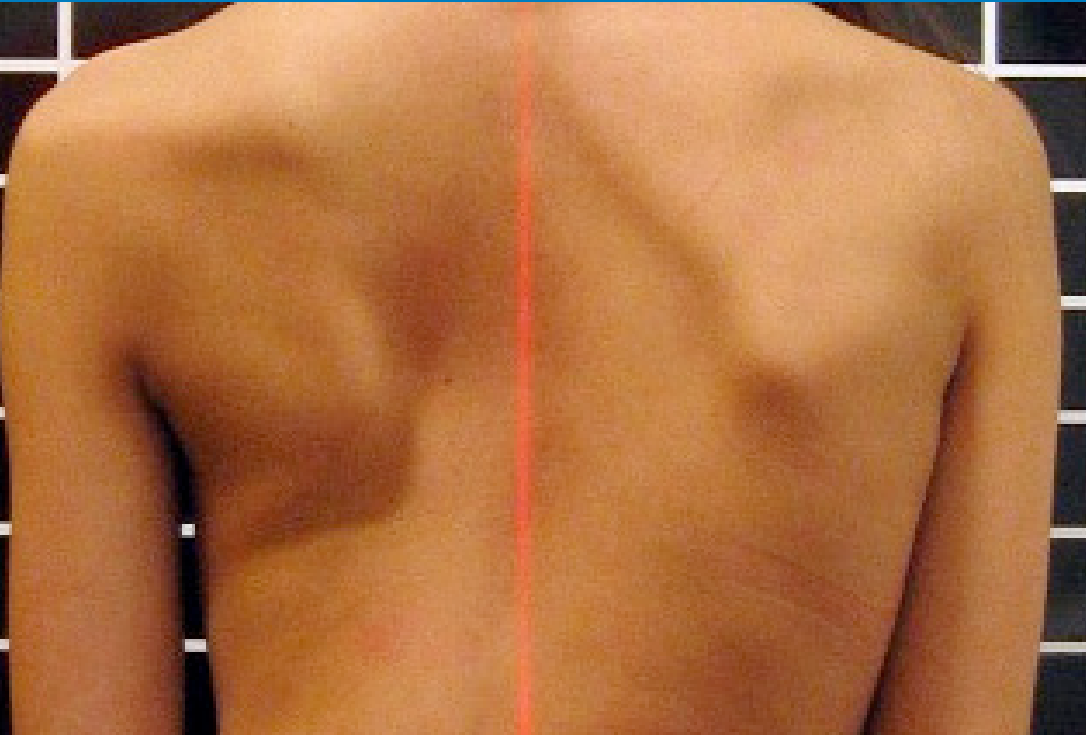


# Adolescent scoliosis correction surgery



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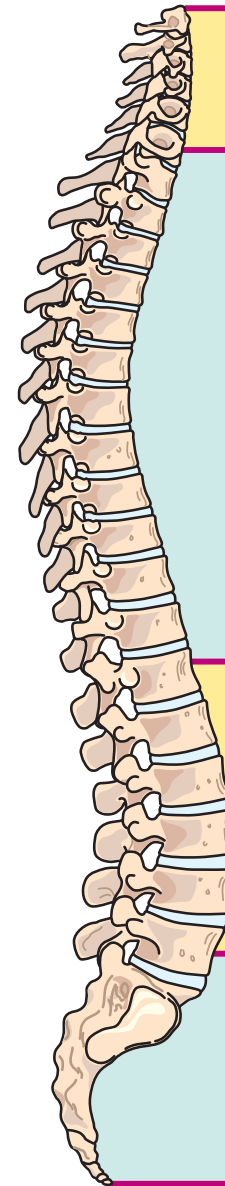
## Introduction

This advice booklet will describe some of the basic ways you can manage your back following scoliosis correction surgery.

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

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

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. The muscles in the back support the vertebrae and the disc.



