

Physiotherapy advice Cervical Spinal Surgery



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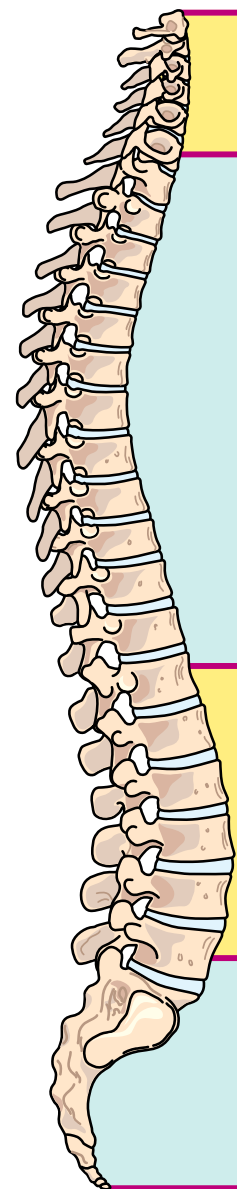
Introduction

Neck pain is very common and most of us will experience it at some point. With the right approach, basic neck pain can be avoided. This advice booklet will describe some of the basic ways you can prevent neck pain.

The spine is made up of 33 small bones, called vertebra, stacked on top of each other in an 'S' shape. Not all spines are the same 'S' shape but they are usually curved at the neck and lowest part of the back.

This shape should be kept in mind when you move to maintain the natural curves in your neck and back whatever you are doing. Each of the vertebrae has a disc in between them which acts like a shock absorber (see diagram).

Spinal nerves pass between each vertebra next to the disc and travel to the arms and legs. These nerves allow us to move our muscles and feel things at different parts of our body.



Cervical:
refers to neck vertebrae

Thoracic:
refers to vertebrae from the bottom of the neck to the lumbar region

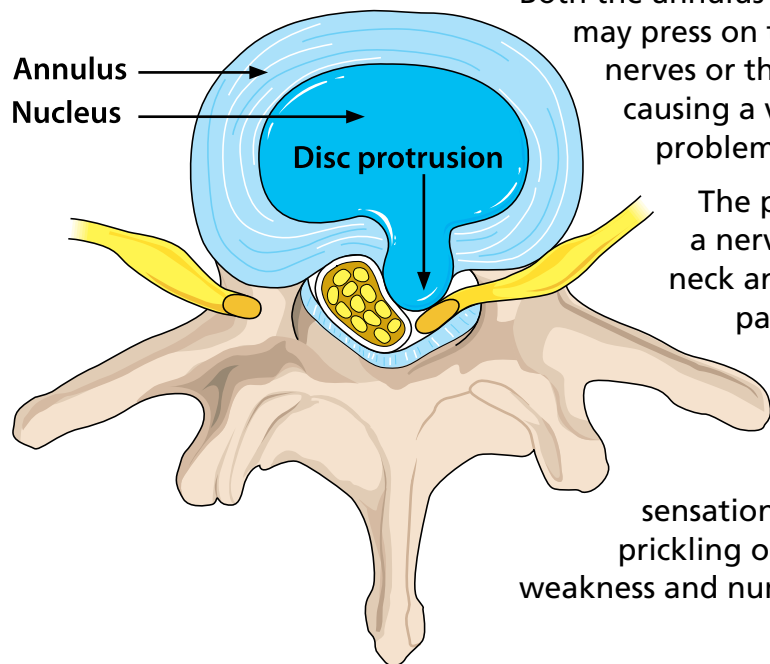
Lumbar:
refers to vertebrae in the lowest section of the spine

Beneath the lumbar spine there are another 5 vertebrae fused together forming the sacrum with the coccyx (or tail bone) underneath

What is a disc?

Discs are tough yet flexible and allow the spine to bend and twist. Discs have a central part filled with a rubbery substance called the nucleus.

The outside wall is called the annulus which is made from tough and flexible fibres. The annulus is a very strong substance which is usually able to heal and 'reseal' itself after surgery.



