

# National Hospital for Neurology and Neurosurgery

Single Level  
Lumbar decompression  
Spinal Neurosurgery  
Information for patients



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This booklet has been written by the Department of Neurosurgery at the National Hospital for Neurology and Neurosurgery to provide general information about the procedure called lumbar decompression. Your neurosurgeon will discuss your particular procedure with you in detail.

It is intended for use by patients (or their families or carers) referred to our service who may be offered this procedure. It is not intended to replace discussion with your consultant. If you have any questions please do not hesitate to contact a member of the team caring for you. They will be pleased to answer them for you.

**If you would like this document in another language or format, or require the services of an interpreter please contact the secretaries 020 3448 3568 / 3150 / 3395.  
We will do our best to meet your needs.**

## Introduction

You have decided to have your back surgery at Queen Square. This leaflet will give you a brief overview of your procedure and general advice on how to prepare for surgery and discharge. Your procedure requires a short stay in hospital.

**You will be discharged 24 to 48 hours after your procedure**

## What do YOU need to do to prepare for your surgery?

If you have existing medical conditions, such as high blood pressure or diabetes, you may like to visit your GP practice to make sure that you are as fit as possible for your surgery.

Make sure you arrange your domestic and social situation so that it will be possible and comfortable for you to go home at the correct time. For instance:

- Arrange for somebody to collect you on discharge
- Make sure you have shopped for adequate food supplies for when you get home
- Tidy your house so you do not need to do housework when you get home
- Ensure you have a supply of simple pain killers available at home, such as paracetamol

- If you think you will need some social support after discharge please speak to your GP and let us know as soon as possible

## **What do WE need to do to prepare for your surgery?**

We will:

- Arrange a pre-assessment check to make sure you are fit for an anaesthetic
- Organise appropriate scans or x-rays for your operation
- Write to you to let you know when your operation will be
- Answer any questions you may have about your operation

## **What is a lumbar decompression?**

A lumbar decompression is the surgical removal of parts of the spine bones in the lower back; these sections of bone are called the spinous processes and the laminae. Lumbar refers to the lower back. The procedure is used to free the nerve roots (points at which the nerve leaves the spine), which have become compressed (squashed).

## **How can a lumbar decompression help?**

The main aim is to help reduce leg pain (radiculopathy) caused by compression of the nerve roots.

This procedure relieves narrowing (stenosis) in the lumbar spine caused by age-related changes.

The spongy discs which separate the vertebrae (bones of the spine) can dry out and shrink with age and the joints between the vertebrae can be affected by 'wear and tear'.

Your symptoms may include:

- Pain in the lower back, buttocks and legs.
- Sensory (feeling) changes in your legs such as numbness, 'pins and needles' and cramping pain when you walk.
- Some people may develop weakness in their legs or problems passing urine.

A lumbar decompression may prevent these symptoms getting worse, but it may not improve your current symptoms.

## **What are the risks of a lumbar decompression?**

Surgery can relieve pressure on the nerves but cannot reverse the effects of degenerative changes which may have taken place over many years. Back pain due to these changes will not get better after decompression.

All operations have risks and your surgeon will explain all the benefits and risks of this operation to you. Your consultant will explain your risk in detail. This operation is performed under a general anaesthetic and your anaesthetist will talk to you about the risks of general anaesthesia.

Female patients must tell their anaesthetist and surgeon if they are or could be pregnant. Anaesthetic drugs and x-rays used during the procedure can be harmful to unborn babies.

- **Problems that may happen during the operation:**

Nerve root injury is very unusual (risk of one to two percent), but can result in temporary or permanent sensory or power loss, problems with bladder, bowel or sexual function or it may cause worsening pain.

Occasionally, the covering surrounding the nerve roots, (the dura) can be torn, resulting in leakage of the fluid (cerebrospinal fluid or CSF) which surrounds your brain and spinal cord. This can be repaired during the operation. However, you may need to stay in bed for longer to allow the dura to heal and seal the CSF leak.

- **Problems that may happen later:**

Bleeding into the area after the operation is uncommon but can cause compression of the nerve roots.

This will result in acute leg weakness, pain and bladder and bowel sphincter dysfunction. This is called 'cauda equina' syndrome and this may require an urgent operation to remove the blood clot.

For this reason you will have regular observations in the first 24 hours after the operation.

- **Other complications include, but are not limited to:**

Spinal instability or 'slip' requiring further treatment

Wound infection, which can be treated with antibiotics

Scarring around the nerve roots

Chronic pain which may require referral to a pain specialist

Levels above or below the level of decompression may be affected later by degenerative changes requiring future surgical decompression

If you have problems passing urine you may need to have a tube (catheter) inserted into your bladder for a short while

### **What will happen if I choose not to have a lumbar decompression?**

Not everyone with these symptoms will benefit from surgery. You may find that your symptoms improve if you make some simple adjustments to your lifestyle.



However, if you have spinal cord or nerve root compression, and your leg symptoms are progressing, you may benefit from surgery.

