## Opioids in labour


### Aspect Consideration

#### Indications

- Women in active labour who request pain management

#### Administration

- Opioid administration may be:
  - More effective in early active labour and
  - Less effective after seven centimetres dilatation
- Morphine preferred to pethidine due to its reduced half-life in both the woman and the baby
  - Pethidine may be associated with reduced breastfeeding success due to baby’s impaired ability to initiate and sustain breastfeeding (low quality data)
- Aim is to provide adequate pain relief with the lowest dose in order to minimise side effects
  - Parenteral administration associated with adverse effects
  - Consider co-administration of an anti-emetic

#### Care provision

- If birth is anticipated within one to four hours, consider the duration of action and effect on the newborn
- During labour and following birth, assess for respiratory depression in both mother and baby

#### Risk/benefit

- Overall, findings indicated that parenteral opioids provided some pain relief and moderate satisfaction with analgesia in labour, although up to two-thirds of women who received opioids reported moderate or severe pain and/or poor or moderate pain relief one or two hours after administration.
- Fetus/newborn:
  - Transient decrease in fetal heart rate variability or pseudosinusoidal fetal heart rate pattern
  - Respiratory depression and hypothermia of the newborn
- Maternal side effects:
  - Impaired capacity to engage in decision making
  - Sedation
  - Euphoria
  - Nausea and vomiting
  - Decreased gastric mobility and emptying
  - Urinary retention

### Comparison of morphine and pethidine

<table>
<thead>
<tr>
<th>Opioid</th>
<th>Dose IM (mg)</th>
<th>Onset (minutes)</th>
<th>Duration of action (hours)</th>
<th>Women half-life (hours)</th>
<th>Newborn half-life (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>10</td>
<td>10 to 20</td>
<td>3 to 5</td>
<td>2 to 4</td>
<td>13.9</td>
</tr>
<tr>
<td>Pethidine</td>
<td>50 to 100</td>
<td>10 to 20</td>
<td>2 to 5</td>
<td>21</td>
<td>63</td>
</tr>
</tbody>
</table>
References

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