### Cervical:

refers to neck vertebrae

### Thoracic:

refers to vertebrae from the bottom of the neck to the lumbar region (the vertebra with ribs attached to them)

### 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 has happened to my spine?

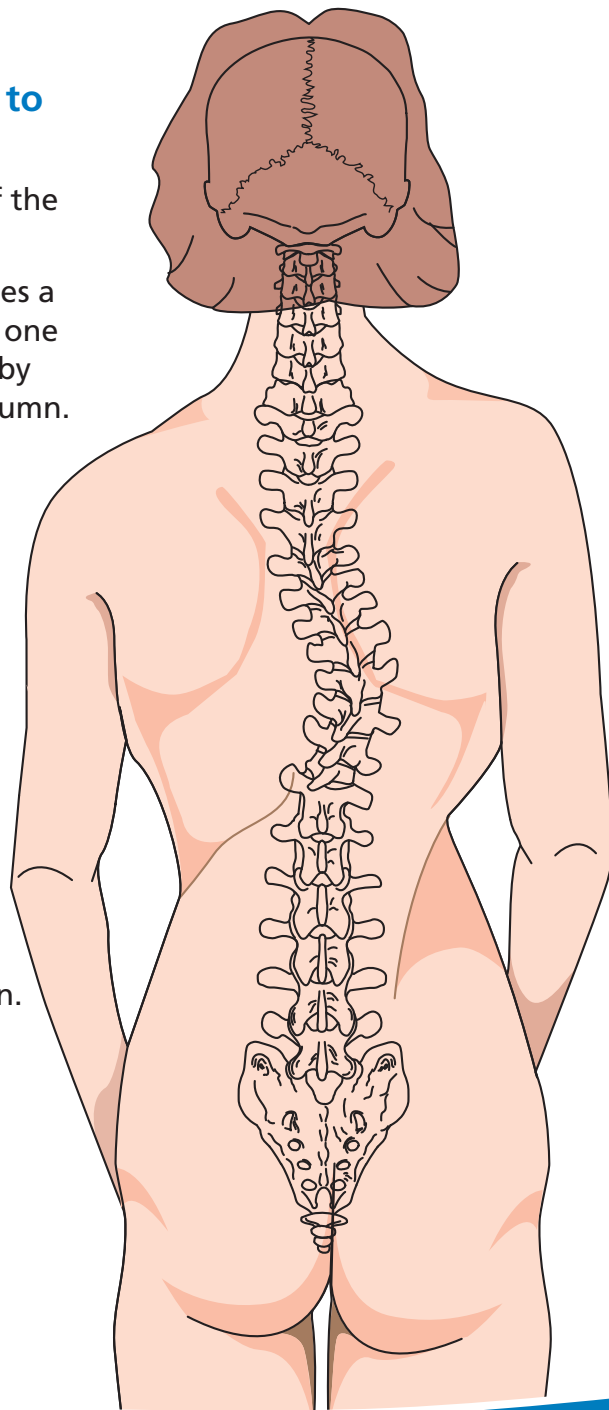
Scoliosis is a deformity of the spine which is quite rare.

It is a condition that causes a deviation of the spine to one side and is accompanied by rotation of the spinal column.

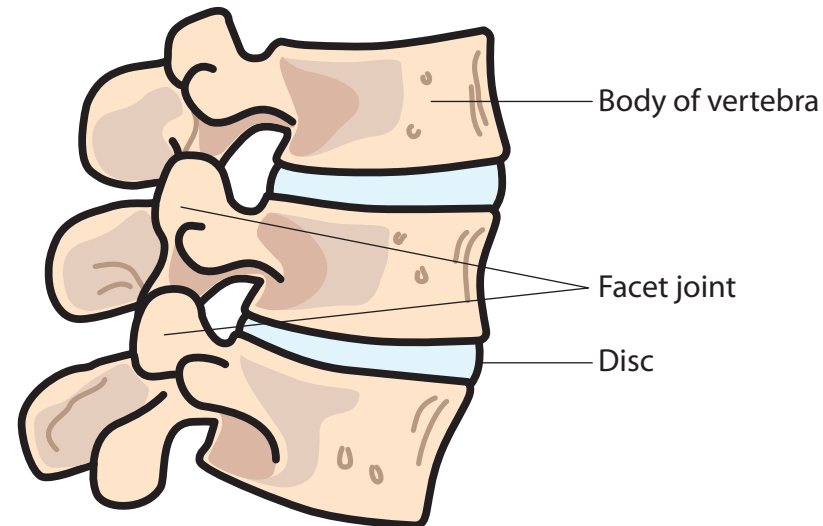
In scoliosis one shoulder may appear higher than the other, there may be a hump in the back and or a shifting of the body to one side or the other.

The most common type of scoliosis affects the thoracic spine and involves a bend to the right.

Scoliosis onset occurs after 10 years of age and the cause is unknown.



