

Lumbar puncture

A lumbar puncture is a procedure performed by a physician in which a special needle is used to take a sample of cerebrospinal fluid.

Indications

- diagnosis of stroke, brain haemorrhage or encephalitis

Performing the test

- Performing the procedure requires a special position where gaps between the vertebrae are as wide as possible. For this, the patient lies on their side with their back curved, head bent towards the knees (hunched cat position). Someone may support the patient's position, holding them from the nape – behind the neck – and hollows of the knees.
- Once the position has been taken, the back will be cleaned with a disinfecting solution. The physician will find the correct vertebral gap for puncture (on the back above the iliac crests) and insert a special needle into the spinal canal, which will release cerebrospinal fluid that will later be sent to the laboratory for analysis. The needle will be removed once a sufficient volume of cerebrospinal fluid is collected, and a bandage will be placed on the puncture site. The patient may sometimes feel flashes in their legs similar to an electric shock, but these are harmless. It is important to lie down for at least 12 hours after the procedure, preferably 24 hours, to avoid a potential headache caused by a decrease in cerebrospinal fluid pressure. You may roll over from one side to the other, but you must not raise your head.

Potential complications and hazards

Complications following a lumbar puncture are rare, but these may include the following:

- headache (in case of rising up too quickly)
- nausea
- injury of nerves and surrounding tissues
- inflammation at the site of puncture
- the site of puncture may be tender for a couple of days