Epidural / Spinal Analgesia during Birth

Frequently Asked Questions

Reviewed August 2023

What is an Epidural Anaesthetic?

An epidural anaesthetic is an injection of drugs into the lower region of the spine, in order to block the passage of painful nerve impulses from the uterus and the lower body to the brain.

Who performs the epidural?

Epidurals are performed by specialist anaesthetists who have had specific training and experience in this technique.

How is an epidural anaesthetic performed?

- An intravenous 'drip' (small fine tube called a cannula placed into a vein, through which fluid is then given) is commenced into the hand or arm before epidural insertion
- An antiseptic solution is applied to the skin on the lower back and a small injection of local anaesthetic is administered prior to insertion of the epidural needle.
- The epidural injection may be performed with you lying on your side or sitting up. You will be asked to 'round' your back by drawing up your knees and flexing your neck to 'open' the space between the bony vertebrae; this position allows easier access to insert the epidural
- It is important that you stay as still as possible while the injection is in progress
- A fine plastic catheter is inserted through the epidural needle into the epidural space and the needle is withdrawn.
- Pain-relieving drugs are then introduced through the epidural catheter
- Epidural catheter is securely taped into place

How long does it take for the epidural to work?

Epidural drugs may take up to twenty minutes to take full effect; although your labour contractions will continue they should not be painful. You may notice a loss of sensation (anaesthesia) and/or a loss of pain (analgesia) in your legs. Very occasionally, epidural anaesthesia fails or only partially works, and this may require further anaesthetic and/or a different method of anaesthesia to be used.

How effective is an epidural in relieving pain?

Epidural analgesia is an effective method of relieving pain during labour while maintaining the mother's consciousness and participation in the birth. Epidural provides excellent pain relief in the 1st stage (long stage) of labour where pain is mainly due to contractions of the uterus. During the 2nd stage (when the baby is about to be born), pain is also caused by the head of the baby stretching the cervix and the vagina, and an epidural may not take all the pain away but allows the mother to retain power to push. Pain medication is administered using an epidural pump to provide an hourly bolus with the potential use of a push button device that you control. Epidurals may sometimes give inadequate analgesia and require an extra top-up of drugs to alleviate residual pain.

Does an epidural anaesthetic affect labour?

An epidural can occasionally slow the progress of labour; more commonly a very prolonged and painful labour may progress more rapidly following an epidural. The urge to push baby out may be reduced; an option of decreasing the epidural will allow some return of sensation to push.









Epidural / Spinal Analgesia during Birth

Frequently Asked Questions

Reviewed August 2023

Close monitoring of you and your baby will be undertaken for the rest of your labour including frequent and regular BP monitoring and continuous monitoring of baby's heart rate and your contractions.

Are there any women who cannot have an epidural?

Women who have had previous spinal surgery, are very overweight, have severe infection or who have impaired blood clotting may not be suitable for an epidural.

When do I need to make a decision about whether to request an epidural?

If you decide to have an epidural your midwife will contact your obstetrician and anaesthetist to discuss and arrange this option. Please take this into account and talk to your midwife early if you anticipate that you may want an epidural.

Is an epidural possible for a caesarean section?

Yes, in most circumstances an epidural or spinal anaesthetic (block) is possible for a caesarean section. If delivery of the baby is required urgently there may be insufficient time to insert and establish an adequate epidural block. In this case the need for a slightly different 'spinal' injection or the need for a general anaesthetic will be discussed.

Is a spinal anaesthetic different to an epidural anaesthetic?

Yes, spinal anaesthesia involves a single injection of drugs into the spinal fluid with a rapid onset of anaesthesia. In some situations a combination of spinal/epidural pain management may be the most appropriate option.

Are epidurals safe? What are the risks?

Epidurals are very safe for both mothers and babies; nevertheless as with all medical procedures side effects and complications can occur.

Common side effects of epidurals are:

- Shivering or tremor and, less commonly, dizziness and nausea
- Tenderness at the site of needle insertion
- Fall in maternal blood pressure, readily corrected by fluids or drugs given through the intravenous drip. In rare instances the low blood pressure may affect the baby requiring urgent intervention.
- Loss of bladder sensation requiring a catheter to empty bladder
- Slightly increased chance of a forceps or vacuum birth if it is your first labour. It does not increase
 your chance of needing a caesarean
- Severe headache lasting a few days or weeks (in about one in a hundred epidurals), due to the
 epidural needle penetrating the membrane containing the spinal fluid allowing spinal fluid to leak.