## Normal spine



Surgery may have been recommended when size of curve exceeds approximately 45-50 degrees and the spinal curvature may worsen with increasing growth.

The purpose of scoliosis surgery is to improve the shape of the spine, by correction of the curve and uses metal rods to hold the spine while it heals solidly together (instrumented fusion of the spinal column).

## What happens during surgery?

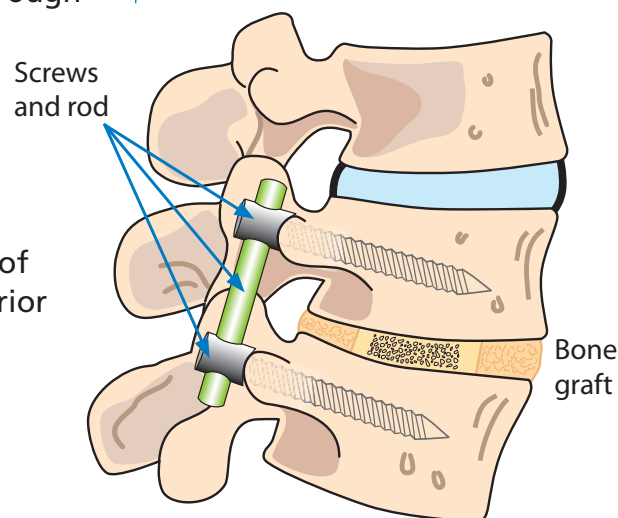
Surgery involves using metal implants which are attached to the spine and then connected to rods. The metalwork is used to correct the position of the spine and hold it in to the corrected position until the spinal segments fuse together.

Fragments of bone are placed along the length of the corrected spine stimulating healing essential to maintain the spine in the corrected position.

The surgery can be performed from the back of the spine (posterior approach), through a straight incision along the midline of the back or through the front of the spine (anterior approach), through the side of the chest, or a combination of both anterior and posterior approaches.

Drains may be inserted during surgery to drain any excess blood that may collect post operatively. Drains will be removed between 24-48 hours post operatively.

The fusions within the spine harden in a straightened position to prevent further curvature, leaving the rest of the spine flexible. It takes about 3 months for the vertebrae to fuse substantially, although 1-2 years are required before fusion is complete.



## Possible complications following spinal surgery

There is a risk of surgical wound infections. Please be aware of the following:

- Pain or soreness in **ADDITION** to the discomfort experienced after surgery that can be long-lasting.
- Delayed healing of wound.
- **Nerve damage.** This is damage to the spinal nerves which can cause weakness, pins and needles, temperature change or reduced feeling in your legs. At worst this can be complete paralysis.
- **Eyesight damage.** Very rarely patients can report damage to their eyesight.
- **Failure of the metalwork.** Rarely the rods or screws used to correct the spine can break or become detached from the spine often because the spine has failed to heal properly.
- **Further surgery.** A number of patients will require further surgery to address curves that persist following surgery or to treat complications that have arisen.
- **Constipation.** some analgesics can cause constipation; daily walking, fibre rich diet and oral laxatives can help. It is important to regain your normal bowel habit to avoid straining.
- **Deep vein thrombosis (DVT).** You will be asked to wear compression stockings post operatively and may have electronic flowtron boots which compress your calf to prevent DVT. There is a risk of developing a blood clot in your leg as you have reduced mobility for a short period of time during and after the operation. You should regularly move your legs and wiggle your toes to encourage good circulation, especially when in bed. Early mobility is encouraged.

*continued page 7*

### ● **Smoking.**

It is important that you stop smoking, smoking has been shown to increase complications after major surgery, increasing risk of chest infection. Smoking may also effect the healing of the metal work and fusion of the spine.

**If any of these complications happen once discharged please contact:**

**Kelly Jackson**

Enhanced Recovery after Surgery  
Specialist Nurse

 **0161 206 0194**

Email:

 **kelly.jackson@srft.nhs.uk**

## What to expect after the surgery

You may experience discomfort in your back and hips from spending time in one position and your wound may be painful. These are all consequences of the surgery you have had and will disappear over time.

You may experience some pain in the area where you had the operation. You will wake up with a catheter in and once you start to mobilise this will be removed.

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.

Whilst in hospital the nurse will check on you regularly to give appropriate pain relief. Following your surgery a nurse will assist you to get out of bed and walk to the bathroom.

