependent on opioids. Use of naloxone where it is not indicated, or in larger than recommended doses, can cause a rapid reversal of physiological effects for pain control, leading to intense pain and distress, and an acute withdrawal syndrome. Hypertension, cardiac arrhythmias, pulmonary oedema and cardiac arrest may result from inappropriate doses of naloxone in these patients.

**N.B.** If, following assessment, professionals are uncertain whether the patient is nearing the end of their life; they may consider seeking advice from the local specialist palliative care team. If the patient is thought to be dying, staff should provide appropriate end of life care.

**Patient not in terminal phase – conservative management plan**

- If respiratory rate greater or equal to 8/min and the patient easily rousable, adopt a policy of “wait and see”. Consider reducing or omitting the next dose of opioid.
- If respiratory rate less than 8/min, patient barely rousable/unconscious and/or cyanosed:
  - Stop the opioid
  - Oxygen via face mask
  - Give IV naloxone 100-200micrograms (1.5-3mcg/kg) as a slow bolus
  - If response inadequate, give further 100microgram boluses every 2 minutes
  - Carefully monitor vital observations whilst aiming to maintain/restore pain relief (monitor for signs of withdrawal as well as overdose)
N.B. Naloxone is shorter acting than morphine, so observe the patient to ensure signs of overdose do not recur. Further boluses/infusion may be necessary, but need to be used with caution and under advice. Particular caution is needed with fentanyl patches due to their long duration of action even once the patch is removed.

In addition to an excessive opioid dose due to over-infusion or an excessive bolus dose, the commonest reasons for development of opioid toxicity in the palliative setting are:

- Development of renal failure in a patient on a renally excreted opioid (e.g. morphine or diamorphine) – **consider checking renal function**
- Reduction of pain relative to opioid dose following a procedure such as radiotherapy or successful nerve block

*Note patient safety alert for use of naloxone in patients on long term opioids (November 2014)*
Management of opioid overdose in palliative care

Opioid toxicity due to:
- Over-infusion or excessive bolus dose
- Pain reduction following DXT/nerve block
- Renal failure (see renal LCP guidelines for guidance on opioids to use in this situation)

Patient in terminal stages (Last 48hrs)

Patient has resps greater or equal to 8/min, Clear airway and adequate respiratory effort

Patient not in terminal phase and resps less than 8/min or poor respiratory effort

Naloxone inappropriate

1. Consider reducing/omitting dose
2. Consider discontinuing opioid infusion
3. Monitor patient

1. Stop the opioid
2. Oxygen via face mask
3. IV naloxone 100-200micrograms (1.5-3mcg/kg) as a slow bolus
4. If response inadequate, give further 100micrograms every 2 minutes
5. Carefully monitor vital observations whilst aiming to maintain/restore pain relief (monitor for signs of withdrawal as well as overdose)

If signs recur, consider further naloxone boluses/infusion and seek advice

- Consider referral to specialist palliative care team
- Consider need for stat dose (of opioid or other syringe driver constituents)
- Review frequently
- Consider need to restart opioid (likely lower dose)

Note patient safety alert for use of naloxone in patients on long term opioids (November 2014)
5.6 Nausea and Vomiting in Palliative Care

Causes:

- Drugs
- Constipation
- Hypercalcaemia
- Cough
- Anxiety
- Gastric irritation
- Raised intracranial pressure
- Unrelated causes – e.g. gastroenteritis

N.B. Treat reversible causes if possible and appropriate

General measures

- Ginger preparations may be effective for nausea
- Sea bands are helpful in movement-related sickness
- Strong smells can trigger nausea

Drug treatments

- Prescribe the appropriate anti-emetic **regularly** and as required
- Give anti-emetics before meals
- Review every 24hrs:
  - If good control - continue anti-emetic unless cause has resolved
  - If some response - increase 1<sup>st</sup> line anti-emetic and consider addition or change to 2<sup>nd</sup> line anti-emetic
  - If no benefit - reassess cause; consider 2<sup>nd</sup> line anti-emetic or alternative 1<sup>st</sup> line anti-emetic; consider alternative route
- If patient is vomiting or oral route in doubt – use SC syringe driver or other parenteral route
- In cases of persistent nausea, absorption may be poor, consider SC syringe driver or other parenteral route
- Consider converting to oral route if good control after 72hrs
- Long term anti-emetic use should be reviewed regularly – continue unless the underlying cause resolves
- Nausea and vomiting due to opioid alone usually resolves in 5-7 days, so a trial without antiemetics is advisable if this is thought to be the cause
N.B. Ondansetron is rarely of value in palliative care due to its limited range of activity – consider for post-operative and chemotherapy induced nausea and vomiting only

5.7 Nausea and Vomiting - Specific treatments

<table>
<thead>
<tr>
<th>Possible causes</th>
<th>Clinical picture</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drugs (inc opioids)</td>
<td>Chemical/metabolic</td>
<td>Persistent, often severe nausea; Little relief from vomiting/retching</td>
</tr>
<tr>
<td>Carcinomatosis</td>
<td></td>
<td></td>
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<tr>
<td>Uraemia</td>
<td></td>
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<tr>
<td>Hypercalcaemia</td>
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</tr>
<tr>
<td>Opioids</td>
<td>Gastric stasis/outlet obstruction</td>
<td>Intermittent nausea often relieved by vomiting; Hiccups; Early satiety</td>
</tr>
<tr>
<td>Anticholinergics</td>
<td></td>
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<tr>
<td>Local tumour</td>
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<tr>
<td>Autonomic failure</td>
<td></td>
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<tr>
<td>Hepatomegaly</td>
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<tr>
<td>Peptic ulceration</td>
<td></td>
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<tr>
<td>Oesophageal or mediastinal disease</td>
<td>Regurgitation</td>
<td>Dysphagia; Little nausea/relieved after food regurgitated</td>
</tr>
<tr>
<td>Gastric stasis/outlet obstruction</td>
<td></td>
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<tr>
<td></td>
<td>Prokinetic</td>
<td>Metoclopramide 10-20mg PO 3x daily</td>
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<tr>
<td></td>
<td></td>
<td>Or 30-60mg SC 24hrly infusion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Or Domperidone 10-20mg PO 3x daily</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If colic or no response – seek advice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consider dexamethasone 4-6mg in the morning (if liver mets or extrinsic compression)</td>
</tr>
<tr>
<td>↑ intracranial pressure</td>
<td></td>
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</tr>
<tr>
<td>Radiotherapy</td>
<td>Cranial disease/treatment</td>
<td>Headache +/- cranial nerve signs</td>
</tr>
<tr>
<td>Brainstem/meningeal disease</td>
<td></td>
<td></td>
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<tr>
<td>Vestibular disease</td>
<td>Movement related</td>
<td>Often associated with vertigo</td>
</tr>
<tr>
<td>Base of skull tumour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motion sickness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unclear</td>
<td>Cause unclear/multiple causes</td>
<td></td>
</tr>
<tr>
<td>Multiple</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
- Cytotoxic drugs – see oncology/haematology guidelines on (BOB) Bowel obstruction – see separate guideline – over page
Symptom Management in Palliative Care Guidelines

- If symptom not resolving – **seek advice from specialist palliative care team**

### 5.8 Management of Bowel Obstruction in Palliative Care

#### Diagnosing malignant bowel obstruction

1. Intra-abdominal malignancy should be present. Most common with:
   a. Bowel cancer
   b. Ovarian cancer
   c. Pancreatic cancer

2. Symptoms/signs
   a. Nausea and/or vomiting
   b. Constipation/diarrhoea
   c. Abdominal pain – insufficient on its own
   d. Abdominal colic
   e. Abdominal distension
   f. Palpable tumour mass
   g. Tympanic percussion
   h. Tinkling/abnormal bowel sounds
   i. Fluid levels/bowel loops on AXR

**N.B.** Pattern and severity of symptoms depends upon level and degree of obstruction

#### Treatment

![Flowchart diagram]

- **Day 1**
  - Metoclopramide 30mg (SC 24hrly in syringe driver)
  - **Stop if develops colic & follow other arm**
  - + Metoclopramide 10mg SC 6hrly as required
  - + Docusate sodium PO 100-200mg twice daily

