

This fact sheet explains headaches that can happen after having an epidural or spinal anaesthetic.

It's common to get a headache after surgery or childbirth.

But, some people develop a specific type of headache called a 'post-dural puncture' headache after an epidural or spinal anaesthetic. Your chances of getting this headache depend on your age, the procedure you had, and other factors.

The headache usually starts 1 to 7 days after the epidural or spinal anaesthetic.

It is often very painful and felt at the front or back of your head. The headache gets better when you lie down but gets worse when you sit or stand.

You may also have neck pain, nausea, and sensitivity to bright lights.

Younger patients and those giving birth are more likely to have a post-dural puncture headache.

What causes the headache?

Your brain and spinal cord are surrounded by a fluid called cerebrospinal fluid (CSF) inside a protective layer called the dura.

During an **epidura**l, a needle is used to inject local anaesthetic just **outside the dura**. Sometimes, the needle accidentally goes through the dura, causing a small leak of CSF.

This can happen due to the difficulty of the procedure or the experience of the anaesthetist.

The risk is higher if you are obese, have spinal issues like scoliosis or arthritis, or if the epidural was given during active labour (especially if you accidentally move during the procedure).

With a **spinal anaesthetic**, a fine needle is inserted **into the dura** to inject local anaesthetic into the CSF. The hole is very small, but sometimes some fluid leak outs.

In both situations, if too much fluid leaks out, the pressure in the rest of the fluid around your brain and spinal cord drops.

When you sit up, the pressure lowers even more, which can cause a post-dural puncture headache.

Some people describe this headache as feeling like a very bad migraine that gets worse when they sit or stand.

What can you do about the headache?

Lying flat and taking simple pain-relieving medicines like paracetamol or ibuprofen may help. If you have strong pain, you might need stronger pain relief for a few days.

Other things you can do:

- drink plenty of fluids some people find tea or coffee especially helpful
- avoid lifting heavy things or straining your body.

The hole in the dura usually seals on its own within a few weeks. But if the headache is severe, you shouldn't wait to let it heal naturally.

In rare cases, the leaking fluid can cause further complications. Your anaesthetist can explain this in more detail.

A post-dural puncture headache can be treated with an 'epidural blood patch'.

What is a blood patch?

A blood patch is a procedure to treat postdural puncture headaches. It is done in a sterile operating room.

The anaesthetist takes blood from your arm and injects it into your back, near the hole in the dura. The blood forms a clot that helps seal the hole.

The procedure feels similar to the original epidural or spinal injection and takes about 30 minutes.

For most people (about 7 in 10) the headache goes away within 24 hours of the blood patch.

If the headache doesn't go away, you might need another blood patch. Most people don't need more than 2.

Sometimes, the headache can go away, but return later. A second blood patch may help. Your anaesthetist will discuss this with you.

After a blood patch, lie flat in bed for 2 hours. Avoid activities that strain your body or carrying anything heavier than your baby for the next 2 weeks. This helps keep the blood patch in place.

You may need someone to help you with your daily activities during this time.

What are the risks of a blood patch?

- A blood patch may cause bruising and back pain for a few days. However, epidurals and blood patches don't cause long-term back pain.
- There is a small chance that another accidental dural puncture may happen.
- Serious problems like infection or bleeding into your back are very rare.

Important: If you have trouble weeing, severe pain, or lose feeling in your back or legs, this is not normal. Contact the Acute Pain Service immediately.

Other treatments are available, but they aren't as effective as a blood patch. Talk to your anaesthetist to find out more.

Follow-up phone reviews

After you leave the hospital, we may call to check if you have ongoing headaches or other problems.

What should you do if you notice any changes?

Complications are rare, but if you have a severe headache again, call the Acute Pain Service nurse and go to the Women's Emergency Care.

If you feel new or worse back pain at the epidural blood patch site, feel numbness or weakness in your legs, or lose control of your bladder or bowels, go the nearest emergency department.

You can contact a staff member of the Acute Pain Service at any time if you have any questions about your headache or treatment.

For more information and advice

- Talk to your anaesthetist if you have questions or need more information.
- Acute Pain Service, The Royal Women's Hospital
 - Monday to Friday, 8am to 4pm
 Call (03) 8345 2389
 - Outside office hours:
 Call (03) 8345 2000 and ask to speak to the on-call anaesthetist.

Sources

- Australian and New Zealand College of Anaesthetists (ANZCA)
- Association of Anaesthetists of Great Britain and Ireland. (2010). *Management of severe local anaesthetic toxicity*. London. This reference has been superseded by:
 - Association of Anaesthetists. (2023).
 Quick reference handbook: Guidelines for crises in anaesthesia. Association of Anaesthetists. Accessed 11 December, 2024, from

anaesthetists.org/Home/Resourcespublications/Safety-alerts/Anaesthesiaemergencies/Quick-Reference-Handbook

Note: this updated reference has not yet been reviewed by ANZCA.

Do you need an interpreter?

You can ask for an interpreter if you need one.

Family Violence Support 1800 Respect National Helpline

You can get help if you have experienced sexual assault, domestic or family violence and abuse. You can call any time of day or night. 1800 737 732 1800respect.org.au

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