

Physiotherapy for Scoliosis and Kyphosis Correction

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Patient Information

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Clinical Diagnostic and
Support Services

Introduction

This booklet is designed to give some guidelines and information about how the physiotherapy team at The James Cook University Hospital will help you in your recovery following your operation.

Physiotherapy plays an important part in your recovery after your operation. Your physiotherapy treatment will focus on three main areas:

- Chest care
- Postural advice
- General mobility

The exercise instructions in this booklet are given as a general guideline only as each patient is treated as an individual and the exercise regime may vary slightly depending on the type of operation or your consultant's instructions.

If you are in doubt about the information given in this booklet, please ask your physiotherapist.

All the exercises contained within this booklet will be taught to you by your physiotherapist.

Physiotherapy before your operation

A physiotherapist may see you prior to your operation. They will teach you exercises to practice before and after your operation. This is usually done at your pre-assessment clinic appointment or on the ward at the time of your admission.

Your physiotherapy exercises will include:

- Deep breathing exercises
- Huffing and supported coughing
- Shoulder exercises
- Leg exercises
- Postural exercises
- General mobility

Incentive spirometry

You may be given an incentive spirometer (as shown below) before your surgery to use. We will continue to use it after your surgery so please bring it with you into hospital. It is best to use whilst sitting upright.

To use your incentive spirometer:

- Take a long, steady breath in through the mouthpiece, keeping the small yellow disc in the smiley face.
- Aim to get the large yellow disc as high up in the cylinder as possible.
- Move the yellow marker on the side to show how high it reached.



What to expect after your operation

You will start to sit of out bed on the first day after your surgery and each day you will gradually increase how much you walk on the ward assisted by the physiotherapy and nursing staff. Your mobility should improve each day, and you will soon be able to walk on your own again. Walking soon after your surgery is encouraged as it will improve your lung function. Lack of walking at this stage and spending too much time in bed can actually cause pneumonia or a chest infection. It will be normal to initially experience discomfort on exercise/ walking, but it will improve with time as you do more.

Chest care

Deep breathing exercises begin immediately after your operation. Some people become chesty in the first few days following surgery due to extra phlegm production as result of:

- Having an anaesthetic
- The discomfort/pain from your wound limiting you from taking in deep breath and coughing.
- Reduced mobility in the first few days after surgery.

Your physiotherapist will assess your breathing and how your lungs are working. They may advise on the ideal position to improve your comfort and lung function.

Following your operation you need to perform your breathing exercises every few hour that you are awake including using your Incentive spirometer (if you have been given one).

These exercises include:

- Deep breathing exercises aimed at keeping your lungs clear after your operation together with huffing and coughing.

Procedure:

- Sit upright with your hands placed over the sides of your chest.
- Take a deep breath in slowly through your nose.
- Hold this breath in for one to two seconds and then breathe the air out slowly through your mouth.
- Repeat five times, then huff five times.

To do a huff, take a breath in then force the air out quickly through an open mouth, as if you are steaming a window/ glass.

If you have any phlegm in your throat have a cough.

Coughing – always take a deep breath in and have a good strong cough.

Afterwards, take normal relaxed breaths.

If pain after your operation is making it difficult for you to take a deep breath, huff or cough then please inform your nurse.

Physiotherapy after your operation

Following your operation you may require oxygen support whilst recovering within PICU.

You will be attached to monitors, a catheter, drains from your wound site and lines for your drugs or fluids. This is all routine and nothing to be concerned about.

It is important that you follow the advice of your physiotherapist and that you continue exercising between their visits.

General mobility

Your physiotherapist will encourage you to progress your mobility from day one after your operation.

The physiotherapist will monitor and assess your ability to do simple tasks during your hospital stay. Any problems will be identified and treated as appropriate in conjunction with other members of the team.

Most patients are usually discharged home after about a week, although this depends on your recovery and if you are able to walk unaided and can complete a flight of stairs.

After discharge from hospital

After your operation, your lung function should improve and your ability to exercise will also gradually increase.

Exercises after discharge

Walking:

- Improves your fitness after your operation and should become part of your daily routine.
- Should start immediately after discharge from hospital.
- Distance should be increased gradually.

