



**The Leeds  
Teaching Hospitals**  
NHS Trust

# Having a Lumbar Puncture

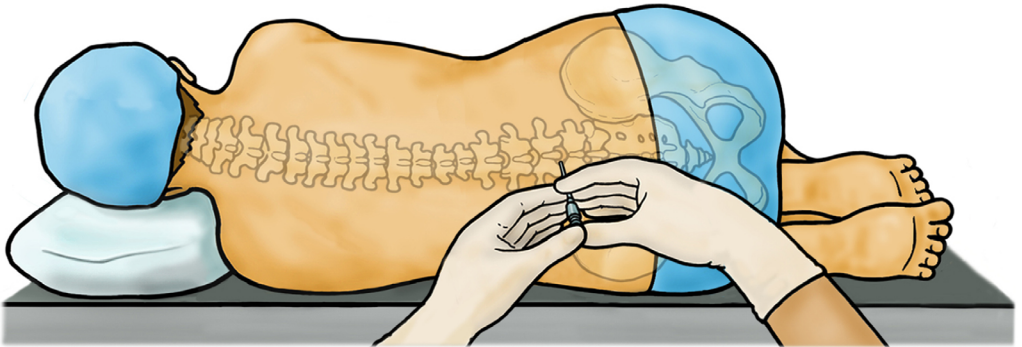
Information for patients

A lumbar puncture is used to help diagnose meningitis, subarachnoid haemorrhage (bleeding around the brain) and some other brain and spinal cord disorders.

### What is a lumbar puncture?

This procedure (sometimes called a 'spinal tap') is used to obtain a sample of the fluid that surrounds the brain and spinal cord called the cerebrospinal fluid (CSF).

### How is it done?



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You will be asked to lie on your left side on a bed or examination couch with your knees pulled up towards your stomach. The procedure is sometimes done sitting up and leaning forward. First the clinician will find the correct place to insert the needle, by feeling the bones in your spine with his/her fingers, then will clean the lower back with some antiseptic solution.

The clinician will next inject some local anaesthetic into the skin over a space between two of the lower vertebrae (spinal bones). This can sting a little to start with, then should go numb.

Next the clinician pushes a small needle between the two vertebrae into the space which is filled with the CSF.

You may experience some pushing or occasionally a sharp pain in the back, or down one leg, as the needle is gently inserted. The lumbar puncture can still continue but you should inform the clinician who is doing the procedure, if you experience this, in order for them to try and relieve this.

The CSF drains out through the needle and is collected and sent to the lab to be examined. The clinician will also measure the pressure of the fluid by attaching a special tube to the end of the needle called a manometer.

Once the required amount of fluid has been collected the needle is removed and a plaster is placed over the site where the needle went in.

Some clinicians may advise you to lay flat following the test, if possible, as it is felt this may reduce the incidence of headaches. However, current evidence, based on several studies, does not support this belief. If a period of laying flat is recommended this needn't be for more than half an hour.

After a lumbar puncture, we advise gentle activity only and drinking plenty of fluids.

## Are there any risks or side-effects?

The most common side-effect of a lumbar puncture is headache - especially in the young or pregnant women. We minimise the risk of headache by using specially designed and smaller needles which are inserted and removed in a certain way.

Slight back-ache at the site of the needle insertion is also common.

Rarely, the headache after a lumbar puncture can be severe, and is treated with painkillers and intravenous fluids. This can lead to a few more days stay in hospital.

Other complications from lumbar punctures are rare.



### What did you think of your care?

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*Your views matter*



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