

# NEURAXIAL ANESTHESIA

Neuraxial anesthesia is **the most common and effective pain relief during labour**. It greatly reduces, and typically eliminates, any pain you feel below your waist. It can also be used if a C-section becomes necessary. There are **three main types** of neuraxial anesthesia used in obstetrics: **Spinal, epidural, and combined spinal epidural (CSE)**.

## EPIDURAL

This is the most common type of pain relief used in labour. The easiest way to conceptualize it is that is like an IV, that is inserted into your back.

### How it happens:

- An anesthesia provider inserts a small needle into your back, which allows for a small tube to be inserted.
- This tube is kept in place during labour and eventual delivery (vaginal or C-section).
- It is a **continuous** technique.
- A pump delivers medication via the epidural tube, it also allows you to administer additional medication if necessary.



## SPINAL

This is the most commonly used during C-section. Here, medication is given into your spinal canal. It works quickly, and lasts about 2 hours.

### How it happens:

- An anesthesia provider inserts a small needle into your back.
- Medication will be administered through this needle. You do not self-administer any medication when you get a spinal block.
- Pain relief is fast and long-acting.
- It is a **single shot** procedure.

**Combined spinal epidural (CSE)** combines epidural and spinal anesthesia to provide fast pain relief with the continuous feature of an epidural.

Epidural, spinal, and CSE anesthesia will cause you to **lose feeling from your waist to your feet**. Since epidurals can be continuously administered (and also allowed to wear off), this makes them suitable to the long process of labour and provides flexibility. Spinal anesthesia acts quickly and provides a dense block, which is perfect for the shorter duration and surgical needs of a C-section.

## Q&A

### Will an epidural slow my labour?

Most people find that neuraxial anesthesia helps them relax, improves their contraction pattern, and allows them to rest. Some studies have suggested epidurals slow labour by 20-30 minutes while other research has found no difference in labour length.

### If I have an epidural, will I be able to push?

**Yes.** An epidural will let you rest comfortably as your cervix dilates. When it's time to push, you'll have energy saved up. It shouldn't affect your ability to push as long as you do not feel completely frozen (typically caused by medication "top-ups").

### How numb will an epidural make me feel?

You'll experience significant pain relief but may still feel pressure from contractions and during exams. While you'll likely be unable to walk, you'll remain awake, alert, and able to feel yourself pushing during delivery.

#### References

Ituk U, Wong C. Overview of neuraxial anesthesia. In: Connor RF, editor. UpToDate. Massachusetts (USA): Wolters Kluwer; 2024.

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