What has happened to my disc?

If part of the outer wall (annulus) weakens, some of the central part (nucleus) of your disc may herniate / move through it. This can occur in lots of people without them knowing it. This is referred to as disc herniation but can also be called slipped disc, disc bulge, nerve impingement, disc protrusion, or prolapsed disc.

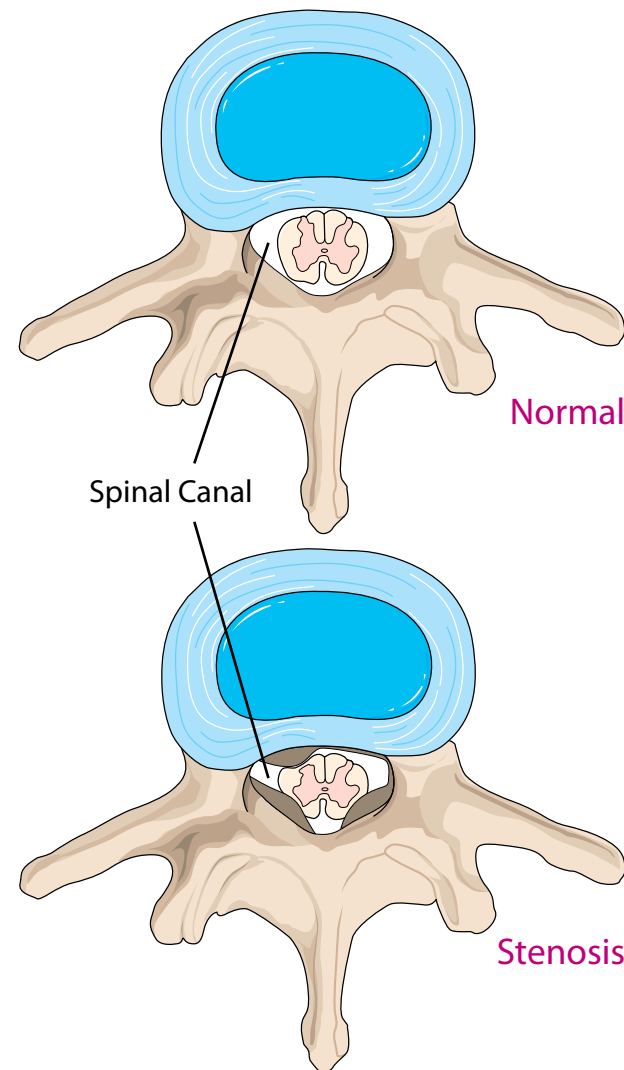
Both the annulus and nucleus may press on the spinal nerves or the spinal cord causing a variety of problems / symptoms.

The pressure on a nerve can cause neck and shoulder pain and stiffness; in the arms it can cause pain and sensations such as prickling or tingling, and weakness and numbness.

What is stenosis?

Neck and arm pain can sometimes be caused by a condition called stenosis, instead of a problem with the disc.

This is when the spinal nerves in the neck are irritated or trapped. This can be due to extra bony growth (osteophytes) pressing on the nerves.



What happens during surgery?

Your surgery will take place in an operating theatre, where you will be put to sleep by an anaesthetist. The operation is performed under general anaesthetic.

Anterior cervical decompression and fusion (ACDF)

A small incision is made in the front of the neck. The throat structures are moved to the side and the operation is performed between these and the blood vessels that are supplying the brain. The disc that is pressing on the spinal nerve or spinal cord is removed. A bone graft and a cage are used to stabilise the bones and maintain disc height to promote fusion.

Once the surgical procedure is completed the incision is closed with either stitches or clips and a sterile bandage applied.

Posterior cervical decompression/fixation

A small incision is made in the back of the neck. A small section of bone and ligament from the spine are removed so the nerves have more space. This is called a laminectomy and will not make your spine weaker. The surgeon may also remove the osteophytes, this is called a foraminotomy.

