## Epidural analgesia in labour


<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
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| **Indications** | • Women in labour:  
  o Who request or consent to epidural analgesia for pain management  
  o Following assessment by an anaesthetist of individual clinical circumstances  
  • Suitable at any stage of labour\(^1\)  
  o No significant differences in clinical outcomes dependent on timing (early versus late initiation) of epidural analgesia (nine RCTs, n=15,752)\(^2\) |
| **Administration** | • No other opioids or sedatives unless prescribed by an anaesthetist  
  • May be administered via patient controlled epidural analgesia (PCEA) device, intermittent bolus or infusion  
  • Follow local protocols for:  
    o Concomitant anti-emetic, naloxone and oxygen prescription  
    o Preferred drug, dose and route  
    o Device management, training, assignment of responsibility for care and escalation procedures  
    o Documentation |
| **Care provision** | • Prior to commencement:  
  o Ensure ready access to resuscitation equipment including vasopressors  
  o Secure intravenous access and commence intravenous fluids  
  o Baseline temperature, heart rate, blood pressure (BP), oxygen saturation, respiratory rate, cardiotocograph (CTG) and level of consciousness  
  • During establishment and after intermittent bolus—five minutely BP for 15 minutes  
  • Position left lateral/wedge to avoid aortic-caval compression  
  • Close midwifery care (consider one to one midwifery care)  
  • Continuous CTG\(^3\)  
  • Ongoing intrapartum maternal observations every 30 minutes; additionally  
    o Assess sedation, motor weakness, back pain and catheter site  
    o Observe for nausea, vomiting, and pruritus  
    o As indicated, assess block height  
  • Monitor urinary function—indwelling urinary catheter usually required  
  • Incorporate pressure injury prevention strategies  
    o Avoid heat packs due to potential for altered skin sensation  
  • Consider venous thromboembolism (VTE) prophylaxis (e.g. compression stockings) |
| **Second stage** | • 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 |
| **Discontinuation** | • Before discontinuing, consider requirement for continuing analgesia for perineal repair  
  • Assess motor function and proprioception prior to mobilisation |
## Risks and benefits

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<thead>
<tr>
<th>Compared to opioids (IV or IM)</th>
<th>with epidural</th>
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<tbody>
<tr>
<td>Effectiveness of pain relief (MD) (-3.36, 95% \text{CI} -5.41\text{ to } -1.31, \text{three trials, 1166 women})^4</td>
<td>Increased</td>
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<tr>
<td>Maternal satisfaction (RR 1.3, 95% CI 0.84 to 2.06 \text{eight trials, 2929 women})^4</td>
<td>No difference</td>
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<tr>
<td>Low blood pressure (RR 18.23, 95% CI 5.09 to 65.35, eight trials, 2789 women)^4</td>
<td>Increased</td>
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<tr>
<td>Oxytocin administration (RR 1.19, 95% CI 1.03 to 1.39, 13 trials, 5815 women)^4</td>
<td>Increased</td>
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<tr>
<td>Duration of second stage (MD 13.66 minutes, 95% CI 6.67 to 20.66, 13 trials, 4233 women)^4</td>
<td>Increased</td>
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<td>Risk of instrumental birth (RR 1.42, 95% CI 1.28 to 1.57, 23 trials, 7935 women)^4</td>
<td>Increased</td>
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<tr>
<td>Fever (RR 3.34, 95% CI 2.63 to 4.23, six trials, 2741 women)^4</td>
<td>Increased</td>
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<tr>
<td>Overall need for caesarean section (RR 1.10, 95% CI 0.97 to 1.25, 27 trials, 8417 women)^4</td>
<td>No difference</td>
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<td>Naloxone administration to newborn (RR 0.15, 95% CI 0.10 to 0.23, 10 trials, 2645 women)^4</td>
<td>Decreased</td>
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<td>Breastfeeding initiation or maintenance^5</td>
<td>Uncertain due to mixed results</td>
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<td>Permanent neurological injury in the woman (death or permanent injury more than 6 months)^6</td>
<td>0.6 per 100,000</td>
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CI: confidence interval, MD: mean difference; RR: risk ratio

*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


### Acknowledgements

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**Endorsed by:** Statewide Maternity and Neonatal Clinical Network (Queensland)