Anticipatory Prescribing

Introduction

If a patient is in the last weeks or days of life it is helpful if ‘just in case’ (JIC) anticipatory medication for end of life symptom control is available so they can be given if required without unnecessary delay. JIC prescribing includes the most important medicines which might be required to manage predictable and distressing symptoms, or in the event that the patient cannot manage necessary oral medications.

If significant bleeding can be anticipated, it is usually best to discuss the possibility with the patient and their family. Ensure carers at home have an emergency contact number and an anticipatory care plan is in place and all professionals and services involved are aware of the care plan, including out-of-hours services (refer to Out of Hours Handover guideline). Refer to Bleeding guideline for full anticipatory preparation actions and post event management.

It is appropriate to use this guidance to prescribe anticipatory medicines for patients in all settings. Particular care may be required in secure (prison) environments. Alternative arrangements may be required in remote and rural locations taking into account ease of access to professional support.

Practicalities in community settings

- The prescriber must complete a community medication administration chart before nurses in the community can administer medicines. This should include the dose, route, frequency, indication(s), limits, and when to seek advice.

- Community nurses or pharmacists supply a container (JIC box), syringes and sharps disposal container. The community pharmacy supply the medicines following individual prescriptions.

- The decision to prescribe medication for use in the future should always be based on a risk/benefit analysis. Reasons for not providing anticipatory medicines include risk of drug diversion or misuse.

- It is good practice to issue separate prescriptions for urgently required medicines so they can be dispensed at different pharmacies if needed.

- Read the Last Days of Life guideline.

Management

Anticipatory medication

- If a patient is currently receiving subcutaneous (SC) analgesics, anxiolytic/sedatives, anti-emetics, or anti-psychotics, an additional anticipatory medication supply may not be
needed. Check what medicines are already available in the patient’s home before prescribing new anticipatory medication.

- If a patient is already prescribed an oral medication for symptom control and this is effective, the same medication may be suitable for prescribing by the subcutaneous route for the JIC box.

- Morphine is the first-line opioid of choice, however some NHS boards may use diamorphine first line. The dose stated below is for an opioid naïve patient.

- If the patient is taking a regular oral opioid, an SC breakthrough dose of the same opioid should be prescribed for the JIC box. SC dose would usually be half of the oral dose. The breakthrough dose should be calculated as 1/6th to 1/10th of the 24 hour opioid dose.

- Refer to the Choosing and Changing Opioids guideline.

- Attention should be paid to renal function.

- If the patient has stage 4/5 chronic kidney disease or severe renal impairment (eGFR <30ml/min), use alfentanil SC. Refer to the Renal Disease in the Last Days of Life guideline.

The medications available in the JIC box are prescribed for specific symptoms and for specific doses. These medications can in some circumstances be used for other symptoms such as severe agitation at higher doses. Clear instructions for the medication administration for the new symptom must be prescribed in the community medication administration chart, including dose, route of administration, frequency, indication(s), limits and when to seek advice.

### Anticipatory prescription

The prescription should include the four medications that might be required for end of life symptom control, plus diluent

Note: It is important that prescription wording for controlled drugs meets the legal requirements to reduce delays in dispensing

Refer to Sample CD prescription.

#### Opioid for pain and/or breathlessness (for opioid naive patient)

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine sulfate injection (10mg/ml ampoules)</td>
<td>Dose: 2mg SC, repeated at hourly intervals as needed for pain or breathlessness</td>
</tr>
<tr>
<td>If 3 or more doses have been given within 4 hours with little or no benefit seek urgent advice or review</td>
<td></td>
</tr>
<tr>
<td>If more than 6 doses are required in 24 hours seek advice or review</td>
<td></td>
</tr>
<tr>
<td>Supply ten (10) 1ml ampoules*</td>
<td></td>
</tr>
<tr>
<td>Note: Some NHS boards may use diamorphine</td>
<td></td>
</tr>
</tbody>
</table>

#### Anxiolytic sedative for anxiety or agitation or breathlessness

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midazolam injection (10mg in 2ml ampoules)</td>
<td>Dose: 2mg SC, repeated at hourly intervals as needed for anxiety/distress</td>
</tr>
</tbody>
</table>
If 3 or more doses have been given within 4 hours with little or no benefit seek urgent advice or review
If more than 6 doses are required in 24 hours seek advice or review
Supply ten (10) ampoules of 2ml*
Midazolam can be used in massive terminal haemorrhage (refer to Bleeding guideline)
Note: if the patient is already on large background doses of benzodiazepines, a larger dose may be needed (if they are frail, a smaller dose may be sufficient)
Levomepromazine can be used in terminal agitation or agitated delirium under specialist advice at a different dose (refer to Care in the Last Days of Life guideline)

<table>
<thead>
<tr>
<th>Anti-secretory for respiratory secretions</th>
<th>Hyoscine butylbromide injection (Buscopan®) (20mg/ml ampoules)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dose: 20mg SC, repeated at hourly intervals as needed for respiratory secretions</td>
</tr>
</tbody>
</table>
|                                          | Maximum of 120mg in 24 hours. Supply 10 ampoules*.

<table>
<thead>
<tr>
<th>Anti-emetic for nausea and vomiting1</th>
<th>Levomepromazine injection (25mg/ml ampoules)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dose: 2.5 to 5mg SC, 12 hourly as needed for nausea. Supply 10 ampoules*</td>
</tr>
<tr>
<td></td>
<td>Levomepromazine can be used in terminal agitation or agitated delirium under specialist advice at a different dose (refer to Care in the Last Days of Life guideline)</td>
</tr>
</tbody>
</table>

*some Health Boards may recommend smaller quantities as appropriate

**Review**

- It is essential to review the effect of any ‘as required’ medicine prescribed in an anticipatory fashion, after it has been administered. This will help to direct a review of the overall treatment plan.
- There should be a review of the treatment plan within one hour to assess if the administered medication has:
  - had the desired effect
  - had no effect on the symptom
  - a partial, but inadequate, effect on the symptom.
- In each of these situations, a comprehensive review of symptoms, drug doses and alternative therapeutic options must be undertaken.
- There should be a review of the treatment plan within 24 hours when the administered medication:

1 QT Indicates this medication is associated with QT prolongation
- is effective for an appropriate and expected time
- has had a limited duration of effectiveness that has necessitated three or more repeated doses.

- As part of the review, the doses of regular medication, such as modified release tablets, transdermal patches or those given by syringe pump, should be considered. If there are signs of toxicity, a dose reduction, or drug switch, may be required. Advice from specialist palliative care should be sought if needed.