

Nerve Root Pain

Service User Information Leaflet

NHS Fife provides accessible communication in a variety of formats including for people who are speakers of community languages, who require Easy Read versions, who speak BSL, read Braille or use Audio formats.

NHS Fife SMS text service number 07805800005 is available for people who have a hearing or speech impairment.

To find out more about accessible formats contact: fife-HB.EqualityandHumanRights@nhs.net or phone 01592 729130

Issue No. 3.5.1.7	Date of Issue: Sept 2016	Review Date: Oct 2022 If review date has passed the content will apply until the next version is published
-------------------	--------------------------	---

Produced by Fife Musculoskeletal Physiotherapy Service

Diagrams (Positions of comfort: © PhysioTools)

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

Your spine is made up of many segments of bone (vertebrae) with discs between. At each vertebral level of the spine one nerve comes out on each side (nerve roots). These nerves travel from the lower back to the legs, where they supply muscles and provide feeling. In the neck the nerves pass into the arms (Figure 1).

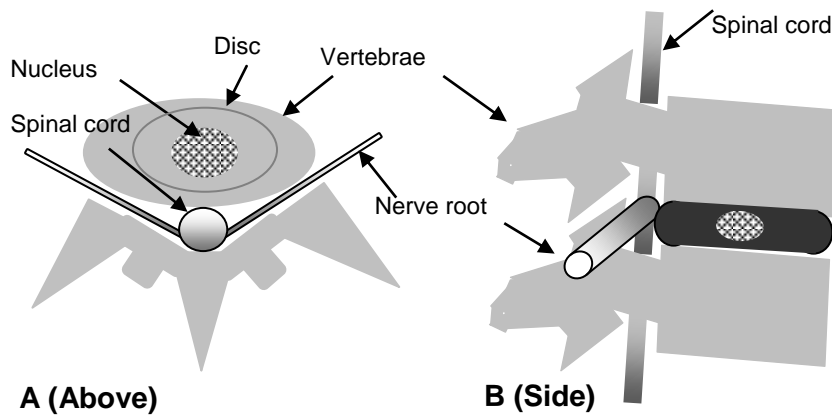


Figure 1 Nerve roots coming from the spinal cord viewed from A) above and B) the side

If something irritates a nerve root then you will experience pain and/or pins and needles in the area which 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. When this happens the pain in the limb is usually much more severe than the back or neck pain.

The most common cause of nerve root pain is that the canal where a nerve exits from the spine is narrower than normal. The canal can be narrowed by something soft like a disc bulge or something hard like bony changes due to age. If the nerve has been getting irritated for a while then it is likely that the nerve will be inflamed. Inflamed nerves tend to swell and therefore get squeezed in the canal as it exits from the spine (Figure 2).

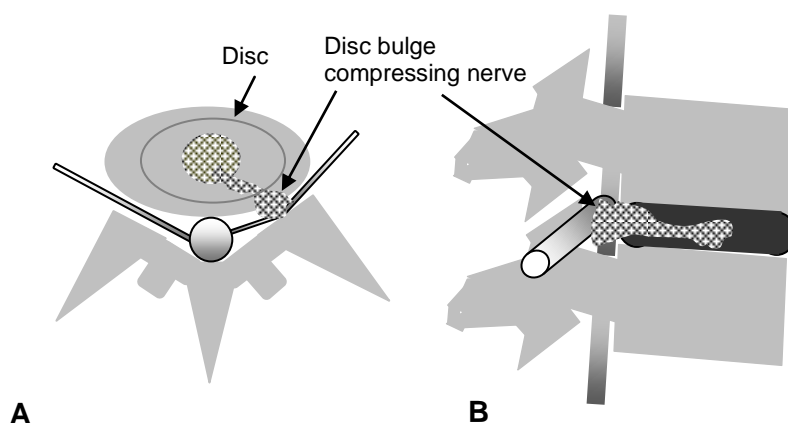


Figure 2 Nerve root compression viewed from A) above and B) the side

Depending on which nerve gets compressed you can experience different patterns of pain. These patterns of pain often help your doctor or physiotherapist identify where the symptoms come from. (Figure 3).

