



Information for  
patients and  
carers

Lumbar Puncture

## What is a lumbar puncture?

This is a procedure to obtain a sample of the fluid which surrounds the brain and spinal cord.

This fluid is called cerebrospinal fluid (CSF).

A needle is inserted into the space between two vertebrae (the bones in the back) to obtain a sample of the cerebrospinal fluid.

## Why do I need a lumbar puncture?

The specimen of CSF obtained can be tested to give the neurologist more information, which may be helpful in the process of diagnosing specific neurological conditions.

In some neurological conditions, removal of a volume of CSF is undertaken as a treatment.

## How will I prepare for this procedure?

You will be asked to give your consent to this procedure.

It is important to let a member of the neurology team know beforehand if you are allergic to anything, such as local anaesthetic, antiseptic solution or plaster dressings.

You should also inform the clinician undertaking the procedure if you are taking anti-coagulation or anti-platelet medications.

You can eat and drink normally before this procedure.

## How will the procedure be carried out?

If you are an outpatient the procedure will often be done as a day case. You will be asked to lie on your side on a bed or couch. A member of staff will assist the clinician performing the procedure to position you in the correct way. Typically your legs are brought upwards and your head

is flexed slightly forwards. This helps to open up the natural gaps in your spinal vertebrae.

We will need to expose the region of the lower back in order for the clinician to locate an adequate spinal space by feeling the structures in your lower back. Once an adequate space has been identified the clinician will clean the lower back with antiseptic solution and infiltrate local anaesthetic in order to numb the skin and surrounding soft tissue.

The spinal needle is then gently advanced into the space between the vertebrae. It is normal to feel a pressure sensation during this part of the procedure.

The CSF pressure is measured and then a small volume of CSF is collected into specimen bottles. Once this has been completed, the spinal needle is removed and a skin dressing is placed over the puncture site.

This dressing can be removed after 24 hours.

## **What happens afterwards?**

You will be asked to lie flat for about 1 hour, then you can move about normally, and bath and shower as normal.

Some patients can develop a headache a few hours after the procedure, which is worse on standing or sitting upright.

You will be advised to drink plenty of water after the procedure. If you develop a headache we advise taking simple painkillers such as paracetamol and consuming caffeinated beverages as these can help improve symptoms.

The results of the procedure can take a few days to a few weeks to be finalised. Your neurologist will update you with the results once these are available.

Following completion of the procedure you will normally be allowed to drive home yourself.

## Are there any complications?

Around 1 in 10 people develop a headache and 40% complain of backache after the procedure. This usually resolves after 72 hours. Lying flat and drinking plenty of fluids are thought to minimise this. If the headache persists contact your GP or NHS 111 for further advice.

Other possible complications include:

- Infection
- Leakage from the puncture site
- Bleeding into the spinal canal and around the brain
- Damage to the spinal nerve roots, but this is very rare

Should your headache become very severe, you develop a rash and/or temperature please attend your local emergency department and inform them you have had a lumbar puncture.

## Contact details

Should you require further advice or information please contact the Neurology Admissions Coordinator on 01772 522317.

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.patient.co.uk](http://www.patient.co.uk)

[www.accessable.co.uk](http://www.accessable.co.uk)

All our patient information leaflets are available on our website for patients to access and download:

[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

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If you want to stop smoking you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

**Gujarati:**

આ માહિતીને સમજવામાં સહાયતા જોઈતી હોય તો કૃપા કરીને પૂછો. આ માહિતી મોટા છપાણામાં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

**Romanian:**

Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi."

**Polish:**

Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

**Punjabi:**

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਲੋਂ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਯਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪ੍ਰਿੰਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਲੋਂ ਮੁਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

**Urdu:**

دوسری زبانوں اور ریڈی اگر آپ کو ہی معلومات سمجھنے کے لئے مدد کی ضرورت ہے تو  
یہی چھپا میں یہ ابی دست ہو سکت ہے برا ہے مہر یان پو ے چھدی۔ معلومات

**Arabic:**

مطبوعه با حرف كبيره و بلغات اذا كنت تر بد مسا عدة في فهم هذه لمعلومات ير جي ان تطلب  
أخرى يملكن تو فسير هذه المعلومات

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