Potential (but much less common risks) include:

 Inadvertent injection of the local anaesthetic into an epidural vein, causing temporary convulsions or a high 'spread' of the anaesthetic which may cause temporary difficulty with breathing or even loss of consciousness









Epidural / Spinal Analgesia during Birth

Frequently Asked Questions

Reviewed August 2023

Rare but potentially serious complications associated with epidural anaesthetics include:

- Infection and bleeding in or around the spine which may cause meningitis or epidural abscess, requiring antibiotics and further treatments
- Bruising or scarring of the nerve roots leading to temporary/permanent weakness and numbness (or paralysis) in the legs, bladder or bowel
- Heart rhythm irregularities, cardiac arrest, fitting and even death

It is important to realise that the risk of these serious complications occurring is extremely small.

When should I seek medical support post epidural?

Seek medical support immediately if you have any concerns or develop any of the following unusual symptoms:

- Persistent back pain
- Tingling or numbness in any part of the lower half of your body
- Bladder or bowel symptoms
- Fever

Does an epidural affect baby?

Epidural solutions can cross the placenta and in rare instances may make baby drowsy and may disturb the initiation of breastfeeding.

What will it cost?

The anaesthetist will send you an account for attendance and insertion of the epidural/spinal; the amount reimbursed by Medicare and your private Health Fund may not cover the full anaesthetic fee, leaving a 'gap' amount determined by the individual anaesthetists.

References:

- Australian & New Zealand College of Anaesthetists ANZCA. PG03 (A) Guideline for the Management of major regional analgesia, 2014.
- Costley PL, East CE. Oxytocin augmentation of labour in women with epidural analgesia for reducing operative deliveries. Cochrane Database of Systematic Reviews 2013, Issue 7. Art. No.: CD009241. DOI: 10.1002/14651858.CD009241.pub3.
- Erikson LM, Nohr EA, Kjcergaard H (2011). Mode of Delivery after Epidural Analgesia in a Cohort of Low Risk Nulliparous. Birth, 38 (4): 317-326.
- Han Sen Tan, Yanzh Zeng, Yueyue Qi, Rehena Sultana, Chin Wen Tan, Alex T Sia, Ban Leong Sng, Fahad J Siddiqui (2023). Automated mandatory bolus versus basal infusion for maintenance of epidural analgesia in labour. Cochrane Database Systematic Reviews 5th June 2023. http://doi.org/10.1002/14651858.CD011344.pub3.







Proudly supported by



Epidural / Spinal Analgesia during Birth

Frequently Asked Questions

Reviewed August 2023

- James D Griffiths, Gillian ML Gyte, Phil A Popham, Kacey Williams, Shantini Paranjothy, Hannah K Broughton, Heather C Brown, Jane Thomas (2021). Interventions for preventing nausea and vomiting in women undergoing regional anaesthesia. Cochrane Database Systematic Reviews 18 May 2021. http://doi.org/10.1002/14651858.CD007579.pub3.
- Kate F Walker, Marion Kibuka, Jim G Thornton, Nia W Jones (2018). Maternal position in the second stage of labour for women with epidural anaesthesia. Cochrane Database of Systemic Reviews 9th Nov 2018, http://doi.org/10.1002/14651858.CD008070.pub4.
- Millicent Anim-Somuah, Rebecca MDE Smyth, Allan M Cyna (2018). Epidural versus non-epidural or no analgesia for pain management in labour. Cochrane Database of Systematic Reviews 21 May 2018, http://doi.org/10.1002/14651858.CD000331.pub4.
- Royal Australian and New Zealand (RANZ) College of Obstetricians and Gynaecologists (2020). Statement Epidural Anaesthesia, 22 Oct 2020
- Scott W Simmons, Alicia T Dennis, Allan M Cyna, Matthew G Richardson, Matthew R Bright (2019). Combined spinal-epidural versus spinal anaesthesia for caesarean section, 10 Oct 2019. Cochrane Database of Systematic Reviews. http://doi.org/10.1002/14651858.CD008100.pub2.
- Sng BL, Leong WL, Zeng Y, Siddiqui FJ, Assam PN, Lim Y, Chan ESY, Sia AT. Early versus late initiation of epidural analgesia for labour. Cochrane Database of Systematic Reviews 2014, Issue 10. Art. No.: CD007238. DOI: 10.1002/14651858.CD007238.pub2.

A teaching hospital of