The nursing staff will redress your wound; you are advised not to shower or bath for the first 10 days.

## Rehabilitation

Post-surgery you will be seen by a physiotherapist who will assess your strength, mobility, balance and encourage walking.

Occasionally the consultant may suggest a brace post operatively; if this is appropriate for you, you will be provided with more information. An orthotist will supply a brace and help you fit the brace initially.

You will need to be independent with placing this on and off and understand when to wear the brace before going home. You may need someone at home to be able to put the brace on correctly.

The physiotherapist will practice stairs with you prior to discharge and you will need to be independently mobile with or without an aid to be ready for home.

Usually, young people do not normally require ongoing physiotherapy once you are discharged from hospital.

## Going home

Length of stay in hospital may vary and will depend on a number of factors:

- Your medical team are happy for discharge.
- Your pain being controlled on oral medication.
- You are independently mobile and your physiotherapist is happy you are safe to go home.
- Length of stay may vary but is often between 4-5 days.

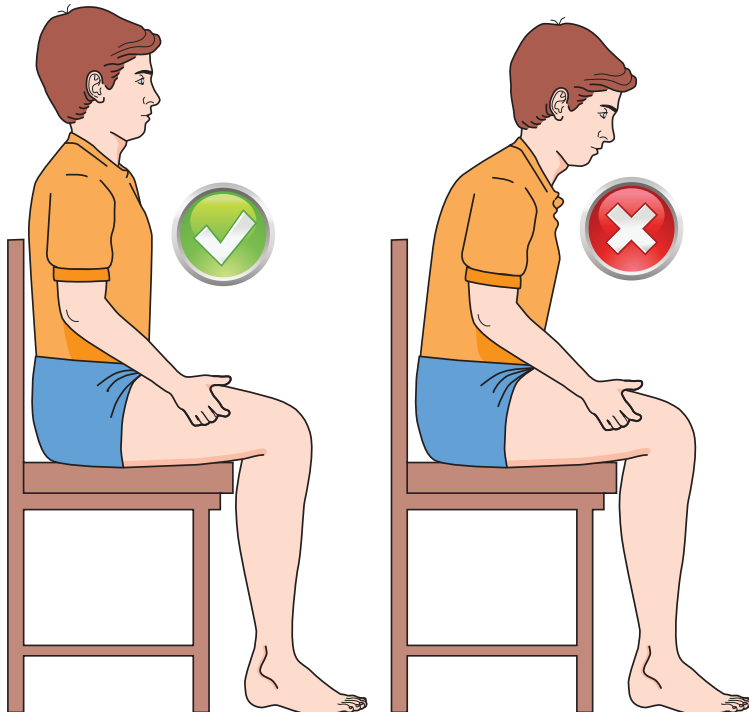
An outpatient clinic appointment will be made for you to see the specialist spinal nurse in clinic usually 6 weeks post op.

You will be reviewed in consultant clinic approximately 3 months post-surgery. An appointment will be sent to your home.

## Posture

Good posture is very important as it helps to reduce the strain on your joints and the ligaments in your spine.

Avoid sitting in a slouched position, a lumbar cushion may be used to help support the natural curve of the spine. Avoid sitting in low chairs (see diagram below).



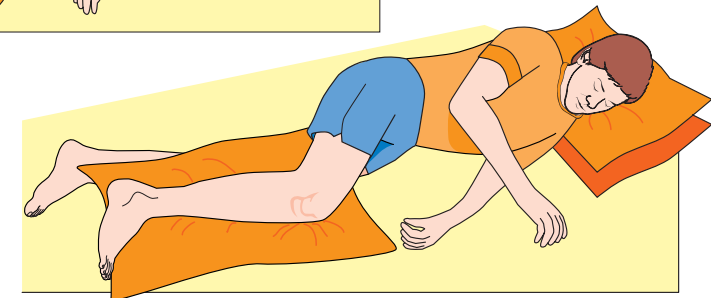
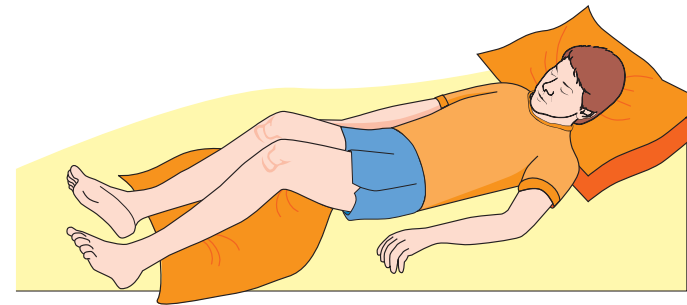
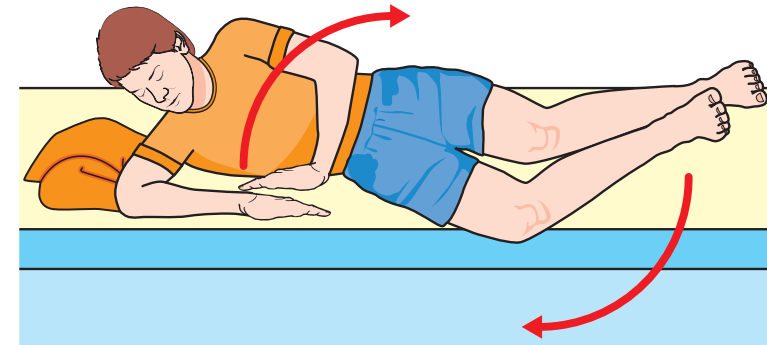
Following your surgery you may be uncomfortable to sit for long periods of time for the first few months so we advise regular position changes.

