**Lumbar puncture**

**What is a lumbar puncture?**

A lumbar puncture is also called a spinal tap or LP. It is a test when a doctor inserts a needle in the lower back to get a sample of cerebrospinal fluid (CSF) that moves around the brain and spine. The needle does not go near the spinal cord.

**Why would my child need a lumbar puncture?**

The lumbar puncture is usually done to find out if your child has an infection of the lining or the fluid around their brain. This type of infection is called meningitis (see Meningitis fact sheet). Occasionally lumbar punctures are done for other reasons that your doctor will explain.

**How is it done?**

- The doctor or nurse may put a local anaesthetic patch on the skin first to numb the area where they will put the needle. It takes about half an hour for the patch to work.
- If your child is very scared or anxious the doctor may give them some medicine that will help them to relax.
- Using distraction strategies and play activities may be helpful for your child. Child life therapy services may be available at your hospital and you could discuss this with your doctor or nurse.
- It is very important that during this test your child does not move so a nurse will hold them gently but firmly to make sure they stay still.
- Your child must lie curled up on their side with their knees tucked up under their chin.

- A doctor will clean the skin on the lower half of your child’s back and then carefully insert the needle, as seen in the picture below.
- The drops of spinal fluid are collected quickly into small tubes, and then the needle is removed.

The test may be a little bit awkward as your child needs to be still the whole time and may feel some discomfort.

**What problems can occur?**

- The doctor will make sure that it is safe for your child to have the test and there are very few side effects from a lumbar puncture.
- After the test a small number of children may complain of feeling sore where the needle went in, and some may have a headache for up to a couple of days.
Complications such as nerve trauma and infection are very rare. A lumbar puncture is done below where the spinal cord ends, so it is not possible to injure the spinal cord. On occasions a headache may occur post lumbar puncture. This may be noticed on mobilizing. Good hydration, lying down for a period if the headache occurs and slow mobilization will help.

**What happens after the lumbar puncture?**

If the lumbar puncture is done to look for infection, the results will usually be available within a few hours. There may be a dressing or bandaid covering the spot where the needle went in. You may notice a little bit of swelling where the needle went in, but this should disappear over the next couple of days.

**What can I do to help during the test?**

- If your child asks about what is happening, be honest. Reassure them and explain the test in simple terms.
- You may be able to comfort and reassure your child while the lumbar puncture is being done. However, if you are not able to stay with your child, then a staff member will stay and comfort them.
- The staff are there to help and you are welcome to ask them if you would like more information.

**What can I do to help after the test?**

- If your child complains of a headache or a sore back, it may be helpful to give your child some mild pain relief such as Panadol (Paracetamol) and allow your child to rest. Give your child the dose that is recommended on the packaging for their age and weight.
- If the headache becomes severe or does not go away your child should see their doctor.