- **Day 2**
  - Metoclopramide 60mg (SC 24hrly in syringe driver)
  - **Reduce dose/stop if develops colic**
  - + Haloperidol 2.5-5mg SC 8hrly as required
  - + Continue laxative

- **Day 3**
  - Octreotide 600micrograms + **seek advice** (SC 24hrly in syringe driver)

- **Is colic present?**
  - **No**
    - No or partial response
  - **Yes**
    - Buscopan 60mg (Hyoscine butylbromide)
      - + Haloperidol 2.5-5mg
      - +/- Diamorphine 10mg
      - (All above SC 24hrly in syringe driver)
    - **Continued vomiting & colic**
      - Continued nausea & colic
    - Buscopan 90-120mg
      - + Haloperidol 2.5-5mg
      - (Both SC 24hrly in syringe driver)
    - **Continued vomiting**
      - Buscopan 90-120mg
      - + Levomepromazine 6.25-12.5mg
      - (Both SC 24hrly in syringe driver)
### Bowel Obstruction

<table>
<thead>
<tr>
<th>Clinical decision</th>
<th>If Yes → Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is there any doubt whether this is bowel obstruction?</td>
<td>Consider other causes of nausea and vomiting, abdominal distension (e.g. ascites), colic (e.g. contact stimulant laxatives) or altered bowel habit (e.g. constipation)</td>
</tr>
<tr>
<td>2. Is constipation the sole cause?</td>
<td>Bowel history, examination and plain abdominal x-ray (AXR) will help in deciding Clear rectum and start laxatives</td>
</tr>
<tr>
<td>3. Is a physical blockage absent or unlikely?</td>
<td>This may be peristaltic failure (absent or reduced bowel sounds) Exclude peritonitis, septicaemia or recent cord compression Stop anti-peristaltic drugs (e.g. antimuscarinics) &amp; osmotic laxatives Start Metoclopramide SC infusion 30-60mg/24hrs Consider adding a stimulant laxative acting on small and large bowel e.g. bisacodyl or senna +/- docusate sodium 100-200mg twice daily</td>
</tr>
<tr>
<td>4. Is thirst present?</td>
<td>Rehydrate orally, SC or IV</td>
</tr>
<tr>
<td>5. Is surgery possible?</td>
<td>Surgery may be possible if - The patient agrees; is in good/reasonable nutritional and medical condition; has a single level of obstruction and has no evidence of more widespread peritoneal disease. The prognosis is poor if there has been previous abdominal radiotherapy, there are abdominal masses, multiple blockages, rapidly recurring ascites or a small bowel blockage</td>
</tr>
<tr>
<td>6. Is nausea and/or vomiting present?</td>
<td>See previous diagram</td>
</tr>
<tr>
<td>7. Is pain present?</td>
<td>Colic – Buscopan 60-120mg SC 24hrly in syringe driver +/- 20mg SC 4hrly as required (see previous diagram) Abdominal pain (likely to need SC regime) – Diamorphine 10mg 24hrly in SD (if opioid naïve) +/- 2.5-5mg 4hrly as required (see WHO ladder) Coeliac plexus pain – (see neuropathic pain ladder). May benefit from referral to a pain specialist for coeliac plexus block</td>
</tr>
<tr>
<td>8. Is the obstruction complete and continuous?</td>
<td>Stop all laxatives Mouth care for dry mouth If colic is present – Buscopan 60-120mg SC 24hrly in syringe driver Allow oral hydration and feeding using occasional, small snacks Consider dexamethasone 8-16mg/day if short term relief of obstruction is appropriate (little evidence for this)</td>
</tr>
<tr>
<td>9. Is the obstruction partial or intermittent?</td>
<td>Stop osmotic (e.g. movicol) and stimulant laxatives Start docusate sodium 100mg twice daily and titrate to produce a comfortable stool without colic Avoid high roughage foods Continue oral feeding and hydration in small, frequent snacks For intermittent colic – Buscopan 20mg SC 4hrly as required</td>
</tr>
</tbody>
</table>

Consider:
- Surgery may help in obstruction (if operable) – e.g. resection, bypass or stoma (see above)
- Stenting may be possible to treat obstruction in some cases
- Radio/chemotherapy may be possible to reduce tumour size and relieve obstruction
- Dexamethasone 8-16mg/day in the morning may help to relieve obstruction temporarily
- Nasogastric tubes are rarely preferred by or needed in some patients to control vomiting
5.9 Management of Constipation in Palliative Care

Contributing factors (often multiple)

- Immobility, poor intake, debility, weakness and lack of privacy
- Drugs (e.g. opioids and anticholinergics)
- Hypercalcaemia
- Dehydration
- Bowel obstruction or pseudo-obstruction (i.e. peristaltic failure)
- Cord compression or cauda equina syndrome

Treatment

- Correct the reversible causes if appropriate
- An understanding of the patient’s normal, accepted bowel habit is essential when planning treatment
- Best managed by empowering patients to adjust their doses according to response
- Almost all patients on opioids require a laxative prescribed regularly
- A combination of stimulant and softener is usually required

N.B. For opioid-induced constipation which fails to respond to laxatives the opioid antagonist Naloxegol is now available on our local formulary – guidance.nice.org.uk/ta345
5.10 Mouth care in Palliative care

General measures
Mouth care should be offered to all patients with palliative care needs
- Particular attention needed for those who cannot manage it themselves
- Families may be able to contribute to this role
- Regular teeth brushing with toothpaste (unless neutropenic/low platelets)
- Regular cleaning of dentures
- Regular oral care with e.g. chlorhexidine mouthwash (avoid in dysgeusia)
- Keeping mouth moist – see below
- Regular inspection of oral mucosa for reversible problems – infection/ulcers/bleeding

Dry mouth
Contributory factors:
- Poor fluid intake and/or poor nutritional state
- Medication which dries secretions e.g. amitriptyline, hyoscine
- Hypercalcaemia – potentially reversible
- Radiotherapy to facial area

Management
- Encourage frequent sips of water and offer to suck ice cubes
- Diet of soft, moist foods with extra gravy, sauces and/or butter (on veg)
- Artificial saliva e.g. Biotène Oralbalance, BoiXtra, Xerotin (vegetarian) etc
- Pineapple juice/unsweetened fruit chunks – avoid if lesions/ulcers
- Pilocarpine 5mg 3 times daily
  - If had head and neck radiotherapy
- Pink sponges with water if patient unconscious – as required
- Lip moisturiser

Mouth ulcers
Common in immuno-suppressed and debilitated patients

Infection:
Consider a swab to aid diagnosis

Oral candidiasis
- Nystatin suspension 1-3ml 4 times daily after meals
- Fluconazole 50-100mg daily for 7-14 days
- Miconazole gel
N.B. In resistant cases – seek advice

Herpetic ulceration
- Aciclovir 200mg 5 times daily for 5 days

Bacterial infection and recurrent aphthous ulcers
- Appropriate antibiotic or doxycycline 100mg 3-4 times a day (mix contents of capsule in water and hold in mouth for 2-3mins and try to avoid swallowing)

Pain:
- Regular chlorhexidine mouthwash
- Betnesol oral preparation for aphthous ulcers – see BNF
- Soluble aspirin as mouthwash +/- swallow or topical salicylates (see BNF)
- Local anaesthetic agents – Diffiam mouthwash (may need to dilute), medijel, Bonjela, mucaine suspension
- Sucralfate paste/mouthwash, orabase or Gelclair may coat ulcers and aid comfort
- Opioids if pain severe
5.11 Hiccup in Palliative Care

Introduction
Hiccups lasting more than 48hrs are not uncommon in patients with advanced disease and can be very distressing

Causes
- Gastric stasis and distension (most common cause)
- Gastro-oesophageal reflux
- Metabolic disturbances (e.g. uraemia or hypercalcaemia)
- Infection
- Irritation of diaphragm or phrenic nerve
- Hepatic disease/hepatomegaly
- Cerebral disease (e.g. tumour or metastases)

Management
- Treat reversible factors
- Hiccups often stop spontaneously
- Treatment is only required if hiccups are persistent
- Try some physical manoeuvres initially, particularly those that have worked previously

