

Spinal Pain

Patient Information

MSK Physiotherapy Department & CATS



The Patient Information Leaflets page on the Trust website is available on the link:
<https://www.wwl.nhs.uk/patient-information-leaflets> or scan the QR code.

Author ID: JED
Leaflet Ref: Musc 092
Version: 1
Leaflet title: Spinal Pain
Date Produced: July 2025
Expiry Date: July 2027

Introduction

This leaflet is for people who have spinal pain and those people who would like to know more about it.

This leaflet is not intended to replace professional advice from your General Practitioner (GP) or another health professional. If you have any concerns or questions, please contact your healthcare professional

Structure of the spine

The spine is made up of 24 bones (**Vertebrae**) stacked on top of each other, and is divided into regions:

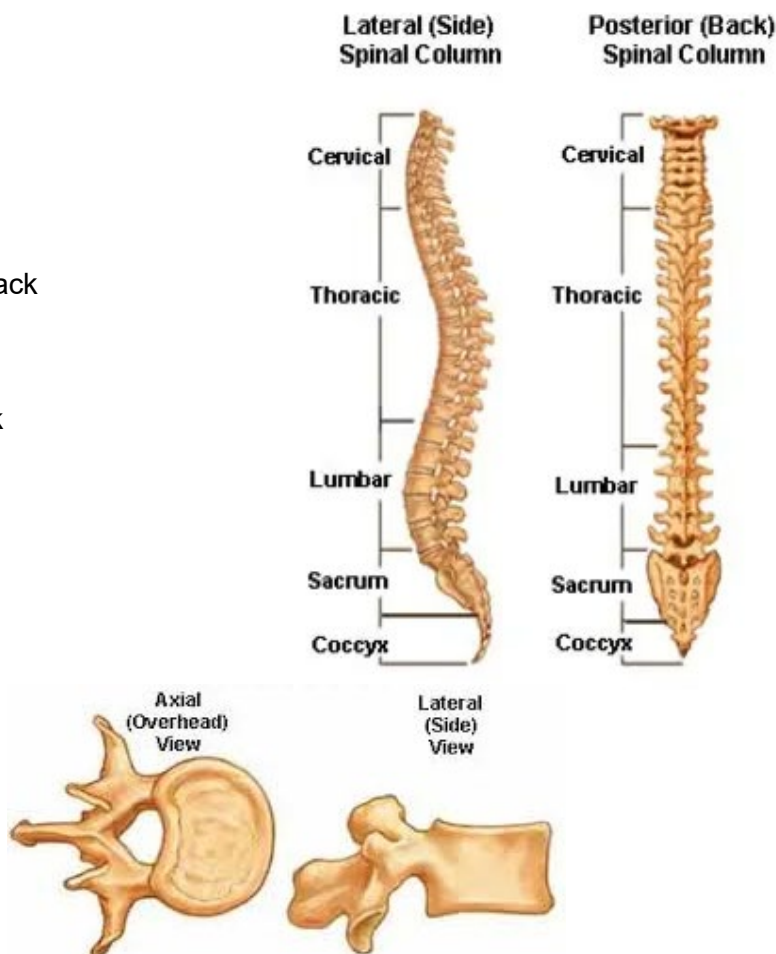
CERVICAL – Neck

THORACIC - Middle back

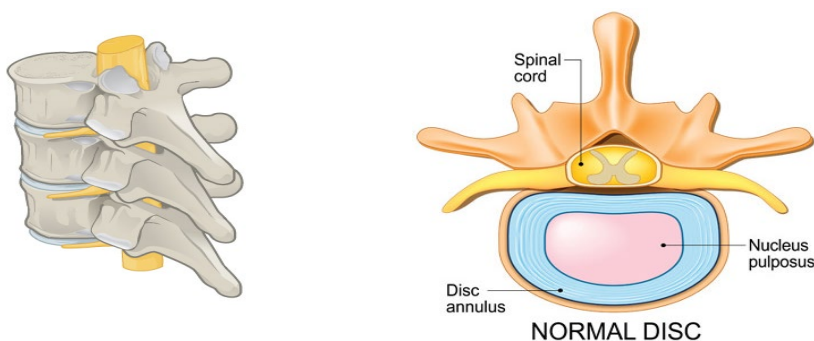
LUMBAR - Lower back

SACRUM

COCCYX



The stacked vertebrae make a bony tube that surrounds the spinal cord, keeping the cord well protected. The spinal cord carries signals or messages to/from the brain to rest of the body. The brain is the main control centre for everything that happens in our bodies. Messages are constantly being transmitted via nerves which peel off the spinal cord through small holes at the side of the spinal column.



