

# Lumbar puncture

This sheet answers common questions about the 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 means 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. Once the fluid is collected it is sent to the laboratory for tests which can help determine the cause of your neurological symptoms.

## **How is a lumbar puncture done?**

A lumbar puncture is usually carried out as a day procedure in our Planned Investigation and Treatment Unit (PITU). A doctor does the procedure.

We ask you to lie on your side. We clean your skin and apply local anaesthetic to numb the area. A very fine needle is inserted into your lower back to obtain the fluid. 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 procedure usually takes 30 minutes in total although this can vary.

## **After your lumbar puncture**

We advise the following:

- Lie down flat for at least half an hour (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.
- Over the next 48 hours, try to drink 3 litres of fluid a 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 1 gram (2 tablets), as long as you are not allergic to this drug. DO NOT take more than 4 grams (8 tablets) in 24 hours. You may also find it more comfortable to rest on your bed until the 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 5 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 or local hospital for further 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**

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. Basic blood tests and often a brain scan will have been reviewed. In these circumstances no serious complications are likely. Headache after lumbar puncture does occur in a small proportion of cases and its occurrence appears to be unrelated to how easily the procedure was performed. It is very rare for this headache to be severe (reported in less than 5 in 100 procedures in good units) and even rarer for the headache to be sufficiently prolonged to require readmission to hospital (necessary in less than 1 in 100 procedures). If this is necessary then you may be given an infusion of caffeine or the anaesthetist may be asked to perform a blood patch. (A blood patch is a very simple procedure during which the anaesthetist will ask you to lie on your side and 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.

## **Do you have any further questions?**

When you come into the hospital for the procedure, the doctor will seek your consent to the procedure and try to provide any further information that you may require. This is also a chance to ask staff any questions you may have.

**If you would like a large print or audio version of this information, please ask a member of staff.**