SUBCUTANEOUS MORPHINE (non maternity)

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM
The aim of pain management with subcutaneous (SC) morphine is to provide and maintain effective analgesia to enable the patient to cough, move, roll, sit or walk without nausea and be able to rest and sleep comfortably. In order to achieve adequate serum opiate levels, SC morphine may be used after either intravenous or SC loading in recovery, or when switching from epidural analgesia or PCA.

For regular and/or PRN use the patient will have their SC morphine administered by either a SC injection or via a subcutaneous cannula which will be left insitu.

2. PATIENT
• Patients with post-operative or other form of acute pain
• Oncology and palliative care patients.
• Chronic non-malignant pain patients.
• Nil by mouth
• Unable to take oral analgesia because of intractable nausea and vomiting.
• Unconscious palliative care patients who have been taking oral morphine.
• Patients who are not suitable for PCA
• See contraindications in educational notes

3. STAFF
• Medical
• Midwives
• Registered Nurses

4. EQUIPMENT
• Insertion of a SC cannula may be required: (Please refer to SESLHNPD/19 - Subcutaneous Needle Insertion and Management – March 2011)

For regular and PRN SC Morphine dosing via a SC Cannula:
• Blue Tray
• Syringe 1 mL (2)
• 18g drawing up needle (2)
• Medication order
• Morphine 10mg/mL
• Sodium Chloride 0.9%10mL
• 2% Chlorhexidine Gluconate v/v 70% Isopropyl Alcohol swab

5. CLINICAL PRACTICE

Prescription
• Document the prescription on the National Inpatient Mediation Chart (NIMC).
• Order the dosage according to patients, age, opioid tolerance/chronic pain, level of pain severity, type of surgery.
• Calculate a baseline dosage of SC morphine for patients who are taking regular opiates pre-operatively. i.e. if a patient is on an opiate medication pre-operatively the equivalent dose should be calculated as a SC morphine dose and factored as a baseline opiate before the post-operative prescription is calculated and prescribed.
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- Refer to suggested starting doses (3-4 hourly) as per chart below.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Dose (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-39yrs</td>
<td>5.0-12.5mg</td>
</tr>
<tr>
<td>40-59yrs</td>
<td>5.0-10.0mg</td>
</tr>
<tr>
<td>60-69yrs</td>
<td>2.5-7.5mg</td>
</tr>
<tr>
<td>70-85yrs</td>
<td>2.5-5.0mg</td>
</tr>
<tr>
<td>&gt;85yrs</td>
<td>2.0-3.0mg</td>
</tr>
</tbody>
</table>

- Specify the maximum number of doses to be given.
- In the early post-operative period prescribe regular doses into 3-4 hourly plus prescribe 2-3 hourly breakthrough doses for strong pain.
- Administer regular SC morphine as ordered unless contraindicated.
- Explain the rationale behind regular SC morphine dosing and the importance of compliance in the early post-operative period.
- Document on both the NIMC and in the integrated notes if a patient refuses their regular SC morphine.
- Contact APRS or Anaesthetist if the patient refuses more than 2 doses of regular morphine.

Procedure
- Prior to dosage record the pain score, any current side effects of the narcotic (sedation score and respiratory rate) and manage accordingly. *(See Naloxone LOP.)*
- Clean hands, don non-sterile gloves
- Assess cannula site and dressing
- Check patients name and MRN number
- Explain procedure and purpose.
- 2 RNs to check medication against order and follow S8 handling of medications policy.
- Aseptically assemble needle and syringe and draw up correct dose of medication.
- Do not dilute medication.
- Remove needle from syringe of prepared medication
- Scrub the hub with a 2% Chlorhexidine Gluconate v/v 70% Isopropyl Alcohol swab
- Connect syringe to cannula/infusion set then inject medication slowly.
- Flush with 0.4 - 1.0mL of sodium chloride 0.9%
- Terminate encounter and discard equipment
- Remove gloves & wash hands
- Apply oxygen via nasal prongs or equivalent for the first post-operative night, unless specified otherwise by the prescribing anaesthetist.
- Observe SC cannula site each shift and remove or change cannula after 7 days.
- Document in integrated notes.

