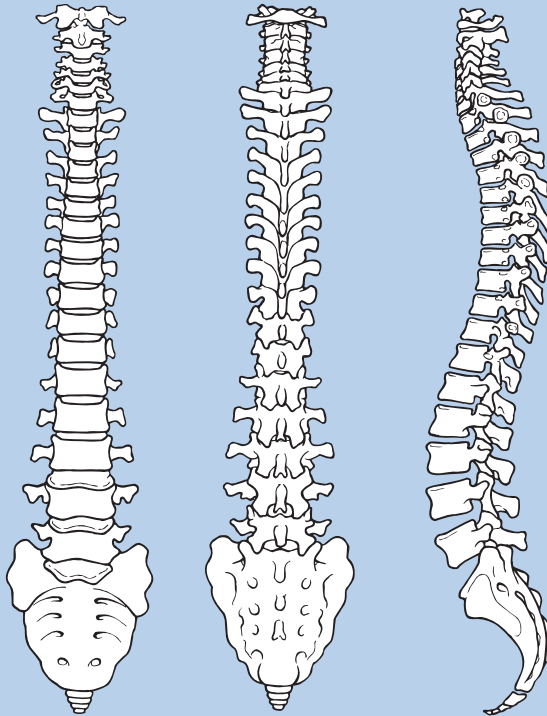




**BASS**  
British Association of Spine Surgeons

# Lumbar Nerve Root Block

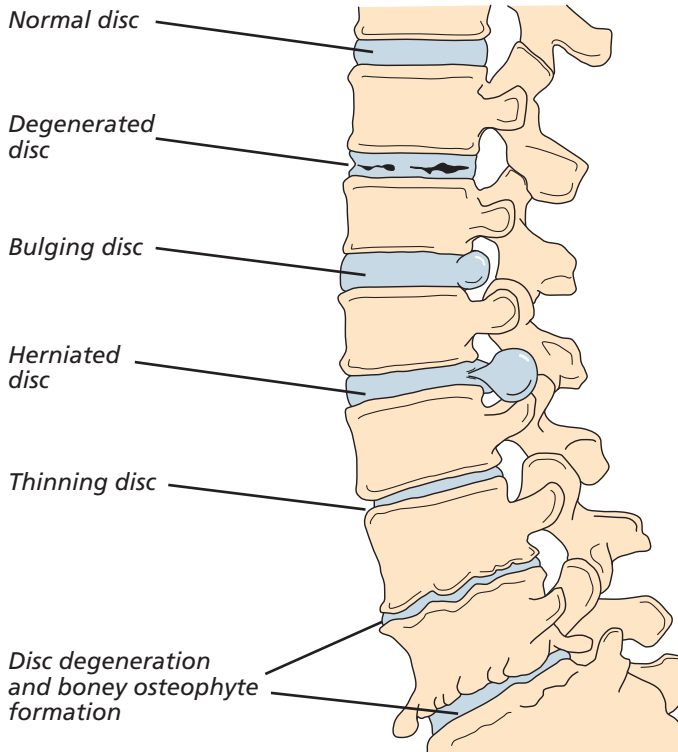


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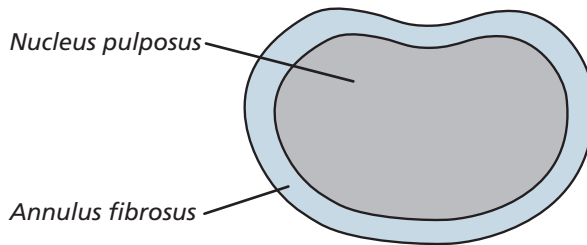
Imaging techniques, such as an MRI scan, can reveal small disc bulges and/or wear and tear in the spine with possible nerve irritation or inflammation. This can cause pain down the leg in the area that the nerve supplies.

### Examples of disc problems



The intervertebral disc is the structure between the vertebrae (bones of the spine). It acts as both a spacer and a shock absorber. The disc is composed of two parts: a soft, gel-like middle (the nucleus pulposus) and a tougher fibrous wall (the annulus fibrosus) which surrounds it.

