#### Are there any alternatives to LP?

No, an LP is the only way to sample CSF and confirm meningitis.

Of course you can refuse an LP for your child, but your doctor or NP will explain why it will be in your child's best interests to have the procedure.

# What happens after the LP?

Your nurse will regularly check your child during and after the procedure.

Your child should lie down for an hour or two after the procedure to minimise side effects such as headache.

You can remove the plaster covering the wound after 24 hours. Your child should not participate in any vigorous activity such as PE for the next week.

Please contact your GP or come back to hospital if you have any concerns, or if your child has any of the following:

- An unexplained high temperature of 38°C or above.
- Clear fluid leaking from the wound where the needle was inserted.
- Redness, swelling or tenderness of the wound where the needle was inserted.

#### Useful contact numbers

For out of hours GP service or advice ring NHS 111

**Royal Alexandra Children's Hospital Children's Emergency Department** 01273 696955 Ext. 62593

Please be aware that CED staff will not be able to give you medical advice for your child over the phone but can direct you to an appropriate service to assist with your enquiry.

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# Lumbar puncture

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**Children's Emergency Department** 





This leaflet is intended for patients receiving care

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### What is a lumbar puncture?

A lumbar puncture (LP) is a type of procedure used to collect a sample of the fluid that surrounds the brain and spinal cord, known as cerebrospinal fluid (CSF).

LPs are usually done to look for infections like meningitis, but we sometimes do them for other problems affecting the brain and spinal cord, such as measuring or reducing pressure in the CSF.

### What does an LP involve?

Your child will usually be positioned curled up and the doctor or Nurse Practitioner (NP) doing the LP will insert a fine needle into the base of your child's spine to collect a small amount of CSF.



Positioning of child during lumbar puncture Picture courtesy of Great Ormond Street hospital

Don't worry, the space that is used only has CSF in it, and because CSF is constantly produced, it is replaced quickly. LPs are always performed under sterile conditions by appropriately trained staff. The procedure generally takes between 15-30 minutes.

Babies can be given a sugar solution during the procedure to make them more comfortable. Older children usually receive local anaesthetic for pain relief or the LP may be done while your child is asleep under a general anaesthetic.

The CSF samples are sent to the laboratory and are looked at under a microscope for any visible bacteria, and the number of red and white blood cells are counted. This will help your child's doctor or NP to decide on immediate treatment for your child.

The CSF is also tested for bacteria and viruses. You can expect to receive these results after around 48 hours.

## Can I be present during the LP?

Yes, unless your child is having an LP in the operating theatre, you can tell your child's doctor or NP that you would like to be present. However many parents find LPs distressing to watch, and would rather not be present. This is completely understandable. Just let your child's doctor or NP know what works best for you.

# Are there any risks or side effects of an LP?

LPS are usually safe and quick procedures and are a routine part of our practice. Serious complications are extremely rare.

#### **Common risks**

- Headache and/or pain at the site: this is not usually serious and can be treated with pain medicine and bed rest. It will resolve within 24-48 hours.
- Not getting a sample: much like a blood test, if your child is very unwell or dehydrated, for example, we are sometimes unable to collect your child's CSF sample. If this happens, your child's doctor or NP will discuss the next steps in treating your child.

#### Rare risks:

- Infection: as with any procedure penetrating the skin there is a very small risk of infection but this is minimised by keeping your child's doctor or NP doing the test, and the area around your child, sterile during the procedure.
- Bleeding: there may be a small amount of bleeding or swelling around the wound however this is harmless and will go away within a few days.