Additional Notes

To read this leaflet in a different language, please visit our website: **www.uhd.nhs.uk/visit/patient-information-leaflets** and use the language and accessibility function available along the top of the site.

To ask for this leaflet in larger print, please contact the patient experience team on **0300 019 8499** or email **uhd.patientexperienceteam@nhs.net**.

The Royal Bournemouth Hospital,
Castle Lane East, Bournemouth, Dorset, BH7 7DW

Author: **Stein Villiers** Date: **November 2025** Version: **Two**
Review date: **November 2028** Ref: **107/25**

t: 01202 303626 w: www.uhd.nhs.uk
: @uhdnhs.bsky.social : @UHDTrust : @uhd_nhs

NHS
University Hospitals Dorset
NHS Foundation Trust

Having a lumbar puncture

Information and advice for patients

t: 01202 303626 w: www.uhd.nhs.uk
: @uhdnhs.bsky.social : @UHDTrust : @uhd_nhs

What is a lumbar puncture?

A lumbar puncture (LP) is a medical test used to collect a sample of cerebrospinal fluid (CSF). CSF is a clear fluid that surrounds your brain and spinal cord. During the test, a thin needle is inserted between the bones in your lower back (vertebrae) to take a small sample. The body then replaces this fluid.

Why do I need a lumbar puncture?

Your clinician may recommend a lumbar puncture to help confirm or rule out conditions affecting the brain and spinal cord, such as infections (e.g. meningitis), bleeding, or brain disorders. It can also help measure pressure or remove excess fluid in conditions where too much CSF is made or it is not absorbed properly.

Is there an alternative to a lumbar puncture?

There isn't another way to get the fluid from around your brain and spine. Sometimes scans can give extra information. They cannot replace a lumbar puncture.

Useful contact information

If you have any concerns or experience any problems after your lumbar puncture, please contact your GP, NHS **111**, or your local hospital's emergency department. You will also have received a patient-initiated follow-up (PIFU) contact number, please use this if you need advice or support related to your test within the given time frame.

This leaflet provides general guidance and does not replace medical advice. If you have any concerns, speak to your clinician.

Having a lumbar puncture

Will I feel pain?

The local anaesthetic will help reduce pain. You may feel pressure or mild discomfort. If the needle touches a nerve, you might feel a sharp pain in your leg. This is short lasting. The clinician will move the needle.

Where is the test done?

A lumbar puncture is often done in a same day emergency care (SDEC) clinic or on a hospital ward.

Consent and your rights

Before the test the clinician will explain how it is carried out, its benefits, and risks. You will be asked to sign a consent form. If you change your mind, you can tell your medical team at any time.

What are the risks and side effects?

Lumbar punctures are common and safe, but possible side effects include:

- Headache (around 30% of cases). This usually improves within a few days with rest, lying flat, staying well hydrated, and taking pain relief such as paracetamol. Caffeine, found in drinks like tea, coffee, or cola, may also help relieve symptoms. Severe or lasting headaches may need treatment.
- Lower back pain, swelling or bruising. This usually resolves within a few days. Paracetamol may help.
- Test failure. In some cases, another try is needed, or a different clinician may do the test.

Are there any serious risks?

Serious problems after a lumbar puncture are extremely rare. Very rarely, a blood clot can form near the test area or around the brain. This might need surgery to fix. There have also been very rare cases of long-lasting back pain, numbness or tingling in the leg, changes in hearing, or double vision.

These kinds of serious problems occur in fewer than 1 in 10,000 procedures. Before suggesting a lumbar puncture, your healthcare team will have thought carefully about the possible benefits and risks.

The test will only be carried out if it is felt to be needed for your care.

What should i do before the test?

- You may need a blood test a few days before.
- A brain scan may be needed.
- If you take ‘blood thinners’, your clinician will advise if you need to pause them.
- You can eat, drink, and take your usual medication on the day (unless advised about blood thinners).
- Arrange for someone to drive you home, as you should not drive for 24 hours after the test.

What happens after the test?

- You will need to lie flat for about 30 minutes before going home.
- The test rarely requires an overnight stay unless you are already admitted.
- Avoid heavy lifting or physical activity for 24 hours. You can then do normal activities if you feel well enough to do so.

When will i get my results?

Some results may be ready on the same day, but full results can take up to 48 hours. In emergencies, certain tests may be processed within a few hours. You may need to wait in hospital for these results.

What should i do at home?

- Remove the plaster the day after the test.
- If you get a headache, try to lie down flat, drink plenty of fluids, take pain relief like paracetamol, and have something with caffeine.
- Seek medical help if you experience:
  - weakness or numbness in your arms or legs.
  - problems going to the toilet
  - severe headache that does not get better within 24 to 48 hours, even after lying down, drinking well, and taking pain relief.
  - high temperature (38°c or above).
  - blood or clear fluid leaking from your back or nose.

How is the test performed?

1. Positioning - you will be asked to either:

- lie on your side with your knees pulled up to your chest,

or

- sit on the edge of the bed with your head and shoulders bent.

2. Preparation

- the clinician will feel your lower back to find the right spot. Then they will clean the area.

3. Numbing the area

- you will get a medicine called local anaesthetic in your lower back to reduce pain. This is usually as a small injection.

4. Needle insertion

- a thin needle is inserted into the lower back to collect the CSF sample. You may feel some pressure at this point

5. Completion

- the needle is removed, and a small plaster is put on. The sample will then be sent for testing.

The whole test usually takes around 30 minutes.
The amount of fluid collected depends on whether the LP is for diagnosis or treatment.

Having a lumbar puncture