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Royal National Orthopaedic Hospital

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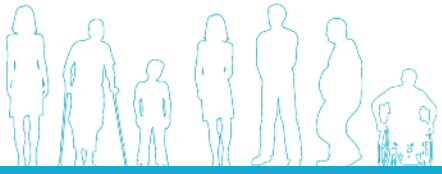


A patient's guide to

Low Back Fusion Surgery

This booklet provides information, which will help you prepare for admission to hospital. Treatment is always planned on an individual basis so your experience may differ slightly from the information given.

You have been given this booklet because it has been suggested that you require lumbar spinal fusion surgery. It has been designed to provide you with information about the procedure and your expected postoperative recovery.

All our staff are here to help and answer any questions that you may have to provide a quality service.

Why do I need a spinal fusion?

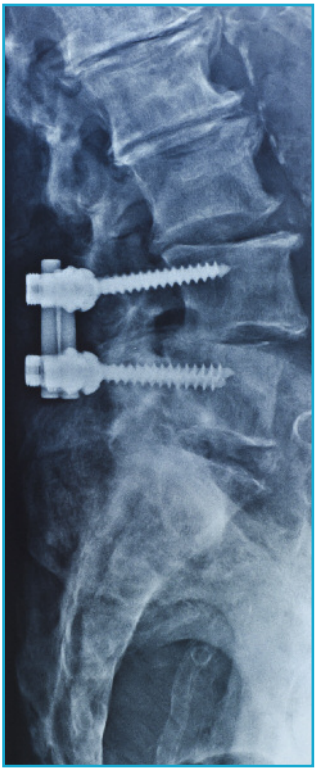
There are many reasons why we would consider surgery but it is generally kept as a last resort, once conservative measures of treatment have been exhausted.

Suitable patients are those with incapacitating back and leg pain that results from either deformity (abnormal spinal curvature) or instability (excessive displacement of the spine).

The aim of a spinal fusion is to relieve back and leg pain. It is difficult to anticipate how much your symptoms will improve following this procedure. However more than 50% of patients experience improvement of their back pain and 50 – 80% of patients will experience improvement of their leg pain.

What is a spinal fusion?

A spinal fusion is a surgical procedure that is done to stabilise two or more vertebrae of the spine. This involves using metalwork and bone graft (either from your body or synthetic bone). The goal is to allow the body to build bony bridges across those segments and eventually stop movement and hence pain generated by this part of the spine.



What does the surgery involve?

There are three main approaches used in low back fusion surgery:

- Anterior, where the surgical cut is made through your abdomen
- Posterior, where the surgical cut is made on your back
- Lateral, where the surgical cut is made on your side.

Surgery involves inserting metal screws and rods into the vertebrae of the spine. Sometimes we use metal cages to replace the disc material that is taken out. The screws and rods act as a scaffold, enhancing the body's ability to build new bone in between the vertebrae.

Are there any possible complications?

All operations involve risks and potential complications. Although rare, it is important that you understand them. There are risks to you in general and risks of the procedure itself.

Risks of the procedure itself include:

- Sickness, nausea, heart problems, breathing problems and nervous system problems – relating to the anaesthetic. The anaesthetic risks will be discussed with you by the anaesthetist on your admission
- Bleeding
- Infection – all possible precautions are taken to avoid infection during your operation. A superficial skin infection is treated with antibiotics. However, if the metalwork becomes infected it may need to be removed and replaced
- Nerve injury around the surgical site. Nerve injury can cause numbness, weakness, paralysis and bladder / bowel problems. If this happens we will investigate it carefully and may ask other experts in the hospital for their advice and help in restoring function
- Blood vessel injury around the surgical site. If this happens we will investigate it carefully and may ask other experts in the hospital for their advice and help in restoring blood vessels
- Bowel injury
- Cerebrospinal fluid (CSF) leak
- Blindness (very rare)
- Increased leg pain
- Increased back pain

