

# A Lumbar Puncture (LP)

Acute Medicine

You have been advised to have a test called a lumbar puncture (LP). This leaflet tells you why you need a lumbar puncture, how it is performed and what to expect after the procedure. If you have any concerns or questions after reading this leaflet, please ask the doctor who will be carrying out the LP.

## What is a lumbar puncture?

A lumbar puncture is a medical procedure performed to collect a sample of cerebrospinal fluid (CSF) for testing. CSF is the fluid that surrounds the brain and spinal cord.

## Why do I need a lumbar puncture and benefits explained

Your doctor will explain the exact reason for having a lumbar puncture, but it is generally one or more of the following reasons:

- To measure the CSF pressure
- To identify possible infection in or around the brain
- To test the levels of chemicals in the CSF (e.g. to investigate a possible bleed in the brain or to diagnose neurological problems)
- Symptom relief in patients with certain neurological problems.

## What happens before the lumbar puncture?

Based on the indication for the procedure, you may have a CT head scan and blood tests performed. If there are no contradictions, the LP can be done.

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

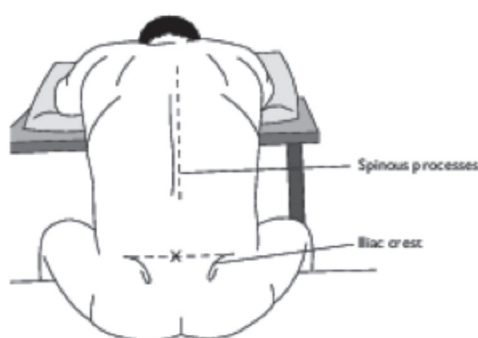
- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

## How is the lumbar puncture performed?

You will lie on your side with both knees up to your chest or stay in a sitting position with your head forward. An assistant will help you to get into a position that is both comfortable for you and appropriate for the procedure to be carried out.

Your back will be exposed and a limited area of your skin will be cleaned. Local anaesthetic will be given to numb your skin. Once the anaesthetic starts to work, you will still feel pressure but you should not feel pain.

A small needle will be inserted into your back directed towards your spine.



The CSF comes out through the needle. Firstly, CSF pressure will be measured, then a sample of CSF will be collected and sent to the laboratory. At the end of the procedure the needle is removed and a dressing is applied.

## What happens after the lumbar puncture?

You will lie flat on your bed for 2-3 hours and will be advised to drink plenty of fluids. The area where the LP was performed may feel sore and may be bruised. You can have medication to ease the discomfort.

## When will the results be available?

The doctor will tell you about the results of the test. Some results will be available within a few hours, but others can take a few weeks.

# What are the risks or side effects of having a lumbar puncture?

The risks and side effects are rare but include:

- Failure of procedure - sometimes it is not easy for the doctor to get the CSF. In this case another doctor may be asked to try or the procedure may be arranged under X-ray guidance in the radiology department
- Infection - caused by the needle breaking into the skin. However, during the procedure we use sterile gloves and equipment and we will clean your skin with antiseptic solution
- Bleeding - from the area where the CSF was taken. Usually applying pressure on the area is enough to stop the bleed
- Damage to any structure around the area such as nerves - the position and the area where the fluid is collected minimise this risk
- Post-LP headache - around 10-30% of people will experience headache after having a lumbar puncture. It is usually due to a leakage of CSF that causes a reduction of the CSF pressure [of the fluid around your brain]. It can be felt at the front or the back of the head. It is worse when sitting or standing and it gets better when lying flat. The headache is most likely to start between one day and one week after the LP. If you develop a headache it is advised that you lie flat and take pain relief medication. You should also drink plenty of fluid (Caffeine drinks such as tea, coffee or cola are helpful). You should avoid heavy lifting and straining. If the headache persists, you may require treatment with intravenous fluids or an epidural blood patch (some of your own blood is injected into your back and it will stop the leak of fluid).

If you have any questions please ask your doctor before the procedure is carried out.

## Consent

We must seek your consent for any procedure or treatment beforehand. Your doctor will explain the risks, benefits and alternatives where relevant before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to ask for more information.

## Alternatives

The choice about which treatment is best for you will be made together with your doctor. This will be based on the risks and benefits of the treatment and your individual circumstances. The doctor will have explained the different treatment options to you and what will happen if you decide not to have any treatment at all.

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。