Welcome to the spinal team at the NOC. Together you and your spinal surgeon have decided that an operation called a spinal fusion is the best way to manage your scoliosis. This will either be because your curve:

- has increased to above 40°
- is causing pain
- is affecting your breathing.

This leaflet will explain what you need to do after your operation to help yourself recover as quickly as possible.

**Benefits of having an operation:**

Surgery aims to:

- reduce the risk of the scoliosis getting worse and
- reduce the size of the scoliosis.

**Risks of having an operation:**

Unfortunately as with all operations, although every effort is made to avoid complications, scoliosis surgery carries important risks. Some of these are mentioned below:

2. Damage to a nerve happens in less than 1 person out of 100.
3. In 10 out of 100 people the metal screws can cause a problem and they need to be removed again.
4. Infection is always a risk with an operation. This affects around 1 in 100 people. Antibiotics are commonly used to prevent this.
5. Dural tear (a tear to the membrane around the spinal cord).

Ronald McDonald House  
(parent accommodation) at Oxford Children’s Hospital  
Tel: 01865 234274

Call for further information or discuss with the Staff Nurse or Occupational Therapist at Pre-admission Clinic.

Where can I find more information?

[www.scoliosis.org](http://www.scoliosis.org) – National Scoliosis Foundation  
[www.srs.org](http://www.srs.org) – Scoliosis Research Society  
[www.sauk.org.uk](http://www.sauk.org.uk) – The Scoliosis Association (UK)

This leaflet was written and approved by the spinal team including the surgeons, physiotherapists, occupational therapists and nurses.
Having problems post operatively

A small number of people have a problem once they go home. You should contact your G.P if you have:

- Any deterioration in your bladder or bowel function.
- Any unusual leg pains or pins and needles.
- Any redness, oozing or discharge from your wound.
- Any increase in your temperature.

If you have any questions or problems, please contact a member of the team.

USEFUL TELEPHONE NUMBERS

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
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<tbody>
<tr>
<td>NOC Main Switchboard</td>
<td>01865 741155</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>01865 738074</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>01865 737551</td>
</tr>
<tr>
<td>Spinal Secretaries</td>
<td>01865 738051</td>
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<tr>
<td>Patient Advice &amp; Liaison Service (PALS)</td>
<td>01865 738126</td>
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The operation will take a minimum of 4 hours and will either be at the John Radcliffe or the Nuffield Orthopaedic Centre (NOC). Post operatively you will be taken care of at the NOC.

**The operation:**

The operation undertaken will depend on the shape of your curve. The most common operations are:

- anterior spinal fusion with instrumentation. This means the operation will be done from the front of the body. You will have a scar on the side of your body.
- posterior spinal fusion with instrumentation. This means the operation will be done from the back of the body. You will have a scar down your back.
- a combination of anterior and posterior fusion with instrumentation. You will have a scar down the back and side of your body.

**Instrumentation:**

This is the term used for the metal work which the surgeon will use to fuse the spine. It will include any or all of the following:

- Metal screws
- Metal rods
- Bone from your pelvis or rib is usually used to help with the fusion

The benefit of using metal screws and rods is that the spine is stable immediately after the operation. The bone graft will fuse with the other bones over the next 9 months. The parts of your spine which are fused will not be able to move.

**Stay in hospital:**

People vary regarding how quickly they can get going after the operation. Most people will be in hospital for 1 to 2 weeks but it is unusual to be in for more than two weeks.
After the operation

The wound
Your wound, just like any cut, may be a bit sore to begin with. But a back operation does not weaken your spine. It is just a matter of the wound healing and getting the moving parts and muscles working again.

Pain relief
You will have pain relief medication immediately after the operation to make you more comfortable and for as long as you need it afterwards. Pain control is important, particularly in the first few days and weeks. This is partly to make you comfortable but also to help you get going. You should not hesitate to use pain killers if you need them. It is best to take them regularly rather than letting the pain build up. You can safely mask the pain to get active—you will not do any harm.

