

# Scoliosis Surgery

## Questions and Answers

Patient information

A circular X-ray image of a human spine, showing the vertebrae and intervertebral discs. The spine is slightly curved, consistent with scoliosis. The image is centered on the page and surrounded by blue decorative elements.

Specialist Care  
Centre

In this booklet are some answers to questions that you may have regarding your care around the time of your scoliosis surgery and during the recovery time afterwards.

## Admission and pre-operative care

### What investigations are done before admission?

You will need blood tests, swabs taken from your nose and groin, clinical photographs and lung function tests. These are done in clinic. Some children need an appointment with the consultant paediatrician who will make a full assessment of their health and may request other tests to make sure they are well enough for surgery. Bending x-rays and an MRI scan may be required if not done earlier. Some children with other health problems, such as cerebral palsy, are admitted for a day or overnight a few weeks before surgery for their investigations. If you are being admitted on the day of surgery, you will come to the clinic the week before your operation for another blood test, measurement of height and weight and urine test – you will be asked to provide a sample.

### What investigations will be undertaken when I am admitted?

Unless you have been to clinic in the week before surgery, you will have another blood test, measurement of height and weight and a urine test. You will be seen by the anaesthetist to make sure you are fit for surgery if you have not been seen by them earlier. They will talk to you about what happens in the anaesthetic room, pain relief and monitoring of the spinal cord. You will be told that if the rare event that the monitoring does not pick up the correct signals, to be safe you may be woken up just enough to hear the anaesthetist asking you to move your hands and feet, before being fully anaesthetised again. If this happens, you would not feel any pain and would probably not remember it when you woke up.

The ward staff and / or specialist nurse will complete the admission forms and do some baseline observations – temperature, blood pressure, pulse and oxygen levels. If you need other tests, these will be explained to you.

### Can someone stay with me?

One parent or carer over the age of 16 can stay overnight. On the ward they can sleep on a camp bed next to you. When you are in the Paediatric Intensive Care Unit (PICU), High Dependency Unit (HDU) or Intensive Care Unit (ITU), someone can sleep on the ward but can, with agreement, see you overnight. In children's areas, parents can visit any time and friends and other family members between 11am and 7pm. There are restrictions to visiting times on adult wards. There should be only two visitors to a bed. This is enforced in intensive care wards.

### Car parking

The specialist nurse can give you a form that entitles you to a months parking pass for two cars for a reduced fee. It may also be possible to claim for a blue badge from your local council to allow you to park closer to shops etc, while you recover.

### Cancellations

Occasionally planned surgery has to be cancelled due to factors such as lack of ITU / HDU beds or illness of one of the team members. This is frustrating for everyone involved and we appreciate the disruption and stress this causes to you and your family. If this happens, we apologise, and will try to re-arrange your surgery for as soon as possible.

## Day of surgery

### What happens on the morning of surgery?

You will not be able to eat or drink anything after midnight on the morning of surgery. If you are coming in on the morning of surgery, you can have a small glass of water or dilute juice before 6am. If you are on the ward, the night staff will bring this to you. You will be given a theatre gown to put on over your pants and some local anaesthetic numbing cream will be put on your hands ready for the small tube (cannula) to be put in to give you medicines in theatre. The ward nurse / specialist nurse will go through a theatre checklist with you, ensuring that you are ready for surgery. When you are ready, you and a parent / carer will be escorted to the paediatric surgical day unit, then on to the anaesthetic room. Your parent / carer can stay with you until you go to sleep.

### How long does the surgery last?

The anaesthetic preparation and surgery take a long time – usually all day. It is a good idea if your family goes out of the hospital to try and make the day seem a bit shorter. A contact mobile telephone number should be left with ward staff during this time. After surgery and recovery from the anaesthetic, the surgeon will come and speak to you/your family.

## Intensive care

You will go to PICU, HDU or ITU for at least the first night, as the staff there are able to monitor you more closely than the nurses on a busy ward.

