



Government of **Western Australia**
East Metropolitan Health Service



Scoliosis

Anterior / Posterior Spinal Fusion

Patient information



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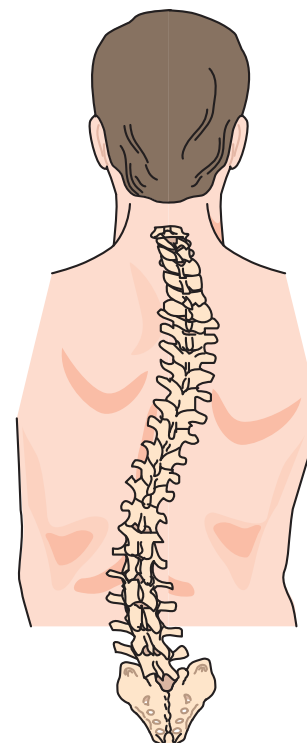
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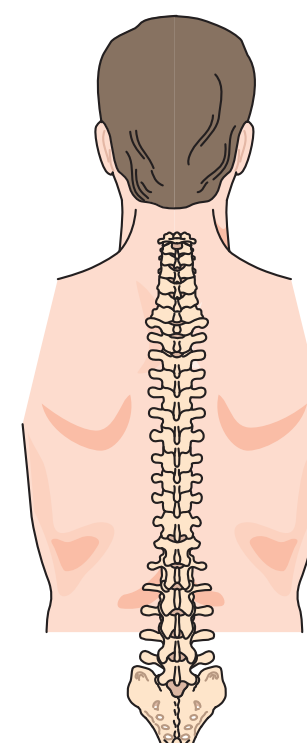
What is scoliosis?

Scoliosis is the development of a side-ways “c” or “s” shaped curve in the spine. The curvature usually develops in the thoracic (chest region) or lumbar (abdominal) region of the spine but may occur in both of these areas. When the curve is severe or showing signs of continued worsening your surgeon may recommend a surgical procedure known as spinal fusion to stop further progression of the curve formation.

Scoliotic Spine



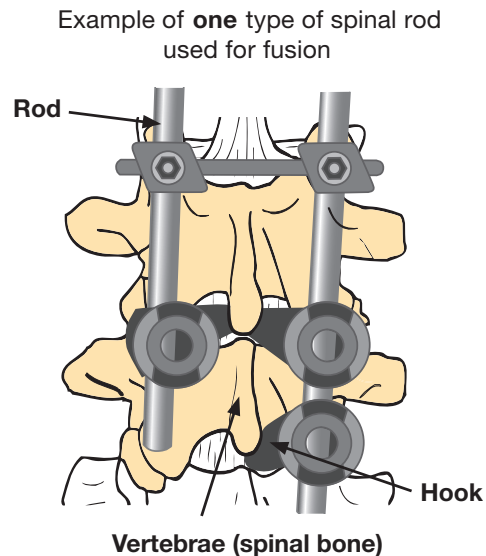
Normal Spine



Pre-operative information

What does a spinal fusion involve?

A spinal fusion operation involves the placement of a metal structure that includes rods bent to fit the corrected spine or backbone. This is held in position by special hooks and screws on the different parts of the spine. Bone grafts are then placed and compacted around the rod and between the bony processes of the spine. The rods and metalwork hold the spine in the corrected position to provide support while the bone heals and fusion of the spine takes place.



What type of spinal fusion will I have?

The level of spinal fusion, type of surgery and the metalwork that will be used is determined by the degree of the curvature in your spine. Your surgeon will explain and clarify the expected level of the operation with you.

There are different types of spinal fusions. Your surgeon will select the best type to suit your needs. The spinal fusion may be approached from the front of the spine (anterior) through the side of the body. If this goes through the rib cage, a chest tube will be inserted to drain the blood from the chest area. For the posterior (from the back) approach, an incision is made on your back down the spine where the levels are to be operated

The anterior approach will require you to stay in the Intensive care area (ICU) for 48-hours post-surgery, whilst the posterior approach will require a minimum of 24-hours in the ICU. A senior nurse from ward 5G (Orthopaedic Trauma/Acute Spinal Unit) will review you prior to transfer to the ward.

How is my pain managed?

Your pain will be controlled by pain relieving drugs through a drip.

There may be two different types of pain relief for you post operatively. One pain machine which will run automatically and is controlled by your nurse at an hourly rate and another pain machine called a Patient Controlled Analgesia (PCA) machine which has a prescribed amount of medication that only you can control by pushing a button as needed.

You will regularly be assessed by the Acute Pain Service to ensure your pain is adequately controlled. The anaesthetist will go into this in more depth during your pre-op review.

What are the effects of the anaesthetic?

You may feel sick and vomiting may occur. This is usually related to the pain relieving drugs. However, medications can be given to reduce the vomiting and discomfort. Please let your nurse know if you are feeling sick.

What complications do I need to be aware of?

To reduce the risk of blood clots in the veins of your legs and chest, you will need to perform chest and leg exercises as taught by the physiotherapist. You will also be required to wear calf compression devices that promote the blood flow in your lower legs until you are independently mobile.

Antibiotics will be given as a precaution to prevent wound infection for 24-hours after your operation.