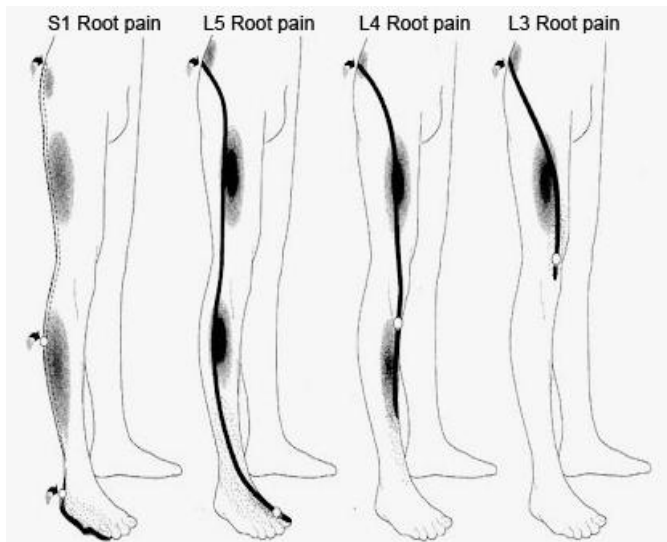


Figure 3 Nerve root pain patterns

Who is likely to get nerve root pain?

Spinal pain is very common. 80% of people will get spinal pain at some time in their lives. Around 25% of people with spinal pain will have nerve root pain. The most common age for nerve root pain is between the ages of 30 years to 50 years. The risk of nerve root pain increases if you have a family history of spinal problems or if you drive more than 1000 miles a week. Surprisingly, heavy manual work and repeated lifting do not seem to be risk factors for nerve root pain.

Is nerve root pain serious?

Nerve root pain can be very painful, but it is not usually serious. The only situation that it is considered an emergency is Cauda Equina Syndrome.

Cauda Equina Syndrome Warning Signs

Many patients have a combination of back pain, leg pain, leg numbness and weakness. These symptoms can be distressing, but do not necessarily require emergency medical attention. **A rare, but serious back condition, Cauda Equina Syndrome, can lead to permanent damage or disability and will need to be seen by an Emergency Specialist Spinal Team. Some warning signs of Cauda Equina Syndrome are as follows:**

- Loss of feeling/pins and needles between your inner thighs or genitals
- Numbness in or around your back passage or buttocks
- Altered feeling when using toilet paper to wipe yourself
- Increasing difficulty when you try to urinate
- Increasing difficulty when you try to stop or control your flow of urine
- Loss of sensation when you pass urine
- Leaking urine or recent need to use pads
- Not knowing when your bladder is either full or empty
- Inability to stop a bowel movement or leaking
- Loss of sensation when you pass a bowel motion
- Change in ability to achieve an erection or ejaculate
- Loss of sensation in genitals during sexual intercourse

Any one or combination of these seek medical help immediately

Do I need any special tests?

Your doctor or physiotherapist will normally be able to identify nerve root pain from the description of the pain and by examining you. A scan may only be advised if the nerve root pain persists and an operation is being considered.

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.

If the leg pain has come on only very recently and is severe then it is advised that you adopt positions of comfort. This is to allow the nerve pain to settle (Figure 4). It is not advisable to go to bed for more than 1-2 days, unless you really need to.

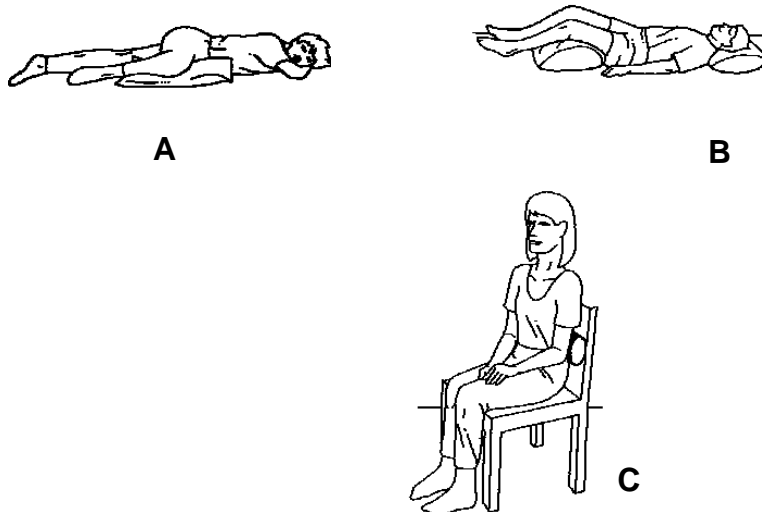


Figure 4: Positions of comfort A) Lie on the non-painful side and bend the painful leg up supported by a pillow B) Lie on your back with pillows underneath the knees and head or C) Sitting upright with a rolled up towel placed across the lower back.