Spinal cord and nerve roots

Between each vertebra are the spinal discs. These act as a cushion between each vertebrae and consist of a tough outer rim (annulus) with a softer centre (nucleus). The structures in the spine will naturally change as we get older, just as our skin and hair change with age.

The spine provides support for the rest of the body, allowing us to stand and bend. The spine is very strong. In healthy individuals it takes great force to damage the spine. It requires movement to remain strong, flexible, and healthy.

REST IS RARELY RECOMMENDED FOR BACK PAIN (it can make pain worse).

Causes of spinal pain

Back pain is very common. Most people are likely to experience back pain in their lifetime. Rarely, is back pain due to a serious or sinister cause (less than 10% of cases). Usually, it is due to a simple strain or sprain. Pain will usually settle with gentle exercise and pain management, such as stretches, heat and simple painkillers.

Common causes of spinal pain include:

- Smoking
- Obesity
- Being pregnant
- Older age
- Lack of exercise
- A stressful job or life
- Job dissatisfaction
- Stress
- Previous history of back pain

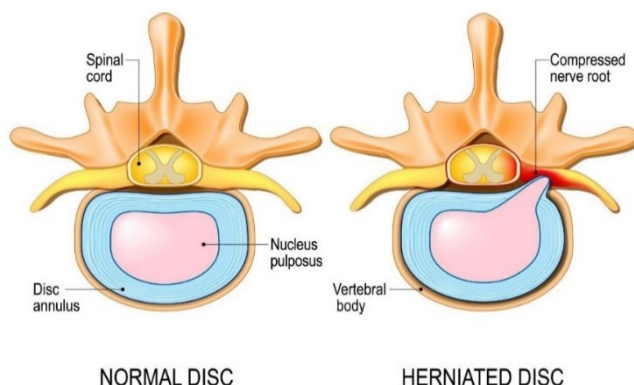
Common spinal conditions

Spondylosis

Also known as wear and tear, degenerative changes, or arthritis. This is a common cause of back pain & is due to the normal ageing process. As we get older, the discs become thinner, with the spaces between the bones becoming narrower. Sometimes, tiny bits of bone form around the edges of the joints. These are called Osteophytes or bone spurs and can contribute to pain as they can irritate the nerves as they exit the spinal cord through the tiny holes. This happens to most people as we get older but not everyone will experience pain. Once this happens, it can't be reversed but by keeping the spine strong and supple with movement it's impact can be reduced. Regular movement is vital to keep our joints healthy - motion is lotion!

Disc Bulges

Disc bulges (herniated discs) are another common cause of back pain. Discs sit between the vertebrae in the spine. They act like a cushion between the bones, helping to absorb some of the pressure that our spines are subjected to in daily life.



Sometimes the outer rim (annulus) can develop tears and the thick, jelly like centre can seep out, causing the outer rim to swell or bulge outwards towards the nerve roots. This causes the nerves to become irritated. This can result in nerve pain which is typically burning or electric shock like pain.

Occasionally, the bulge can compress or squash the nerves resulting in pain, numbness, pins and needles. Sometimes weakness can occur in the limb which the nerve supplies. Disc bulges can occur anywhere in the spine but are most common at the lower lumbar levels (L4, L5, S1). Disc bulges are sometimes called Slipped Discs, although they don't actually slip or move out of place. Discs are designed to bulge to allow the spine to move easily.

Sciatica

Sometimes back pain can cause pain in the leg. This could be a pain which shoots into the legs and can be associated with tingling, burning or numbness. This is known as Sciatica. This is a sign that the nerve is or has been irritated. The pain could travel down the leg to the foot. Sometimes the leg pain can be worse than the back pain, some people just have leg pain and no back pain. In most cases, the pain will settle quickly, but can, in some cases, persist for months. Starting gentle exercise as soon as possible can help sciatica settle. Sciatica is also known as Trapped Nerve.

