Risks associated with your anaesthetic

SECTION 10: HEADACHE AFTER A SPINAL OR EPIDURAL INJECTION

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

What kind of headache is it?

Headaches after surgery or childbirth are very common. A post dural puncture headache is an unusual and specific kind of severe headache which can only happen after an epidural or spinal injection. It can be felt at the front or the back of the head. It is worse when sitting or standing and it gets better when lying down flat. There may also be neck pain, sickness and a dislike of bright lights.

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

It is most likely to start between one day and one week after the spinal or epidural injection. Young patients and women having the spinal or epidural for childbirth are more likely than other people to have a postdural puncture headache.

How likely is it?

The risk of getting a post dural puncture headache after an epidural or spinal injection is between 1 in 100 and 1 in 500 procedures.

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).

For an **epidural**, a needle is used to inject local anaesthetic just outside the dura. If the needle accidentally passes through the dura, a small hole is made, through which CSF can leak out.

When a **spinal** injection is given, a very fine needle is inserted through the dura deliberately. Although the hole made by a spinal needle is exceptionally small, in some people this can still lead to leakage of CSF.

If too much fluid leaks out through the hole in the dura, the pressure in the rest of the fluid around the brain is reduced. This causes the typical headache. If you sit up, the pressure around your brain is reduced even more. This lowered pressure makes the headache worse.

What can be done about the headache?

Lying flat as much as you can will help.

You should take a simple pain relief drug, such as paracetamol. You can take ibuprofen as well, providing you are not intolerant of it. Your doctor can advise you if it is safe to take ibuprofen, or you can check the information in the patient information leaflet supplied with the tablets.

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. If the headache is left untreated, this cushioning is not present and it is occasionally possible for bleeding to occur into or around the brain (a subdural

haematoma). Very occasionally a fit (seizure) can happen. Your anaesthetist can explain more about these events.

A post dural puncture headache is therefore frequently treated with an **epidural blood patch**.

What is an epidural blood patch?

Some of your own blood is injected into your back. The aim is that the blood seals the hole in the dura and stops the leak of fluid.

Great care is taken to clean your arm and take blood in a fully sterile (clean) manner. This reduces the risk of infection. Blood is carefully injected into your back using an epidural needle, near to the hole in the dura.

The blood will clot and tend to seal the hole that has been made in the dura. As the fluid leak is stopped, the pressure around the brain will increase and the headache should improve.

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 the headache continues, or if the headache returns, you may be advised to have another blood patch. Your anaesthetist will discuss this with you.

What risks are associated with a blood patch?

A blood patch may cause local bruising on the back where the injection has been done.

A blood patch can occasionally cause quite significant backache and stiffness which can last a few days.

Epidurals and blood patches do not cause longterm 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 the back are very rare complications of epidurals, spinals and blood patches. Having a fit during the blood patch has also been described very occasionally. This would be managed immediately by the anaesthetist.

The following are NOT normal after a blood patch:

- difficulty passing urine
- severe back pain
- loss of sensation in your back or legs

In the very unlikely event any of these develop, you should contact your anaesthetist or another doctor immediately.

Some comments on having a blood patch

- 'When it finally worked, the blood patch was wonderful...'
- ► 'My back was stiff for a little while, but I was mostly back to normal very quickly'.

Other causes of severe headache after childbirth

If you have a severe headache after having a baby, there are other causes for severe headache that your doctors need to consider. 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. Please contact your GP or hospital immediately, or call the emergency services.

More information

Your anaesthetist, or any anaesthetist, will be happy to discuss any concerns with you in more detail and to answer your questions.

You can find a more detailed leaflet about post dural puncture headache after childbirth from the Obstetric Anaesthetists' Association information website: www.labourpains.com.

More general information about having an anaesthetic is available at: www.rcoa.ac.uk/patintinfo.

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