

## Epidural analgesia 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
<b>Indications</b>	<ul style="list-style-type: none"> <li>• Women in labour:               <ul style="list-style-type: none"> <li>○ Who request or consent to epidural analgesia for pain management</li> <li>○ Following assessment by an anaesthetist of individual clinical circumstances</li> </ul> </li> <li>• Suitable at any stage of labour<sup>1</sup> <ul style="list-style-type: none"> <li>○ No significant differences in clinical outcomes dependent on timing (early versus late initiation) of epidural analgesia (nine RCTs, n=15,752)<sup>2</sup></li> </ul> </li> </ul>
<b>Administration</b>	<ul style="list-style-type: none"> <li>• No other opioids or sedatives unless prescribed by an anaesthetist</li> <li>• May be administered via patient controlled epidural analgesia (PCEA) device, intermittent bolus or infusion</li> <li>• Follow local protocols for:               <ul style="list-style-type: none"> <li>○ Concomitant anti-emetic, naloxone and oxygen prescription</li> <li>○ Preferred drug, dose and route</li> <li>○ Device management, training, assignment of responsibility for care and escalation procedures</li> <li>○ Documentation</li> </ul> </li> </ul>
<b>Care provision</b>	<ul style="list-style-type: none"> <li>• Prior to commencement:               <ul style="list-style-type: none"> <li>○ Ensure ready access to resuscitation equipment including vasopressors</li> <li>○ Secure intravenous access and commence intravenous fluids</li> <li>○ Baseline temperature, heart rate, blood pressure (BP), oxygen saturation, respiratory rate, cardiotocograph (CTG) and level of consciousness</li> </ul> </li> <li>• During establishment and after intermittent bolus—five minutely BP for 15 minutes</li> <li>• Position left lateral/wedge to avoid aortic-caval compression</li> <li>• Close midwifery care (consider one to one midwifery care)</li> <li>• Continuous CTG<sup>3</sup></li> <li>• Ongoing intrapartum maternal observations every 30 minutes; additionally               <ul style="list-style-type: none"> <li>○ Assess sedation, motor weakness, back pain and catheter site</li> <li>○ Observe for nausea, vomiting, and pruritis</li> <li>○ As indicated, assess block height</li> </ul> </li> <li>• Monitor urinary function—indwelling urinary catheter usually required</li> <li>• Incorporate pressure injury prevention strategies               <ul style="list-style-type: none"> <li>○ Avoid heat packs due to potential for altered skin sensation</li> </ul> </li> <li>• Consider venous thromboembolism (VTE) prophylaxis (e.g. compression stockings)</li> </ul>
<b>Second stage</b>	<ul style="list-style-type: none"> <li>• Consider the influence of epidural on duration of second stage when assessing progress and/or the need for intervention in both multiparous and nulliparous women</li> </ul>
<b>Discontinuation</b>	<ul style="list-style-type: none"> <li>• Before discontinuing, consider requirement for continuing analgesia for perineal repair</li> <li>• Assess motor function and proprioception prior to mobilisation</li> </ul>

## Risks and benefits

Compared to opioids (IV or IM)	with epidural
Effectiveness of pain relief (MD) -3.36, 95% CI -5.41 to -1.31, three trials, 1166 women) <sup>4</sup>	Increased
Maternal satisfaction (RR 1.3, 95% CI 0.84 to 2.05 eight trials, 2929 women) <sup>4</sup>	No difference
Low blood pressure (RR 18.23, 95% CI 5.09 to 65.35, eight trials, 2789 women) <sup>4</sup>	Increased
Oxytocin administration (RR 1.19, 95% CI 1.03 to 1.39, 13 trials, 5815 women) <sup>4</sup>	Increased
Duration of second stage (MD 13.66 minutes, 95% CI 6.67 to 20.66, 13 trials, 4233 women) <sup>4</sup>	Increased
Risk of instrumental birth (RR 1.42, 95% CI 1.28 to 1.57, 23 trials, 7935 women) <sup>4</sup>	Increased
Fever (RR 3.34, 95% CI 2.63 to 4.23, six trials, 2741 women) <sup>4</sup>	Increased
Overall need for caesarean section (RR 1.10, 95% CI 0.97 to 1.25, 27 trials, 8417 women) <sup>4</sup>	No difference
Naloxone administration to newborn (RR 0.15, 95% CI 0.10 to 0.23, 10 trials, 2645 women) <sup>4</sup>	Decreased
Breastfeeding initiation or maintenance <sup>5</sup>	Uncertain due to mixed results
Permanent neurological injury in the woman (death or permanent injury more than 6 months) <sup>6</sup>	0.6 per 100,000

CI: confidence interval, MD: mean difference; RR: risk ratio

<sup>4</sup>Evidence relates to low risk women with cephalic presentation at term and may not be applicable to other higher risk groups. Quality of evidence generally low.

## References

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