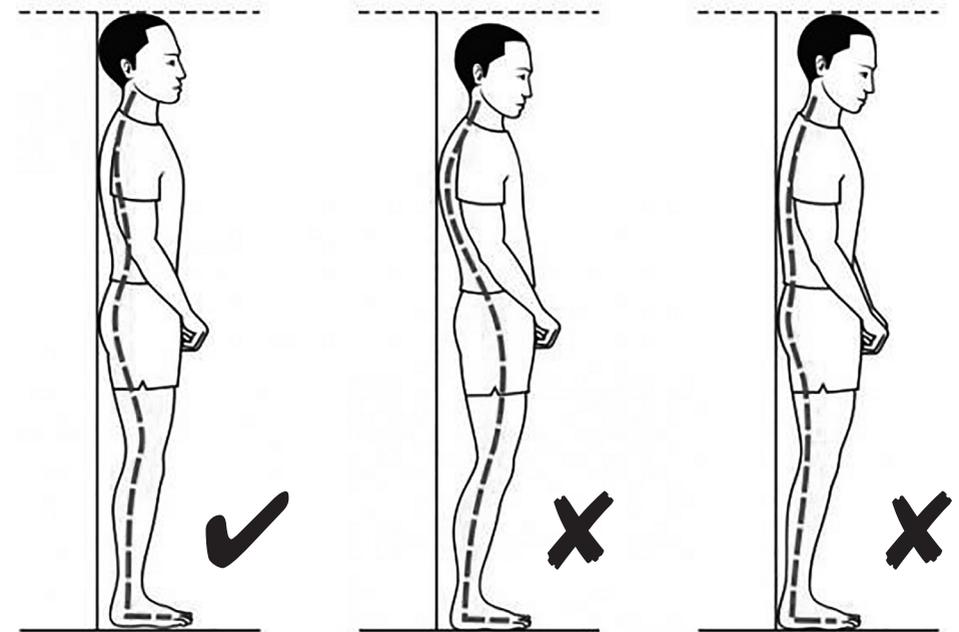
Make sure you have someone with you when you first walk outside as you may be unsteady on uneven ground or lose your balance.

Posture:

Once you have left the hospital it is your responsibility to check and correct your posture.

At first you may feel like you are leaning to one side when sitting or standing. This is a normal feeling and it can take time to adjust to your new posture. The muscles that support your spine will take time to adapt after your surgery.

- Try standing in front of a mirror to help in adjusting and seeing what your new posture looks like. It is easier to correct when you can see what you look like.
- Ask your family and friends to remind you to stand or sit up tall when you are with them.
- Try standing with your back to a wall pushing your shoulders back so they touch the wall.



Exercises:

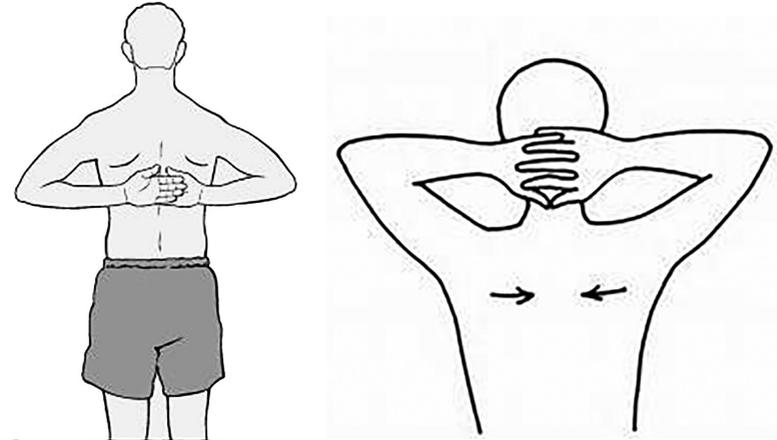
Arm and leg exercises: From the first day after your surgery we will encourage you to begin exercising. This may initially involve some gentle arm and leg exercises to prevent stiffness, help circulation and increase general mobility by walking. Repeat each exercise two to three times per day.

Arm exercises:

- While standing or seated, raise both arms up above your head as pain allows, then back down.
- Repeat five to ten times.
- Gentle shoulder shrugs (up/down) and shoulder rolls (forwards/backwards)



- Place your hands on top of your head
- Bring your hands behind your back. Slowly stretch your hands up towards your shoulder blades.
- Place your hands behind your neck



Gentle leg exercises: These exercises are taught to help keep your muscles strong and promote your circulation.

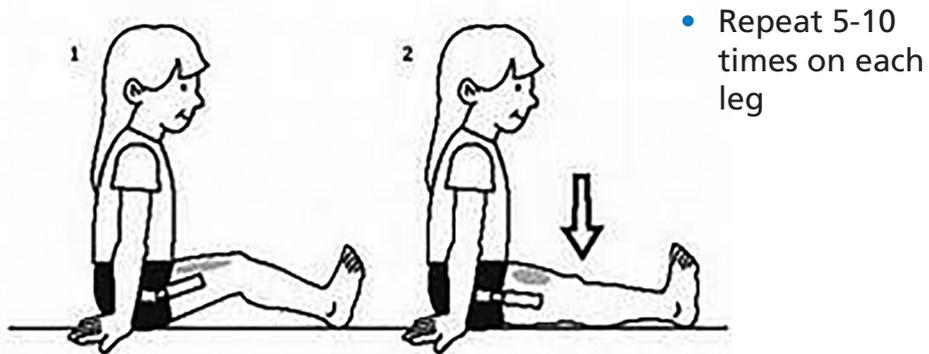
Circulatory exercises:

- Bend and straighten your ankles and toes. Repeat ten times on each foot.
- Circle your feet from your ankles round in one direction and then repeat in the other direction.
- Repeat ten times each direction and on each foot.