## What tubes will I have in?

Quite a few, at least for the first couple of days!

- 1. A urinary catheter.** This goes to your bladder and lets urine come out without you having to get up and go to the toilet. This is put in when you are asleep and the nurses will take it out after a few days. This feels a bit strange but does not hurt.
- 2. Wound drain(s).** To remove any blood from the wound area. These are usually removed after 48 hours or when the drainage settles.
- 3. Chest drain.** If you have surgery anteriorly (from the front) you will have a chest drain inserted. This is to clear any blood, fluid or air, allowing the lung to expand properly. These drains will be removed on the second or third post-operative day. This will be uncomfortable, but is quick and you will be given pain medication beforehand. You may need a chest x-ray following removal.
- 4. Monitoring.** You will also have a monitor attached to one of your fingers and a blood pressure cuff on one of your arms.
- 5. Oxygen mask.** You may have an oxygen mask on your face when you are recovering from the anaesthetic and sometimes for a while afterwards.
- 6. Cannula.** Some medications and fluids will be given through a cannula (a small plastic tube) into a vein, usually in your hand or arm.
- 7. Central line.** You may also have a line into a vein in your neck for the first day or so.

## Will I be in pain after surgery?

Scoliosis surgery is a major operation and will involve some pain, but this is minimised as much as possible. During the operation you may get some medicine that numbs the spinal area and this area stays numb for a while afterwards. The anaesthetist will give you sufficient pain relieving medicines in theatre and recovery, and you will get more as needed by a Patient Controlled Analgesia (PCA) device. This will have been explained to you by the pain team, but is basically a button that you can press to give you some pain relief medicines when you need it. It has a special 'lock out' setting that does not allow you to give yourself too much medicine so it is safe. As you won't be able to press the button when you are sleeping, a machine will give you a constant low-dose morphine infusion. Occasionally, you may get medication through an epidural catheter directly into the operated site. Again, the pain team will explain this to you if it applies. The ward staff will also give you regular medications and you will have some to go home with.

## Will I get pain or discomfort anywhere other than my back?

If you have anterior approach surgery, which requires a chest drain, the site of the chest drain may be sore but as the drain is usually removed in a couple of days, this does not last too long. You may also find the urinary catheter a bit uncomfortable but it should not hurt. You may have mild, temporary skin reddening where your bones stick out at your hips and / or knees, or on your face. This is due to the positioning required for surgery and is common after long operations. As you have been lying on your front you may find that your face is quite puffy for a day or two following surgery.

## What do I need to tell the surgeons and medical / nursing staff about?

Anything that concerns you. All worrying symptoms such as limb weakness or numbness should be reported straight away. Leg pain can occasionally be caused by irritation of the nerves or inflammation. Chest pain, difficulty breathing or passing urine, feeling sick or vomiting should be reported straight away.

## Will I need a blood transfusion?

Your own blood lost during surgery, is saved whilst in theatre and is usually transferred back to you if appropriate. Sometimes, additional blood from a donor is given if your blood level drops below a certain level and you have symptoms.

## Recovery on the ward

### When can I eat and drink?

During the first few days after surgery you probably won't feel like eating much, due to the anaesthesia, operation and because you are not moving about as much. You will probably have a drip up, which will give you fluids into your body, to make sure you don't become dehydrated. You may find that you feel sickly. The nurses can give you medicines to try to stop this. When you are able to eat, it is a good idea to eat foods high in fibre (fruits, vegetables, wholemeal bread and cereals) and drink plenty of fluids as these will reduce constipation. You may lose weight until your appetite returns to normal.