Other specific information

- › The Scoliosis coordinator will ensure that you are booked to attend the Pre Admission Assessment clinic and have all the investigations required prior to your operation such as blood tests, x-rays and/or MRI's. Please have these test/investigations completed as directed as any delays may lead to a change in theatre bookings if your results are not available.
- › Please ensure contact details are always up-to-date so that we can contact you as needed. Refer to page 11.
- › At the above appointment you will also meet the anaesthetist who will be caring for you during your operation.
- › If you require EEG monitor leads these need to remain dry. Wear a shower cap in the shower on the day of your operation when showering.
- › Excessive personal property is not encouraged to be brought to the hospital prior to your operation. Any property will be sent to the Patient Trust for security reasons, and due to limited storage facilities in the ICU after the operation.

Admission at Royal Perth Hospital

What happens on admission?

The day prior to admission please come to the Royal Perth Hospital Admissions centre to be admitted. You will then immediately be allowed home on overnight leave. At 6am the following day you are to present to ward 4B; level 4, South Block where the nursing staff will be expecting you and will prepare you for theatre.

Please note you will:

- › be unable to drink or eat for six (6) hours before your operation.
- › be given a pre-medication orally with small amounts of water if charted.
- › have EMLA patches placed on the back of your hand before insertion of an intravenous drip in theatre.

The anaesthetist will see you again when you arrive in the theatre reception area with your parents/carer.

Post-operative care

What happens immediately after the operation?

Immediately after the operation, you will go to the ICU where you will be closely monitored for the next 24 to 48 hours. It is normal to have drips, drains and monitors attached to your body during this time.

A catheter is normally inserted into the bladder in theatre for draining of urine. The catheter is usually left in place and removed after 48 to 72 hours. You will only be allowed ice-chips, and will be gradually increased to sips of water and then from liquid drinks and to a light diet as needed. The nurses will regularly assess your bowel sounds to ensure that your gut

function has returned to normal function. They will also closely observe you and monitor your pain levels. During this time the nurses will assist with personal care and follow specific post-operative instructions. If you have any questions or concerns, please do not hesitate to talk with your nurse.

The physiotherapist will assist you to do special breathing exercises as soon as you are awake and able to participate. You will be able to sit up in bed as tolerated the day after surgery and mobilise with help from the physiotherapist as early as day one after surgery, as per orders provided by your surgeon.

What happens when I return to the ward?

Your pain control will be managed by the Acute Pain Service. They will ensure that you have sufficient pain relieving tablets before the injection drip is removed. Your drips and drains will be removed as required between 48 to 72 hours. You will have a shower on a commode chair as soon as you are able to sit out of bed. Your wound incision is kept dry and reviewed by the medical/ nursing staff and dressed as required on the fourth day.

The ward Occupational Therapist will visit you/parent/carer to discuss treatment and assess your ability to manage day-to-day activities e.g. showering, dressing and toileting, and provide education and equipment in order to help maximise your independence with these tasks.

Where able, we will endeavour to accommodate you in a single or double room (non- gender mixed) so that if needed a parent/carer may stay at night as required. Please note minors such as siblings, or boyfriend/girlfriends, will not be able to stay at the bedside at night with you.

The physiotherapist will see you daily along with the medical team caring for you, to ensure you stay on track for discharge and are home between day four to seven post-op. Visitors are encouraged once you feel up to company, normally day four or after some of your drips and drains are removed.

Note: visiting hours are from 8am to 1pm and 2pm to 8pm - ward 5G.

Discharge plan

When can I go home?

The length of your hospital stay will be between four and seven days.

You will be allowed to return home when:

- › You can shower and dress mostly by yourself. Your occupational therapist will provide equipment as required to assist you in the shower and toilet.
- › You can get in and out of bed by yourself.
- › You can walk safely as deemed by the physiotherapist.
- › Your wound is clean and healing.
- › Pain is adequately controlled with oral medication.
- › Your doctor gives you a medical clearance for discharge.

What happens before/after I return home?

The physiotherapist will reinforce exercises, posture and teach you how to negotiate stairs, if required. The occupational therapist will provide you with equipment for the shower and toilet if needed. Before you leave, you will be given an outpatient clinic appointment, letter for your general practitioner and medications.

You are expected to follow certain precautions and restrictions as advised by your surgeon until your next review.

Rehabilitation at Fiona Stanley Hospital

If you are not well enough to go home you may need to be transferred to Fiona Stanley Hospital where you will continue your rehabilitation. The hospital transport will take you to Fiona Stanley Hospital. Your stay at Fiona Stanley Hospital is expected to be no longer than a week.

Post-operative bracing

If your surgeon has requested that you wear a post-operative brace, this will be arranged with an Orthotist. The Orthotist will meet with you and/or your parent/carer to discuss and explain the requirements for the brace or corset, as ordered by the surgeon.

Corsets are cloth braces that will be fitted to measurements of your body. If more support is required, you may be fitted with a plastic body jacket. This is where a plaster cast is made of your body shape. The plaster cast is made in the casting room and you will return to the ward. The brace will be fitted within the next couple of days once it is manufactured. The Orthotist will fit the brace and make sure you are comfortable with it before you go home.

If any issues occur with your brace when you are at home please call Orthotics and Prosthetics Department at Fiona Stanley Hospital on (08) 6152 7450 who will be able to assist with adjustments and/or a review.

When do I see the surgeon again?

On discharge from the hospital, a review appointment will be made for you to see your surgeon, usually in six weeks' time. At the follow-up appointments the surgeon will review x-rays and examine your back.

You will continue to see your surgeon at regular intervals as needed after the surgery if needed. Please do not book holidays away and ensure you are available for your six- week follow up appointment.

If you have any concerns about your operation date or the operation please contact in working hours:

Scoliosis/Spinal clinic coordinator – (08) 9224 3146

Spinal Perioperative coordinator – (08) 9224 3120

Spinal waitlist officer – (08) 9224 8705

