

Information for Patients: Lumbar Puncture

What is a lumbar puncture?

A lumbar puncture is a procedure that takes a sample of your cerebrospinal fluid (CSF). CSF is the fluid that surrounds the brain, spinal cord and nerves.

A needle is inserted in between two spinal bones in the lower back (lumbar spine), and a sample is removed.

Why is a lumbar puncture done?

A lumbar puncture may be done to:

- Collect a CSF sample for laboratory analysis. This may be to look for abnormal cells such as cancer or infection.
- Administer medication such as chemotherapy.

What happens during the procedure?

The procedure usually takes about 15 minutes:

- Your lower back will be cleansed with an antiseptic solution.
- A local anesthetic is injected into your lower back to numb the puncture site before the needle is inserted. You will feel a stinging sensation and then numbness.
- A thin, hollow needle is inserted between the two lower vertebrae (lumbar region), through the spinal membrane (dura) and into the spinal canal. You may feel pressure in your back during this part of the procedure.
- A small amount of fluid is withdrawn. If required, a medication is injected.
- The needle is removed, and the puncture site is covered with a bandage.
- Your doctor will likely instruct you to lay flat for a period of time following the procedure.

What happens after the procedure?

- Your lower back may be tender to touch for the next few days.
- Elevate your head on two pillows for two days when lying down or sleeping.
- Do not bend over from your waist for two days, for example to tie your shoes.
- Do not lift anything heavier than 10 lbs (4 kg) for two days.
- Avoid strenuous activity for at least two days.
- Resume your normal activities as tolerated.
- You may shower or tub bath the day after your procedure.
- Wash the puncture site gently.
- A headache is common after this procedure. If you are experiencing a headache, drink plenty of fluids, lay flat in bed and use pain medication. If your headache is severe or continues to increase, go to the nearest emergency department.

Call your healthcare provider or go to the nearest emergency department if you have any of the following for 48 hours after your lumbar puncture:

- Fever (temperature greater than 38°C or 100.4°F)
- Redness, swelling or any discharge from the puncture site
- Persistent or worsening back pain
- Persistent nausea and vomiting
- Increased irritability
- Numbness, tingling or pain in your arms or legs that is different from what you were experiencing before your procedure

