



Procedure Information Sheet

Introduction

Lumbar puncture (LP) is a common diagnostic procedure performed in paediatric patients. The aim is to obtain cerebral spinal fluid (CSF) for examination.

Indication

The most common reason for having a LP is to see if there is any infection of the lining around the brain (meningitis) or inflammation in the brain itself (encephalitis).

The Operation / Procedure

1. A nurse will assist your baby to lie curled up on his/her side, with knee up to the chest.
2. After sterilizing the skin at the back, the doctor will insert a small needle into the space between two backbones (the lumbar vertebrae). A small amount (few ml) of CSF will be drained out and sent for tests.

Before the Operation / Procedure

1. The doctor will explain the procedure and potential complications to the parents.
2. Parents have to make sure that they fully understand the explanation before the consent form is signed.

After the Operation / Procedure

1. Your baby will lie flat in incubator for 12 hours.
2. After procedure, the nurse will monitor the vital signs and puncture site every hour.

Risk and Complications

1. Headache (40%) or local pain (40%) over the puncture site is relatively common but usually mild and transient.
2. Potential risk but with serious consequences such as sudden change in intra-cranial pressure, leakage of CSF, bleeding, bacterial infection, nerve root damage, and production of implantation dermoid, etc. The doctor will always perform the procedure very carefully to minimize the risk.

Alternative Treatment / Investigation

- Meningitis can be rapidly fatal or cause serious consequences such as deafness, hydrocephalus, cerebral palsy and epilepsy. Doctors have to make the correct diagnosis and start treatment promptly. LP is the safest and most effective means to make the diagnosis.
- The cerebrospinal fluid (CSF) will undergo biochemical tests and be examined under the microscope. The preliminary results will be available within a few hours. The CSF will also be sent for bacterial and/ or viral culture for identification of the organism and antibiotics sensitivity test.
- As CSF circulates around the central nervous system, detailed examinations of CSF can provide direct evidence to diagnose many diseases that involve the brain.

Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

Reference

Smart patient website by Hospital Authority: Lumbar Puncture (2015)

Signature of
Parents/ Guardian: _____ Date: _____

Patient's Label

Patient Name: _____
Hospital No: _____
Episode No: _____