After completing the spinal decompression, the bone removed may be repositioned into a similar position as before surgery. Sometimes, to add stability to the spine following decompression, a cervical plate or rod can be placed on the side of the spine and attached using screws.

Once the surgical procedure is completed the incision is closed with either stitches or clips and a sterile bandage applied.

Disc replacement

Artificial spinal disc replacement involves removing the damaged disc and inserting an artificial disc in its place. The patient is given a general anaesthetic and the procedure is carried out through a cut in the front of the patient's neck. Bone or parts of the disc are removed from around the nerve roots (decompression) and the damaged disc or part of the disc is removed. An artificial disc is inserted that aims to allow painless movement between the bones and prevent damage to the adjacent discs over time. Depending on how many discs are affected, a person may have one or more discs in the neck replaced during the same operation, (NICE 2010).

Expectations of surgery

The primary reason for surgery is to prevent further deterioration in your symptoms, **NOT** to improve any symptoms you may already have.

If your surgery is for arm pain then you may have good pain relief following surgery.

If you have other symptoms such as weakness, muscle wasting and stiffness in the limbs, these are less likely to change and the surgery is primarily to prevent any deterioration in your symptoms.

Possible complications following spinal surgery

- Disc-space infection - this is an infection in the disc that was operated on. It is uncommon and is treated with antibiotics
- Nerve damage - this is damage to the nerves in your neck which can lead to weakness, pins and needles, temperature changes or no feelings in your arms, legs or both
- Bleeding or haematoma (collection of blood)
- Swallowing problems
- Hoarseness of voice
- Bone grafts used during surgery may not fuse properly with your bone, this may require further surgery
- Bladder and or bowel problems - this may lead to incontinence (loss of control), which may be temporary or permanent
- Dural tears or leaks - this is when the membrane covering the spinal cord (the dura) is damaged. This may lead to nausea, vomiting and headaches. It is usually treated with bed rest.

What to expect after the surgery

You must remember the main aim of your surgery is to prevent deterioration in your symptoms as opposed to fully resolving your symptoms. Some patients do notice some recovery, though this may take several months.

Everyone is different. You may experience discomfort around your wound and from spending time in one position. You may also find it difficult to pass urine and so may need a catheter for a short time after surgery.

It is normal to be in some discomfort, but let the nurse know if your pain stops you from doing normal things like eating, sleeping, walking and going to the toilet.

Soon after your surgery a nurse will come and see you to work on safely getting out of bed and walking. You will be seen by a Physiotherapist who will provide post-operative advice, information on starting to exercise and advise when you are ready for home.

If you have had clips to close your wound, the nurses on the ward will arrange a referral for them to be removed usually between 5-10 days after your surgery.

An outpatient appointment will be made for you to see the surgeon's team about 6 weeks after surgery. It is usually sent to your home address if not given to you in hospital.

If you experience any of the following symptoms you should see a Doctor immediately:

- Numbness around your back passage and genital region
- New onset of bladder or bowel incontinence
- New numbness, pins and needles or weakness in both arms and legs

ADVICE

Avoid excessive lifting and use a common sense approach.

You should not lift anything heavy for a period of 6 weeks.

It is advised not to lift objects heavier than a full kettle of water.

