

Lumbar puncture

Information for patients

What is a lumbar puncture?

A lumbar puncture is a way of measuring the pressure of the fluid (cerebrospinal fluid) that surrounds the spinal cord and obtaining a small sample for analysis.

Why do I need to have a lumbar puncture?

Lumbar punctures are performed to help make a diagnosis. By measuring the pressure of the spinal fluid and examining the fluid for cells, proteins, glucose, and looking for bacteria and viruses, it may be possible to find out what is wrong and guide the management of your care.

Are there alternatives?

Unfortunately, there are no real alternatives to obtaining this fluid. A lumbar puncture is usually the safest and simplest method for collecting this information.

How should I prepare for this procedure?

If you are taking blood thinning medication (such as clopidogrel, apixaban, rivaroxiban, or dabigatran) or if you have any allergies to local anaesthetic (usually the same as the one given by your dentist), let your doctor know before your procedure. You may need to stop taking these before your lumbar puncture or avoid having a local anaesthetic.

What happens when I arrive for my procedure?

On the day of your lumbar puncture a doctor will go through the consent procedure with you. They will explain the procedure and review the possible risks. You will have the chance to ask them questions or raise concerns. Remember you can withdraw your consent for treatment at any time.

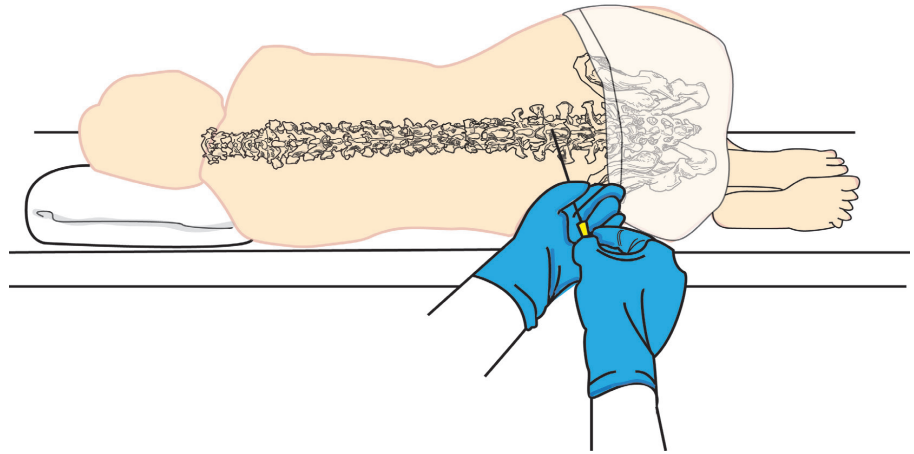


How is a lumbar puncture performed?

A lumbar puncture is a simple procedure, though a little uncomfortable. A needle is passed into the space around your spinal cord via your lower back.

You will be asked to lie on your side and curl up into the foetal position (see diagram below). The skin of your lower back will be cleaned and a small amount of local anaesthetic will be injected to numb the area. This can sting at first.

A specialised needle for the procedure is inserted between two of the lower vertebrae in your backbone, positioned below the end of the spinal cord, and then through into the fluid contained in the space around your spinal cord.



Sometimes the needle may touch a nerve as it is passed into the fluid space. If this happens you may feel an odd sensation, similar to a small electric shock or tingling, down your leg. If this happens just let the doctor know, so they can change the position of the needle.

Once in the correct place, the pressure can be measured and a small sample of fluid is collected.

Try to remain still and relaxed as this can take a little time, as the fluid comes out in small drops.

How long will the procedure take?

On average the procedure will take about 40 minutes. You will then need to be monitored for approximately one hour after the procedure before you can be discharged home.

Are there any restrictions after the procedure?

A lumbar puncture is a simple procedure and in most cases you will be able to go home a few hours later. However, if the lumbar puncture was to investigate an infection, you may need to stay in hospital.

To reduce the risk of developing a headache after your lumbar puncture, we advise you to avoid strenuous activity for 12 hours, after which you can return to your normal daily activities.

When will I receive my results?

Please note that some test results can take several weeks to return. These results will be available through the doctor who ordered your lumbar puncture.

Are there any risks with a lumbar puncture?

As with all medical procedures there are some risks with having a lumbar puncture, though the risks are small.

- A small number of patients develop a **headache** after their procedure. This is known as a low pressure headache. The headache may not appear immediately but will usually resolve by itself within a few days. Many patients find simple painkillers, such as paracetamol, and caffeine help reduce their symptoms. If the headache continues, please speak to your GP.
- A few patients experience some **mild lower back pain** after their procedure, particularly after the local anaesthetic wears off. This will generally stop by itself within a few days.
- On very rare occasions you may notice **some tingling or numbness around your thigh**. This can sometimes be due to a small collection of blood putting pressure on your nerves. Although this does not always need medical help, please contact your hospital doctor if you notice this symptom.
- There is a risk of **infection** from the procedure as we are creating a tract between the outside world and your nervous system; this is very rare. If you develop any concerning symptoms such as a fever, confusion, flu like symptoms, or a headache please contact your GP.
- On extremely rare occasions, there can be bleeding in the area of the lumbar puncture, spinal cord, or brain which will need further intervention.
- Occasionally it is not possible to pass the needle between the vertebrae and the procedure cannot be completed. In these situations the needle is taken out and the procedure stopped. We may then proceed with a radiological guided lumbar puncture; your clinician will explain this procedure to you and answer any questions you may have.

Further information

If you have any further queries or concerns you wish to be answered before the day of your lumbar puncture, please speak to the healthcare professional responsible for your care.

Additional information

- **NHS: Lumbar puncture**
Web: www.nhs.uk/conditions/lumbar-puncture/Pages/Introduction.aspx
- **Patient.co.uk: Lumbar puncture**
Web: www.patient.co.uk/health/lumbar-puncture

This leaflet has been produced with and for patients

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

Any complaints, comments, concerns, or compliments please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email ekh-tr.pals@nhs.net

Patients should not bring in large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

Further patient leaflets are available via the East Kent Hospitals web site www.ekhufft.nhs.uk/patientinformation