- Failure of fusion
- Failure to improve current symptoms
- Metalwork misplacement
- Metalwork failure
- Adjacent segment disease
- Deep Vein Thrombosis (DVT) – a DVT is a blood clot in the deep veins of the calf or thigh. To reduce the risk of developing a DVT and to help your circulation you will be given stockings and will be asked to wear special inflatable sleeves around your legs whilst in bed. These inflate automatically and provide pressure at regular intervals, increasing blood circulation in your legs. You may require blood thinning medication which will be decided by the consultant depending on risk factors. The physiotherapist and nursing staff will show you how to exercise your legs and ensure that you start to move about quickly after your operation. If a clot develops and part of it breaks away, it can travel to the lungs where it is called a Pulmonary Embolus (PE). A PE is potentially life threatening and so everything is done to prevent a DVT from developing. We ask you to help by wearing your stockings at all times while you are in hospital, except when you are bathing.

Fortunately most of these risks are rare, however, it is crucial that you consider these carefully before making a decision. Please therefore discuss the procedure thoroughly with your surgeon. Your surgeon will provide you with more details of the risks and benefits that relates directly to the type of surgery you will be having.

Preparation before your operation

Pre-assessment

Shortly before your operation you will be asked to attend a pre-assessment anaesthetic and medical screening and you may require a further pre-assessment appointment for the anaesthetist to see you. This is a medical examination to make sure that you are well enough for surgery.

Whilst at this clinic you may have some tests / investigations including:

- Taking your past medical history
- Blood tests
- Vital signs
- Height and weight
- MRSA status

You will be given instructions to prepare you for the procedure. It is important to follow these instructions to reduce the risks associated with surgery.

Contraceptive pill or hormone replacement therapy (HRT)

You will need to discuss with your doctor about possibly stopping any medicines containing hormones (for example, the oral contraceptive pill, HRT or Tamoxifen) six weeks before surgery.

Wearing nail polish, nail decorations or false nails (hands and feet)

Please remove nail varnish, decorations or false nails prior to coming in. Failure to do so could lead to your operation being cancelled or delayed. This is due to the monitoring that is used in theatres whilst under anaesthetic and to reduce risks of infection.

Pre-operative therapy

You may receive a questionnaire from the occupational therapy (OT) department that needs to be returned to the department. The OT will review the information you provide to highlight any functional concerns that may arise about how you will cope with daily life following surgery. If you have any particular concerns regarding how you will manage after your surgery please contact the OT team on the number provided at the back of this booklet.

It is important that you consider your home set up and environment in order to allow you to effectively and safely function when you are discharged from hospital, particularly in the initial six to eight week recovery period;

- Ensure you have made alternative arrangements for anyone you care for (children, parents, pets)
- Remove any trip hazards from your home
- Stock up on food or identify someone who may be able to assist you with some shopping initially
- Consider moving essential items so that they are more accessible to you
- Plan adequate time off work

- Plan your travel arrangements to and from hospital. Patients are responsible for their own transport to and from the hospital. You will be informed of your admission and discharge date in advance so that you can arrange for a relative, friend, or taxi to transport you. In most cases it will not be appropriate to use public transport on discharge. Please note that patients who wish to claim their travel costs must prove that they are eligible to do so by providing relevant benefit documentation and travel receipts.

If you are eligible for patient transport the assessment team will be able to assess your needs through a brief telephone conversation. The interview remains completely confidential. The transport control room can be contacted on **0800 953 4138**. Any enquires relating to booked journeys please call **020 8909 5895**.

What to pack for coming into hospital

- Wash items such as shower gel, shampoo, toothbrush and toothpaste
- Loose fitting pyjamas and slippers with backs
- Clothes to wear during the day
- Any regular medication
- Books, laptop / tablet
- Mobile phone charger
- Any walking aids you use
- Any dressing aids you use

On the day of your operation

When you arrive on the ward you will be shown to your bed space and introduced to the nursing staff looking after you for that day. You will then be settled onto the ward.