Changing your position and taking frequent walks will help to keep your muscles working and 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.

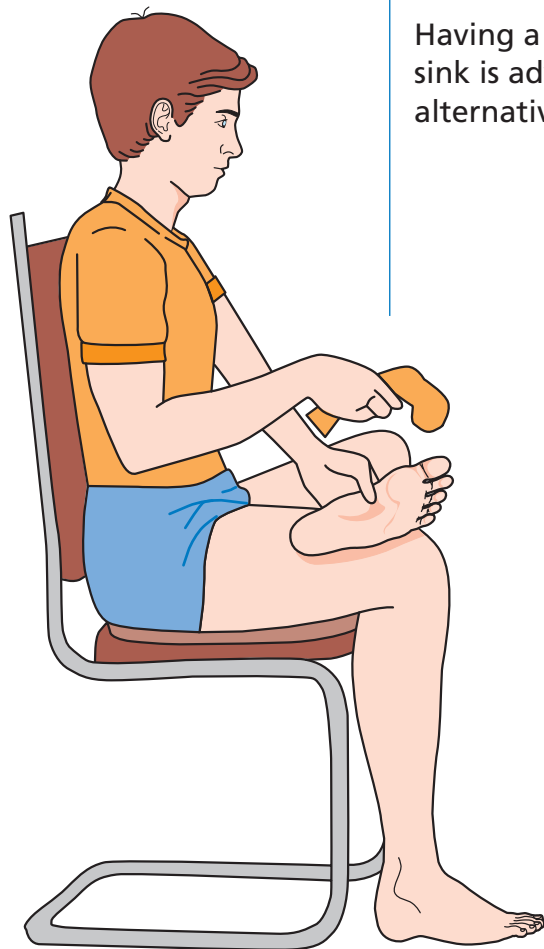
Whilst doing this, push up the top part of your body using your arms to help push you into a sitting position as your legs lower to the floor (see diagram).



You may sleep on your back or side following surgery providing you are well supported.

## Personal care

When washing and dressing the lower half of your body e.g. putting on socks bring your foot up and rest it on your knee (see diagram).



If you have access to a cubicle shower this should be utilised. If you have a shower over the bath, the use of a bath mat is recommended to avoid slipping.

Having a strip wash at the sink is advised if there are no alternative facilities.

## Domestic activities

You must avoid any heavy lifting for a period of 6 months post surgery. We advise that you do not lift anything heavier than a full kettle of water.