## Overhead view of an intervertebral disc (simplified)



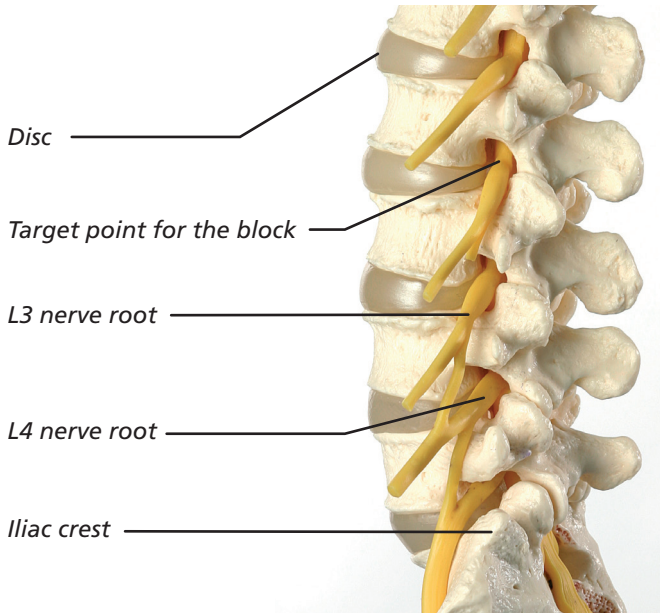
Sometimes the intervertebral discs lose their flexibility, elasticity and shock-absorbing characteristics, while the tough layer of ligaments that surrounds the intervertebral disc may weaken and no longer be able to contain the gel-like substance in the centre. This material may bulge through a tear in the disc wall (herniation) and can cause inflammation to the surrounding area and nerve roots. As the disc then degenerates it can lose height and, as a consequence, close down the bony canal where the nerve root leaves the spinal column. This can cause pain if it touches the nerve.

Sciatic nerve root inflammation can be an extremely painful and debilitating condition. The pain generally goes below the knee and is felt in the area of the leg that the particular spinal nerve supplies. Although most people's pain will settle in time without the need for surgery, in the short term, delivery of anti-inflammatory medicine direct to the source of irritation around the spinal nerve root is beneficial and can provide excellent pain relief and help your surgeon understand your condition.

## About the procedure

The procedure is carried out under intravenous sedation (so the patient is asleep) and with the patient lying on their stomach. The skin on the back is cleaned with antiseptic solution. Live X-ray is used as guidance to direct the needle to the nerve root where it exits between the vertebral bodies before a small volume of corticosteroid and/or local anaesthetic is injected.

### Photo of spine model showing target point for the nerve block



This procedure is carried out as a day case and can lead to a fairly rapid recovery. There may be some temporary numbness or heaviness in the leg for a few hours after the injection, so care should be taken when first getting out of bed.

Once the numbness has worn off often the pain returns, occasionally slightly worse, until the corticosteroid takes effect. This can take several days. Continue to take your usual pain relief medication until you begin to feel the benefit of the corticosteroid.

It is important not to stop taking certain pain relief medication suddenly. It may be necessary to gradually 'wean' yourself off them – your GP can advise you if necessary.

## **Risks and complications**

Fortunately, there are very few risks associated with nerve root block. Very uncommon risks involve: infection, nerve or dural injury (the membrane around the nerves) or bleeding.

## **What to expect in hospital**

Immediately after the injection you will be taken on your bed to the recovery ward where nurses will monitor your blood pressure and pulse. Oxygen may be given to you through a facemask to help you wake up after the sedation. Once back on the ward and when you are fully awake you will be allowed to get out of bed (taking care if some numbness or heaviness persists).

## **Going home**

You will normally be allowed home a few hours after your injection, when you and your physiotherapist are happy with your mobility.

Please arrange for either a friend or relative to collect you from the hospital, as driving yourself or taking public transport is not advised for 48 hours after the sedation. A responsible adult should remain with you overnight.

If you are likely to require a hospital car, please arrange this through your GP before admission.

## **Work**

You will need to be off work for at least 48 hours, or maybe longer if discomfort persists. It may be several weeks before the full benefit of the injection takes place, so patience is required. The hospital can give you an off work certificate or you can ask your GP.

## **Follow-up**

We do not routinely see patients undergoing injections in the clinic as the relief provided is variable and therefore it does not make sense to see patients at a specific fixed interval following the procedure.

Please allow up to four weeks for your pain to improve following your treatment, but if you do not gain adequate pain relief after this time you can contact the Spinal Unit.

The next stage may be an operation to decompress your nerve root.

If you have any queries before your clinic appointment please contact the nurse specialist for your consultant's team.

Produced, researched and revised by spinal nurse specialist Helen Vernau at The Ipswich Hospital NHS Trust, in association with and on behalf of the BASS Consent and Patient Information Committee.

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