

**INFORMATION FOR ADULT PATIENTS  
ABOUT LUMBAR PUNCTURE  
AS A DIAGNOSTIC TEST**

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## **What is a Lumbar Puncture?**

A lumbar puncture is a procedure used to collect a small sample of cerebrospinal fluid (CSF) from the spinal canal in your lower back. CSF is the fluid that surrounds the brain and spinal cord and is constantly produced so that the small amount removed is quickly replaced.

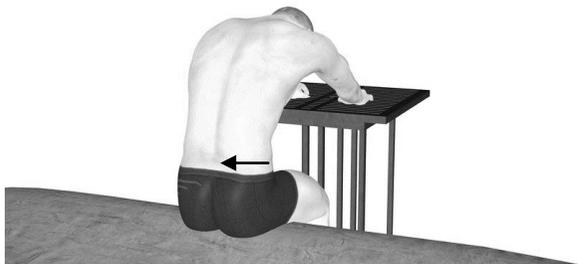
## **Why am I having a lumbar puncture?**

CSF testing can provide doctors with information about how the brain and spinal cord are working and can help diagnose a range of neurological conditions, such as infection, bleeding, inflammation or raised pressure within the head. Your doctor will discuss the reason to have this test in more detail with you. You may choose not to have the test, but this may affect the treatment options available for your symptoms.

## **What does it involve?**

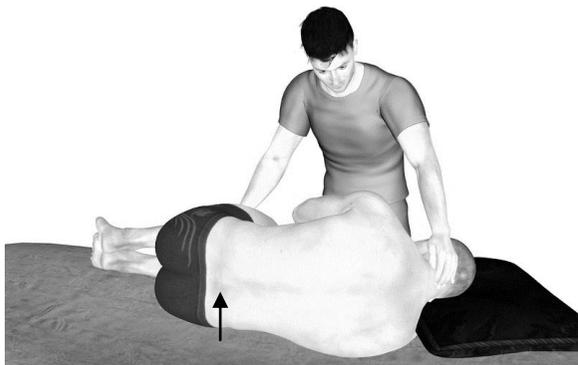
- After speaking to the doctor about the lumbar puncture you will be asked to sign a consent form if you agree to the test.
- A lumbar puncture can be performed either sitting bent forwards or lying on your side with your legs pulled up and your chin tucked down (shown in pictures 1 and 2). These positions widen the gap between the back bones allowing the needle to be inserted more easily. The doctor will decide which position is most appropriate.
- The area where the needle needs to be inserted in the lower back will be cleaned using antiseptic solution which feels wet and cold. This area will then be numbed with a local anaesthetic that may be given by a spray or injection.
- When the area is numb, the doctor will insert a needle between the back bones (the position is shown by an arrow in the pictures). You may feel a pushing sensation or discomfort in the back.

- When the needle is correctly positioned the doctor will measure the pressure of the fluid and collect the samples to send to the lab. The needle will be removed and a small plaster put on the skin.



**Picture 1** Seated position for lumbar puncture.

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**Picture 2** Lying down position for lumbar puncture.

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### **What happens afterwards?**

You will then be asked to lay in bed for between one and three hours to help prevent a headache. You can go home the same day, as long as you feel well.

You should drink plenty of water afterwards and should not drive for 24 hours. The plaster can be removed after 24 hours.

## What are the risks?

- Occasionally the procedure is unsuccessful and the doctor is unable to collect the CSF. Depending on your symptoms the doctor will decide if the lumbar puncture needs to be performed again using X-rays to guide the needle position.
- You may have a headache that occurs only when standing, and is relieved when lying down. This can last from hours to a few days. If it lasts longer than 7-10 days, you should return to the hospital for further treatment.
- The risk of infection and bleeding is low, but if you become unwell or develop a fever, pain or skin redness at the site of the lumbar puncture please contact your GP or the ward where the lumbar puncture was performed.
- Before the lumbar puncture please inform the doctor if you are taking medications to thin the blood such as heparin or warfarin.
- Backache can occur in up to one third of patients and is generally mild and settles in a few days. It is exceptionally rare for a lumbar puncture to cause damage to the nerves. Nevertheless, if you develop numbness or tingling in your legs you should contact your GP or A&E.

## How do I get my results?

The doctor who performed the lumbar puncture will be in contact with the laboratory to get the results as soon as possible and discuss these with you when they are available.

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