Plastic jacket
Once you can stand for twenty minutes you will be fitted with a plastic jacket. The purpose of the jacket is to help you find your new position and to give you some support after the operation. The jacket is commonly worn for around three months (possibly longer). It can be removed when you are sleeping and when you stand in a shower but needs to be worn at all other times. It can be worn underneath your clothes so that it is not visible.

Physiotherapy
The physiotherapist will come to see you on the day after your operation. You should expect to be getting out of bed within 48 hours after your operation. This is the first step in your rehabilitation and helps prevent post operative complications. It is unlikely that you will receive physiotherapy after discharge, however, if this is required it will be arranged locally.

Standing
Stretch your arm above your head
Lean over to the side
Repeat to the other side

Cycling on an exercise bike if you have access to one

You can return to swimming after 3 months.
Kneeling on all fours
Hollow your back

Lean over a stable surface at hip height
Lift one leg backwards
Repeat on the other side

How soon can I get going?

You should be able to do a lot surprisingly soon after the operation. But people vary in how long it takes them to get active. Things that affect this include:

- your age
- how fit you were before your operation
- how confident you are
- how much pain you have

You will need to start slowly and build up your stamina over a period of months by pacing yourself. Please refer to the activity chart for guidance on when to start activities.

You may feel some pain when you begin to do things again but this is normal and does not mean that you are doing any harm to your back.

Good and bad days are normal

You will find that you will have days when the pain is better or worse. This is normal. On a good day it is tempting to do more, but this is not a good idea, as it can lead to a flare up of your pain. It is best to keep to your activity plan even on bad days.

Within two months you should be doing most everyday things fairly normally. Heavy physical activities come more slowly. You do not need to avoid lifting all together—just be sensible and leave the heavy stuff for a while.
Practical Tips

Toileting
You might find it difficult to go to the toilet at first. Don’t panic, sit down, relax and take your time. It helps to take your painkillers about 20 minutes before. The sound of running water sometimes helps. Constipation is quite common, but nothing to worry about. It may just be the side effects of the painkillers. It helps to drink plenty of fluids. If need be, take a mild laxative. It might surprise you, but just walking helps.

Getting out of bed
Bend your hips and knees, roll onto your side, swing your legs over the side and push up with your hands into sitting. It does help if the bed is higher than normal. You can progress to getting up normally over time.

Bending forwards
It will be easier to use your knees rather than your back.

Washing
Initially, you will have to wash at a basin with a cloth. This is to prevent the wound from getting infected. You may return to showering after 1 week in a shower cubicle only. Baths are best left until 3 months after the operation.

Dressing
You may find it easier to get dressed while lying on the bed or perching on the edge of your bed or a chair. Lots of people wear slip on shoes initially. Others put their shoes on by putting their foot on a chair.

Sitting
You will find it easier to sit on something high like a high stool or a chair raised by cushions initially. You will find it helpful to only sit for short periods initially. It is useful to have a walk each time you get up from sitting. You can sit in normal chairs once you are comfortable to do so, but this often takes a few weeks.

Getting out of a chair
To begin with you will find it easier to get out of a higher chair. It helps to move your bottom to the front of the chair, and use your hands to push up.
Exercises to add once the plaster jacket is removed

Your back might feel stiff. Some of these exercises will help to loosen your back up.

☐ Lying on your back.

Use your hands to bend one knee towards your chest.

Repeat on the other side.

☐ Lying on your back.

Use your hands to move both knees towards your chest.

Housework (have a look at the activity chart)

You can return to normal household activities as you feel able to do so. However, you may be more comfortable if:

- You use pacing techniques to do tasks such as hooverying.
- You sit on a high stool when ironing or preparing meals.

Shopping

Initially shopping may be more comfortable if:

- You use 2 smaller bags or a backpack.
- You use a shallow trolley rather than a deep one.

Also

- Some supermarkets have a “carry to car” facility to help with your shopping.
- Try internet shopping.

Pacing activity

After the operation everyone builds up how much they do at different rates. The activity chart will give you a general feel for what’s normal.