Other forms of pain relief

Table 1: Short term pain relieving measures

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

Many people use other forms of pain relief alongside or instead of medication. They may only give short-term pain relief, but they can be important in helping you stay active.

What can I do to help myself?

Staying active stops your spine from stiffening up, it may hurt a bit at first, but it is safe to keep generally active. It is worth gradually working through any initial discomfort. This will help you get back to normal quicker.

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 a little and often is a good idea. Being fit and active will help you get better faster and reduce the risk of longer term symptoms.

Research shows that changes in your daily life involving exercise and relaxation will help manage your pain.

Should I be off work?

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

For free and confidential advice about work call the Health Working Lives Advice Line on 0800 019 2211

What are the treatment options?

Health care professionals can help you get back to activity quicker and make things more comfortable. Nerve root pain generally gets better with time. Health care professionals can help you get back to activity quicker.

Manual Therapy

Most healthcare professionals recognise that manual therapy can be helpful for some people with nerve root pain. If manual therapy is going to help then you should feel improvement after two or three sessions. If your symptoms are not improving then it may be useful to try another treatment other than manual therapy.

Exercise/McKenzie method

Some people find that they can control the nerve root pain by using exercise and/or the 'McKenzie' method. A physiotherapist can advise you on a personalised exercise programme.

Traction

There is currently no research that proves traction works. Trials have shown that traction is no more effective than dummy traction (a placebo).

Pain management

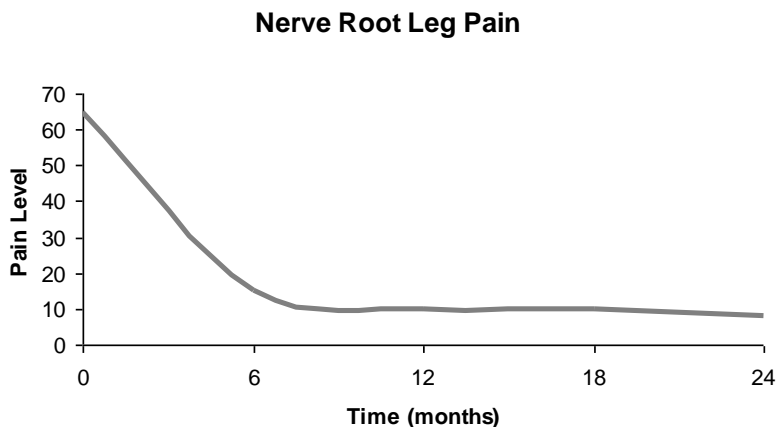
If the pain persists, and surgery is not an option, then sometimes you will be referred to a team of specialists in pain management. The team can include doctors, nurses, pharmacists, physiotherapists and psychologists who can give specific advice on medication and other methods on managing and coping with your pain.

Surgery

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. The severe leg or arm pain often lasts for around 2 to 3 months. Milder pain may persist for many months after this. Do not panic if you have a flare-up of your pain; small set backs during the healing period are quite common. It may take up to 12 to 18 months for symptoms to fully settle. Occasionally symptoms may recur.



Graph 1 Example of nerve root leg pain and improvement with time

Should I have an x-ray?

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. Also 30-40% of people without symptoms may have evidence of disc problems. The information you gave to your doctor or physiotherapist can be more helpful in diagnosing your problem than any test.

Useful reading

For Back Pain

The Back Book

TSO Information and Publishing Solutions

ISBN 0-11-322312-9

For pain that is limiting your activity

Explain Pain

Author L Mosley and D Butler

ISBN-13: 978-0975091005

Treat Your Own Back

Author R McKenzie

ISBN: 0959804927

Useful Information

www.nhsinform.scot/illnesses-and-conditions/muscle-bone-and-joints

NHS Inform Helpline: 0800 22 44 88

For free and confidential advice about work call the Healthy Working Lives Advice line on 0800 019 2211. www.healthyworkinglives.com

Position of Comfort Diagrams: ©PhysioTools