

# Post-Dural Puncture Headache and Epidural Blood Patch



## What is a post-dural puncture headache?

Although headaches are common following surgery or childbirth, there is a slim chance (1 in 100 to 1 in 500) of developing a 'post-dural puncture headache' following an epidural or spinal anaesthetic

Your brain and spinal cord are surrounded by a fluid (called cerebrospinal fluid), which is covered by a thick membrane called the dura. Outside the dura is the epidural space. During an epidural needle insertion, the needle may accidentally puncture the dura, creating a small hole, which *may or may not* be recognised at the time. If it was recognised, you would have been informed of it by the anaesthetist at the time. During a spinal needle insertion (which goes in deeper than for an epidural), the very fine needle is deliberately inserted through the dura. In either case, if too much cerebrospinal fluid leaks through the hole in the dura, the pressure around the brain and spinal cord becomes reduced. When you sit up, the pressure around your brain is further reduced, resulting in a headache called a post-dural puncture headache. There is an increased risk of a dural puncture in patients who are overweight, who have spinal abnormalities, or when epidurals are inserted during active labour.

What is the headache like?

- It will usually develop between 1 and 7 days after your spinal or epidural injection
- It is often severe and felt as 'a pressure across the forehead' and/or 'pain in the back of the head'
- It is often worse when sitting or standing and relieved when lying down
- You may also experience associated neck pain or nausea
- You may also experience photophobia (an intolerance of bright lights)

## What can be done about the headache?

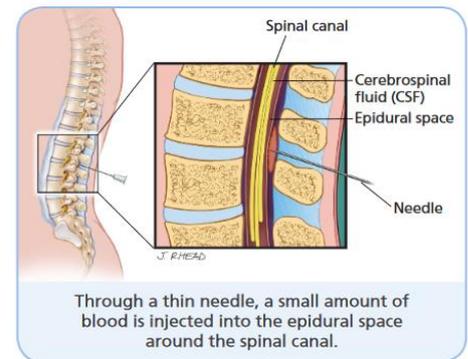
We know that this headache can be very severe and may affect your ability to function. The Acute Pain Team will review you on a regular basis until we are satisfied the pain is under control and the dura is healing. Initially we may suggest some of the following:

- Resting and lying flat as much as possible (but you will **not** be confined to bed)
- Keep well hydrated. If you feel nauseated or have been vomiting, IV fluids may be prescribed
- Regular simple analgesia (paracetamol and ibuprofen) and additional analgesia (Tramadol & Endone®) if required
- Time. It has the potential to resolve/improve over 5 - 14 days
- Avoid heaving lifting and straining (you may be prescribed laxatives)
- Sphenopalatine ganglion block – this is a non-invasive procedure in which a local anaesthetic is delivered to a group of nerve cells located behind the nose to relieve the headache pain
- An epidural blood patch may be offered

## Epidural Blood Patch

The aim of an epidural blood patch is to inject some blood into the same epidural/spinal site to form a blood clot (patch) over the dural puncture, therefore plugging the hole. The procedure will be very similar to having the original epidural or spinal injection. The blood will be your own, usually taken from your arm.

For 60-70% of people who have this procedure, the blood patch will resolve the headache within 24 hours (sometimes immediately). If the headache persists after the blood patch, the anaesthetist *may* discuss the option of a second blood patch.



Epidural blood patches are usually *not* performed within the first 48 hours following your original epidural or spinal, as evidence has demonstrated better success when it is delayed by more than 48 hours. During this time, we will offer conservative pain management strategies for your headache as mentioned earlier.

Following the blood patch, we will recommend that you continue to lie flat for 2 hours to allow the clot to form in the right place. If the headache has resolved, you feel well, and there is no other reason for you to remain in hospital, you can be discharged home. Once discharged, we may contact you to ensure that your recovery is going well.

Following discharge, we recommend the following:

- Take it easy for a couple of days. Mobilise gently, keep hydrated and take simple analgesia if you have any mild headaches or backache
- Avoid straining when opening bowels. Laxatives may be required.
- Avoid carrying anything heavier than your baby (or 2.5kg) for 2–3 weeks.
- Squat rather than bend when picking up items (to avoid putting extra strain on the dural puncture site)

### Risks:

- There may be some local bruising and mild soreness in the lower back region due to the blood patch procedure, which is to be expected.
- There is a small chance of another accidental dural puncture
- Nerve damage, infection or bleeding from the puncture site are very rare complications:
  - Symptoms such as an inability to control your bowels or bladder, a high temperature, nausea or vomiting, severe pain or loss of sensation in your back or legs are ***not normal*** and you should contact your GP or the hospital urgently if any of these symptoms occur.

#### Acute Pain Service

Phone: 3413 7930

Monday to Friday 7.30am – 4.30pm  
Saturday and Sunday 7.30am – 12.00pm

#### Ipswich Hospital Switchboard

Phone: 3810 1111

After hours, ask to speak to the  
Anaesthetist on call

#### Interpreter Services

available 24 hours a day, seven days a week at no charge. Please contact our staff for assistance.

