

# Lumbar puncture (child)

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## Information for parents

This leaflet has been adapted from the Great Ormond Street Hospital for Children NHS Foundation Trust leaflet, **Your child is having a lumbar puncture: information for families** (February 2020).

This leaflet aims to help you understand what happens when your child has a lumbar puncture. If after reading this you still have questions, please speak to a member of staff.

### What is a lumbar puncture?

A lumbar puncture is a procedure carried out to obtain a sample of cerebrospinal fluid (CSF). The same fluid covers the brain and the spinal cord.

When a lumbar puncture is carried out, a special needle is used to obtain CSF from the bottom of your child's spine; this is the easiest and safest way. It is carried out by a qualified professional.

### Why does my child need a lumbar puncture?

The exact reasons for your child having a lumbar puncture will be explained by the professional looking after your child. It is generally carried out for one or more of these reasons.

- To find possible infection in the CSF.
- To measure the pressure in the CSF.
- To measure the levels of chemicals in the CSF.



## What happens before my child's procedure?

Your health professional will talk to you about the procedure, answer any questions you may have, and ask you to give your permission by signing a consent form. Consent must be given by the person who has parental responsibility; this is usually a parent whose name(s) appears on the child's birth certificate. Please note, you have the right to withdraw your consent for treatment at any time.

If your child is having the procedure while they are under sedation or general anaesthetic, they will have to stop eating and drinking for a number of hours before their procedure. This reduces the risk of stomach contents getting in to their lungs. It is important to follow these instructions, otherwise your child's lumbar puncture may have to be delayed.

Your child will be given the sedation medicine as a liquid to swallow, about 30 to 60 minutes before their procedure is planned. We will put local anaesthetic cream on your child's back, around the area of the lumbar puncture to numb the area. The cream will be covered with a plastic dressing to keep it in place, as it will take 45 minutes to an hour to work.

## How is a lumbar puncture carried out?

- Most lumbar punctures take place on a ward.
- The procedure can be distressing to watch, so depending on the age of your child, we may encourage you to allow staff to comfort your child, and then reunite you with them immediately after their procedure.
- Sometimes a lumbar puncture will need to be performed under general anaesthetic in theatre. If this happens you will be able to come with your child to theatre, but you will not be able to go in to theatre whilst their procedure is performed.
- Your child will be asked, or positioned, to lie on the bed on their side and to curl up into a ball. Some older children may need to sit up and lean forward. The nurse will help your child stay in the correct position.
- The health professional will feel your child's lower back and find the correct space between their vertebrae (the bones of the spine). The health professional will then wash the skin around this area and cover the surrounding parts of your child's back with a sterile towel. The health professional will insert a needle into the space between the vertebrae (spine).
- If a sample is needed for testing, the CSF will be collected in to special containers and sent to the laboratories to be examined.
- In some cases, the CSF pressure will also be measured during the same procedure.

## Are there any risks?

- A lumbar puncture is not dangerous, as long as the health professionals carrying it out follow the correct procedures. This includes checking that there are no contraindications (such as a sudden rise in pressure in the brain or an abnormality in the way in which blood clots).
- The health professionals will take precautions to prevent any **infection** entering your child's body during their lumbar puncture.
- The **spinal cord cannot be injured by a lumbar puncture** that is correctly carried out, as the needle enters the spine below the lower end of the spinal cord.
- Your child's body replaces the small amount of fluid that is removed for testing very quickly (in less than two days).
- If your child is too restless or upset to be able to get in position and hold still, we may have to **postpone the lumbar puncture or carry it out with your child under general anaesthetic**.
- Sometimes it is **not easy for the health professional to find the place where the needle should be inserted**. Another health professional may be called to help, but in some cases the procedure has to be stopped. The health professionals will discuss with you when and if your child's lumbar puncture should be repeated.
- If **a little bleeding** occurs when the lumbar puncture is done, some of the blood may become mixed with the CSF, affecting the results of your child's test.
- After a lumbar puncture, **a little fluid may leak out** and collect under your child's skin. You may be able to see some swelling in their lower back, around where the lumbar puncture needle went in. This is not dangerous and will stop. Lying flat afterwards can prevent this leak from developing.
- Some children develop a **headache** after a lumbar puncture. This is due to the slight reduction in pressure around the brain, resulting from the procedure. This headache usually settles down on its own in 24 to 48 hours. If needed your child can be given paracetamol, unless you have been advised otherwise.
- **Vomiting** can also occur after a lumbar puncture. Resting quietly with regular sips of fluid can help. Talk to the health professional if vomiting is severe or lasts for more than a day or two.

## What happens after my child's lumbar puncture?

- The health professional will use a plaster to cover the site where the needle entered your child's skin.
- Your child will be encouraged to lie flat for about an hour after their procedure.
- You should encourage your child to drink normally.

## How will my child feel after their procedure?

- Your child may be discharged home the same day of their procedure or remain in hospital to complete further treatment.
- Your child may be in pain, if at home give paracetamol according to the instructions on the bottle. If the pain gets worse or lasts for more than a day or two, please contact your GP.
- Encourage your child to drink plenty of fluids for the next day or two. This will help them feel better and replace the CSF.
- Keep an eye on the lumbar puncture site. If the site continues to swell, you see any clear fluid or blood, or it looks red and swollen, please contact your GP.
- The plaster covering the lumbar puncture site should stay in place for 24 hours and then you can remove it.
- It is fine for your child to go to school the day after their procedure. However, we advise that they do not take part in any sports or PE for a week after their test.

## What happens next?

Some of the tests are routine and you will receive the results of these within a few hours. However some tests can take longer. As soon as the results return, the health professional will review them and discuss them with you, and how they will affect your child's treatment.

## What if I have any questions or concerns?

If you have any questions, please contact the ward where your child had their lumbar puncture. In an emergency, please take your child to your nearest Emergency Department.

**This leaflet has been produced with and for parents and their children**

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

**Any complaints, comments, concerns, or compliments** please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email [ekh-tr.pals@nhs.net](mailto:ekh-tr.pals@nhs.net)

**Patients should not bring in large sums of money or valuables into hospital.** Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

**Further patient leaflets** are available via the East Kent Hospitals web site [www.ekhuft.nhs.uk/patientinformation](http://www.ekhuft.nhs.uk/patientinformation)