

## Dept of Neonatology

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# LUMBAR PUNCTURE

### What is a lumbar puncture?

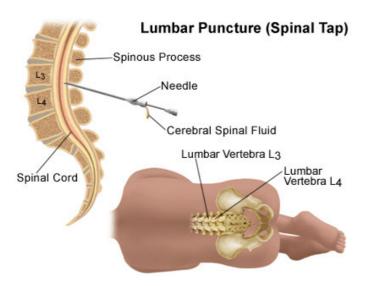
A lumbar puncture (also called a spinal tap) is a common medical test that involves collecting a small sample of cerebrospinal fluid (CSF) for examination for infection or biochemical tests. CSF is a clear, colorless liquid that delivers nutrients and "cushions" the brain and spinal cord, or central nervous system. In a lumbar puncture, a needle is carefully inserted into the lower spine to collect the CSF sample.

#### Why does your baby need a lumbar puncture?

Medical personnel perform lumbar punctures and test the cerebrospinal fluid to detect or rule out suspected diseases or conditions. CSF is collected to look for signs of possible infection by analyzing the white blood cell count, glucose levels, protein, and bacteria or abnormal cells that can help identify specific diseases in the central nervous system. A lumbar puncture may also be performed to treat post-haemorrhagic hydrocephalus.

### The Procedure

A lumbar puncture takes about 15-30 minutes and is done under sterile conditions. The doctor carefully inserts a thin needle between the bones of the lower spine (below where the spinal cord ends) to allow the CSF to drip into collection tubes. Your baby will be positioned on his/her side with head, hips and knees flexed in a curled position, so the spaces between the vertebrae are as wide as possible. This allows the doctor to easily find the spaces between the lower lumbar bones (where the needle will be inserted).



http://www.daviddarling.info/images/lumbar\_puncture.gif

Your baby will be given sucrose before the procedure as pain relief to minimize any discomfort during the procedure. After the CSF sample is collected the needle is withdrawn and the samples are sent to a laboratory for analysis and testing.

#### What to Expect

Babies generally tolerate this procedure well and rarely experience any side effects. In rare cases, infection or bruising may occur. Your baby will be kept comfortable after the procedure and will be given pain relief if necessary to settle.

#### How soon will the results be available?

Some results from a lumbar puncture are available within 30 to 60 minutes. However, to look for specific bacteria or viruses, the sample is sent to the laboratory and these results may take up to 48 hours. If an infection is suspected, antibiotic or antiviral treatment will be commenced while waiting for the results of the culture.

If you have any further questions please ask the medical and nursing staff.

Approved by Canberra Hospital Neonatal Intensive Care Unit, 2012 Revision Date 2015