Palliative Care Education Snap Sessions
Darling Downs – South Burnett
Cairns & Hinterland – Atherton Tableland
South West HHS

First session: Tuesday 28th June 2016
Last session: Tuesday 30th August 2016
14.30 – 14.50 hours each week

Subcutaneous infusions in palliative care

- standard practice in palliative care
- improve person’s comfort
- administration of medication at a constant rate to assist in control of pain and other symptoms
- power driven devices
- Commencement of a subcutaneous infusion of medication:
  - careful assessment by health professionals involved
  - discussion with the person and family/carer

Subcutaneous infusions in palliative care

- a small, portable battery operated pump that delivers medications at an accurately controlled rate
- offers a convenient, accessible alternative for continuous administration of medications
- can be used for ambulant patients with most devices relatively unobtrusive, not interfering with patients wanting to continue with their normal daily activities

Subcutaneous infusions in palliative care

Advantages:

- allows continuous supply of medications, bypassing the gut and associated problems with swallowing & mal-absorption
- more stable plasma levels of drugs – better symptom control as peaks and troughs of intermittent drug administration are avoided
- continued management of symptoms removing the need for frequent interventions eg repeated oral medications or injections at end of life

Indications:

- inability to swallow due to dysphagia from physical obstruction/tumour in the mouth, throat or oesophagus
- persistent nausea and vomiting
- severe weakness
- unconsciousness
- bowel obstruction

Snap sessions 2009
23rd August 2016
Subcutaneous infusions in palliative care

Contraindications:
- lack of permission from the patient and/or family/carer as proxy
- other viable routes of administration are available
- contraindications exist related to the drugs to be infused

Limitations and Risks:
- flexibility of the prescription
- technical problems
- skin reactions at cannula site
- management in accordance with policies & procedures
- by knowledgeable appropriately trained staff

General Principles for use of subcutaneous infusion devices

- manufacturer’s guidelines and your organisation’s protocol for preparation and set-up for changing the device
- generally used to deliver medications over a 24 hour period to reduce risk of errors in setting up the device
- evidence for microbiological stability and physical & chemical compatibility relate to a 24 hour timeframe → a 24 hour infusion period is still recommended

- consider using a tamper-proof ‘lock-box’ if tampering with the device or using the boost facility is a possibility
- Ensure that the person and family understand how the device works, reasons for use and;
- have a 24 hour support contact number

- when changing the extension set and/or cannula, prime the line after drawing up the prescribed medications, and before connecting to the patient.
- after priming – note volume to be infused.
  * NIKI pumps will adjust time for infusion if pump mechanism is used to prime
- document line change and time the infusion is calculated to finish
- use a minimum volume extension set to minimise dead space in the line

General Principles for use of subcutaneous infusion devices

S/C site selection
- area with a good depth of subcutaneous fat not near a joint
- consider if person is ambulatory, agitated and/or distressed
- chest or abdomen are preferred sites – upper, anterior chest wall above the breast, away from the axilla
- if person is cachectic – the abdomen is a preferred site;
- select and use sites on a rotating basis;
- site longevity can vary from 1–14 days – influenced by medications and type of cannula used

Site inspection
- tenderness or hardness at the site
- presence of a haematoma
- leakage at the insertion site
- swelling—a sterile abscess can occur at the insertion site, causing local tissue irritation
- erythema (redness)
- presence of blood in the tubing
- displacement of the cannula

Conversion tables – instructions

1. Total previous opioid dose over the past 24 hours (regular doses + break through doses)
2. Use part A of the table – convert to an equivalent dose of oral morphine
3. Use part B of the table – convert to an equivalent dose of desired/new opioid

STEP A. Previous dose X Conversion Factor = Oral Morphine dose (mg / 24hrs) Equivalent

<table>
<thead>
<tr>
<th>Previous Opioid Dose/24hrs</th>
<th>Route</th>
<th>Conversion Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine mg</td>
<td>PO</td>
<td>1</td>
</tr>
<tr>
<td>Hydromorphone mg</td>
<td>PO</td>
<td>0.2</td>
</tr>
<tr>
<td>Oxycodone SR mg</td>
<td>PO</td>
<td>0.66</td>
</tr>
<tr>
<td>Oxycodone mg</td>
<td>S/C</td>
<td>0.66</td>
</tr>
<tr>
<td>Tramadol SR mg</td>
<td>PO</td>
<td>10</td>
</tr>
<tr>
<td>Tramadol mg</td>
<td>PO</td>
<td>4.5</td>
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<tr>
<td>Fentanyl patch mcg/hr</td>
<td>Topical</td>
<td>0.28</td>
</tr>
<tr>
<td>Fentanyl mg</td>
<td>S/C</td>
<td>5</td>
</tr>
<tr>
<td>Sufentanil mcg</td>
<td>S/C</td>
<td>0.5</td>
</tr>
<tr>
<td>Codeine mg</td>
<td>PO</td>
<td>8</td>
</tr>
<tr>
<td>Norspan Patch mcg/hr</td>
<td>Topical</td>
<td>0.5</td>
</tr>
</tbody>
</table>

STEP B. Oral Morphine Dose X Conversion factor = Opioid of choice dose (units/24hrs)

<table>
<thead>
<tr>
<th>Opioid of choice</th>
<th>Route</th>
<th>Conversion factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine mg</td>
<td>PO</td>
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<tr>
<td>Hydromorphone mg</td>
<td>PO</td>
<td>0.067</td>
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<tr>
<td>Oxycodone SR mg</td>
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<tr>
<td>Oxycodone mg</td>
<td>S/C</td>
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<td>Tramadol SR mg</td>
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<td>10</td>
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<tr>
<td>Tramadol mg</td>
<td>S/C</td>
<td>2.5(?)</td>
</tr>
<tr>
<td>Fentanyl Patch mcg/hr</td>
<td>Topical</td>
<td>0.28</td>
</tr>
<tr>
<td>Fentanyl mg</td>
<td>S/C</td>
<td>0.2</td>
</tr>
<tr>
<td>Sufentanil mcg</td>
<td>S/C</td>
<td>2</td>
</tr>
<tr>
<td>Codeine mg</td>
<td>PO</td>
<td>0.13</td>
</tr>
<tr>
<td>Norspan Patch mcg/hr</td>
<td>Topical</td>
<td>2</td>
</tr>
</tbody>
</table>

GOLDEN RULE

Previous opioid

ORAL MORPHINE

New Opioid
Resources

Caresearch

On line Drug Compatibility

References