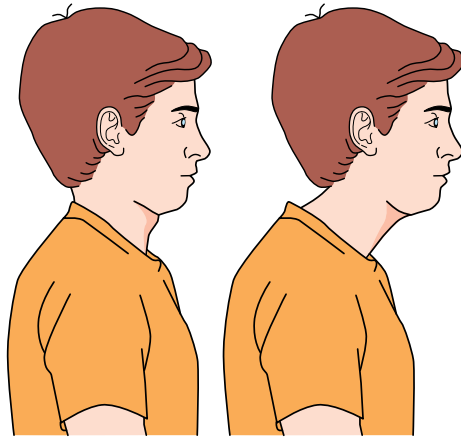
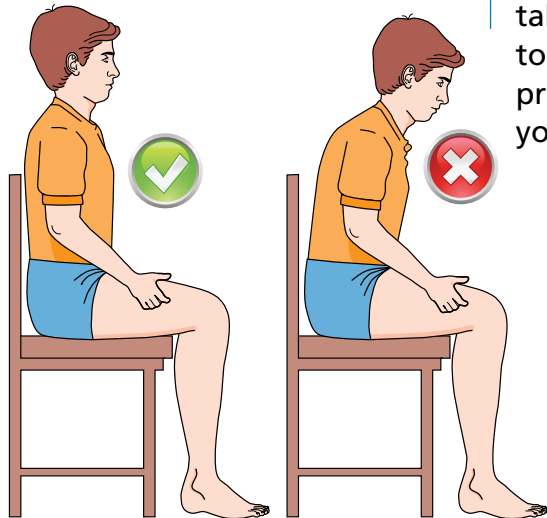
Posture

Good posture is vital as it helps to reduce strain on the joints and ligaments in your spine, therefore reducing the risk of neck pain.

After neck surgery try to avoid sitting slouched with your head and chin poking forwards.

To help your posture tuck your chin in as if making a double chin.

Sit well supported in a chair, with a pillow or rolled up towel in the lowest section of your back, if needed, so you are using your natural curves.

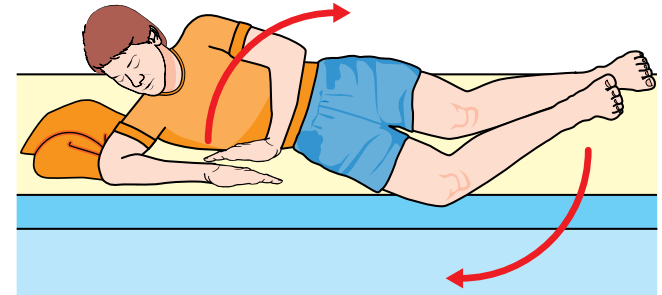


For the first few days after surgery, do not sit for longer than 30 minutes, get up, stand and have a walk.

Changing your posture and taking frequent walks will help to keep your muscles working, prevent stiffness and promote your recovery.

Getting in and out of bed

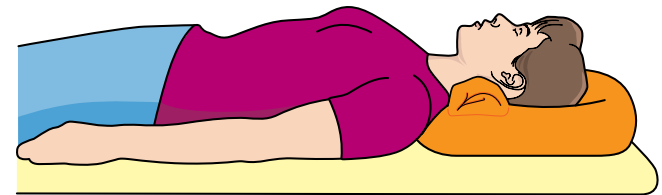
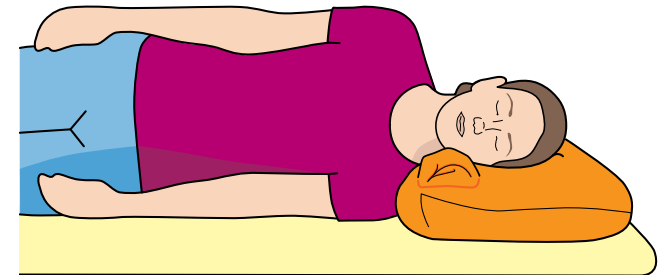
When getting out of bed roll onto your side with your knees bent and slide your feet over the edge of the bed.



Whilst doing this use your arms to help push the top part of your body into a sitting position as your legs lower to the floor (see diagram).

You may sleep on your back or side following surgery, providing your neck is supported.

If you have neck pain when in bed, try rolling up a towel and placing it in the pillow case to support the natural curve of your neck (see diagram).



Personal care

If you are having any difficulties with personal care including washing and dressing, an Occupational Therapist will assess this. If you have access to a cubicle shower this should be utilised. If you have a shower over the bath we recommend the use of a bath mat so you don't slip.

Having a strip wash at the sink is advised if there are no alternative facilities. If you feel you may struggle with bath transfers you will require a referral to your Community Occupational Therapist.