Non-drug
Simple measures or home remedies may be effective:
- Sipping iced water or swallowing crushed ice
- Breathing into a paper bag – particularly if the patient is hyperventilating
- Interrupting normal breathing e.g. breath holding
- Rubbing the soft palate with a swab to stimulate the nasopharynx
- Acupuncture works for some patients

Medication
- Treat gastric stasis/distension with prokinetic e.g. domperidone or metoclopramide PO 10-20mg 3 times daily
- Treat gastro-oesophageal reflux with PPI +/- metoclopramide if gastric stasis contributing
- Dexamethasone PO 4-8mg in the morning may reduce compression/irritation if the patient has hepatic or cerebral tumour. Stop if no benefit after a week
- Other options for intractable hiccups supported by limited evidence include:
  - Haloperidol PO 0.5-1mg at night for less than 2 weeks to avoid side effects
  - Baclofen PO 5-10mg 3 times daily (avoid abrupt withdrawal)
  - Levomepronazine PO 6.25mg at night (Now used as an alternative to chlorpromazine, avoid if hypotensive)
  - Nifedipine PO 5-10mg 3 times daily (Avoid if hypotensive)
- If other treatments are unsuccessful and the patient is very distressed, try midazolam SC 10-30mg 24hrly in a syringe driver, reducing the dose as the patient improves.
5.12 **Breathlessness in Palliative Care**

- **Is treatment of the underlying illness appropriate?**
  - Check with specialist if in doubt

- **Are there any reversible causes of breathlessness?**
  - Cardiac failure
  - Pulmonary embolus
  - Tracheal obstruction
  - Infection
  - Arrhythmia
  - Anaemia
  - Pneumothorax
  - Pleural effusion
  - Bronchospasm
  - Tracheal obstruction
  - Anaemia
  - Bronchospasm
  - Superior venacaval obstruction

  - Treat if appropriate

**Breathlessness at rest**

- If hypoxic, consider trial of oxygen
  - Well ventilated room
  - Try a fan
  - Advice on posture and positioning
  - Reassurance and calm atmosphere
  - Assess for anxiety (see below)

**Trial of opioids** – monitor patient response and side effects

- **Oramorph 2.5-5mg 4hrly** – titrate as needed
- If unable to swallow use syringe driver SC 24hrly:
  - Diamorphine 10mg +/- midazolam 10mg

  - **Consider:**
    - Trial of nebulised bronchodilators, particularly if wheeze
e.g. salbutamol 2.5-5mg +/- ipratropium 250-500micrograms 4x daily
    - Nebulised saline for retained secretions
    - Steroids, particularly for lymphangitis/COPD e.g. dexamethasone
    - If symptoms persist – **seek advice**

**Anxiety and panic attacks** Common in breathlessness – Try:

- Simple breathing exercises
- Relaxation training
- Ask about anxieties and fears
- Offer written information about living with breathlessness
- Discuss drug management with patient and family
  - Lorazepam 0.5mg SL for panic attacks
  - Diazepam 2-4mg at night if more constant anxiety
  - SSRIs may help in more chronic situations

**Consider lifestyle adaptations**

- Discuss limitations and listen to patient and family concerns
- Maximise abilities including using breathing retraining, energy conservation and paced exercise to retain muscle strength
- Consider need for equipment/aids and package of care

In terminal phase – see guideline later
5.13 Confusion/Agitation (Delirium) in Palliative Care

Recognition
- Acute onset and fluctuating course
- Inattention – easily distracted
- Disorientation to time/place/person
- Disorganised thinking – rambling or irrelevant conversation, switching topics
- Altered level of consciousness – hyperactive or hypoactive

Causes (often multiple)
- Can the cause(s) be identified?
- Is the cause(s) reversible?
- What is the patient’s prognosis?
- Is investigation or treatment of the cause(s) appropriate?
- For terminal agitation – see Terminal Phase Care (Terminal Restlessness)

**Past History**
- Dementia, other mental illness
- Cerebrovascular disease
- Brain tumour/secondary
- Alcohol/drug abuse

**Drugs**
- Opioid toxicity (see guideline)
- Corticosteroids
- Anticholinergics
- Acute withdrawal of alcohol/nicotine

**Metabolic**
- Infection
- Glucose (high or low)
- Hypercalcaemia
- Hyponatraemia
- Hypoxia
- Organ failure

**Physical**
- Uncontrolled pain
- Constipation
- Urinary retention

**Psychological distress**
Explore concerns of patient and family if possible

**General measures**
- Maintain hydration – use SC fluids if appropriate
- Try to nurse in a quiet, well lit environment with few staff changes
- Involve key family members and offer support and information
- Use lucid intervals to establish rapport and address fears/concerns
- Try to establish patient wishes during lucid intervals & from family/friends
- Gentle, repeated re-orientation, where possible, to place, time and people
- Don’t confront deficits & communicate in a simple, clear concise manner
- Try to maintain a normal sleep-wake cycle
- Correct hypoxia if possible

**Medication**
- Review all medication and discontinue any non-essential drugs
- Use the minimum sedative medication possible and review regularly
- Use the oral route if possible
- Withdraw sedative medication as the episode of confusion settles
- Benzodiazepines alone don’t improve cognition in delirium & may worsen it
Treating Delirium

Identify and manage (if appropriate) any underlying cause or combination of causes.
E.g.:
- Infection
- Metabolic disturbance
- Hypoxia
- Pain
- Review medication
- Urinary retention
- Constipation
- Intoxication/withdrawal
- Cerebral oedema

- Ensure effective communication and re-orientation
- Provide reassurance
- Consider involving family and friends to help with this

- Ensure people are cared for by a team of professionals familiar to them
- Avoid moving people within and between wards or rooms unless necessary

Delirium symptoms not resolved

Is person distressed or considered a risk to themselves or others?

Yes
- Use verbal and non-verbal techniques to de-escalate the situation if appropriate

Delirium symptoms not resolved

No
- Re-evaluate for underlying causes
- Consider dementia

Able and appropriate to take oral medication

Consider short-term (Usually less than or equal 1 week)
- Olanzapine or Quetiapine
- More rarely Haloperidol
- Start at lowest clinically appropriate dose
- Try to start at 6pm
- Titrate cautiously according to symptoms

Consider rapid tranquillisation – See Devon Partnership NHS Trust Policy (Full issues and guidance on web site)
- Continue non-drug measures and maintain dignity
- Policy uses IM lorazepam +/- Olanzapine/Haloperidol
- Consider legal issues including Mental Health Act/Mental Capacity Act/Deprivation of Liberty
- Consider advice from psychiatrist/consultant physician

Oral medication unsuccessful OR
Oral medication refused OR
Serious risk to person/inappropriate to use restraint

- Continue non-drug measures and maintain dignity
- Policy uses IM lorazepam +/- Olanzapine/Haloperidol
- Consider legal issues including Mental Health Act/Mental Capacity Act/Deprivation of Liberty
- Consider advice from psychiatrist/consultant physician
5.14 **Terminal Phase Care (not expected to live more than 48-72 hours)**

**Signs commonly seen in the terminal phase – Diagnosing dying**

- More rapid deterioration – often daily
- Increasing weakness, bed-bound and requiring help with personal care
- Barely able to take even liquids and unable to take medications by mouth
- Impaired concentration & unable to sustain even the briefest conversation
- Increasing drowsiness

**Principles of Care for the dying (see prompt sheet and tool kit for more details)**

1. There needs to be **MDT discussion** & agreement in diagnosing the dying phase
   - This needs to be confirmed by the senior clinician caring for the patient
   - Consider reversible causes for the situation
   - Consider time-limited trials of active treatment if there is uncertainty

2. Sensitive **communication** is essential to good end of life care (leaflets available)
   - Patients (as able and wish) and families (respecting confidentiality) are aware the patient is dying and have had an opportunity to contribute to the care plan
   - Patient's views/wishes regarding their care are elicited from them or their family and used to formulate an individualized care plan for their care at this time with their agreement
   - There is healthy team discussion of the situation in order to make informed clinical decisions & provide a consistent message to patients & families

