Nerve-related back and leg Pain

**What is nerve related back and leg pain?**

Back pain that radiates down one or both legs may be nerve-related. This pain is often called ‘sciatica’. Nerve-related back pain may also be called referred pain, radicular pain or radiculopathy.

**How is it caused?**

Pain and symptoms are usually caused by either compression of the nerve or inflammation of the nerve roots. It is very hard to trap or pinch a nerve as there is plenty of space and they are quite slippery structures. Nerves carry messages about movement and sensation to and from your legs to your brain via your spinal cord.

The nerve may be compressed by a disc herniation – which is a hernia-type bulge in the wall of the disc. Discs don’t slip – they are very securely held in place. Be reassured, nothing is out of place, though it might feel like it. Disc bulges are common, part of aging and not always associated with pain. They can shrink and resolve over time, usually 3-6 months.

More often the pain is linked to nerve inflammation. In these cases there is pain but no loss of power or sensation. Inflamed nerves are sensitive to touch, stretch and movement. They have the capacity to repair and recover just like sensitive muscles and ligaments.

**What are the symptoms?**

* Back and leg pain which is usually worse in the leg and it may be quite intense.
* You may also have numbness, tingling, altered sensations or weakness in the leg.
	+ Zings and zaps do not mean a nerve is injured – more likely it is sensitive. Sensitive nerves report all that they possibly can to the brain – sometimes weird and wonderful things. There is usually nothing wrong with the area in your leg where you feel the pain.
* Pain often worse at night, this may be due to lower blood pressure and sleep positions causing temporary reduction in blood flow to your nerve.

**Why has it happened?**

Usually there are several reasons, you may recognise some from this list:

* Straining your back
* Avoiding movements and protecting your back.
* Fear of damage or not improving
* Feeling down or being stressed.
* Smoking, being overweight, poor sleep, inactivity.
* Difficult relationships at work or at home
* Being unhappy at work
* Stressful life events such as bereavement or illness
* Genetic factors may make the disc more vulnerable to load and create an inflammatory environment around the nerve.

The main risk factor is genetic. Sedentary occupations are more at risk than those involving activity. Being very overweight is another risk factor. Heavy manual work and repetitive lifting do not seem to be risk factors.

**Should I be worried?**

Only 1% of people with back pain have a rare or serious condition. One rare but serious condition called Cauda Equina Syndrome. This requires emergency treatment. If you experience any of these symptoms you should visit A+E.

* New, significant pain, pins and needles or numbness in both legs
* Loss of feeling or pins and needles between your inner thighs or around genitals
* Numbness around your back passage or buttocks
* Difficulty trying to start, stop or control flow of urine
* Loss of sensation passing urine
* Leaking of urine or not knowing your bladder is empty or full.
* Inability to stop a bowel motion or leaking
* Loss of sensation passing a bowel motion
* Change in ability to achieve an erection or ejaculate
* Loss of sensation in genitals during sexual intercourse

If you would like to read this information in another language please follow this link: <https://www.eoemskservice.nhs.uk/advice-and-leaflets/lower-back/cauda-equina>

You should also seek advice from your GP if you experience any of the following:

* Severe night pain or night sweats
* Rapid, unexplained weight loss
* Weakness in your legs causing you to trip and fall
* A fever or feeling unwell

You should tell your practitioner if you have a history of cancer or have had a fall, injury or accident.

**How is it diagnosed?**

Diagnosis is usually made from your symptoms.

Most cases of nerve related back and leg pain improve in the first 6-12 weeks.

X-rays or MRI scans are not needed or recommended in the early stages. MRI scans show many age-related changes including disc bulges in many people – many of whom do not have sciatica. Many people with sciatica do not have a disc herniation. Usually a scan will not change your treatment plan or improve outcomes of treatment. An MRI scan may be considered if the symptoms are not improving on their own or with treatment. This can help us to decide on more invasive options, such as injections or surgery.

A scan is only essential if it is suspected you are in the 1% of people with back pain with a rare or serious condition.

**What can I do?**

The impact that the pain will have on you is very individual depending on who you are and what you do in life. There are many strategies you can use for managing your pain. Don’t panic if you have an increase in your pain - ups and downs during the recovery period are normal.

Move

The number one strategy is to keep active. Exercise is the best medicine for sciatica.

You should try to stay active, resume normal activities and return to work as soon as possible. It is fine to exercise with your nerve pain. Nerves are strong and tough and like movement. They move, bend and stretch with the rest of the body. A workout gives them a good stretch, disperses any inflammation and brings them a fresh blood supply.

If you find your pain is flaring up try to break down activities into manageable chunks with a rest period between being active. Build up your activity over time.

Regular exercise almost halves the risk of your back pain reoccurring. No exercise has been proven more effective. The best exercise is the one you enjoy and that you will continue to do regularly. You may benefit from starting with some of the stretches and movements below.





**Factors influencing pain and recovery**

During your recovery a number of other factors can influence your pain levels. Keep the following factors in mind to help move the healing process along:

Work

You may be worried about continuing with work, or other responsibilities. It is important to discuss these fears with your practitioner. Remaining at work usually leads to a quicker recovery even if you have to work with modified activities.

