

Lumbar Nerve Root Pain

Introduction

The aim of this leaflet is to give you some understanding of the problems you have with your leg pain and to provide some advice on how to manage this. It is not a substitute for professional healthcare advice and should be used along with information you may be given by your GP or health practitioner.

What do we mean by the term 'nerve root pain'?

Your spine is made up of many segments of bone (vertebrae) with discs between the vertebrae. At each level of the spine two nerves come out (nerve roots). There is one nerve root on the left side and one nerve root on the right side. In the lower spine these nerves pass into the legs to supply the muscles in the legs and provide feeling to the legs.

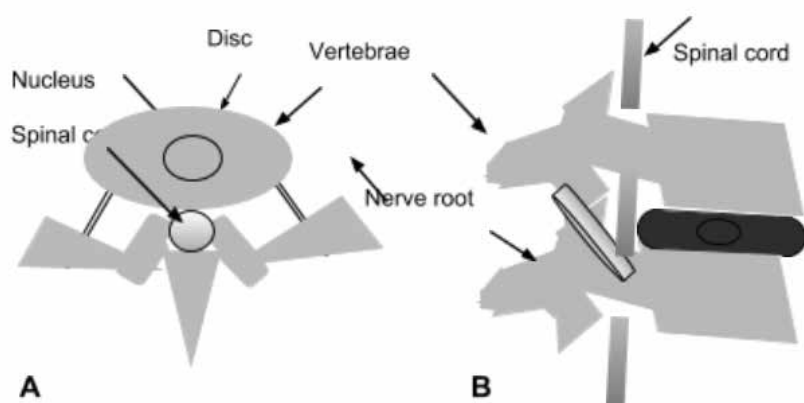


Figure 1. Nerve roots coming from the spinal cord viewed from A) above and B) the side

If something irritates a nerve root then you will experience pain and/or pins and needles in the area that the nerves supplies. If the nerve becomes compressed then you can also experience numbness or muscle weakness in the leg/arm supplied by the nerve.

The most common cause of nerve root pain is that the hole where a nerve exits from the spinal cord is narrower than normal. The hole can be narrowed by something soft like a disc bulge or something hard like increased bone due to ageing change. If the nerve has been getting irritated for a while then it is likely that the nerve will be inflamed. Inflamed nerves tend to increase in size and therefore take up more room in the hole through which it exits from the spine (Figure 2).

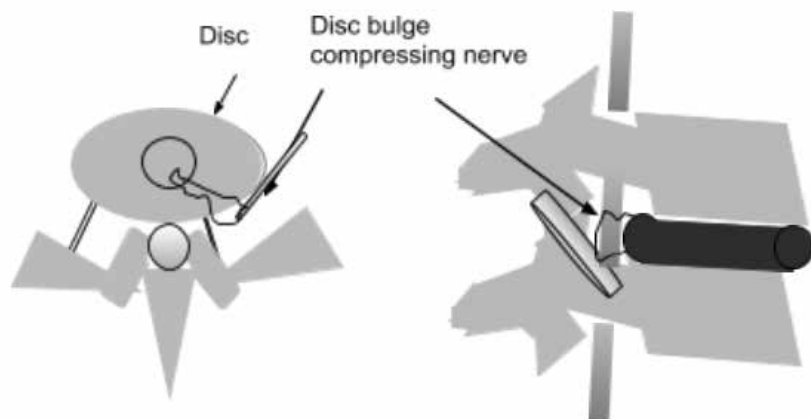


Figure 2. Nerve root compression viewed from A) above and B) the side

Symptoms

Depending on which nerve gets compressed you can experience different patterns of pain. These patterns of pain often help your doctor or physiotherapist identify which area has been damaged (Figure 3).

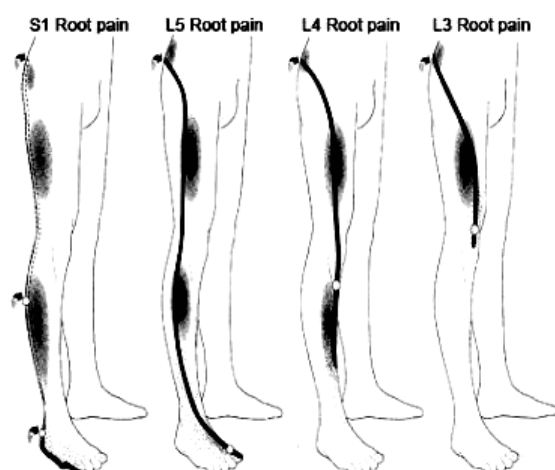


Figure 3. Nerve root 'sciatica' pain patterns

Spinal pain is very common in human beings. 80% of people will get spinal pain at some time in their lives. Around 25% with spinal pain will have nerve root pain. Most cases improve with time.

Is nerve root pain serious?

Nerve root pain can be very painful. It is not usually serious. However, if you have any of the symptoms mentioned below it is best to get them checked out by a medical practitioner.

Cauda Equina Syndrome

This is rare, but needs urgent medical attention.

- Difficulty passing water (retention).
- Loss of bladder control.
- Loss of bowel control.
- Weak muscles in your legs.
- Numbness between your legs (back passage or genitals).

If you suddenly develop any of the above symptoms then it is strongly recommended that you contact your GP or the Accident and Emergency Department as an emergency.

Do I need any special tests?

An X-ray of your spine will probably not help identify the cause of pain unless the pain has come on recently as a result of a fall or direct trauma. Discs and nerve roots do not show up on an X-ray. A MRI scan may not show where the pain is coming from either. If we scan people with no spinal pain, 30% to 40% of patients have evidence of disc damage, but do not suffer pain. The information you gave to your doctor or physiotherapist can be more helpful in diagnosing and managing your problem.

Pain control

Medication

Nerve root pain can be very uncomfortable. Many people use medication to help them remain active and cope with the pain. It is recommended that you take medication regularly. It is best to get advice from a GP or pharmacist.

Other forms of pain relief

Many people use other forms of pain relief alongside or instead of medication, some examples are listed below.

Short term pain relieving measures

- Acupuncture
- Cold packs
- Heat packs
- Massage
- Transcutaneous Electrical Nerve Stimulation (TENS)

What can I do to help myself?

It is important to keep your spine moving this will help you get back to normal more quickly

It is advised to remain active, however some positions of comfort are shown below, figure 4.



Figure 4: Positions of comfort A) Lie on the non-painful side and bend the painful leg up supported by a pillow B) Lie on your back with pillows underneath the knees or C) Sitting upright with a rolled up towel placed across the lower back.

What are the best exercises?

You do not have to do any special exercises. Simply continue to do your ordinary activities as normally as possible. You may need to take it a little easier at first and gradually build it up. Being active little and often is a good idea

Should I be off work?

Nerve root pain can be very painful. You may be unable to do some parts of your job. It is usually recommended that you try to stay at work, if possible, or get back to work as soon as possible after a flare-up. The pain does not need to be 100% away in order to return to work. Research shows that the longer you are off work the less likely it is that you will return.

Surgery

Occasionally people with nerve root pain may require surgery. This may be considered if the nerve root is compressed, particularly if it is causing weakness then an operation may be considered. Often this results in an improvement in the leg pain, but the spinal pain can persist. The weakness and numbness also improves with time in most cases, but again may not be completely 'cured'.

What is the prognosis?

Most nerve root pain will fully recover whether you treat it or not. Small set backs during the healing period are quite common. It may take some months for symptoms to settle. Recurrence of your nerve root pain is not uncommon however in most cases the pain, weakness and numbness improves with time.