3. **Current treatment** and interventions need to be re-evaluated in light of the situation
   - Review medication – consider benefits/burdens with special attention to comfort
   - As patients become unable to take medications by mouth, convert essential medications to the subcutaneous route (especially those for symptom control)
   - Review hydration – consider carefully benefits/burdens of continuing/starting artificial hydration. It is not precluded in the dying patient.
   - Unless exceptional circumstances, try to avoid a NBM order in a dying patient
   - Invasive procedures, e.g. blood sampling, should be avoided unless the results are to be acted upon
   - Review and ensure not for cardiopulmonary resuscitation
   - Remember to de-activate implantable defibrillators with careful discussion

4. Good **symptom control** is essential
   - Ensure pre-emptive prescribing for the commonest symptoms seen at this time (according to individual need)
   - If symptoms are continuous e.g. pain/nausea, the most effective method of administration is by continuous subcutaneous infusion in a syringe driver

5. **Excellent Care**
   - Most patients are fully dependent at this time and will need help to achieve their care needs
   - Always continue to assess and offer, as appropriate, oral food and fluids
   - Pay particular attention to skin, continence needs and mouth care
   - Frequent holistic assessment and review is essential at this time

6. **Ensure carers** receive the following care (Leaflets available to help):
   - They are aware the patient is dying, feel informed and have had an opportunity to contribute to and understand the care plan
   - Their needs have been assessed and addressed where possible
   - They are aware of facilities available

**For flow charts; renal failure = eGFR <30**

(This is for guidance only. All decision-making should be clinically driven)
5.15 Not on opioids; not in renal failure

**Pain**

- **Patient is in pain**
  - Can patient still swallow?
    - **Yes**
      - Start
      - ORAMORPH 5-10mg 4hrly and PRN
      - DIAMORPHINE 2.5-5mg SC and PRN
      - Titrate as needed

    - **No**
      - Stat dose
      - DIAMORPHINE 2.5-5mg SC and PRN
      - If 2 or more breakthrough doses per 24hrs/recurrent pain, start:
      - DIAMORPHINE 10-15mg SC 24hrly in syringe driver

- **Patient’s pain is controlled**
  - Can patient still swallow?
    - **Yes**
      - Prescribe
      - ORAMORPH 5-10mg PRN
      - DIAMORPHINE 2.5-5mg SC PRN

    - **No**
      - Prescribe
      - DIAMORPHINE 2.5-5mg SC PRN

For Patients on fentanyl patches
- Continue patch
- Top up with opioid syringe driver if pain worsens (dose dependent on patch strength)
- Breakthrough doses need to take total regular opioid into consideration

To convert from other strong opioids – see chart or contact specialist palliative care team.

If symptoms persist contact the specialist palliative care team.

In renal failure (eGFR <30) see Pages 29-33
On regular opioids; not in renal failure

Pain

Patient is in pain

Can patient still swallow?

Yes

Increase opioid dose by 30-50%

(Remember to increase oral breakthrough dosage)

+ Convert new breakthrough dose to DIAMORPHINE SC PRN

No

Increase opioid dose by 30-50%

Then

Convert new regular dose to DIAMORPHINE SC 24hrly in syringe driver

+ New breakthrough dose to DIAMORPHINE SC PRN

Patient’s pain is controlled

Can patient still swallow?

Yes

Prescribe

Continue current doses (Regular and as required)

+ Convert breakthrough dose to DIAMORPHINE SC PRN

No

Prescribe

Convert regular opioid dose to DIAMORPHINE SC 24hrly in syringe driver

+ Convert breakthrough dose to DIAMORPHINE SC PRN

For Patients on fentanyl patches

- Continue patch
- Top up with opioid syringe driver if pain worsens (dose dependent on patch strength)
- Breakthrough doses need to take total regular opioid into consideration

In renal failure (eGFR<30) see renal prescribing at the end of life on BOB

To convert from other strong opioids – see chart or contact specialist palliative care team

If symptoms persist contact the specialist palliative care team
Not in renal failure

Breathlessness

Present

Can patient still swallow?

Yes

Stat dose

ORAMORPH 2.5-10mg
(If not already on opioid)
+/-
LORAZEPAM 0.5-1mg
SL and 4hrly PRN

Consider 24hrly SC infusion via syringe driver if recurrent symptoms or 2 or more breakthrough doses:

DIAMORPHINE 10mg
(If not already on opioid)
+ MIDAZOLAM 10mg

No

Stat dose

DIAMORPHINE 2.5-5mg SC and PRN
(If not already on opioid)
+/-
MIDAZOLAM 2.5-5mg SC and PRN

Prescribe

ORAMORPH 5-10mg PRN
(If not already on opioid)
+
LORAZEPAM 0.5mg SL 4hrly PRN

In renal failure (eGFR <30) see Pages 29-33

Absence

Can patient still swallow?

Yes

Prescribe

DIAMORPHINE 2.5-5mg SC PRN
(If not already on opioid)
+
MIDAZOLAM 2.5-5mg SC PRN

No

To convert from other strong opioids – see chart or contact specialist palliative care team

If symptoms persist

contact the specialist palliative care team
Not in renal failure

Nausea and Vomiting

Present

Stat dose
LEVOMEPROMAZINE 6.25mg SC and 6hrly PRN

If 2 or more doses in 24hrs/recurrent symptoms
LEVOMEPROMAZINE 6.25-12.5mg SC 24hrly in syringe driver

Absent

Prescribe
LEVOMEPROMAZINE 6.25mg SC 6hrly PRN

Appropriate alternatives include:
1. CYCLIZINE 50mg SC 8hrly PRN
   (100-150mg over 24hrs in syringe driver)
2. HALOPERIDOL 2.5mg SC 8hrly PRN
   (2.5-5mg over 24hrs in syringe driver)

If symptoms persist contact the specialist palliative care team

In renal failure (eGFR <30) see Pages 29-33
Terminal Restlessness and Agitation

**Not in renal failure**

**Present**

1. Stat dose

**MIDAZOLAM 2.5-10mg SC** every 30mins until patient settles
   (If more than 40mg given contact team)

   +/-
   **LEVOMEPRAMINE 12.5-25mg SC** or **HALOPERIDOL 5mg SC**

2. If 2 or more doses in 24hrs or recurrent symptoms, consider
   Syringe driver SC 24hrly:

   **MIDAZOLAM 20-30mg**
   +/-
   **LEVOMEPRAMINE 12.5-50mg** or **HALOPERIDOL 10-20mg**

**Absent**

Prescribe

**MIDAZOLAM 2.5-5mg SC PRN**

N.B. For acute confusional states, consider Haloperidol or Levomepromazine

Consider short acting and least restrictive options to control distress

**Consider and exclude or treat**

- Urinary retention
- Uncontrolled pain

In renal failure (eGFR <30) see Pages 29-33

If symptoms persist contact the specialist palliative care team
**Not in renal failure**

**Respiratory Tract Secretions**

**Present**

- **Stat dose**
  - HYOSCINE HYDROBROMIDE 0.4mg SC and 4hrly PRN
  - If successful after 1 or 2 doses
    - Start
    - HYOSCINE HYDROBROMIDE 1.2mg SC 24hrly in syringe driver
  - If further breakthroughs needed - increase to
    - HYOSCINE HYDROBROMIDE 2.4mg SC 24hrly in syringe driver

**Absent**

- **Prescribe**
  - HYOSCINE HYDROBROMIDE 0.4mg SC 4hrly PRN

**Note**
- Re-positioning of patient often helps
- Reassurance of family usually needed
- If unconscious, patient unaware and not distressed by this situation
- Drug treatment may be ineffective

In renal failure (eGFR <30) see Pages 29-33

If symptoms persist contact the specialist palliative care team
Not in renal failure

Respiratory Tract Secretions

Present

Stat dose
HYOSCINE HYDROBROMIDE 0.4mg SC and 4hrly PRN
If successful after 1 or 2 doses
Start
HYOSCINE HYDROBROMIDE 1.2mg SC 24hrly in syringe driver

If further breakthroughs needed - increase to
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Absent

Prescribe
HYOSCINE HYDROBROMIDE 0.4mg SC 4hrly PRN

Note
• Re-positioning of patient often helps
• Reassurance of family usually needed
• If unconscious, patient unaware and not distressed by this situation
• Drug treatment may be ineffective

In renal failure (eGFR <30) see Pages 29-33

If symptoms persist contact the specialist palliative care team
Supporting information