Observations
- Record vital signs (Temp, Pulse, RR, BP, and O₂ Sats) on the SAGO or HDU chart.
- Record pain observations (pain score, respiratory rate, sedation) on the RHW Pain Observation Chart.
- Perform and record both vital signs and pain observations immediately prior to dose administration.
- Perform and record both vital signs and pain observations 60 minutes after any dose in order to assess pain and to ensure there are no adverse effects.
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- Perform and record pain observations at 30 minutes post dose, if the dose given was a breakthrough dose (e.g. after 2 hours from regular dose).
- If all observations are satisfactory and pain score warrants, the patient may be offered PRN analgesia as per PRN orders.
- Discuss safe mobilisation with the patient.
- Refer to possible complications and their management – (Appendix 1)

6. DOCUMENTATION
- National Inpatient Medication Chart
- SAGO or HDU Chart
- RHW Pain Observation Chart
- Clinical Pathways
- Integrated Clinical Notes

7. EDUCATIONAL NOTES

Contraindications/Precautions
- Where sedation score of ≥2 or respiratory rate ≤ 10
- If they are having a reaction to the medication such as rash, or hallucinations.
- If they find the nausea too unpleasant despite at least 2 types of anti-emetic being delivered.
- In these cases call the APRS or Anaesthetist for review.

Registered Nurse/Midwife Education

An RN/RM witnessed by another RN/RM can administer and check legally prescribed SC morphine for the management of pain.

See the medication section of the RHW policy for the handling and prescribing of medications and the responsibilities of the RN/RM and for Schedule 8 medications.

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP
- Sedation – Respiratory depression LOP
- Naloxone – guidelines for use of naloxone HCL for the treatment of respiratory depression and over-sedation following opiate use
- SESLHNPD/19 - Subcutaneous Needle Insertion and Management

9. RISK RATING
MEDIUM
SUBCUTANEOUS MORPHINE (non maternity) cont’d

10. REFERENCES

<table>
<thead>
<tr>
<th>Reference</th>
<th>Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Consensus recommendations: The Pain Management Unit and Palliative Care Department, The Prince Henry and Prince of Wales Hospitals.</td>
<td>Level 1C</td>
</tr>
</tbody>
</table>
### Appendix 1

**Possible complications and their management**

<table>
<thead>
<tr>
<th>Complication</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inadequate analgesia</strong></td>
<td>Review dose, consider alternative, or add another pain medication</td>
</tr>
<tr>
<td><strong>Nausea</strong></td>
<td>Ensure antiemetic’s are prescribed and offered as frequently as the PRN order permits. If one antiemetic does not work proceed to alternative or page APRS for advice. Anti-emetics should be ordered on the medication chart but administration should be recorded on both the medication chart and pain observation chart. Any patient requiring more than 2 doses of antiemetic will need a regular dose ordered on their medication chart. Identify if the patient is hypotensive and check their fluid balance.</td>
</tr>
<tr>
<td><strong>Pruritus (itch)</strong></td>
<td>DO NOT use sedative antihistamines – consider naloxone. Refer to naloxone LOP If persistent, contact APRS</td>
</tr>
</tbody>
</table>
| **Respiratory Depression** | **If Respiratory Rate 6-10 bpm and/or SpO2 < 90%**  
  - Cease administration of all opioids.  
  - Give oxygen via mask and support airway if necessary  
  - Assess sedation level and if possible encourage patient to breathe deeply  
  - Activate a PACE Tier 1 call  
  - Contact APRS/Anaesthetist  
  **If Respiratory Rate ≤ 5 breaths per minute**  
  - Cease administration of all opioids including PCA  
  - Give oxygen at 10L/min via Hudson mask and support airway if necessary  
  - Activate a CODE BLUE  
  - Give IV naloxone as prescribed OR as per naloxone LOP  
  - Contact APRS |
| **Increased Sedation** | **Sedation Score 2**  
  - Cease administration of all opioids.  
  - Give oxygen  
  - Check respiratory rate frequently  
  - Activate a PACE Tier 1  
  - Contact APRS  
  **Sedation Score 3 (Difficult to rouse)**  
  - Cease administration of all opioids.  
  - Give oxygen  
  - Check respiratory rate  
  - Activate a PACE Tier 2  
  - Give naloxone as prescribed OR as per naloxone LOP  
  - Contact APRS  
  **Sedation Score 3 (Unresponsive)**  
  - Cease administration of all opioids.  
  - Give oxygen  
  - Check respiratory rate  
  - Activate a CODE BLUE  
  - Give naloxone as prescribed OR as per naloxone LOP  
  - Contact APRS |
| **Urinary Retention**  | Contact the patients primary care team                                                                                                        |
| **Constipation**      | Prophylactic aperients therapy is beneficial. Contact primary care team                                                                       |