

Opioids in labour

IMPORTANT: Consider individual clinical circumstances. Consult a pharmacopeia for complete drug information. Read the full disclaimer at <https://www.health.qld.gov.au/qcg>

Aspect	Consideration
Indications	<ul style="list-style-type: none"> • Women in active labour who request pain management
Administration	<ul style="list-style-type: none"> • Opioid administration may be: <ul style="list-style-type: none"> ○ More effective in early active labour and ○ Less effective after seven centimetres dilatation¹ • Morphine preferred to pethidine due to its reduced half-life in both the woman and the baby¹ <ul style="list-style-type: none"> ○ Pethidine may be associated with reduced breastfeeding success due to baby's impaired ability to initiate and sustain breastfeeding¹ (low quality data) • Aim is to provide adequate pain relief with the lowest dose in order to minimise side effects <ul style="list-style-type: none"> ○ Parenteral administration associated with adverse effects^{2,3} ○ Consider co-administration of an anti-emetic⁴
Care provision	<ul style="list-style-type: none"> • If birth is anticipated within one to four hours, consider the duration of action and effect on the newborn¹ • During labour and following birth, assess for respiratory depression in both mother and baby
Risk/benefit	<ul style="list-style-type: none"> • 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.² • Fetus/newborn: <ul style="list-style-type: none"> ○ Transient decrease in fetal heart rate variability or pseudosinusoidal fetal heart rate pattern¹ ○ Respiratory depression and hypothermia of the newborn² • Maternal side effects¹: <ul style="list-style-type: none"> ○ Impaired capacity to engage in decision making² ○ Sedation ○ Euphoria ○ Nausea and vomiting⁵ ○ Decreased gastric mobility and emptying ○ Urinary retention

Comparison of morphine and pethidine

Opioid	Dose IM (mg)	Onset (minutes)	Duration of action (hours)	Women half-life (hours)	Newborn half-life (hours)
Morphine	10	10 to 20	3 to 5	2 to 4	13.9
Pethidine	50 to 100	10 to 20	2 to 5	21	63

References

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