## What will my wound look like?

Depending on the exact type of surgery the position and length of the wound will vary. You will have a scar in the middle of the back for surgery done posteriorly (through the back of the spine), and scars at the side of the chest if the procedure is done anteriorly (through the front of the spine). These scars may fade to a certain extent after about 18 months. You will have stitches hidden under the skin which do not need removal and will dissolve within three weeks. There may be steri-strips (paper strips) covering the wound and these are removed two weeks after surgery with the dressings if the wound has fully healed. Occasionally, staples are used to close a wound, and these will need removing after two weeks. You will have been given an appointment with the specialist nurse to review your wound, or if it is easier, you can go to see your GP practice nurse. Any redness or discharge from the wound should be brought to the attention of the surgeon immediately.

### When can I get up after surgery?

You will be helped to get up by the physiotherapist as soon as you feel comfortable after surgery. You will be allowed to sit up after surgery – at first this will be in bed, but you can sit in a chair as you progress. On the second or third post-operative day you will be standing and walking a few steps in the room. Between the fourth and sixth day after surgery you will progress as you feel comfortable. It is important to move about as much as you can – it is good for your lungs, your skin, your digestive system and speeds recovery.

### Will I be able to sleep well?

You may have trouble sleeping after surgery. This is due to a number of things – being in a strange environment, discomfort, worries and anxieties. This disruption to normal routines can also make you tired so you might fall asleep at times during the day.

### How long will I be in hospital?

For most people, surgery is single stage and usually you stay about a week but this depends on how well you have recovered. You need to be able to mobilise, eat and drink, and be comfortable before you can be discharged home. If your curve is severe, your surgery may involve two operations and your stay will be about two weeks.

## Recovery at home

### Will I look completely straight afterwards?

The aims of scoliosis surgery are to partially correct the curve as safely as possible and to prevent the curve getting worse. You will stand straighter and be taller by a few centimetres following surgery. Everyone is different and there are lots of different possible outcomes. Your surgeon will have discussed this with you. As your body and brain adapted to your spinal curve before surgery, it can take a while for them to adapt to the new you. With the help of the physiotherapist, and your family and friends reminding you to stand up straight, this improves over time.

### How flexible will I be?

Your spine can be divided into three parts – the cervical (neck), thoracic (rib cage area) and lumbar (lower back). Most scoliosis

surgery involves fusing the thoracic and top of the lumbar spine. Fusing the thoracic spine can limit rotation movement and fusing the lumbar spine can limit bending. Most patients will lose some movement of their spine, but the hips and upper spine compensate and so the body adapts very well.

### When can I go in the shower?

It is safe to shower when the wound has been seen by the specialist nurse or practice nurse and it has healed fully – about two weeks after surgery. Baths are not recommended for four weeks. Avoid heavily perfumed products. Always pat the wound dry rather than rubbing. You will need help initially, as you may feel weak when you stand. You may also need help washing your hair and drying your legs and feet. You can ask to have your hair washed in bed in hospital before you leave. The ward staff have special equipment to enable them to do this for you.

### What will my back feel like as I recover?

Your wound site may itch a bit as the skin heals, and then may be a bit numb – it may take up to a year for the feeling to come back. Sometimes the skin can be very sensitive. This should settle, but if it is prolonged and causing problems, we may be able to refer you for desensitisation therapy. Occasionally you may be able to feel the metalwork, especially if you are very slim. You will get used to this!

### Will I have a brace after surgery?

Sometimes a brace is needed after surgery to support the spine further. This depends on your surgeon and your spinal problem, and this will be discussed in clinic or after surgery.

## After discharge home, when should I call the team / GP?

- Wound – redness, discharge, gaping (surgical team)
- High fever not associated with cold, flu or other illness (GP)
- Numbness, weakness, severe shooting pains in the legs (surgical team)
- Increase in pain at the wound site (surgical team)
- Excessive swelling in the legs and/or calf muscle swelling (GP)
- Urinary problems, such as pain when passing urine (GP)
- Constipation (GP)
- Vomiting or abdominal pain (GP)

## When can I stop the pain medication?

When you feel comfortable – there is no set time. If you need more medication, you can buy most over the counter or your GP should be able to help.

## What aftercare will I have?

You will be seen in clinic regularly – usually at six weeks, six months, one year and two years. You can contact the team at any time if you have concerns.