If you have difficulty getting on and off the toilet, you may need to be assessed by an Occupational Therapist. They can assess if toileting equipment is required for discharge. Alternatively, get someone to help you during the period of time you have post-operative pain.

Domestic activities

You can engage in light household activities (i.e. dusting, ironing) when you go home from hospital if you wish to but nothing strenuous until you have seen your consultant. Use a common sense approach, remembering no heavy lifting for 6 weeks, correct lifting posture for lighter tasks and pacing of activities.

Carry only things that you are comfortable carrying with one hand and do this close to your body. Aim to store frequently used items at waist height to avoid bending and overstretching. Alternatively you could try sliding objects across the work surfaces.

Occupational Therapists can also provide advice if you are having difficulties with fine finger movements that affect you using your hands for daily tasks.

- Stand close to the item you are lifting
- Bend at your knees keeping your back straight



Travelling / driving

If you have recently had neck surgery you can restart driving between 2-4 weeks dependent on your symptoms.

You must feel you can control the car, are able to turn your head to view your blind spot effectively and manage an emergency stop with no pain.

You may travel in a car but make sure you don't travel for longer than half an hour before getting out and having a walk around to relieve any stiffness.

This applies for the first few weeks following your surgery.

Return to work

You can return to work as soon as you feel able to manage, remembering heavy lifting must be avoided for the first six weeks. Your Doctor or Physiotherapist may be able to advise you further.

The nursing staff can provide you with a 'not fit to work note' when you leave hospital should you require one. Your GP can provide any further fit notes. It may be useful to speak to your employer / occupational health about your absence, potential for a graded return and for any changes / work based assessments.

Return to exercise / leisure

Everyone wants to know how soon they can start doing things, timescales can be helpful, but everyone is different and will recover at a different rate after an operation. A common sense approach is best. Being mobile as soon as possible improves your circulation and will help with the healing process.

Activity and exercises should not increase any neck pain or symptoms. If you have concerns regarding worsening neck pain or weakness contact your GP, spinal specialist nurse or surgeon's secretary.

You may or may not be given exercises by your physiotherapist. This will depend on your surgery and needs. You may or may not require additional physiotherapy on discharge. This will depend on your individual needs. This will be provided locally to where you live.

Regular daily walks are a good way to increase your general fitness and activity level. Walk for as long as is comfortable.

If your discomfort increases your neck is telling you to take a short rest and then carry on. Make a note of how far you walked and try to improve your distance next time. Make sure you take your painkillers at regular intervals; this will help you to keep mobile.

You may return to sex when your neck is comfortable. At first choose a position based on comfort.

You may return to the gym after 4 weeks starting with light cardiovascular exercise such as treadmill walking, static supported bike and cross trainer.

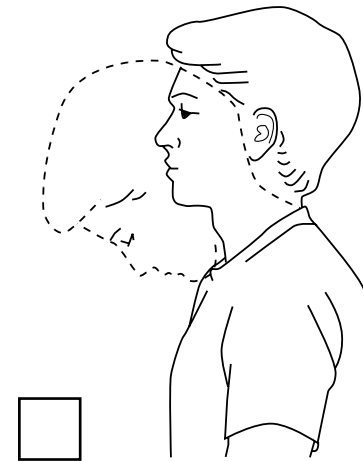
Keep all exercises low resistance and no inclines. No weighted exercises for 6 weeks. Any classes must be low impact for 6 weeks. Pilates based exercises classes can be beneficial.

You can commence swimming once the wound is healed and dry utilising any stroke but avoiding prolonged breaststroke.

Returning to vigorous hobbies, recreation or sport will need to be discussed with your surgeon in clinic.