- For advice on prescribing and symptom management or conversions from other opioids contact the specialist palliative care team or the hospice.
- *If fentanyl is temporarily unavailable give:
  - Oxycodeone 1-2mg s/c PRN or morphine 1.25-2.5mg s/c PRN
- Many of the opioid analgesics and their metabolites may accumulate in renal failure causing toxicity with myoclonic jerks, profound narcosis and respiratory depression.
- Morphine and its metabolites are most likely to cause toxicity. Fentanyl and alfentanil are less likely to cause these problems as their metabolites are not active.
- The duration of effect from morphine and oxycodone may last longer than in a patient with normal renal function. (See conversion table.)
- If symptoms persist contact the specialist palliative care team
- For patients already on fentanyl or buprenorphine patches it is usually recommended that the patch is not removed. Continue to change the patch at prescribed intervals. Additional opioid is given, as appropriate, via a syringe pump. Do not forget to calculate the prn dose based on the total 24hourly opioid dose (i.e. patch and pump together)
- In patients with a low eGFR it is not imperative to switch opioid if symptoms are well controlled without toxicity on the current regime
- Anticipatory prescribing in this way prevents a delay in symptom control at end of life
- Fentanyl and alfentanil are very short acting, so in some cases oxycodone s/c prn (at a reduced dose 50% and increased dose interval 6-8hrly) may be necessary to control pain
Renal Failure; eGFR <30

Breathlessness

Present

Is patient already taking oral opioids for breathlessness?

Yes

If patient is already taking strong opioids, contact the specialist palliative care team or hospice. If not available, see conversion chart.

No

Fentanyl 25 micrograms s/c PRN

If fentanyl is temporarily unavailable see below*

Absent

Fentanyl 25 micrograms s/c PRN

If fentanyl is temporarily unavailable see below*

If more than 2 or 3 doses in 24hrs, consider starting a s/c syringe driver of fentanyl

Fentanyl 100-250 micrograms in a syringe driver over 24hrs. PRN dose should be 1/8th of 24hr dose e.g. 100 micrograms/24hrs give 12.5 micrograms PRN

Supporting information

- For advice on prescribing and symptom management or conversions from other opioids contact the specialist palliative care team or the hospice
- *If fentanyl is temporarily unavailable give:
  - Oxycodone 1-2mg s/c PRN or morphine 1.25-2.5mg s/c PRN
- If the patient is breathless and anxious, consider midazolam 2.5mg s/c PRN. (If a continuous infusion is required, syringe driver of midazolam 5-10mg over 24hrs.)
- Many of the opioid analgesics and their metabolites may accumulate in renal failure causing toxicity with myoclonic jerks, profound narcosis and respiratory depression.
- Morphine and its metabolites are most likely to cause toxicity. Fentanyl and alfentanil are less likely to cause these problems as their metabolites are not active.
- The duration of effect from morphine and oxycodone may last longer than in a patient with normal renal function. (See conversion table.)
- If symptoms persist contact the specialist palliative care team
- Anticipatory prescribing in this way prevents a delay in symptom control at end of life
Renal Failure; eGFR <30

Nausea and/or vomiting

Present
Levomepromazine 6.25mg s/c PRN

Absent
Levomepromazine 6.25mg s/c PRN

If more than 2 or 3 doses in 24hrs consider starting a s/c syringe driver of levomepromazine:
Levomepromazine 6.25mg over 24hrs

Supporting information

- If symptoms persist contact the specialist palliative care team
- Cyclizine is not usually recommended
- Haloperidol 0.5-1mg s/c PRN is a suitable alternative (if syringe driver is required, consider 1.5-3mg s/c over 24hrs)
- Anticipatory prescribing in this way prevents a delay in symptom control at end of life
Renal Failure: eGFR <30

Terminal Restlessness and Agitation

Present

Midazolam 2.5mg s/c PRN

If more than 2 or 3 doses in 24hrs consider starting a s/c syringe driver of midazolam:
Midazolam 5-10mg over 24hrs

Continue to give PRN doses as required
Tritrate according to need

Absent

Midazolam 2.5mg s/c PRN

Supporting information

- If symptoms persist contact the specialist palliative care team
- Anticipatory prescribing in this way prevents a delay in symptom control at end of life
Renal Failure; eGFR <30

Respiratory Tract Secretions

- Present
  - Hyoscine butylbromide 20mg s/c PRN
  - If more than 2 or 3 doses in 24hrs consider starting a s/c syringe driver of hyoscine butylbromide: Hyoscine butylbromide 40-120mg over 24hrs

- Absent
  - Hyoscine butylbromide 20mg s/c PRN

Supporting information

- If symptoms persist contact the specialist palliative care team
- Glycopyrronium 200 micrograms s/c PRN may be used as an alternative. (If continuous infusion required, glycopyrronium 600-1800 micrograms over 24hrs in s/c syringe driver.)
- Anticipatory prescribing in this way prevents a delay in symptom control at end of life
- Hyoscine hydrobromide is not usually recommended
5.17 Syringe Driver Use and prescribing in Palliative Care

Syringe drivers are just another way of giving drugs. They are often used for symptom control during the terminal phase, but if people are asymptomatic, they can die peaceful deaths without one.

Indications
- Nausea
- Dysphagia
- Vomiting
- Unconscious, so unable to take oral medication
- Intestinal obstruction
- Malabsorption of drugs from alimentary tract

Advantages
- Constant analgesia level
- Patient comfort (no need for regular SC injection or cannula changes)
- Does not limit mobility
- Improves control of nausea and vomiting

Disadvantages
- May be seen as the only solution for difficult symptom management
- Patient need for frequent reassessment can be forgotten
- Local skin irritation may occur with certain agents and can interfere with infusion rate and absorption

General principles
- For patients who have previously been prescribed oral morphine, the conversion factor to SC diamorphine is 3:1 (see opioid conversion chart)
- The equivalent “as required” dose of drugs should also be prescribed SC PRN for breakthrough symptoms (for opioids 1/6th 24hrly dose) – see relevant guidelines
- If frequent breakthroughs needed and/or symptoms not settling – seek advice from specialist palliative care services
- A bolus, SC dose of medication will be needed if the patient is symptomatic when starting the infusion since the syringe driver will take 2-4hrs to reach an optimal level
- When mixing 2 or more drugs in a syringe driver, check compatibilities with pharmacy or palliative care team and ensure that diluent is compatible with the drugs (see below)
- If more than 3 drugs in a syringe driver – reassess options
- With combinations of 2 or 3 drugs in one syringe, a larger volume of diluent may be needed (e.g. in a 20ml or 30ml syringe)

For further information refer to relevant Standard Operational Procedure
If any problems or concerns - seek advice from the specialist palliative care team

In case of renal failure (eGFR less than 30ml/min), please refer to Pages 29-33
5.18 Anxiety and Depression in Palliative Care

Anxiety and depression both remain under diagnosed and under treated in palliative care patients. Estimates of the incidence of depression vary, but are in the order of 20-40%. Often the symptoms will be accepted by the patient, family or physician as a “normal” reaction to terminal illness:

- 30% of patients will experience “adjustment reactions” at the time of diagnosis or relapse. These will usually resolve in a few weeks with appropriate support
- 20% of patients will develop psychiatric disorders that require specific treatment in addition to support

Risk Factors for anxiety and depression

- Poorly controlled physical symptoms
- Past history of mood disorder or alcohol/drug abuse
- Difficult relationships and communications
- Social isolation and lack of social support

Assessment

- It is often necessary to assess patients on more than 1 occasion to differentiate between adjustment reaction and anxiety or depression
- Disease symptoms often overlap with those of anxiety/depression (e.g. loss of weight, poor sleep, loss of energy, poor appetite, and weight loss). In this situation more specific questions about mood and anhedonia may help. Consider a trial of treatment if still uncertain.
- Information from family members may be helpful
- Poor response of physical symptoms to medical treatment may suggest a psychological diagnosis (e.g. total pain)

Management

- Take time to discuss and clarify concerns and allow expression of feelings
- Explore methods of treatment with patients and involve them in any decisions
- Explain their disorder in terms of reaction to their illness (not evidence of cerebral spread)
- Explore support mechanisms
- Consider referral to additional support – e.g. specialist palliative care team
- Consider other therapies e.g. relaxation, creative, etc
- Do GAD-7 and PHQ-9 to assess need for psychology referral
Anxiety and Depression (contd)