As a general rule, do things slowly at first and a little bit at a time.

Establish a routine of activity that builds up gradually, step by step and day by day.

The first thing to do is find out what you can manage. Expect this to be less than what you could do before the operation. It helps to keep a record.

I can

Sit for ———— minutes at present

Walk for ———— minutes at present.

Once you know what you can do then you can work to improve it.

To do this you need to do a bit less than you can do (say 80%) but practice frequently and then build it up gradually by doing a bit more every few days.
**Getting back to normal (have a look at the activity chart)**

Within a few months you should be back to most basic activities. Begin by getting out and about, driving, shopping, friends, clubs, regular exercise. It will be 12 months before you begin strenuous sports and even then you must train and build up gradually.

<table>
<thead>
<tr>
<th>Build up gradually</th>
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<tbody>
<tr>
<td>5 min</td>
<td>Sitting/ standing/ driving/cycling/ walking/ swimming/ running</td>
</tr>
<tr>
<td>6 min</td>
<td>8 min</td>
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<tr>
<td>11 min</td>
<td>15 min</td>
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<tr>
<td>20 min</td>
<td>5 min</td>
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**Driving**

You may resume driving after the jacket is removed as long as you are able to control the pedals and perform an emergency stop. It is best to inform your insurance company that you've had an operation.

You can get into the car normally, but if this is difficult then you can try sitting down first and then putting your legs in. Similar to other activities you need to build up the length of the journey gradually. Stopping regularly to stretch or have a walk will help.

**Sexual activity**

Your back is not fragile, so the decision about when to have intercourse is really governed by when you feel comfortable to do so. This is likely to vary from person to person. The activity chart will give you a guide.
Work or School
You need to get fit for returning to work or school as soon as possible. You do not need to wait until you are painfree. If you are returning to work, how long you are off depends on your job. The following is a rough guide:
- Desk jobs 8—12 weeks
- Light lifting 4—6 months
- Heavy lifting 12 months

It helps to make a plan for when and how you are going to return firstly to work and secondly to your normal duties.

Return to Work Plan
- What does your job involve? (e.g. sitting/ lifting/pushing/pulling/ driving/ bending/ walking/ reaching)
- Which of these activities are not a problem?
- Which of these activities are or may be difficult?
- How can you make the activity easier?
- When do you aim to return?
- How many hours/days will you manage at first?
- Who do you need to talk to to arrange things?

Sit down then stand up
Repeat several times

Standing
Step on and off a step
Change to leading with the opposite leg
General Advice to assist with the return to School/College

Due to fatigue you may wish to make a graded return to school (i.e. starting with half day and gradually increasing the time spent at school).

Travelling on a busy school bus may be difficult to start with, so alternative arrangements may need to be made.

It is useful to have permission to leave class 5 minutes early, to avoid the potential of being knocked in corridors, and to allow extra time to get to lessons.

Ensure you can sit in a position in class where you can face straight forward and do not need to look over your shoulder or twist you spine.

No carrying heavy equipment or books. A light backpack over both shoulders is acceptable.

P.E. and sports. No sports for 3 month.s. After 3 months you can start light exercise such as swimming. No contact sports for 12 months.

If you or your school have any specific queries, please feel free to contact the Occupational Therapy Department at the Nuffield Orthopaedic Centre on 01865 737551.

Exercises

The following exercises are designed to get you back to normal activities as soon as possible.

It is best to exercise in small amounts, but several times a day. Start exercising at a level you find easy, and progress gradually.

In addition to these, it is important to:

- Take 2 or 3 deep breaths every half an hour to prevent you developing a chest infection.
- Pump your feet up and down, push your knees down into the bed and squeeze your bottom muscles to prevent you developing a deep vein thrombosis (DVT).

Exercises with the plastic jacket on

Lying on your back, pull your tummy button in towards your spine whilst breathing normally. You may find it helps to squeeze your bottom whilst doing this.

Lying on your back

Bend your hip and hold the leg behind the knee

Straighten the leg until it pulls a little.

Do this one in the morning before you put your plaster jacket on.