



**The Leeds  
Teaching Hospitals**  
NHS Trust

# Lumbar Drain

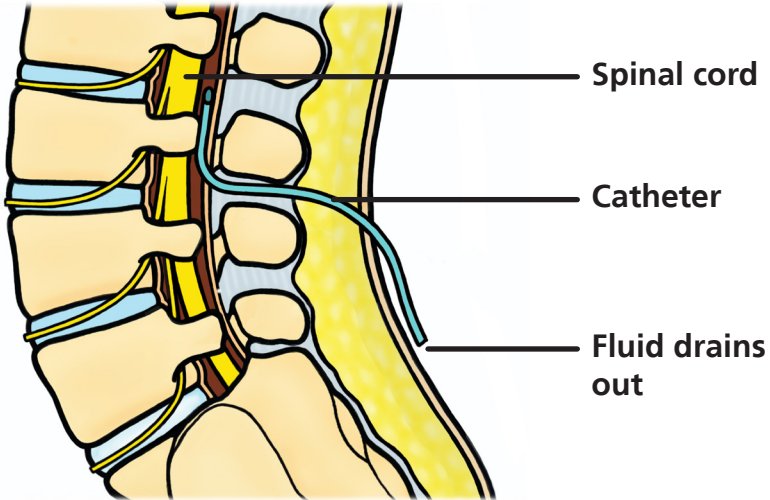
Information for patients



Leeds Centre for  
Neurosciences

A lumbar drain is a soft, thin, sterile tube (catheter) that your doctor places through the skin of your back into your lower (lumbar) spine.

The drain collects cerebrospinal fluid (CSF). This is a clear fluid that surrounds your spinal cord and brain to protect them from injury.



## The Central Nervous System

To appreciate why you need a Lumbar Drain it is useful to understand the anatomy of the Central Nervous System.

The Central Nervous System refers to the brain and spinal cord.

Within the brain lies the ventricular system; the ventricles are spaces filled with Cerebrospinal Fluid (CSF).

CSF has several purposes; to provide protection to the Central Nervous System, supply nutrients to tissue and to remove any waste products.

The ventricular system is made up of two lateral ventricles - the third ventricle and the fourth ventricle.

CSF is produced in the lateral ventricles and flows throughout the ventricular system through channels called the Foramen of Monro and the Cerebral Aqueduct to the spinal canal and subarachnoid spaces around the brain.

The Lumbar drain catches the same CSF at the base of the spine as it travels down the spinal column instead of directly from the brain.

## During the procedure

- You will lie on your side with your knees bent toward your chest. Or you may sit on the edge of the bed leaning on a support, such as a chair.
- Your doctor cleans the insertion site and injects local anaesthesia into the skin around the insertion site to numb it.
- They insert a long, thin needle between the bones (vertebrae) that make up the spine in your lower back. The needle guides the lumbar drain into place. The needle is slowly removed, leaving the drain in place.
- The drain is covered with a bandage or dressing.
- The drain is attached to a drainage bag and hung on an IV (intravenous) pole or placed beside you in bed.

It is important to keep your lumbar drain at the correct position.



## While the drain is in place

- The drain often remains in place for up to seven days.
- A nurse checks on you often while your drain is open and CSF flows into a sterile bag to be sure there are no problems.
- Let your nurse know if you're uncomfortable and need to change positions. Your nurse can raise or lower the head of the bed.
- If you must get up for any reason, your nurse must clamp the drain so please ask the nurse to assist you. This is to allow the rate of CSF drainage to be carefully controlled to prevent over or under drainage.
- Don't touch the drain or allow visitors to touch it as this can lead to infection, can change the drainage speed or result in the drain being pulled out.

## Removing the drain

- Your doctor removes the drain slowly when you no longer need it.
- You lie on your side or sit bent over a support. After the drain is removed, your doctor uses a stitch (suture) to close the hole.
- The doctor or nurse places a dressing over the insertion site. The hole closes quickly, often within a few days.

## When to alert a Nurse or Doctor

Let your nurse know if you have any of the following symptoms while the drain is in place, or after it is removed:

- Stiff neck
- Headache, especially when sitting or standing
- Pain, swelling, or warmth at the insertion site
- Confusion
- Dizziness
- Nausea or vomiting
- Pain, numbness, or tingling in your legs that doesn't go away
- Trouble controlling your bladder
- Pain that isn't relieved by medicines
- Leakage of clear fluid from the insertion site or tubing
- Fever or signs of infection, such as pus coming out from where the drain was inserted

## More information

If you would like any further information please contact Cerebrospinal Fluid Disorders Nurse

**Tel: 0113 392 2607.**



**What did you think of your care?**

Scan the QR code or visit [bit.ly/nhsleedsfft](https://bit.ly/nhsleedsfft)

***Your views matter***



© The Leeds Teaching Hospitals NHS Trust • 1st edition (Ver 1)  
Developed by: Fiona Evans, Cranial Clinical Nurse Specialist  
Produced by: Medical Illustration Services • MID code: 20240205\_005/NR

LN005791  
Publication date  
02/2024  
Review date  
02/2027