Psychotropic drugs

1. Anxiety

   Short term  Non-pharmacological methods
   (Few weeks)  Lorazepam 0.5-1mg 4hrly as required
                Diazepam 2-5mg nocte (up to 3 times daily)

   - Use minimum doses for shortest time
   - Remember the possibility of tolerance to longer term use of benzodiazepines (more than a few weeks)

   Longer term:  SSRIs can help with panic/anxiety disorder

   - Remember to consider agitated depression

2. Acute anxiety state

   - Remember non-pharmacological-methods
   - Consider sedation with lorazepam 1mg SL (up to 2.5mg) or
   - Midazolam 5mg SC (up to 10mg)

3. Depression

   - Where treatment aimed at depression alone – SSRI e.g. citalopram 20mg once daily
   - Where side effects such as sedation/appetite stimulation may be helpful – consider tricyclics e.g. trazodone 50-150mg nocte
   - Explain antidepressant takes several weeks to reach maximum effect
   - Plan to increase to full therapeutic dose over 3 weeks, but reassess at each increment
   - Ensure ongoing reassessment once treatment is established
   - Avoid stopping both benzodiazepines and SSRIs abruptly to prevent withdrawal reactions or symptom recurrence
5.19 Fatigue in Palliative care

Introduction
A persistent, subjective feeling of tiredness, weakness or lack of energy (physical or mental) related to cancer or advanced chronic illness
- Common (70-100% of patients receiving cancer treatment)
- Not related to activity
- Not alleviated by rest or sleep
- Affects physical function, cognitive ability, emotional and spiritual wellbeing
- Multiple contributory factors, but exact aetiology poorly understood
- Fatigue is common in the last few days of life as part of the dying process

Assessment

Screen for fatigue & its impact
- Symptom pattern and duration
- Associated or alleviating factors
- Interference with function or quality of life
- Severity (mild/mod/severe or 1-10 scale)

Contributing factors & associated symptoms
- Pain
- Anxiety/depression
- Sleep disturbance
- Anaemia
- Poor nutrition or absorption
- Fluid/ electrolyte imbalance (check sodium, potassium, calcium, magnesium)
- De-conditioning due to reduced activity level, fitness or muscle wasting
- Co-morbidities:
  - Chronic infection
  - Cardiac/respiratory disease
  - Renal/hepatic impairment
  - Hypothyroidism
  - Adrenal insufficiency
  - Hypogonadism

Disease status & treatment
- Exclude cancer recurrence or progression
- Radiotherapy/chemotherapy can cause fatigue
- Hormone treatment often causes fatigue
- Review medication (e.g. β-blockers, sedative drugs, corticosteroids, opioids)

Management
A combination of approaches tailored to the individual patient is likely to be required
- Acknowledge the reality of symptoms and their effect on the patient/family
- Explore understanding of the illness/treatment; explain possible causes of fatigue (written information may help)
- An activity/fatigue diary may help identify precipitants/timing of symptoms

Physical activity
- Graded exercise – both aerobic and strength training – to maintain muscle strength and function
- Consider physiotherapy referral

Psychosocial interventions
- Stress management
- Relaxation therapy
- Sleep hygiene

Energy conservation
- Set priorities and pace
- Schedule activities at times of peak energy
- Eliminate non-essential activities
- Short daytime naps provided night sleep is unaffected by this
- Attend to one activity at a time
- Conserve energy for valued activities

Medication
For cancer patients with anorexia/cachexia related fatigue (see anorexia guidelines)
5.20 Anorexia and Cachexia

Introduction
Anorexia/cachexia syndrome is a complex metabolic process found in many end-stage illnesses. Characterised by loss of appetite, weight loss and tissue wasting, it impacts significantly on quality of life. It causes anxiety and distress for patients and, perhaps even more, for carers. It is often associated with fatigue (see previous guideline).

Consider reversible causes
- Treat thrush, mucositis and xerostomia
- Consider stents for Dysphagia
- Treat constipation
- Treat depression/anxiety
- Treat nausea/vomiting
- Review need for medications which may contribute to poor appetite
- Pro-kinetics for early satiety

Non-drug treatment
- Discussion and setting of realistic goals
- Exploration of meaning attached by patient and family to anorexia and weight loss
- Exploration of any anxieties/concerns
- Consideration of altered body image
- Consideration of the social relevance of food, costs, ability to prepare
- Exploration of any altered taste/food preferences
- Review of food intake – aim for:
  - Small meals
  - Frequent meals
  - Energy dense meals
  - Attention to presentation and taste
- Consider review by dietician
- Consider supplements

Drug treatment
- Corticosteroids if prognosis weeks - effect tends to decrease over 3-4wks:
  - Dexamethasone 2-4mg in morning (stop if no benefit after 1 week)
  - If helpful, reduce to lowest effective dose (needs gradual reduction)
- Megace if prognosis more than 2-3months:
  - Megace 160-320mg once daily
  - A few weeks to take effect, but more prolonged benefit than steroids
  - Gradual reduction if used for more than 3wks - adrenal suppression

Artificial nutrition
- May be considered if starvation – e.g. H&N tumours, oesophageal, MND
- PEG/RIG most common
- TPN much more rarely, if gut not functioning
- Does not alter quality of life or survival from anorexia/cachexia syndrome
5.21 Itch in Palliative care

Introduction
Itch may be localized, or due to systemic disease. It can cause discomfort, frustration, poor sleep, anxiety and depression. Persistent scratching leads to skin damage – exoriation and thickening. Patients with itch usually have dry skin.

Assessment
- Examine the skin
- Look for local/systemic causes (may be multi-factorial)
- Primary skin disease - atopic dermatitis, contact dermatitis, psoriasis
- Infection – candidiasis, lice, scabies, fungal infection
- Medication – opioids (particularly morphine/diamorphine), drug reaction
- Systemic diseases that can cause itch include:

  | Iron deficiency +/- anaemia | Cholestatic jaundice |
  | Lymphoma                  | Hepatitis           |
  | Leukaemia                 | Hepatoma            |
  | Multiple myeloma          | Primary biliary cirrhosis |
  | Polycythaemia             | Thyroid disease     |
  | Mycosis fungoides         | Diabetes            |
  | Paraneoplastic syndrome   | Chronic renal disease |

Management
- Treat underlying causes – e.g. biliary stenting or drainage for cholestasis
- Review medication to exclude a drug reaction, consider opioid switch
- Keep nails short
- Use loose fitting, cotton clothing and sheets and keep cool
- Dry skin by patting rather than rubbing, then apply moisturizer
- Avoid lanolin and perfumed products
- Use emollient/aqueous cream frequently as a moisturizer
- Add an emollient to bath water and use aqueous cream as a soap-substitute

Treatments

<table>
<thead>
<tr>
<th>Topical agents</th>
<th>Systemic medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emollients</td>
<td>Antihistamine (stop if no benefit after a few days) e.g. chlorpheniramine/loratadine</td>
</tr>
<tr>
<td>Aqueous cream (1% menthol may be added)</td>
<td>Colestyramine for cholestatic jaundice – usually poorly tolerated</td>
</tr>
<tr>
<td>Crotamiton 10% cream (Eurax)</td>
<td>Corticosteroids help in some hepatobiliary disease</td>
</tr>
<tr>
<td>Aqueous calamine cream</td>
<td>Cimetidine 400mg twice daily for lymphoma/polycythaemia</td>
</tr>
<tr>
<td>Topical corticosteroid (mild/mod potency) once daily for 2-3 days if area inflamed, but not infected</td>
<td>Ondansetron 4-8mg twice daily for opioid-induced/uraemic itch – seek advice</td>
</tr>
<tr>
<td></td>
<td>Paroxetine 5-10mg for paraneoplastic itch – seek advice</td>
</tr>
</tbody>
</table>
5.22 Sweating in Palliative Care

Introduction
Excessive sweating occurs in about 16% of patients with advanced cancer. It occurs more commonly at night and may necessitate changes of clothes or bedding

