Just in Case Medications

Where patients are deteriorating from a palliative illness, the therapeutic aim is prompt symptom control and losing the ability to take oral medicines is foreseeable (due to vomiting, weakness or drowsiness), please:

1. Prescribe the medications on an FP10 (see boxes below)
2. Complete the grey boxes in the ‘PRN table’ below (authorising community nurses to administer the medicines)
3. Ensure questions and concerns from the patient and their carers have been addressed
4. If appropriate, update the Adastral Frail Persons Advanced Care Plan, lilac DNACPR form and 111 triage bypass form

Usual regimen is 10 ampoules of each of the following

- **Morphine sulphate** (10mg/1ml size)
  - 2.5 to 5mg SC 1-4 hourly if no prior strong opioid or SC dose at half of the existing oral PRN Oramorph
  Additional notes on opioid dose conversions are over the page
- **Haloperidol** 0.5 to 2.5mg SC PRN (5mg/1ml size)
- **Midazolam** 2.5 to 5mg SC PRN (10mg/2ml size)
- **Hyoscine butylbromide** 20mg SC PRN (20mg/1ml size)
- **Water for injections** as directed (20ml size)

Plus 14 tablets of
- **Lorazepam** 0.5mg PRN QDS SL (1mg size Genus brand)

Situations needing a modified regimen

- **Parkinson’s disease**: avoid haloperidol; use cyclizine 50mg SC† TDS for nausea and midazolam for agitated delirium
- **Severe renal impairment**: avoid morphine; use fentanyl SC† (100microgram/2ml size) instead
- **Epilepsy**: prescribe midazolam 5-10mg SC PRN for seizures and pre-emptively prescribe midazolam† 20mg/day via CSCI when unable to take oral anti-epileptics
- **Already using oral oxycodone**: use SC oxycodone (10mg/1ml size) in place of morphine. SC PRN dose is half the oral PRN dose

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**PRN (‘as required’) doses**

This pre-printed record of drugs prescribed is used instead of the ‘blank’ district nurse administration chart.

*Seek advice if 2 or more doses have been ineffective or if benefit lasts less than 1 hour* — the dose or drug may need changing.

Most are used in the last days of life once a decision has been made that the focus of care is on ensuring comfort.

Some can be used in a few other specific circumstances — turn over for more details.

<table>
<thead>
<tr>
<th>Date</th>
<th>Drug</th>
<th>Indication</th>
<th>Dose</th>
<th>Route</th>
<th>Minimal interval</th>
<th>Seek advice before exceeding</th>
<th>Prescribers signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Morphine Sulphate</td>
<td>Pain</td>
<td></td>
<td>SC</td>
<td>1 hour</td>
<td>6 doses/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breathlessness or cough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Haloperidol†</td>
<td>Nausea</td>
<td>0.5 to 2.5mg</td>
<td>SC</td>
<td>1 hour</td>
<td>4 doses/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agitated delirium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Midazolam†</td>
<td>Anxiety</td>
<td>2.5 to 5mg</td>
<td>SC</td>
<td>1 hour</td>
<td>4 doses/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breathlessness (2nd line)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hyoscine Butylbromide†</td>
<td>Distressing chest secretions</td>
<td>20mg</td>
<td>SC</td>
<td>1 hour</td>
<td>4 doses/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Colicky abdominal pain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lorazepam†</td>
<td>Anxiety</td>
<td>0.5 to 1mg</td>
<td>Subling</td>
<td>1 hour</td>
<td>4 doses/day</td>
<td></td>
</tr>
</tbody>
</table>

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**Continuous Subcutaneous Infusion (CSCI / Syringe Driver)**

This section is generally left blank until PRN doses start to be needed. If PRN drugs are used *and are effective*, those drugs are then given via continuous subcutaneous infusion. The above 4 subcutaneous drugs can be used singly or in combination.

