



This information sheet describes a special type of headache that can occur after having an epidural or spinal anaesthetic. It explains the causes, symptoms and treatment of the headache. Your anaesthetist will be happy to discuss this in greater detail and to answer any questions that you have.

What is special about the headache?

Headaches after surgery or childbirth are common.

However, after having an epidural or spinal anaesthetic, you have a 1 in 100 to 1 in 500 chance of developing a 'post dural puncture' headache depending on your age, procedure and other circumstances.

This typically occurs between one day and one week after having the epidural or spinal anaesthetic.

It is usually a severe headache felt at the front or back of your head, which gets better when lying down and worse on sitting or standing. Along with the headache you may experience neck pain, nausea and a dislike of bright lights.

Young patients and women during childbirth are more likely than other people to have a post dural puncture headache.

What causes the headache?

Your brain and spinal cord are contained in a bag of fluid. The bag is called the dura and the fluid is called the cerebro-spinal fluid (CSF).

When an epidural is given, a needle is used to inject local anaesthetic just outside the dura. Occasionally the needle passes through the dura: the chances of this happening depend on the experience of the anaesthetist but the risk also increases in obese patients, patients with spinal abnormalities (e.g. Scoliosis or arthritis etc) and when epidurals are placed during active labour (i.e. when the woman moves during needle insertion). You can discuss this with your anaesthetist.

When a spinal is given, a fine needle is inserted into the dura deliberately to inject local anaesthetic into the CSF.

If too much fluid leaks out through the hole in the dura, the pressure in the rest of the fluid is reduced. If you sit up, the pressure around your brain is reduced even more. This decreased pressure can cause the symptoms typical of a post dural puncture headache.

Some patients describe it as like a very bad migraine which is made worse when sitting or standing up.

What can be done about the headache?

Lying flat and taking simple pain relieving drugs (such as paracetamol and ibuprofen) may help. You should drink plenty of fluid (some people find tea or coffee especially helpful) and avoid lifting and straining.


Although the hole in the dura will usually seal over in a number of weeks, it is not usually advisable to wait for this to happen. Rarely, further complications can occur due to the leaking fluid. Your anaesthetist can explain more about this.

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

What is a blood patch?

The anaesthetist takes blood from your arm and injects it into your back, near to the hole in the dura. The blood will clot and tend to plug the hole. This feels similar to having the original epidural or spinal injection. It takes about half an hour to do.

In 60–70% people who have this kind of headache, the blood patch will cure the headache within 24 hours. After this, if you still have a headache, you may be advised to have a second blood patch. It is very rare to need more than two blood patches. In some people, the headache goes away, but it then returns. A second blood patch may then help. Your anaesthetist will discuss this with you.



After a blood patch, many anaesthetists recommend that you lie flat in bed for 2 hours. It is also recommended that for the following two weeks you avoid excessive straining or carrying anything heavier than your baby. This is to help prevent the blood patch from becoming dislodged.

You may need someone at home with you to help you with your daily activities.

What problems are associated with a blood patch?

- A blood patch may cause local bruising and backache which lasts for a few days. Neither epidurals nor blood patches cause chronic longterm backache.
- There is a small chance that another accidental dural puncture could occur.
- Infection or bleeding into your back are very rare complications of epidurals, spinals and blood patches.
- Difficulty passing urine, severe pain or loss of sensation in your back or legs is not normal and you should contact the Acute Pain Service immediately.

Some comments on blood patches

'...when it finally worked, the blood patch was wonderful...'

'...I was back to normal very quickly, but my back was stiff for quite a while...'

There are alternative treatments but none has been shown to be as effective as an epidural blood patch. You can discuss this with your anaesthetist.

Follow-up phone reviews

As part of our routine service, a Clinical Nurse Consultant will phone you at home at one month and then at six months following discharge from the Women's. This is to ensure that you have had no ongoing headaches or other concerns. However, you are most welcome to contact a staff member of the Acute Pain Service at any time if you have any queries regarding your headache or treatment.

For more information and advice

Acute Pain Service

The Royal Women's Hospital
Monday to Friday: 8am-4pm (03) 8345 2389
Outside office hours: ring switch – (03) 8345 2000
please ask to speak to the on-call anaesthetist.

Information sourced from 'Headache after an epidural or spinal anaesthetic' with permission by the Royal College of Anaesthetists and the Association.