



Diagnostic Lumbar Puncture

Procedure Information

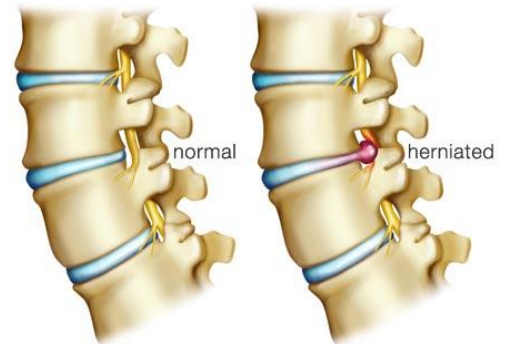
A diagnostic lumbar puncture, also called a spinal tap, is used to diagnose a range of conditions. The procedure involves removing a small amount of cerebrospinal fluid (CSF) so that it can be tested. There are many causes of lumbar pain including muscle strain, ligament or disc sprain and degeneration of the cervical spine related to aging. In many cases, rest followed by a physical therapy program will relieve lumbar pain; however, chronic back pain due to wear and tear will often require more intensive treatment.

SPINE ANATOMY

The human spine is comprised of 24 bones called vertebrae which are stacked on top of each other to create the spine. Between each vertebra is a disc which provides cushioning, holds them together and controls motion. Each disc is composed of two parts – the annulus which is the strong outer layer and the nucleus which is made of a soft, rubber-like material. The composition of the disc ensures the even distribution of pressure and force throughout the structure which allows normal body movement.

LUMBAR PAIN

As we age, the discs become worn and degenerate which may cause the disc to bulge or break open. When this happens, the herniated disc may leak chemicals which inflame the nerves that surround the vertebrae. A large tear can cause the disc to bulge which puts pressure on the nerves or spinal cord leading to back pain. Stiffness in the lower back is common and you may also suffer from sciatica, pain that radiates down the buttocks and backs of the legs due to irritation or compression of the sciatic nerve.

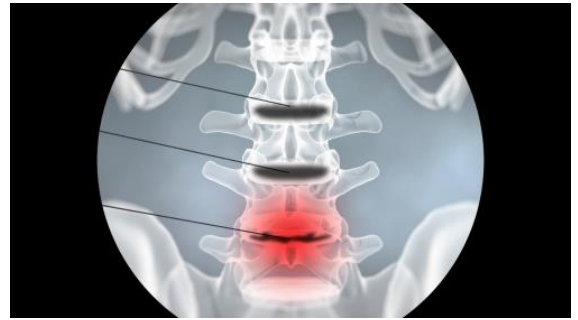


DIAGNOSIS

Diagnosis begins with a history and physical examination. Investigations may include X-ray, CAT scan, MRI scan or bone scan. An MRI will be able to show a bulging disc and nerve root compression but may not show a torn or leaking disc. In this case, a lumbar discogram may be recommended to help determine the source of the pain.

THE PROCEDURE

A lumbar discogram is done as an outpatient by a radiologist or pain specialist. You are awake for the procedure however sedation is available. You may need to fast for a short period beforehand and please inform your specialist if you are taking any blood thinning medications such as Aspirin or Warfarin as these may need to be ceased. Please ensure you bring any relevant scans with you.



You will lie on your stomach on an X-ray table and a local anaesthetic will be injected to numb the skin and tissue on the area where the pain is located. With the aid of a fluoroscope (X-ray) or CAT scan, a needle will be passed through the numbed area and into the centre of the disc.

Once the needle is in place, a contrast dye will be injected along with saline. When a normal disc is injected, pressure will be felt. Injections into abnormal discs will result in pain. You will be asked about the sensations you are feeling throughout the procedure which will help identify the discs that require treatment.

The procedure will take 30-60 minutes depending on the number of discs to be injected. Once completed, you will be observed for ill-effects for a short time before being discharged. Please ensure you have someone to drive you home. You may have some leg weakness or numbness for several hours after the procedure.

SIDE EFFECTS & RISKS

Side effects after this procedure are rare although you may develop some bruising from the needle. You may also experience some long-lasting numbness in the injected area or down the legs. Other risks include:

- Worsening pain at the injection site
- Bleeding causing a haematoma or blood in the epidural space
- Infection of the skin or injection point
- Headache if the injections causes a spinal tap (release of cerebrospinal fluid)
- Allergic reaction to the medication

If you have any concerns, please contact the radiology department where you underwent the procedure. **Please call 000 if you are affected by any life-threatening symptoms.**

WHAT TO EXPECT

Lumbar discography is not a treatment and will not result in pain relief. Results from the procedure will be used to help diagnose the cause of your back pain and determine the best course of treatment for you.