The “when to start” column is only used if prescribing pre-emptively (e.g. “when ability to take oral Zomorph is lost”)

<table>
<thead>
<tr>
<th>Date</th>
<th>Drug</th>
<th>When to start</th>
<th>Dose over 24 hours</th>
<th>Route</th>
<th>Diluent</th>
<th>Prescribers signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSCI</td>
<td>Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CSCI</td>
<td>Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>CSCI</td>
<td>Water</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>CSCI</td>
<td>Water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† = off-label use or route    # = specialist-initiated    Authors: Paul Howard and Graham Grove (Earl Mountbatten Hospice, October 2014)
Just in Case Medications – when to use and when not to use

Most subcutaneous medications can be used either in the last days of life or alongside the treatment of intercurrent problems. For example, SC morphine can be used to maintain analgesia while addressing vomiting and SC hyoscine butylbromide can control colicky pain due to constipation whilst obtaining appropriate laxatives.

However, the following subcutaneous medications should generally only be used in the last days of life unless on the specific advice from an experienced clinician or a written symptom management plan:

- **Hyoscine butylbromide for chest secretions** - This reduces the volume of chest secretions but sometimes makes them more tenacious. Thus it is generally only used when you are no longer able to treat the underlying cause (e.g. antibiotics for chest infection) and when the patient no longer has an effective cough (otherwise, treatment aimed at aiding expectoration would be more appropriate: chest physiotherapy; saline nebulisers; carbocisteine)

- **Morphine sulphate and midazolam for breathlessness** – Seek further advice before use if still treating a reversible cause (e.g. antibiotics for a chest infection) unless a patient-specific management plan advising their use is in place

- **Midazolam via continuous subcutaneous infusion for epilepsy** – This may cause drowsiness that could hamper subsequent treatment of an underlying cause. Seek advice about possible alternatives (e.g. IV anti-epileptics, SC valproate or SC levetiracetam) before commencing if the patient is not thought to be in the last few days of life. Note that stat doses of midazolam can be given for emergency treatment of a seizure even if the underlying causes can potentially be treated.

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**Equianalgesic Doses for Opioids**

For patients who are on oral opioids and are no longer able to swallow, replace their previous opioid with a continuous subcutaneous infusion (syringe driver) of the same opioid at half the previous oral dose (see chart).

*Worked example*: a patient taking Zomorph 60mg/day (i.e. 30mg twice daily) requires morphine sulphate 30mg/day via a continuous subcutaneous infusion.

For patients who are on opioid patches, continue these unchanged and prescribe a PRN opioid:

- For a fentanyl 25 size patch, prescribe morphine sulphate 7.5mg SC PRN or oxycodone 5mg SC PRN.

If further analgesia is needed, commence a low-dose continuous subcutaneous infusion in addition to the patch.

*Working example*: a patient with a 50 size fentanyl patch required SC morphine 15mg twice in the last day. The patch was continued at an unchanged dose and morphine 30mg/day (reflecting the 2 PRN doses needed) was added via a continuous subcutaneous infusion (syringe driver) because this would achieve therapeutic levels more quickly than titrating the patch.

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**Titrating Up Doses of Continuous Subcutaneous Infusions**

If pain is poorly controlled and the opioids are helpful, increase the long-acting background opioid dose. In general, increase by approximately a third. For example, if a patient on morphine 30mg/day via continuous subcutaneous infusion has 3 breakthroughs of 5mg SC morphine in 24-hours which relieved the pain effectively for several hours on each occasion, the continuous subcutaneous infusion would be increased to 40mg/day.

If distress persists despite previous opioid increases and PRNs, seek advice. Common explanations include agitated delirium (try haloperidol or midazolam) or opioid poorly-responsive pain (try midazolam if muscle spasm suspected; otherwise, seek advice).

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**Titrating the PRN opioid dose in parallel to the regular dose**

For patients on a continuous subcutaneous opioid infusion, a dose of one-sixth to one-tenth of the total daily dose of opioid is usually required as the PRN dose (e.g. a person taking morphine 60mg over 24 hours via CSCI will probably require breakthrough doses of 10mg of SC morphine PRN)

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**Further Information and Advice**

For any concerns or advice, please call the Earl Mountbatten Hospice community team and speak to the patient’s nurse or a palliative care doctor. The phone number is 533 331. The 2014 Isle of Wight Palliative Medicine Advice Handbook contains further advice. It can be obtained via the hospice, its website or via the Apple, Google and Microsoft app stores.

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\# = specialist-initiated

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