Before your operation a member of the surgical team will discuss the surgical procedure with you. You will be asked to sign a form giving your consent to the operation, if not already done so in clinic. You will also be visited by an anaesthetist to discuss your anaesthetic. You will be told not to eat or drink from midnight on the day of your operation, depending on the anaesthetist's instructions. Failure to follow these instructions will result in your operation being delayed or even cancelled.

Our porters will take you to the operating theatre and a member of the nursing team will accompany you and hand you over to the care of the theatre team. The operation is usually carried out under general anaesthetic and the procedure usually takes between three to four hours. You will be away from the ward longer than this as you will be taken to the recovery area and cared for there until you are well enough to return to the ward.

How will I feel after the operation?

After the operation you will feel some pain and discomfort, which will be helped by medication. You may have the following:

- Small drainage tubes coming from your wound
- A drip to replace lost fluids
- Patient Controlled Analgesia (PCA) Device
- An oxygen mask
- A catheter to drain your urine

These will be removed as soon as possible following the surgery.

Following your operation

You are likely to stay in the hospital for two to three days if your surgery involves only one approach.

There is a possibility that you will be required to wear a brace or a soft corset following surgery. The surgical team decides on this. You will be guided by the therapists on the ward as to when you need to wear the corset or brace, and for how long.

Post-operative therapy

Physiotherapy

The physiotherapist will see you for the first time either on the day of surgery (if you are operated on early in the day) or on the day after surgery.

They will teach you how to get out of bed correctly and they will work with you every day to improve your mobility and advise you on any relevant exercises. The provision of walking aids are often discouraged, unless you required them prior to your surgery. This is to encourage a symmetrical upright posture. Sitting in a chair for short periods is advised. Initially you will be instructed to sit for 20 – 25 minutes, building up the time gradually, as comfort allows.

The physiotherapist will discharge you when you are able to independently transfer out of bed, mobilise safely and independently on the ward and you can perform a small flight of stairs (if required). You will be advised to continue to increase your sitting and walking tolerance daily when you go home. You will be referred to your local outpatient physiotherapy department, to be seen at six weeks post-operatively. Here they will teach you core stability exercises and they will ensure that your mobility and function is improving accordingly.

Occupational Therapy

You will be assessed by an occupational therapist (OT) after your surgery who will discuss how you will manage your daily activities. Following your surgery you will have some precautions that you need to comply with:

- Avoid bending your hips more than 90 degrees whether lying, sitting or standing
- Avoid twisting your back
- Avoid lying on your stomach
- Avoid lifting heavy objects (more than 1 kg in each hand)

The OT will give you tips on how to manage and may also make suggestions about equipment that can be purchased to assist. Any equipment suggested can be purchased through the companies detailed at the end of this booklet.

Washing and dressing

Your OT will discuss your personal care activities with you, taking into consideration any post-operative restrictions. Using a bath is not advised post-operatively. If you have a shower over your bath you can shower sitting on a bath board which the OT will issue if necessary. If you use a shower cubicle, a high quality non slip mat is essential and a shower seat may be helpful. You may need a long handled sponge to reach your feet or get someone to help you.

It is best to wear loose fitting clothing and front opening garments if possible. Try and sit to dress and undress as this provides more stability. Lower body dressing such as underwear, trousers, socks and shoes will be more difficult. You can get assistance from a family member and / or your OT will show you some techniques which may include using a "helping hand". Shoes should be comfortable and have low heels. Slip-on shoes with backs are easier to manage than laces.

Whilst on the ward we encourage patients to get dressed in their own clothes once any drips or drains have been removed. This is for your own comfort as well as promoting dignity within the ward area.

Domestic tasks

Sit for as many jobs as possible. A high stool is useful so that you can still reach worktops.