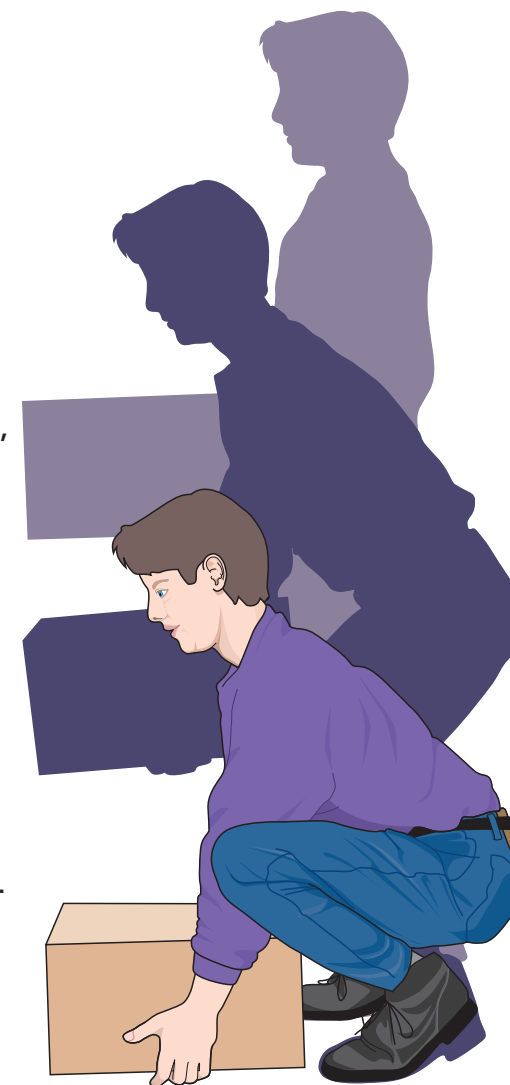
You can engage in light household activities (i.e. dusting, ironing) when you go home from hospital.

You should refrain from undertaking any strenuous domestic activities until you have seen your consultant, remembering no heavy lifting for 6 months.

Remember the correct lifting posture and technique. Consider the 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.



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

## Traveling / driving

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 before restarting driving.

Please confirm with your consultant at what stage they are happy for you to return to driving.

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

It is advisable to place a pillow or cushion in the small of your back to relieve any strain whilst travelling. This applies for the first few weeks following your surgery.



## Return to work / studies

Most young people will be able to return to college or school 4-6 weeks after surgery. If you are in full time employment however, it is likely to take longer and may be 3-6 months depending on your job. Remember heavy lifting must be avoided for the first 6 months. Your Doctor or Physiotherapist may be able to advise you further.

The nursing staff can give you a sick note, if you need one, when you leave hospital, then your G.P can provide any further sick 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 activities

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.

You will not be given specific exercises following your operation.

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 too much, your back is telling you to take a short rest, and then carry on.

Make a note of how far you walk and try and improve next time.

Make sure you take your painkillers at regular intervals; this will help keep you mobile.

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

Returning to vigorous hobbies, recreational / competitive sport and swimming will need to be discussed with your surgeon at your 3 month clinic appointment.

As a general rule, you will be able to return to impact sports / hobbies after 6-12 months depending on the type of activity.



## Useful addresses

### NHS Choice Scoliosis

 <http://www.nhs.uk/conditions/Scoliosis/Pages/Introduction.aspx>

### Scoliosis Research Society

 [www.srs.org](http://www.srs.org)

### British Scoliosis Society

 <http://www.britscoliosissoc.org.uk/>

### Scoliosis Association

 <http://www.sauk.org.uk/>

### British Scoliosis Research Foundation

 [www.bsrf.co.uk](http://www.bsrf.co.uk)

### Back Care

National charity providing information, support, promoting good practice

 **0845 130 2704**

 [www.backcare.org.uk](http://www.backcare.org.uk)

### NHS Choices

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

 [www.nhs.uk/conditions/splipped-disc/pages/symptoms.aspx](http://www.nhs.uk/conditions/splipped-disc/pages/symptoms.aspx)

### NHS Direct

Give advice on how to manage back pain


 [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)

### NHS 111 Service

when its less urgent than 999

 **111**


### Arthritis Research UK

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

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

 [www.arthritisresearchuk.org/](http://www.arthritisresearchuk.org/)


### Disabled Living Centre

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

 **0161 607 8200**

 [www.disabledliving.co.uk](http://www.disabledliving.co.uk)

### The Care Team Ltd

 6 Allen Road  
Urmston  
Manchester, M41 9ND

 **0161 746 7566**

 [www.thecareteam.co.uk](http://www.thecareteam.co.uk)

## Notes

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Review Date: February 2020

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Jeżeli potrzebne jest Państwu to 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

**0161 206 0224**

or Email:

**InterpretationandTrans@srft.nhs.uk**

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If you object to your tissue being used for any of the above purposes, please inform a member of staff immediately.

**Salford Royal operates a smoke-free policy.**

For advice on stopping smoking contact the Hospital Specialist Stop Smoking Service on 0161 206 1779

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