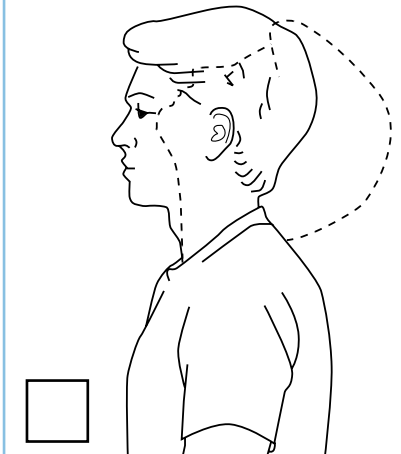
Neck exercises: active range of movement exercises

A : FLEXION



Tuck chin in and bring forwards towards the chest

B : EXTENSION



Tuck chin in and bend head backwards

C : LATERAL FLEXION



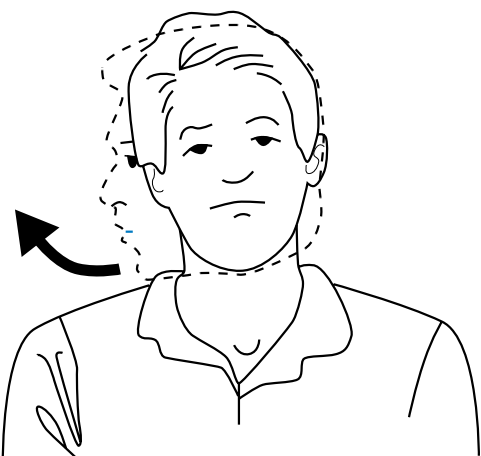
Bring ear towards shoulder without turning head or poking out chin.

Complete to (R)

(L)

Neck exercises: active range of movement exercises - continued

D : ROTATION

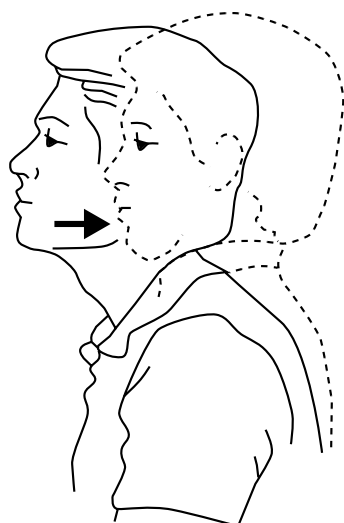


Slowly turn head to look over shoulder

Complete to (R)
(L)

E : RETRACTION

Pull head straight back (as in making a double chin)
DO NOT allow chin to rise up or dip down



Useful addresses

Back Care

National charity providing information, support, promoting good practice


 **0845 130 2704**
 www.backcare.org.uk

NHS Choices

information about the symptoms, causes, diagnosis, treatments and prevention of a slipped disc

 www.nhs.uk/conditions/slipped-disc/pages/symptoms.aspx

Disabled Living Centre

 Disabled Living, Burrows House, 10 Priestley Road, Wardley Industrial Estate, Worsley, Manchester, M28 2LY

 **0161 607 8200**
 www.disabledliving.co.uk

The Care Team

 6 Allen Road, Urmston, Manchester, M41 9ND

 **0161 746 7566**

 www.thecareteam.co.uk

Arthritis Research UK

 St. Mary's Court, St. Mary's Gate, Chesterfield, Derbyshire, S41 7TD

 **+44 (0) 300 790 0400**

 www.arthritisresearchuk.org/

NHS Direct

 www.nhsdirect.nhs.uk

NHS 111 Service

when its less urgent than 999

 **111**

Back Pain Charity

 **0845 130 2704**

 www.backcare.org.uk

NICE, May 2010, Replacing worn spinal discs in the neck with artificial discs, Information about NICE interventional procedure guidance 341

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If you need this interpreting please telephone

Polish

Jeżeli potrzebne jest Państwu tłumaczenie, proszę zadzwonić pod numer.

Urdu

اگر آپ کو اس ترجمانی کی ضرورت ہے تو مہربانی کر کے فون کریں۔

Arabic

إذا كنتم بحاجة الى تفسير او ترجمة هذا الرجاء الاتصال

Chinese

如果需要翻译，请拨打电话

Farsi

اگر به ترجمه این نیاز دارید ، لطفاً تلفن کنید

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