For several weeks after your operation, you are likely to need help from your spouse, relatives or friends with activities such as shopping, laundry and vacuuming. You will also need to wear anti-embolism stockings for six weeks after your surgery. These must be removed once a day for washing your legs. If you feel that you will require assistance with this please discuss it at your pre-assessment screening.

Returning to work

You should be able to return to work between four to six weeks post-operatively, but this depends upon your surgical procedure and the nature of your work. If you undergo extensive surgery or have a job that involves heavy manual work you may not be able to return for six months. Please discuss any queries with the team.

Driving

You may start driving once you have spoken to your consultant in your post-operative clinic review. If your ability to drive has been affected you are required by law to contact the DVLA and you may need to inform your insurance company of your operation as your insurance may be invalid.

Returning to leisure activities

Prior to restarting any leisure activities it is advised that you discuss them at your post-operative clinic review or with your outpatient physiotherapist. The ability to return to leisure activities will depend on pain, range of movement, strength and the procedure undertaken.

Avoid any strenuous exercise, especially if pulling or pushing is involved. Contact or high impact sports, i.e. rugby, football, horse riding, skiing should not be attempted until about one year after your operation, and then only when given permission by your consultant.

Non-contact sports, including swimming and cycling, may be started earlier, however ask your consultant first. Every sport should be resumed gradually.

Your sex life can be resumed when you are comfortable (usually about four to six weeks post-operatively). However, vigorous sexual activity should be deferred until fusion is confirmed.

Going home

We aim to discharge you from hospital within three days of the surgery, however this may vary depending on your needs. The ward nurses may change your dressings if they become wet and give you water resistant dressings to take home with you. Prior to discharge we need to ensure that:

- You can mobilise safely
- You have adequate social support
- You understand your exercises and precautions
- Your pain is managed with effective pain relief
- Your wound is clean and dry
- Your post-operative X-ray is satisfactory

Aftercare

On discharge you will be asked to see your GP for a wound check. If you are not able to attend your GP practice then a district / practice nurse appointment will be arranged to check your wound. It is normal to expect some bruising and swelling, but any excessive redness, inflammation or discharge from the wound must be reported to your GP.

It is expected that you will have some pain on discharge from hospital. We will supply you with pain relief for your initial hospital discharge. If you require further pain relief, you are advised to visit your GP.

A surgical clinic appointment will be arranged for approximately six to eight weeks after your operation and this date will be sent to you at home.

We suggest you bring this booklet with you when you come into hospital and use it as a guide.

Please note that this is an advisory booklet only. Your experiences may differ from those described.

Useful contacts

In the event that you are unable to contact a member of your surgical team and feel you have an urgent problem, you should visit your GP or local emergency department for advice.

Spinal Consultant Secretaries – contact via the hospital switchboard
Tel: **020 8954 2300**

Mr. Wilson - **Extension 5840**
Mr. Lee - **Extension 5118**
Mr. Anwar - **Extension 5796**

Clinical Nurse Specialists - Tel: **020 8909 5828**
Patient Transport Assessment Team - Tel: **0800 953 4138**
Physiotherapy/Occupational Therapy Service - Tel: **020 8909 5480**
Pre-assessment clinic - Tel: **020 8909 5630**
Customer Care and Patient Advice and Liaison Service (PALS)
Tel: **020 8909 5439/5717**

Trust website: **www.rnoh.nhs.uk**

Equipment

Disabled Living Foundation **www.dlf.org.uk**
Patterson Medica **www.pattersonmedical.co.uk**
Nottingham Rehab Supplies **www.nrs-uk.co.uk**

If you would like this leaflet translated into another language/large print, please contact the Quality Team on 020 8909 5439.

Royal National Orthopaedic Hospital NHS Trust
Brockley Hill
Stanmore
Middlesex
HA7 4LP

Switchboard: 020 8954 2300

www.rnoh.nhs.uk

Twitter: @RNOHnhs

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