As we age, wear and tear (degeneration) & disc bulges become increasingly more common (see table below). Just as our skin and hair changes with age, so do our spines.

Imaging features	Age groups (years)						
	20	30	40	50	60	70	80
Disc degeneration	37%	52%	68%	80%	88%	93%	96%
Disc signal loss	17%	33%	54%	73%	86%	94%	97%
Disc height loss	24%	34%	45%	56%	67%	76%	84%
Disc bulge	30%	40%	50%	60%	69%	77%	84%
Disc protrusion	29%	31%	33%	36%	38%	40%	43%
Annular fissure	19%	20%	22%	23%	25%	27%	29%
Facet degeneration	4%	9%	18%	32%	50%	69%	83%
Spondylolisthesis	3%	5%	8%	14%	23%	35%	50%

(Wociał, Krzysztof, & Feldman et al (2021) 'Imaging features of the aging spine' Polish journal of radiology)

Warning signs / red flags

Most spinal pains do not have a sinister cause, however if you have any of the following symptoms along with spinal pain you should see your GP immediately:

- A high temperature
- Redness or swelling on your back
- Constant pain, especially at night
- Pain that it is getting much worse and travelling up your spine to your chest
- Unexplained weight loss

Also seek medical advice if you are having back pain and:

- You are under 20 or over 55 years old
- You have taken steroids for a few months
- You misuse drugs
- You have or have had cancer
- You have a weakened immune system because of chemotherapy or a medical condition such as human immunodeficiency virus (HIV) or acquired immune deficiency syndrome (AIDS)

Many patients have a combination of back pain, leg pain, leg numbness and weakness. These symptoms can be distressing for you but don't necessarily require emergency medical attention.

Cauda equina syndrome

A rare but serious back condition, cauda equina syndrome, can lead to permanent damage or disability. If you experience any combination of the following, which are some warning signs of cauda equina syndrome, you should seek **immediate advice** from an emergency department.

Warning signs:

- 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 a bowl movement
- Change in ability to achieve an erection or ejaculate
- Loss of sensation in genitals during sexual intercourse

Any combination, seek help immediately

Preventing and managing spinal pain

Remain active

Remaining as active as possible and gradually returning to your normal daily activities and work is key during recovery from back pain and can help prevent flare ups in the future.

It is, however, completely normal to reduce aggravating activities during the first few days of back pain, however prolonged rest and avoidance of activity has been shown to be detrimental towards long term recovery, so staying as active as possible is best.

Weight management

Actively losing weight is an effective way to reduce and prevent back pain. Speak to your GP about weight loss programmes and advice if you are overweight.

Lifting and bending

Lifting, bending, and carrying whilst you have back pain is unlikely to cause any damage to the spine. Continuing with normal day-to-day activities is encouraged, which includes lifting and bending that you might do as part of your job, however modification of loads may be required in the short term whilst pain is in the acute phase.

Discussing load management with your employers and working with physiotherapy to continue lifting and bending can speed up your recovery and return to normal activities.

Exercises

All the exercises below can be performed if you have back pain, however listening to your symptoms is important as some exercises will be easier than others. Mild-to-moderate discomfort during exercise is normal, however regularly pushing into significant pain is not advised so speak to a Physiotherapist if this is occurring.

1 – Bridge



While lying on your back with knees bent, tighten your lower abdominal muscles, squeeze your buttocks and then raise your buttocks off the floor / bed as creating a "Bridge" with your body. Hold and then lower yourself and repeat.



Repeat 5 times before resting for 1 minute, if symptoms are tolerable, you can repeat this again up to 4 sets per day.

2 – Lumbar rotations



Lying on your back with your knees bent, gently rock your knees side-to-side.

Alternate left and right after for a total of 8 repetitions before resting for 1 minute, you can repeat this again up to 4 sets per day.

3 – Deadlift



Reach down and pick up a small weight such as a bag of shopping or large bottle of water. Try to keep your middle and upper back flat the entire time and hinge at your hips and lower back. Your knees can bend a little during this movement but try not to turn this movement into a squat.

Repeat 5 times before resting for 1 minute, if symptoms are tolerable, you can repeat this again up to 4 sets per day.