Assessment
Multiple causes, including:
- Infection (check patient not at risk of neutropenic sepsis)
- Lymphoma
- Disseminated cancer (particularly with liver mets)
- Medication e.g. SSRIs, Hormone therapies, opioids
- Endocrine:
  - Oestrogen deficiency (natural or treatment-related menopause)
  - Androgen deficiency (surgical or hormone treatment)
  - Hypoglycaemia
  - Hyperthyroidism
- Alcohol or opioid withdrawal
- Anxiety/panic attacks
- Autonomic neuropathy

Management
- Treat any underlying cause, including infection (if appropriate)
- Reduce room temperature, remove excessive bedding, increase ventilation, use a fan
- Wear loose, cotton clothing, use cotton sheets and cool with tepid sponging
- Maintain fluid intake to avoid dehydration
- Review medication and prescribe an alternative if possible

Medication
- Sweating with pyrexia:
  - Paracetamol 1g 4x daily
  - NSAID

- Sweating without pyrexia (tumour associated)
  - NSAID
  - Antimuscarinic (e.g. amitriptyline 10-50mg at night or levomepromazine 6.25mg at night)
  - Consider Dexamethasone 4mg in the morning

- Sweating with hormone insufficiency:
  - Seek advice from an oncologist
5.23 Management of Seizures in Palliative Care

Common causes in palliative care
- Cerebral tumours – primary or secondary
- Pre-existing epilepsy
- Strokes
- Biochemical disturbance (e.g. Hypoglycaemia, hyponatraemia, renal failure, etc)

General considerations
- For patients with cerebral tumours, consider starting or review the dose of steroids (usually dexamethasone)
- Remember to advise patients on driving restrictions
- Remember to check for and treat hypoglycaemia
- Consider drug interactions which may have altered anti-convulsant levels

Patients with a seizure history unable to take oral regimen
- Phenytoin and Sodium valproate have long half-lives and will have a continuing, but diminishing anti-convulsant effect. If a patient is moribund and death near, additional anticonvulsant medication may be unnecessary
- In patients with low risk of seizure and nearing death, but on long-term anticonvulsant, additional anticonvulsant medication may not be required

If replacement regimen appropriate – consider:

1. First line
   Midazolam 20-30mg SC 24hrly in syringe driver
   + Midazolam 10mg SC as required for prolonged seizures/status

2. Second line (and if high risk of seizures/recent status)
   Phenobarbital 600-1200mg SC 24hrly in syringe driver – seek advice
   + Midazolam 10mg SC as required for prolonged seizures/status

N.B. For acute, prolonged seizures or status epilepticus – see next page
5.24  Management of Acute, Prolonged Seizures or Status Epilepticus

Prolonged seizure
Or
Status Epilepticus

- Secure airway and resuscitate
- Give oxygen
- Ensure safe environment
- Check capillary blood sugar

- Diazepam 10-20mg PR repeated once at 15mins if needed
  or
- Midazolam 10mg buccally

Is IV access appropriate and possible?
(Often in hospital setting)

Yes

Lorazepam 4mg IV
(Can be repeated after 10-20mins)

Phenytoin 18mg/kg
Rate not to exceed 50-100mg/min
(With ECG monitoring)

Is Rapid sequence Induction (RSI) appropriate?
(Rarely in palliative care)

Yes

- RSI
- ITU management

No

Midazolam 10mg SC (or buccal)
(Can be repeated after 10-20mins)

Consider Phenobarbital 100-200mg IM/IV/SC
Seek advice

Once seizures controlled – Consider
Maintenance dose via syringe driver over 24hrs:
Midazolam 20-30mg
+/-
Phenobarbital 600-1200mg (seek advice)
5.25 Emergencies in Palliative Care

Introduction

- Patients receiving palliative care may deteriorate suddenly due to their illness or another acute medical or surgical problem
- Management options depend on life expectancy, level of intervention needed and an assessment of risks, benefits, side effects, likely outcome and patient wishes
- Symptom control and supportive care may be the most appropriate management if the patient is dying (see terminal phase care)
- Discuss treatment options fully and sensitively with patient and family
- If possible, discuss and document patient’s wishes in advance, including those about resuscitation, hospital admission and transfer to an intensive care unit – then share, with patient consent, with other health care agencies
- In patients who lack capacity to consent, emergency treatment can usually be given – refer to the mental capacity act and BOB
- Palliative Care emergencies covered in this section:
  - Bleeding events
  - Hypercalcaemia of malignancy in palliative care
  - Malignant spinal cord compression (MSCC)
  - Superior Vena Cava Obstruction (SVCO)

Bleeding

- Acute haemorrhage can be distressing for the patient and family
- It is usually best to discuss this possibility with patients and families, but benefits and burdens of any discussion including the likelihood of this event need to be considered by the healthcare team (MDT discussion often helpful)
- An anticipatory care plan may be helpful, including prescription and availability of sedative medication as required
- Consider and discuss resuscitation (if appropriate) - document and communicate status
- Ensure all professionals/services are aware of the care plan, including out of hours services

Management of acute, severe haemorrhage

- Call for help; ensure carers at home have an emergency contact number
- If possible, lie patient down
- Apply direct pressure to any bleeding area – dark coloured towels are best
- If resuscitation is appropriate – admit to hospital and treat accordingly
- If a massive and clearly fatal haemorrhage; support and non-drug interventions are more important, until help arrives, than trying to give sedative medication, as the patient will usually lose consciousness rapidly
- Sedative medication – depends upon route available:
  - IV access – Midazolam 5-20mg IV (small boluses until settled)
  - IM injection - Midazolam 5-10mg IM (SC not absorbed)
  - Rectal route - Diazepam 10mg PR
  - Sublingual – Midazolam 10mg (parenteral or buccal preparation)
5.26 Hypercalcaemia in Palliative Care

Introduction

- Hypercalcaemia is the commonest life-threatening metabolic disorder in cancer patients
- Most common in myeloma, breast, renal and lung cancers
- 20% those with hypercalcaemia do not have bone mets
- Common symptoms – malaise, thirst, nausea, constipation, polyuria and delirium
- Treatment may not be appropriate in a dying patient at the end of life

Treatment

Patient presents with symptoms suggestive of hypercalcaemia

Is treatment appropriate?  

No

- Consider End of life care plan
- Palliate symptoms

Yes

Check Calcium, U&Es, eGFR and albumin

*Corrected calcium 2.6 - 4.0mmol/l

Rehydrate 1-3l normal saline
Recheck calcium and U&Es next morning

If calcium still raised:
Pamidronate IV (doses see right →)
(Reduce dose in renal impairment)

Continue IV fluids until patient able to maintain oral hydration

Recheck calcium after 3-5 days (takes 48hrs to work)

Calcium remains elevated (seek advice)

- Maintain good hydration
- Steroids may help in haematological malignancy
- Consider zoledronic acid

*Corrected calcium = measured calcium + (40 – serum albumin) X 0.02

Corrected calcium  
Pamidronate dose (mmol/l)
2.6-3.0 30mg
3.0-3.5 60mg
3.5-4.0 90mg
More than 4.0 90mg

If calcium more than 3.0mmol/l, consider pamidronate 90mg as a higher dose may increase response and delay relapse

* Corrected calcium more than 4.0mmol/l

Risk of seizures/arrhythmias
Seek consultant advice
5.27 Malignant Spinal Cord Compression

**Suspected MSCC**
- From history and examination

- Urgent whole spine MRI
- Dexamethasone 16mg PO stat
  (Then daily in the morning)
- Log roll for all care

**If MSCC confirmed**

---

**See Acute Oncology Guidelines**
If MSCC confirmed **MONDAY –FRIDAY 0800 – 1800**
CONTACT ACUTE ONCOLOGY SERVICE: Ext 5664 / Bleep 240
OUT OF THESE HOURS:
Contact ONCOLOGY CONSULTANT on call RDE: 01392 411611

Remember:
- Analgesia
- Bladder and bowel care

**Definition**
- Occurs when the dural sac and its contents are compressed at the level of the spinal cord or cauda equina
- Affects 5% patients with cancer
- Commonest cancers – lung, breast, prostate
- May be the initial presentation of cancer
- Late diagnosis may cause permanent loss of function and significant morbidity

