Lumbar Puncture

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

Why does my child need a lumbar puncture?

A lumbar puncture is carried out in children who are unwell, irritable, and usually have an unexplained fever. Doctors are looking for evidence of conditions affecting the brain, spinal cord or parts of the nervous system. It is commonly used to diagnose (or exclude) meningitis, as well as many other conditions, but may also be used to treat conditions (such as relieving pressure on the brain).

How is the procedure carried out?

If time allows, anaesthetic cream is applied to the area of the back to help with the pain, approximately one hour before the procedure. Doctors and nurses will take all precautions to prevent any infection from entering the body during the lumbar puncture. An LP is carried out under sterile conditions by the medical team. You may be present to comfort your child during the procedure, however many parents choose not to be there, as it can be distressing to see your child go through this. Older children may require sedation for the procedure as it can be uncomfortable and it is important to lie still.

1. Your child will be held firmly in the foetal position by a doctor or nurse, which may be uncomfortable. This may distress them if they are not sedated, but it is essential they lie in the correct position for the investigation to be performed correctly and to prevent complications.

2. The doctor performing the lumbar puncture will feel your child's lower back and locate the correct space between the vertebrae (the bones of the spine).

3. The doctor will then wash the skin around this area and cover the surrounding parts of the back with a sterile towel. The doctor will insert a needle into the space between the vertebrae. The fluid will be collected into containers and sent to the laboratory to be examined. In some cases the pressure will also be measured.

What can go wrong?

It is unusual for something to go wrong, but occasionally one of the following may occur:

- It may not be possible to get the child into the correct position for the lumbar puncture because they are too restless or upset. If this is the case, the procedure may have to be postponed or carried out with a general anaesthetic.

- Sometimes it is not easy for the doctor to locate the place where the needle should be inserted. Another doctor may be called to assist, but in some cases the procedure has to be stopped.

- 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 the test.

How long until we find out the results?

The initial results from the LP will be back within around two hours. However a culture result will take up to three days, to identify what, if any, bacteria are present. If the doctors suspect, or are trying to rule out meningitis your child will start strong intravenous antibiotics as soon as possible to prevent any delay in treatment. Your child will be kept in hospital for observation and antibiotic treatment until results are confirmed, and longer if necessary.

Feedback

We want your visit to be as comfortable as possible. Please talk to the person in charge if you have any concerns. If the ward/department staff are unable to resolve your concern, please ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care. **Before you leave the hospital you will be asked to complete a Friends and Family Test feedback card.** Providing your feedback is vital in helping to transform NHS services and to support patient choice.

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IN TRAN communication for all The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

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