Having a lumbar puncture

Information for patients

This leaflet answers common questions about having a lumbar puncture procedure. If you would like further information, or have any particular worries, please do not hesitate to ask your nurse or doctor.

In all cases, a doctor will explain the procedure to you and answer any questions you may have.

In most cases it will be possible for a friend or relative to accompany you for all or part of the procedure. Please ask your nurse or doctor.

What is a lumbar puncture?
A lumbar puncture is a way of safely obtaining a sample of the fluid that surrounds the brain and spinal cord. This fluid is described as cerebro-spinal fluid or CSF. In certain cases the pressure of the fluid is important and will also be measured. Once the fluid is collected it is sent to the laboratory for tests which can help determine the cause of your symptoms.

How is a lumbar puncture done?
A lumbar puncture is carried out by a doctor.

We will ask you to lie curled up on your side. Before starting the procedure, we will clean your skin with a cleaning solution (iodine) and inject a local anaesthetic to numb the area. A very fine needle is inserted into your lower back to obtain the CSF. It is very important to stay as still as possible during the procedure.

You may be aware of a pushing sensation at this point and you may experience some pain. If this becomes too uncomfortable speak to the doctor. Occasionally you may be asked to change your position to help with the insertion of the needle. The doctor may measure the pressure of the CSF with a manometer (a special device), and afterwards the CSF will drip out into a container which will be sent to the lab for analysis. Then the needle is removed and a plaster is placed at that spot. The procedure usually takes 30 minutes in total, although this can vary from patient to patient.
After your lumbar puncture
We advise the following:

- Lie down flat on your back for a few hours after the procedure (you are in hospital for this time).
- Before leaving hospital, get up and walk around to ensure that you are ready for your journey home. Inform your nurse when you intend to leave.
- Do not drive for the next 24 hours. Avoid sports and strenuous exercise for a week.
- Over the next 48 hours try to drink plenty of fluids during the day. This helps to reduce the chance of headaches.
- Remove the plaster on your back after 24 hours. The iodine used to clean your back will wash away after a few days.
- Some people experience a headache after a lumbar puncture. You can take paracetamol (2 x 500mg tablets) to help with the pain, as long as you are not allergic to this drug.

Do not take more than 4 grams of paracetamol in total in 24 hours (8 x 500mg tablets). Please read the medicines information leaflet included in the medicines box for more information.

You may also find it helps to rest on your bed until headache lessens.

Increasing your caffeine intake may also reduce headaches, so drinking a lot of strong coffee can help.

In rare cases the headache can continue for up to five days and, exceptionally, up to 10 days following the procedure. If you feel your headache has not lessened during this time, please contact your GP practice or local emergency department for further advice.

Seeking urgent medical advice
Contact your local hospital or GP for advice if you have any of the following symptoms:

- vomiting
- nausea
- fever
- photophobia (bright lights hurting your eyes).

Risks
A lumbar puncture is a very safe procedure. It is routinely performed without complication. Before the test you will have been carefully assessed by your...
doctor, and they will have decided that the benefits of having a lumbar puncture outweigh the potential risks of the procedure. However, we want you to be involved in decisions about your care. If you have any questions or concerns, please do not hesitate to ask your doctor.

You may be asked to sign a written consent form which states you understand why you need to have a lumbar puncture and the risks and benefits of the procedure. In some cases, verbal consent will be taken by your doctor.

Basic blood tests and often a brain scan will have been reviewed. In these circumstances no serious complications are likely from the procedure.

Developing a headache after having a lumbar puncture does occur in a small proportion of cases (up to 30%) and its occurrence appears to be unrelated to how easily the procedure was performed.

It is very rare for this headache to be severe and even rarer for the headache to be sufficiently prolonged to require readmission to hospital. If this is necessary then you may be given an infusion of caffeine or an anaesthetist may be asked to perform a blood patch.

A blood patch is a very simple procedure during which an anaesthetist will ask you to lie on your side and will then inject a small amount of your own blood into your lower back to seal any site of spinal fluid leak.

Other complications are usually mild and uncommon:
- Back pain may occur, but will usually settle.
- It is extraordinarily unlikely for the test to cause infection within the nervous system but this is theoretically possible.

Your doctor will provide you with any other risks that may be relevant to you.

**Do you have any further questions?**  
Please do not hesitate to speak to the doctor who is carrying out the procedure if you have any further questions or concerns.
If you have any feedback on this leaflet, or would like a list of references for it, please contact; rf.communications@nhs.net

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please ask a member of staff.

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