4 – Squats (sit to stand)



Start by scooting close to the front of the chair. Next, lean forward at your trunk and either reach forward with your arms or cross them across your chest, rise to standing without using your hands to push off from the chair or other object.

Repeat 5 times before resting for 1 minute, if symptoms are tolerable, you can repeat this again up to 4 sets per day.

5 – Walking



Continue walking as tolerable every day.

Set yourself time or distance goals to try and maintain, however if back pain is flared up then you might break this down into smaller walks throughout the day.

Remaining active is key to recovery.

Scans and x-rays for spinal pain

Most people will recover from spinal pain within 2-6 weeks using simple treatments at home. The most up to date research recommends to not routinely refer for X-rays or magnetic resonance imaging (MRI) scans for spinal pain as it does not improve outcomes or give us an accurate diagnosis. Scans and X-rays are only recommended for a very small number of people with spinal pain.

Some important things to be aware of and the limitations of MRIs:

- MRIs provide a picture of the anatomy of the spine
- MRIs cannot tell how someone feels and are not a diagnosis
- MRIs can be used to plan treatment with you and rule out serious conditions such as cancer or fractures
- MRIs are rarely needed for people with back or neck pain
- MRIs cannot see pain
- MRIs should be requested after assessment by a specialist

If you have any questions about having an MRI or need clarification on the results of an MRI scan, please discuss with the person who sent you for the MRI.

Useful resources and further information

When to Seek Urgent Help for Your Back Pain:

www.youtube.com/watch?v=FdlxfcJmn-4

Chartered Society of Physiotherapy: 10 Things You Need to Know About Your Back:

www.csp.org.uk/system/files/001446_spinedumbell_a4.pdf

Versus Arthritis Back Pain:

www.versusarthritis.org/about-arthritis/conditions/back-pain/

Lower Back Pain:

www.wwl.nhs.uk/msk-lower-back-pain

Bupa Lower Back Pain:

www.bupa.co.uk/health-information/muscles-bones-joints/back-pain

Patient Info:

<https://patient.info/doctor/low-back-pain-and-sciatica>

Flippin' Pain:

www.flippinpain.co.uk/

Contact details

Musculoskeletal clinical assessment service departments:

- Wigan 0300 707 1112 / wwl-tr.cats.msk@nhs.net
- Platt Bridge 0300 707 1422 / wwl-tr.cats.msk@nhs.net
- Leigh 0300 707 1631 / wwl-tr.cats.msk@nhs.net

Physiotherapy Departments:

- Wigan 0300 707 1113 wwl-tr.mskphysio-bostonhouse@nhs.net
- Platt Bridge 0300 707 1772 wwl-tr.mskphysio-bostonhouse@nhs.net
- Leigh 0300 707 1595 wwl-tr.leighphysio@nhs.net

All departments are available 08:00-16:00 Monday to Friday

Comments, Compliments or Complaints

The Patient Relations/Patient Advice and Liaison Service (PALS) Department provides confidential on the spot advice, information and support to patients, relatives, friends, and carers.

Contact Us

Tel: 01942 822376 (Monday to Friday 9am until 4pm)

The Patient Relations/PALS Manager
Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust
Royal Albert Edward Infirmary
Wigan Lane
Wigan
WN1 2NN

Ask 3 Questions

Become more involved in decisions about your healthcare. You may be asked to make choices about your treatment. To begin with, try to make sure you get the answers to three key questions:

1. What are my options?
2. What are the positives and negatives of each option for me?
3. How do I get support to help me make a decision that is right for me?



How We Use Your Information

For details on how we collect, use, and store the information we hold about you, please see patient information leaflet, Ref. **Corp 006** How we use your information, this can be found on the Patient Information Leaflets page on the Trust website, see details on the front cover.

This leaflet is also available in audio, large print, Braille, and other languages upon request. For more information, please ask in the department/ward.

© Wrightington, Wigan and Leigh Teaching Hospitals NHS Foundation Trust.
All rights reserved. Not to be reproduced in whole or in part without the permission of the copyright owner.

Call 111 first when it's less urgent than 999.



EMPLOYER RECOGNITION SCHEME

GOLD AWARD 2021

Proudly serving those who serve.

Phone: 0808 802 1212

Text: 81212

www.veteransgateway.org.uk