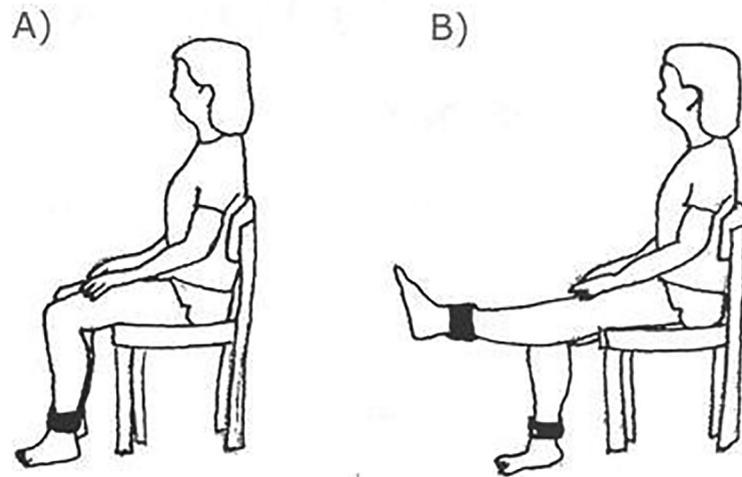


Thigh exercises:

- Tighten your thigh muscles on the front of your legs by pressing the back of your knee into the bed and pulling your toes towards you.
- Squeeze your thigh muscle and hold for 5 secs.



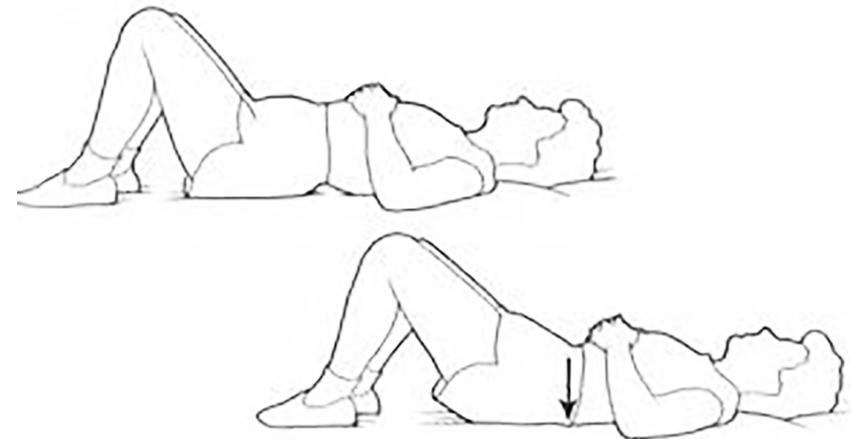
- Straighten one leg out in front of you whilst sitting.
- Hold for five seconds, and then relax.
- Repeat 5-10 times with each leg.



Gentle back exercises:

Pelvic tilting:

- Lay on your back with your knees bent so your feet are flat on the bed.
- Gently arch the bottom of your back, hold for 3 seconds then flatten your back by pressing your lower spine on the bed.
- Try and increase the amount of movement you can achieve each time.
- Repeat 5-10 times



Knee rolls:

- Lay on your back with your knees bent and your feet flat on the bed.
- Keeping your knees together slowly let your knees fall out to the right side.
- Only move them within a comfortable range.
- Stop and bring them back to the middle.
- Then repeat letting your knees fall to the left side.
- Repeat 5-10 times to each side.



Knees to chest:

- Lay on your back with your knees bent and feet flat on the bed.
- Bring one knee towards your chest at a time.
- Hold for 5 seconds and then relax.
- Repeat 5-10 times .
- Then change legs and repeat.



Contact details

- Ward 22: 01642 854522 (24 hours)
- PICU: 01642 854667 (24 hours)
- Paediatric Physiotherapists: 01642 850850. Bleep 1486.
(Monday to Friday 8:15am - 4:15pm)

Useful websites:

www.southtees.nhs.uk/services/orthopaedics/paediatric-spinal/

www.sauk.org.uk

www.srs.org

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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

Author: Senior Respiratory Physiotherapy

The James Cook University Hospital
Marton Road, Middlesbrough, TS4 3BW. Switchboard: 01642 850850
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