Having poor posture does not cause back pain. There is no perfect posture. Staying in one position for long periods can be a factor in your pain. It is important to plan regular breaks and change posture regularly.

Your relationship with your boss and colleagues, job enjoyment, feeling supported at work and returning to work are all very important in helping your recovery. Speak to your employer if you need support at work.

Painkillers

Painkillers may help to manage your pain but should only be taken for a short period. Paracetamol is not usually effective for sciatica. Painkillers do not speed up your recovery. They should always be used with other options such as exercise or other improvements to your well-being.

Look after yourself

Pain is not usually simply a physical problem. Your general well-being can make you vulnerable to pain and your wellbeing can also be made worse by pain. Looking after your general health and well-being will help recovery. There is helpful advice on this website: [https://www.nhs.uk/oneyou](https://www.nhs.uk/oneyou/)

Reduce stress and anxiety

It is normal for people with pain to have stress, anxiety and change in mood. This may affect your ability to cope with the pain and may influence your pain levels. Help is available if you are being affected by stress, anxiety or low mood – see the links below or discuss with your practitioner.

It is important that your whole nervous system is in a healthy state to aid recovery. If your brain is stressed or overworked this may slow recovery. Relaxation is an important part of your recovery. Simple relaxation techniques may help manage pain and stress. Try to set aside some time each day to relax – you can use relaxation techniques as linked below, or simply an activity you enjoy – reading, deep breathing, sitting in the garden, singing – whatever relaxes you.

Find help and support here: <https://www.nhs.uk/oneyou/every-mind-matters/>

<https://www.northessexiapt.nhs.uk/west-essex>

Physical Activity

Exercise improves fitness, confidence with movement and strength. It can also help reduce your stress and tension and improve your mood and quality of sleep, helping support you to return to normal activities. Perhaps you could simply start by trying to walk for 10 minutes per day.

Alcohol

Avoid alcohol in the early stages of healing (first three days). Evidence has shown this can slow down recovery and increase the chances of re-injury. <https://www.drinkaware.co.uk/>

Sleep

Sleep is very important for your wellbeing. Poor sleep quality, and lack of sleep can make managing pain more difficult. Consistently getting 6-9 hours is recommended. Get help and tips here:

<https://www.nhs.uk/live-well/sleep-and-tiredness/>

Nutrition and weight

Being overweight can increase the physical strain on the body and also contribute to inflammation in your body. Make sure you eat a balanced diet. Adult weight management services are available free to Essex residents here: <https://acelifestyle.org/weight-management>

Smoking

Smoking is also linked with an increased susceptibility to back pain and slower healing. For help with stopping smoking <https://www.essexlifestyleservice.org.uk/stop-smoking/> <https://www.nhs.uk/better-health/quit-smoking/>

**How long will it last?**

75% of people with sciatica will feel better within 28 days. Most episodes of nerve-related back pain will improve within 12 weeks.

If the pain goes out of your leg and more towards your spine that is a good sign of improvement. Symptoms of numbness and weakness may take longer than the pain to improve. Returning to work and progressing your fitness levels will help you led a normal life whilst the pain resolves over time.

There is a good chance that your pain will resolve but there is also a good chance it may not. There are no guarantees that your nerve pain will get better. Many people do improve within a few weeks but for some the pain can become persistent. If after 6-12 weeks of exercise, lifestyle improvements and non-surgical management your symptoms are still persisting see your practitioner for further assessment.

**Is there anything I should avoid?**

Avoiding aggravating activities for a couple of days may help relieve some pain but continuing to avoid activities may lead to higher pain levels, poorer recovery and longer off work.

You do not need to be pain free before returning to normal activities and work. Normal movements may produce some pain. It is safe to move - bending, lifting, twisting are safe, even though they may be sore initially– you don’t need to worry you won’t be damaging your back or nerve.

There is about a 90% chance sciatica that settles will not happen again in the next 10 years.

**What other options are there?**

Low back braces are not recommended as they can reduce the movement in your back and symptoms may last longer.

In a very small number of cases spine injections may help if pain does not improve with usual care.

Surgery is rarely needed and usually only indicated where there is progressive loss of power and sensation of the lower limb and inability to pass urine.

Besides the rare but serious types of nerve-related back pain others that have surgery are no better than those that follow an exercise programme at a 2 year follow-up.

**Other information – some helpful videos and information**

What is sciatica? <https://www.youtube.com/watch?v=HJvNBYOKf64&feature=youtu.be>

Understanding low back pain <https://www.youtube.com/watch?v=BOjTegn9RuY>

Exercising when it hurts article [https://medium.com/@thomas\_jesson/exercising-when-it-hurts-a8b70f7b1ebf](https://medium.com/%40thomas_jesson/exercising-when-it-hurts-a8b70f7b1ebf)

South Tees NHS Trust 10 Facts about Sciatica: <https://www.southtees.nhs.uk/content/uploads/ST1112-Sciatica-Booklet.pdf>