What risks are associated with a blood patch?

A blood patch may cause local bruising and backache which lasts for a few days. Epidurals and blood patches do not cause long-term backache.

There is a small chance that another accidental dural puncture could occur when the blood patch injection is done.

Nerve damage, 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 your anaesthetists or another doctor 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…’

This leaflet describes a certain type of headache that can occur after an epidural or spinal anaesthetic.

Many people have epidurals or spinals for surgery or childbirth. Uncommonly, a headache may develop after an epidural or spinal injection. This is called a post dural puncture headache. This leaflet explains the causes, symptoms and treatment of this type of headache.

Your anaesthetist will be happy to discuss this in greater detail and to answer your questions.

You can find a more detailed leaflet about post dural puncture headache after childbirth on the Obstetric Anaesthetists Association website (www.oaa-anaes.ac.uk/content.asp?ContentID=469).

More information about anaesthesia is available at: www.rcoa.ac.uk/patientinfo

The Royal College of Anaesthetists
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The Association of Anaesthetists of Great Britain and Ireland (AAGBI).
This leaflet will be reviewed within five years of the date of publication.
What is special about the headache?

Headaches after surgery or childbirth are common. However, after having an epidural or spinal anaesthetic, there is a risk that you may develop a 'post dural puncture headache'. The risk lies between 1 in 100 and 1 in 500, and it happens between one day and one week after the epidural or spinal anaesthetic. A severe headache is felt at the front or back of your head which is worse when sitting or standing and gets better when lying down flat. There may also be neck pain, sickness 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. If the needle passes through the dura accidentally, CSF can leak out. When a spinal injection is given, a very fine needle is inserted through the dura deliberately.

If too much fluid leaks out through the small 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 lowered pressure causes the typical 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 relief drugs (paracetamol and ibuprofen) may help. You should also drink plenty of fluid. Caffeine drinks such as tea, coffee or cola are especially helpful. You should avoid heavy lifting and straining.

What are my choices if the headache persists?

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. The brain is cushioned by the CSF around it. Without this cushion it is possible for a certain type of stroke (subdural haematoma) to occur if a post-dural puncture headache is left untreated. 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?

Blood is taken from your arm and injected into your back, near to the hole in the dura. This injection is similar to having the original epidural or spinal injection. The blood will clot and tend to plug the hole.

What if I still have a headache?

In 60-70% people who have this kind of headache, the blood patch will cure the headache within 24 hours. If, after this, you still have a headache, or if the headache returns, you may be advised to have another blood patch. Your anaesthetist will discuss this with you.

There are other causes for severe headache after childbirth. Some of these headaches are very serious and require immediate treatment. All severe or persistent headaches after childbirth should be reported immediately to the obstetric team for further investigation and appropriate management. If the headache is associated with drowsiness, confusion or vomiting, this should be regarded as a medical emergency.