### **What alternatives are available?**

Your surgeon will talk to you about any suitable alternative treatments. These may include:

- Surveillance with regular review and assessment and referral for physiotherapy and pain management
- Your GP may prescribe pain-relieving medicines
- Adopting a healthy lifestyle with regular exercise, combined with diet and weight control.

Although some patients may respond to these measures and remain stable, some patients may still suffer progression of their symptoms.

### **Asking for your consent**

We want to involve you in all the decisions about your care and treatment. If you decide to go ahead with treatment, by law we must ask for your consent and will ask you to sign a consent form. This confirms that you agree to have the procedure and understand what it involves. Staff will explain all the benefits, risks and alternatives before they ask you to sign a consent form.

If you are unsure about any aspect of your proposed treatment, please don't hesitate to speak with a senior member of staff again.

### **What happens during a lumbar decompression?**

Before the procedure we will give you a gown and anti-embolic (elastic) stockings to wear and a nurse will complete a safety checklist. The nurse will accompany you to the operating theatre. The operation usually takes around two hours.

Once the anaesthetic is started and you are 'asleep' you will be moved to the operating theatre.

An x-ray is taken to guide the surgeon to the correct place.

An incision (cut) is made in the middle of the lower back and the muscles separated to the bone. The bone is removed in small pieces until the cauda equina or nerve roots are freed up (decompressed).

The wound is closed using dissolvable stitches on the inside of the wound and the skin is closed with clips or stitches.

At the end of the operation a wound drain may be placed under the skin to drain any blood and allow the wound to heal. The drain is a thin plastic tube secured to your skin by a stitch and attached to a plastic bottle. You can walk around with the drain in. This is removed the following day.

## **What should I expect after a lumbar decompression?**

You will be prescribed regular pain relieving medicine.

Please tell your nurse if you still have pain; we want you to be comfortable and reduce the risk of complications. You may still experience discomfort on movement, this is normal.

We will assess the strength in your legs regularly to check for complications.

You will be able to mobilise immediately after surgery, usually the same day, and this is encouraged. Routinely no physiotherapy will be required and the nurses on the ward can give advice about how to care for your back in the future, including how to strengthen your back muscles and how to lift correctly.

Before going home, you will be given an information booklet concerning your wound care.

On the journey home, you may find sitting in a car seat for long periods uncomfortable, so if you have a long journey home, try to plan regular stops so you can stand up and walk about.

## Once at home

You may find that you need to take regular painkillers for two to three weeks after the operation to ease the pain at the wound site. This should improve over time and you can cut down the number of tablets you take.

It is normal to feel tired after an operation. Try to do a little regular activity such as walking, rather than attempting to do too much at once. Avoid strenuous exercises and activities until you have been reviewed in clinic.

It is normal to experience some leg pain and/or back pain after surgery. This usually settles with pain killers, rest and time.

However, if you develop:

- new-onset symptoms such as leg weakness or numbness
- new difficulty with bladder or bowel control, or problems with sexual function
- any wound problems such as redness, excessive soreness, or wound discharge

Contact your consultant or clinical nurse specialist via their secretary (during working hours). The ward, your GP or local Accident and Emergency Department can give help and information at other times.

## **Driving, working and getting back to normal**

You can start driving again when you feel comfortable and confident enough to operate a vehicle safely and you are confident you are in full control of the vehicle. This varies between individuals after surgery. Contact the DVLA and your insurance company for further information about driving restrictions.

Please discuss your return to work, daily or leisure activities with your surgeon, specialist nurse or therapist. Most people will return to work six weeks after the operation, depending on their work. You may need to contact your Occupational Health Department if you need to make adjustments to your working arrangements, such as different seating for a desk job or if you are unable to do heavy manual work.

Your surgeon will write to your GP to inform them of the operation you have had.

You will be asked to attend an outpatient clinic at the hospital approximately 6 weeks after surgery so that we can check on your progress.

## **References**

Baaj AA, Mummaneni PV, Uribe JS, Vaccaro AR and Greenburg MS (2012) *Handbook of Spine Surgery*. New York. Thieme Medical Publishers

## Where can I get more information?

[www.spinesurgeons.ac.uk](http://www.spinesurgeons.ac.uk)

[www.brainandspine.org.uk](http://www.brainandspine.org.uk)

[www.spine-health.com](http://www.spine-health.com)

[www.spineuniverse.com](http://www.spineuniverse.com)

[www.back.com](http://www.back.com)

[www.uclh.nhs.uk/nhnn](http://www.uclh.nhs.uk/nhnn)

[www.patient.co.uk](http://www.patient.co.uk)

UCL Hospitals cannot accept responsibility for information provided by other organisations.

## How to contact us:

Victor Horsley Neurosurgery Department

National Hospital for Neurology and Neurosurgery Queen Square

London WC1N 3BG

Switchboard: 0845 155 5000 / 020 3456 7890

Secretary's direct line: 020 3448 3568/3150/3395/3514

Fax: 0203 3448 3340

Website: [www.uclh.nhs.uk/nhnn](http://www.uclh.nhs.uk/nhnn)

## Where to find us:



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We are committed to  
 delivering top-quality patient  
 care, excellent education  
 and world class research

**Safety**  
**Kindness**  
**Teamwork**  
**Improving**