**Key signs and symptoms**
- New, progressively severe back pain
- New spinal nerve root pain (may radiate down thigh or around chest/abdomen)
- Coughing, straining or lying flat may aggravate pain
- Sudden unexplained reduction in pain in spine or legs

**NB** Have a high index of suspicion with any of these pains, aiming to diagnose and treat prior to the development of neurological dysfunction
- New difficulty climbing stairs
- Reduced power (motor weakness) – may be sudden or progressive
- Sensory impairment, from tingling to numbness, below level of damage to the cord
- Sphincter dysfunction – urinary retention/faecal incontinence (late sign)

Full neurological examination, including PR is required

**Cauda equina syndrome**
- Compression of lumbosacral nerve roots below the level of the cord itself results in a different clinical picture
- New, severe root pain affecting low back, buttocks, perineum, thighs, legs
- Loss of sensation often with tingling or numbness in the saddle area
- Leg weakness, often asymmetrical
- Bladder, bowel and sexual dysfunction – occur earlier than in cord compression
- Loss of anal reflex
5.28 Malignant Superior Vena Cava Obstruction (SVCO)

Definition
- Occurs when the Superior Vena Cava is compressed by tumour (in the right main or upper lobe bronchus) or mediastinal lymphadenopathy
- Leads to a reduction of blood flow from the head, neck and upper limbs
- It often has a gradual onset allowing for the development of collateral vessels and fewer symptoms
- Acute onset requires urgent management
- Commonest cancers – lung (more rarely lymphoma)
- May be initial presentation of cancer
- Remember - can occur due to thrombus associated with central venous catheters

Signs and symptoms
- Degree of symptoms depend upon the rate of onset
- Exacerbated by sitting forward or lying down – raising venous pressure
- May not all be present
- High index of suspicion needed in at-risk individuals

Symptoms
- Dyspnoea/Orthopnoea
- Facial/arm swelling
- Head fullness/Headache (worse in morning)
- Cough
- Chest pain
- Dysphagia

Signs
- Breathlessness
- Plethora
- Facial/Conjunctival Oedema
- Cyanosis
- Collateral vessels over anterior chest wall (insidious onset)
- Venous distension of internal and external jugular veins with fixed JVP (acute onset)

Principles of management
- Explanation and reassurance – symptoms are unpleasant and frightening (may be new diagnosis)
- Comfortable position - likely to be sitting up
- Trial of oxygen – continue if beneficial
- Pain control if needed
- Consider opioids +/- benzodiazepines if severe breathlessness/anxiety
- If very frail or terminally ill further intervention may not be appropriate, but meticulous attention to symptom control is of principle importance

N.B. If thought to be due to lymphoma – liaise closely with haematologists – high dose steroids in these patients may instigate tumour lysis syndrome
5.29 Management of Malignant SVCO in Palliative Care

Symptoms and signs suggestive of SVCO

Simple measures of symptom control
- Reassurance and explanation
- Comfortable position – sitting up
- Trial of oxygen
- Consider opioids +/- benzodiazepines for symptoms

CXR +/- CT thorax (as appropriate) to confirm diagnosis

Is further investigation or treatment appropriate?

Yes

Dexamethasone 16mg daily
In the morning with PPI cover
(Check with haematology if lymphoma)
+ Refer to oncology re DXT/Stenting/Chemotherapy
Urgently if acute onset
(Haematology if lymphoma)
+ Consider anticoagulation
N.B. May need to arrange tissue diagnosis if new presentation

No

- Consider dexamethasone 8-16mg daily (to help symptom control)
- Ongoing support and palliation of symptoms
6 Education and Training

Responsibility for education and training lies with the Lead Clinician for Palliative Care. It will be provided through formal study days and informal training on the ward.

7 Consultation, Approval, Review and Archiving Processes

The author consulted with all relevant stakeholders. Please refer to the Document Control Report.

Final approval was given by the Drug and Therapeutics Group on 12th May 2011.

The guidelines will be reviewed every 3 years. The author will be responsible for ensuring the guidelines are reviewed and revisions approved by the Drug and Therapeutics Group Clinicians for in accordance with the Document Control Report.

All versions of these guidelines will be archived in electronic format by the author within the Palliative Care Team policy archive.

Any revisions to the final document will be recorded on the Document Control Report.

To obtain a copy of the archived guidelines, contact should be made with the Palliative Care Team/author.

8 Monitoring Compliance and Effectiveness

Monitoring of implementation, effectiveness and compliance with these guidelines will be the responsibility of the Lead Clinician for Palliative Care. Where non-compliance is found, it must have been documented in the patient’s medical notes.

9 References


- www.palliativedrugs.com (document library) (continually updated)

- Twycross and Wilcock - Palliative Care Formulary - PCF3 (2007)

- Lothian Palliative Care Guidelines (2002) and (2009)


- Previous symptom control guidelines from the North Devon District Hospital (NDDH) (Dec 2003, reviewed Jan 2008)

- Guy's and St Thomas’ hospital palliative care team guidelines – bowel obstruction (2003)

• Rowan’s Hospice, Portsmouth
  ▪ Constipation flow chart (2008)
  ▪ Seizures and status epilepticus (2009)
  ▪ Opioid conversion chart (revised 2009)

• Devon Partnership Trust guidelines on rapid tranquillisation (2010)

• Mid-Trent Cancer Services Network Palliative Care Group – Pain control (2001)

• Galway Hospice Foundation – Neuropathic pain (2007)

• North East London Cancer Network – Opioid overdose (2007)


• RD&E spinal cord compression referral form and guidelines – www.execord.co.uk

10 Associated Documentation

• LCP Prescribing in Advanced Chronic Kidney Disease (Liverpool Care Pathway) – Guidelines
Appendix A - Acknowledgements

Acknowledgements

These symptom control guidelines were compiled by the Specialist Palliative Medicine team at the North Devon District Hospital:

- John Fletcher-Cullum – CNS in palliative medicine
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  - Dr Murray Fletcher – Consultant and Medical Director at North Devon Hospice
Appendix B - Abbreviations

Abbreviations

2x daily – twice daily
3x daily – 3 times daily
4x daily – 4 times daily

AXR – Abdominal X-Ray

β-blocker – Beta-blocker
BNF – British National Formulary
BOB – North Devon Healthcare trust Intranet

COPD – Chronic Obstructive Pulmonary Disease
CT scan – Computed Tomography scan
CXR – Chest X-Ray

DICP – Devon Integrated Care Pathway for the dying patient
DXT – Radiotherapy (Deep X-ray Therapy)

ECG – Electro-Cardiogram
E.g. – for example
eGFR – Estimated Glomerular Filtration Rate

G – grammes
GI – Gastrointestinal
GAD-7 – Generalised Anxiety Disorder Assessment

H&N – Head and Neck
Hr(s) – Hour(s)
Hrly – Hourly

IM – Intra-muscular
Inc – Including
ITU – Intensive Treatment Unit
IV – Intravenous

JVP – Jugular Venous Pressure

L – litre
LCP – Liverpool Care Pathway for the dying patient

Max – Maximum
Mcg – micrograms
Mets – metastases
Min(s) – minute(s)
Mg – milligrams
MDT – Multi-Disciplinary Team
MI – millilitres
Mmol – Millimoles
MND – Motor Neurone Disease
Mod – moderate
MRI scan – Magnetic Resonance Imaging scan
MSCC – Malignant Spinal Cord Compression
MST – Morphine Sulphate Tablets (Modified release preparation)

NMDA – N-methyl-D-aspartic acid
NSAID(s) – Non-steroidal Anti-Inflammatory Drug(s)

PEG – Percutaneous Endoscopic Gastrostomy
PHQ-9 – Patient health Questionnaire (Depression assessment)
PO – Oral
PPI – Proton Pump Inhibitor
PR – Rectal

Resps – Respirations
RIG – Radiologically Inserted Gastrostomy
RSI – Rapid Sequence Induction

SC – Subcutaneous
SL – Sub-lingual (under the tongue)
SSRI(s) – Selective Serotonin Reuptake Inhibitor(s)
SVCO – Superior Vena Cava Obstruction

TENS – Transcutaneous Electrical Nerve Stimulation
TPN – Total Parenteral Nutrition

U&Es – Urea and Electrolytes

WHO – World Health Organization