Lumbar Puncture

Lumbar puncture, also known as a spinal tap, is done to look for problems that involve the brain or spinal cord. It involves the placement of a thin, hollow needle into the lower back to get a sample of the fluid which surrounds the spinal cord.

Common reasons for its use and benefits:

- **Infections** - Bacterial meningitis, an infection of the fluid and tissues surrounding the spinal cord, is a life-threatening disease that needs prompt diagnosis and treatment.
- **Inflammation** - Some diseases can cause inflammation in or around the spinal cord, such as multiple sclerosis.
- **Cancer** - Cancers that spread to the fluid surrounding the spinal cord can also be detected by looking at fluid obtained with a lumbar puncture. Because only a few cancer cells may be present in the fluid, sometimes it can take several lumbar puncture samples to find the cancer.
- **Hemorrhage** - A form of stroke, in which bleeding occurs in the fluid around the spinal cord (called subarachnoid hemorrhage), can be detected with a lumbar puncture.

Risks:

Some of the risks of lumbar puncture include:

- **Pain during placement** - Discomfort can result from the needle stick at the time it is inserted. Doctors try to lessen the pain with a local numbing medicine (anesthetic like novocaine). The discomfort is usually mild and goes away once the needle is removed. Occasionally, the pain will continue for a short time, but the pain is usually bearable and does not cause serious injury.
- **Headache** - Following lumbar puncture, some patients get a headache. The headache is usually mild and gets better on its own.
- **Bleeding** - Bleeding can occur around the puncture site or, rarely, into the spinal cord. Bleeding is usually minor and stops on its own.
- **Nerve injury** - In very rare circumstances, spinal nerves or the spinal cord can be damaged while inserting the needle.
- **Brain injury** - Removing fluid from the spinal canal can change the pressure around the brain. In very rare situations, the change in pressure can lead to further brain damage, particularly if there is a disease causing an abnormally high spinal fluid pressure.