



What is a Lumbar Puncture?

This is a minor procedure where a needle is inserted into the fluid filled space around the spinal canal, in the back.

Why do we do a Lumbar Puncture?

Lumbar Punctures are performed to collect spinal fluid known as cerebrospinal fluid (CSF) for analysis of certain biochemical and microbiological/pathological parameters. In some instances, the procedure is done to estimate the “pressure” within the brain.

How is this procedure performed?

Patients are admitted to hospital for this procedure. It is not done in the operating theatre, rather at the bedside. You will be placed in a hospital gown. Many times, the procedure is done with the patient lying on the side but rarely it is done in the sitting position. To prevent infection, the surrounding skin will be cleaned, and the entire procedure is performed under a sterile technique; with the equipment for the procedure obtained from a sealed sterile pack. While lidocaine is given for local anesthesia, there will be some degree of discomfort as the entire area cannot be completely anesthetized, i.e. “numbed”. Next, the needle is inserted, and the fluid extracted. After the procedure we advise patients to lay flat (complete bed rest) for 3-4 hours and minimize exertion for 1-2 days following the procedure.

What are the complications of a Lumbar Puncture?

- a) Headaches: This is the most common complication of the procedure and may occur immediately after or up to 1-week post-procedure. To minimize this, we advise lying flat for as long as possible and for a minimum of 4-6 hours after the procedure. It is also advisable to avoid strenuous activity for up to a week and to keep well hydrated. Simple pain medications can be used, e.g., Panadol, Paracetamol
- b) Lower Back Discomfort: Patients may experience discomfort in the lower back for a day or two and this can be treated with simple pain medications.
- c) Bleeding: As with any procedure, there is a risk of bleeding but in a lumbar puncture there is minimal bleeding. Rarely, a hematoma (bruise) may develop just under the skin in some patients. This can be minimized by lying flat for 4-6 hours.
- d) Infection: As with any procedure, there is a risk of infection at the needle insertion site or around the area of skin where the procedure is done. In exceptionally rare instances, there is a risk of development of an infection within the central nervous system.