## What about transport?

You can travel in a car on discharge from hospital but avoid long distances for three weeks or you may get uncomfortable. You should not drive for six weeks and check with your insurance company. After six weeks you can take a short flight (up to about three hours), but for long haul flights you should wait about three months. More individual advice can be obtained from your surgeon's team.

## When can I go back to school?

You should be able to go back to school after four to six weeks. It might be useful to speak to the school about going in for half days at first. Until then, the hospital teaching service will liaise with the school to ensure you do not miss too much work and may arrange home tuition. If you have exams coming up, please let the team know, as the surgeon can write to the school if special requirements are needed.

## How much can I do afterwards?

- Start with walking exercises as much as you are able and try to undertake normal daily activities as much as you can.
- Start simple core stability exercise to the back and stretching exercises to the limbs. The physiotherapist will teach you these before you go home.
- You can start gentle bending and twisting movement of the spine as tolerated.
- Initially you may tire easily and need to pace yourself, doing more each week.
- You can start swimming three to six months after surgery depending on your surgeon's advice.
- Restrict your activities to light for three months and moderate for three to nine months.
- Avoid contact sports and horse riding for a year.
- You should not lift heavy bags for at least six months, and then avoid when possible and carry backpacks using straps over both shoulders.
- Moderate to heavy activity can be recommenced after a year, with common sense precautions.
- Trampolining should be avoided.

## Can I sunbathe?

You should protect the scar from sunlight for a year then follow the usual precautions for sunbathing.

## Will I need further surgery and will the metalwork need to be removed?

This rarely happens. The metal put in acts like a scaffold for one to two years until the fusion of the spine occurs. The metal is not usually removed, unless in the rare event it causes any problems.

## Will the metalwork set off airport scanners?

The metal used is titanium and / or cobalt chrome. Walk through scanners will not usually be activated but hand held ones may be. A quick explanation to the security staff beforehand may ease your worries. You could carry a copy of your post-op x-ray when you travel.

## Will I be able to have a baby?

Your surgery does not prevent you conceiving, carrying a baby or having a normal delivery. You should, however, let the midwife know at the booking in appointment that you have had scoliosis surgery. If your surgery extended to your lower back then epidural analgesia during labour may be difficult. You should inform your midwife and obstetrician about it when you attend for delivery. Most women get some back pain during the later stages of pregnancy and your risk of developing back pain during pregnancy is similar or slightly higher. Building up your back muscle strength regularly before pregnancy is recommended. Before discharge from the spinal team, ask for a copy of your most recent x-rays to take with you to show the obstetrician and midwife.

## Contact details

- Ward 22: 01642 854522 (24 hours)
- PICU: 01642 854667 (24 hours)
- Mr Raman Kalyan's secretary: 01642 855564
- Mr Waleed Hekal and Mr Mathew Sewell's secretary: 01642 854311
- Cheryl Honeyman, Nurse Specialist  
**Office number:** 01642 850850 extension 56267  
**Mobile number:** 0793 536 1881  
**Email:** cheryl.honeyman@nhs.net

### Useful websites:

[www.southtees.nhs.uk/services/orthopaedics/paediatric-spinal/](http://www.southtees.nhs.uk/services/orthopaedics/paediatric-spinal/)  
[www.sauk.org.uk](http://www.sauk.org.uk)  
[www.srs.org](http://www.srs.org)

## Comments, compliments, concerns or complaints

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However we do appreciate that there may be an occasion where you, or your family, feel dissatisfied with the standard of service you receive. Please do not hesitate to tell us about your concerns as this helps us to learn from your experience and to improve services for future patients.

## Patient Advice and Liaison Service (PALS)

This service aims to advise and support patients, families and carers and help sort out problems quickly on your behalf.

This service is available at The James Cook University Hospital and the Friarage Hospital Northallerton, please ask a member of staff for further information.

If you require this information in a different format please contact Freephone 0800 0282451

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