

Spinal Anaesthesia

A single injection that numbs the lower half of your body for surgery

A spinal anaesthetic is a **single injection** of local anaesthetic into the fluid that surrounds your spinal cord. It is performed at the level of your lower back and numbs you from roughly the waist down within a few minutes, so an operation can be done without you feeling pain. You can stay awake, or have sedation to make you drowsy. A spinal is closely related to an epidural. The main difference is where the medication goes and how long it lasts.

WHEN IT IS USED

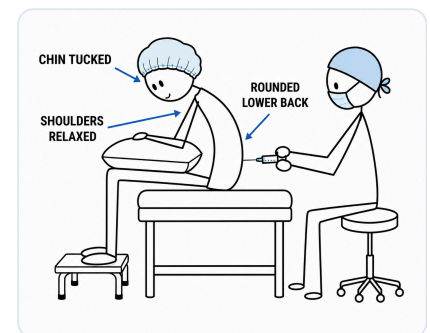
Common operations

A spinal can be used for lots of operations including: hip and knee joint replacements, caesarean sections, bladder and prostate surgery, hernia repairs, and leg or foot operations. It may be used instead of a general anaesthetic, or in combination with one (for example, in major abdominal surgery) to provide pain relief afterwards.

HOW IT WORKS

What happens, step by step

- You sit or lie on your side and curl your back outward to open the gaps between the bones.
- Your back is cleaned with antiseptic and a small injection of local anaesthetic numbs the skin.
- A very thin needle is passed between two bones of your spine, **below where the spinal cord ends**, into the fluid-filled space around the nerves.
- A small dose of local anaesthetic is injected and the needle is removed. Nothing is left in your back.
- Warmth, tingling and heaviness spread through your legs within minutes. The numbness usually lasts 2 to 4 hours.



This position can help to open up the spaces in your back. Your anaesthetist will guide you through it.

Sometimes the space can be tricky to find and the procedure takes a little longer. Let your anaesthetist know if you would like a break between attempts; we want you to be as comfortable as possible.

BENEFITS

Why a spinal may be offered

- Excellent pain relief, often with less need for strong opioid medications.
- You can avoid a full general anaesthetic for certain operations if you prefer.
- Less nausea and drowsiness afterwards, and often a quicker recovery.
- For some patients it lowers the risk of breathing problems after surgery.

RISKS AND SIDE EFFECTS

How safe is a spinal?

A spinal is a very safe and common procedure. Most effects are mild and expected; serious complications are rare. The numbers below are approximate, and your own risk depends on your health and your operation.

- 1 Low blood pressure — Very common.** Expected, and routinely treated with fluids and medication.
- 2 Difficulty passing urine — Common.** Temporary; a urinary catheter is sometimes needed for a short time.
- 3 Headache afterwards — Uncommon (about 1 in 200).** Usually settles; occasionally a simple treatment is offered.
- 4 Temporary nerve irritation — Rare (about 1 in 1,000).** A numb or tingling patch that almost always recovers fully over days to weeks.
- 5 Permanent nerve damage — Very rare (about 1 in 20,000–50,000).** You are more likely to be killed on NZ roads this year than to have this happen.
- 6 Serious harm (bleeding or infection around the spine) — Extremely rare (about 1 in 100,000).** Far rarer than a serious car crash.

How is a spinal different from an epidural? A spinal is a single injection of fluid *into* the spinal fluid, works within minutes, and wears off in a few hours. An epidural places a fine tube (catheter) *just short of* the spinal fluid, so pain relief can be topped up and continued for days. See the companion leaflet, **Epidural Pain Relief**.

COMMON QUESTIONS

Your questions answered

Will I be awake?

You can stay awake, listen to music, or have sedation to make you relaxed and drowsy. For a caesarean, parents are usually awake to meet their baby.

Will I feel the operation?

You should feel no pain. You may notice pressure, pulling or movement, which is normal. Tell your anaesthetist if you feel anything sharp.

When will the feeling come back?

Movement and sensation return gradually over 2 to 4 hours. Your team will check before you try to stand, as your legs may be weak at first.

Will it cause long-term back pain?

No. You may have a small bruised or tender spot for a day or two, but a spinal does not cause ongoing back pain.

Does the injection hurt?

The local anaesthetic may sting briefly. The spinal itself usually feels like pushing or a brief tingle.

Can I have one if I take blood thinners?

Tell your team about all your medications. Some blood thinners must be stopped for a period beforehand to keep the procedure safe.

Authors: Dr Sam Schriek & Dr Jenny Ross, Consultant Anaesthetists, Wellington. This leaflet is our own work, created for patient education. We have not received payment from Te Whatu Ora or any other organisation for this content.

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