

Having a lumbar puncture

Information for Patients

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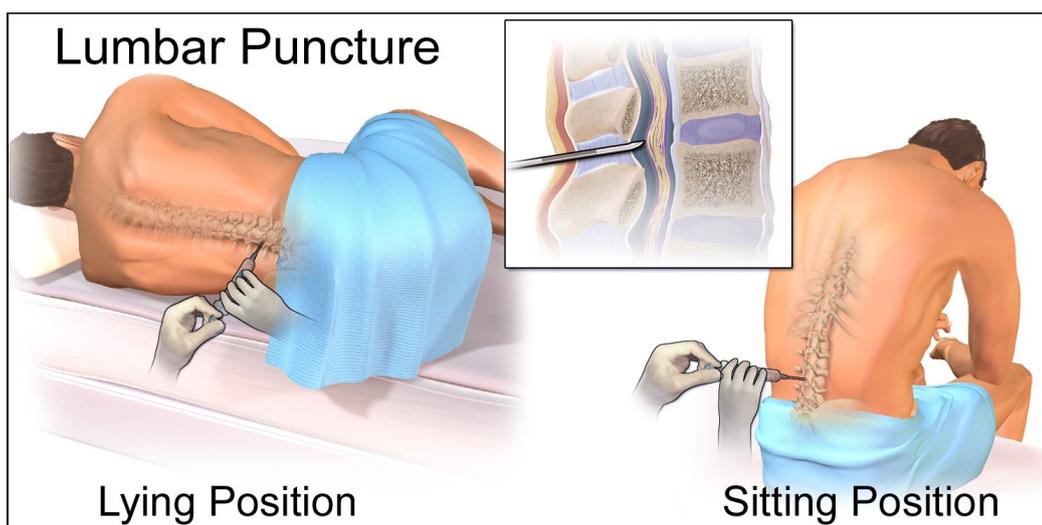
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What is a lumbar puncture?

A lumbar puncture (LP) is a common procedure done to take a sample of cerebrospinal fluid (CSF). CSF is a special fluid in your body that surrounds and protects the brain and spinal cord. This fluid is constantly made by your body.

Why are lumbar punctures useful?

Lumbar punctures can help diagnose a range of neurological conditions. We can do this procedure as an emergency test or as a planned procedure. Your doctor should have explained why you need a lumbar puncture. If you are unsure, please ask questions that you may have.



Blausen.com staff (2014). "[Medical gallery of Blausen Medical 2014](#)".

WikiJournal of Medicine 1 (2). [DOI:10.15347/wjm/2014.010](#). [ISSN2002-4436](#).

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

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How is it done?

1. We will ask you to give your consent before the lumbar puncture. The doctor will explain what will happen next.
2. You can eat and drink normally before the lumbar puncture. Please use the toilet before so you are comfortable while the lumbar puncture is being done.
3. There are 2 ways to position yourself. You can lie down on your side with your knees tucked up in the foetal position (staff can help). You can also sit down, bending forwards and resting your arms on a chair.
4. We will clean the skin on the back with an antiseptic wipe. This can feel cold. We will inject local anaesthetic under the skin with a very small needle. We use this to numb the area. The area can sting for a few seconds.
5. **You must not move.**
6. We will insert a thin needle through the gap between 2 spinal bones below where the spinal cord ends. This is so there is no risk of injuring the spinal cord.
7. You may feel a pushing or pressure sensation as the lumbar puncture needle is inserted. This can be slightly uncomfortable.
8. It is normal to feel a similar sensation down 1 leg. This does not mean anything is wrong, but please let us know if you do feel this.
9. We measure the CSF fluid pressure with a small tube (manometer). We take small amounts for laboratory analysis.
10. We then take out the needle. We put a small dressing to the skin which you can take off after 1 day.
11. It can take 15 to 20 minutes to finish the procedure.

Aftercare advice

You should:

- lie flat for 30 minutes.
- drink plenty of fluids.
- take simple painkillers such as paracetamol if you have a headache. Caffeine such as coffee or tea can also help with a headache.
- avoid driving or manual labour for a day.

When will I get the results?

Some results can come back within a day, others can take weeks. It depends on which tests have been requested by your doctor and why the lumbar puncture is being done.

Are there any risks?

- **Headache:** around 1 in 10 people will get a headache after having a lumbar puncture. This is because of the leakage of spinal fluid. Sometimes neck stiffness, feeling sick (nausea) and dizziness can happen temporarily. Painkillers, fluids, lying flat and drinking caffeine can make the headache better. In rare cases the headache is severe and needs medical attention.
- **Back pain** at the site of needle insertion. Use paracetamol.
- **Procedural issues:** sometimes we cannot get a sample because of technical reasons. We can repeat the procedure with X-rays to guide the needle to the right place.
- **Bleeding:** before the lumbar puncture, you should tell the doctor if you are taking blood thinning medications such as aspirin, clopidogrel, warfarin, apixaban, rivaroxaban or dabigatran. You should also let them know if you have any bleeding disorders.

Extremely rare risks:

- **Nerve damage** often from nerve irritation which is temporary. Tingling or discomfort in legs.
- **Infection:** contact a doctor right away if you get a high fever in the days after the lumbar puncture. Or you notice any significant redness or swelling around the site of the lumbar puncture.
- **Blood clot:** surgery may be needed if a blood clot develops around the spinal cord.

What should I look out for?

Get medical advice from your GP or call the NHS helpline on 111 if you have:

- severe, lasting headache which does not go away after lying flat
- weakness in your arm or leg
- losing control over bowels or bladder
- a high temperature (38 degrees)
- sweats or confusion
- severe eye pain on seeing light

Who can I contact if I have questions?

If you had your procedure in an outpatient clinic, please contact the consultant's secretary if you have any questions.

If you had your procedure as an inpatient as an emergency, please contact the ward team, or the consultant's secretary, or your GP if you have been discharged home.

