Epidural effective for pain relief in labour

Clinical Question
Compared with non-epidural or no pain relief during labour, how effective is epidural analgesia?

Bottom Line
Low-quality evidence showed that epidural analgesia might be more effective in reducing pain during labour and increasing maternal satisfaction with pain relief than non-epidural methods. Epidural analgesia had no impact on the risk of caesarean section or long-term backache, and did not appear to have an immediate effect on neonatal status as determined by Apgar scores or in admissions to neonatal intensive care. Women with epidural experienced more hypotension, motor blockade, fever, and urinary retention. They also had longer first and second stages of labour, and were more likely to have oxytocin augmentation than the women in the opioid group. Women receiving epidurals had less risk of respiratory depression requiring oxygen, and were less likely to experience nausea and vomiting than women receiving opioids. Babies born to women in the epidural group were less likely to have received naloxone. There was no difference between women in the epidural or opioid groups for postnatal depression, headaches, itching, shivering, or drowsiness. All but six studies compared epidural analgesia with injected opioids.

Caveat
Although overall there appeared to be an increase in assisted vaginal birth when women have epidural analgesia, a post hoc subgroup analysis showed this effect was not seen in recent studies (after 2005), suggesting that modern approaches to epidural analgesia in labour do not affect this outcome.

Context
Epidural analgesia is a central nerve block technique achieved by injection of a local anaesthetic close to the nerves that transmit pain, and is widely used as a form of pain relief in labour. However, there are concerns about unintended adverse effects on the mother and infant.

Cochrane Systematic Review
Anim-Somuah M et al. Epidural versus non-epidural or no analgesia for pain management in labour. Cochrane Reviews, 2018, Issue 5. Art. No.: CD000331.DOI: 10.1002/14651858.CD000331.pub4. This review contains 40 studies involving over 11,000 participants.

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Systematic review link: