

## WHAT IS A CT MYELOGRAM ?

This is a CT scan which you have probably already had done with the addition of a contrast agent injected in around the nerve roots via a Lumbar puncture or via an injection into the neck. This gives 2 types of pictures which can be used to diagnose some problems with the spine.

## WHAT IS A LUMBAR PUNCTURE?

A Lumbar puncture is where a special needle is inserted into the fluid around the spinal nerve roots in the low back. Sometimes the procedure is known as a SPINAL TAP.

## WHAT ARE THE REASONS FOR HAVING A CT MYELOGRAM ?

1. To look for a disc prolapse
2. To look for cervical canal stenosis
3. To look at the foramen that the nerves leave from.
4. To see if there is pressure on a previously operated nerve root.

USUALLY YOU HAVE ALREADY HAD AN M.R.I. THAT HAS NOT SHOWN THE REASON FOR YOUR PROBLEM OR YOU ARE UNABLE TO HAVE AN M.R.I.

## WHAT INFORMATION CAN BE GAINED ?

The main aim of the test is to look at not only the nerves in the back but also the relationship between them and the bones and discs of the spine.

## HOW IS IT PERFORMED ?

The test is performed by a doctor and happens either in the X ray department in a hospital or in a specialist Radiology centre.

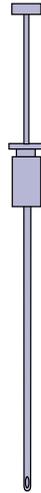
You will be either lying on your back or side.

**Lumbar puncture** You are on your side then your knees are tucked up under your chin.

**Cervical Puncture** You are on your back and the needle is inserted near the top of the neck just below the head.

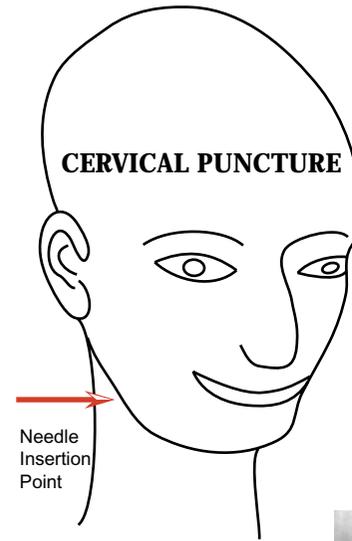
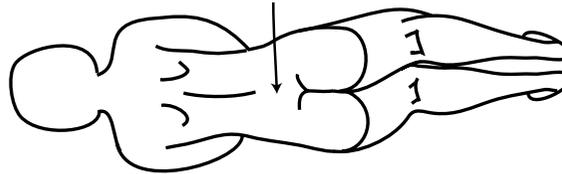
The place for the needle is prepared with antiseptic to prevent infection.

Local anaesthetic may be injected into the area to numb it prior to the needle being inserted.

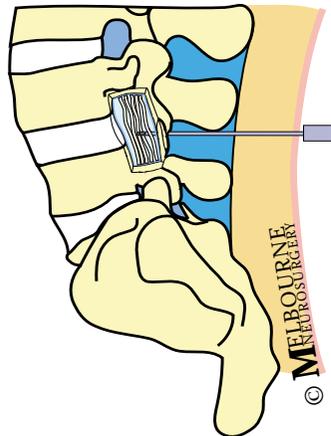


The needle has a solid centre and this is removed to sample the fluid. Then the contrast is injected. This moves around the nerve roots and spinal cord and makes them appear black against the white contrast. The needle is then removed. Plain pictures are taken to look at all the nerves. You will be tilted around on a special table to get the contrast to run to where it is needed. When these are taken you will be left for a while for the contrast to be partly absorbed and then go for a CAT scan. After all the pictures are taken you will go to a special area to wait to go home or go to the ward. You usually cannot go home till about 4 hours after the test is finished. A bandaid is all that is needed to cover the wound.

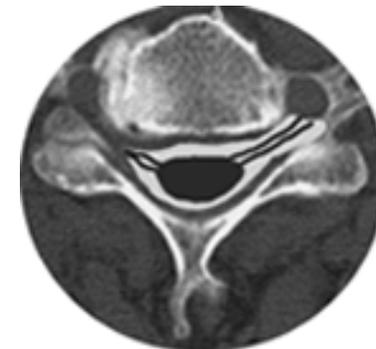
## LUMBAR PUNCTURE



Plain Xray showing the contrast injected around the cord



The needle is then pushed through the layers of the back to the membrane lining the lumbar nerve roots. This may sting a little but it is important not to move.



CT scan with contrast injected showing foraminal stenosis on the left of the picture

## WHAT SHOULD YOU DO AFTER ?

You will usually rest in bed for 4 hours to reduce the risk of headache from the fluid leaking.

You will then be able to go home.

Somebody should drive you home.

Until the next day it would be advisable not to exercise.

## WHAT SHOULD YOU NOTIFY YOUR DOCTOR OF AFTER ?

1. INCREASING HEADACHE
2. INCREASING DROWSINESS
3. FEVER
4. SEIZURES
5. WEAKNESS IN LEG/S or ARMS

## WHAT ARE THE RISKS?

The risks are very small.

There is a small chance that you may be allergic to the contrast that is injected. If you have any allergies then we need to be told. If you do develop a reaction you will be in hospital so this can be treated.

With the needle going in, a nerve may get caught and this may give pain or tingling down the leg or arm. This is transient and disappears when the needle is removed. Paraplegia / death is also a risk but extremely rare.

Infection is a theoretical risk but almost never seen.

If you have a bleeding problem or you are taking a medication to thin your blood then there is a risk of bleeding at the area and developing weakness in the legs. It is important to tell the doctor if you are on blood thinning tablets such as aspirin/warfarin /anti- inflammatory drugs.

Headache is the commonest side effect because a small hole is left when the needle is removed. The fluid may leak into the tissue around the spine, dropping the pressure in the head. This usually resolves in 24 hours or less.

Seizure

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