

## Neurosurgery

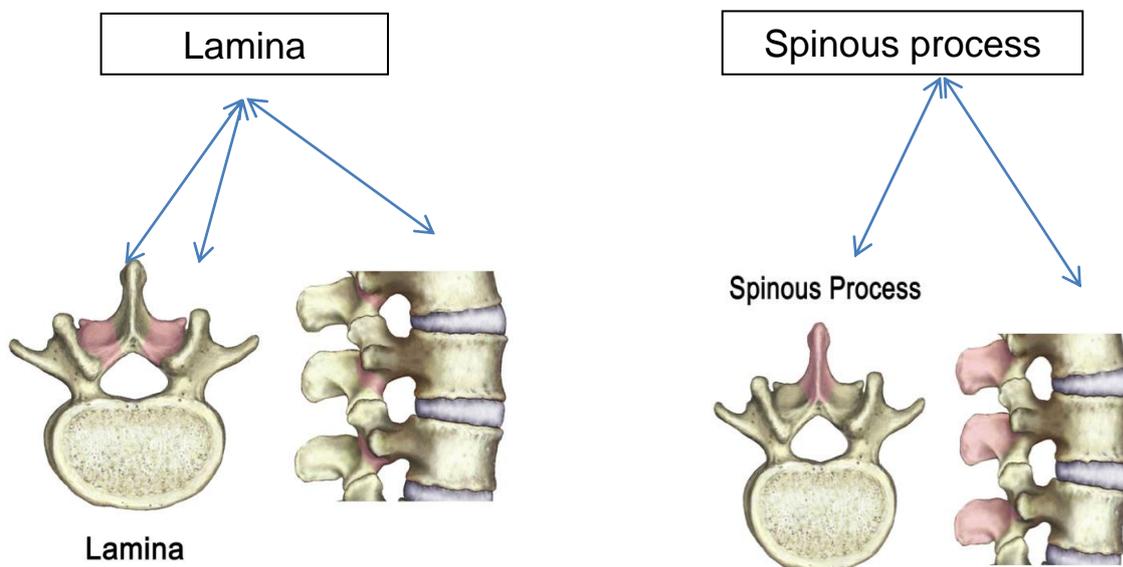
# Decompressive Lumbar Laminectomy

## Introduction

This patient information leaflet has been written to provide information about the procedure called lumbar laminectomy. This is intended for use by patients (plus families or carers) referred to our service and who may be offered this procedure. Your Consultant will discuss your particular procedure with you in detail. This leaflet is not intended to replace discussion with your Consultant.

## What is a Lumbar Laminectomy?

A lumbar laminectomy 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.



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

The surgery involves removing the bone and other elements causing the pressure on the nerves, this will relieve leg pains and prevent symptoms getting worse

This can improve your mobility and increase the distance you can walk without pain.

For the most part this procedure is used to relieve narrowing (stenosis) of the lumbar canal caused by degenerative or age-related changes in the structures of the spine. The spongy discs which separate the vertebrae (bones of the spine) and act as shock absorbers can dry out and shrink with age and the joints between the vertebrae can be affected by 'wear and tear' that gradually loses the ability to be flexible.

Your symptoms may be pain in the lower back, buttock and legs or you may have sensory (feeling) changes such as numbness, pins and needles or cramping on walking. The pain pattern depends on the nerves affected.

Surgery is intended to prevent symptoms getting worse; however, it is important to note that it cannot reverse the effects of degenerative changes which may have taken place over many years

### **Risks of a lumbar laminectomy**

All operations have risks and your surgeon will explain all the benefits and risks of this operation to you.

The operation is performed under a general anaesthetic (you will be asleep for the operation) and your anaesthetist will talk to you about the risks of general anaesthesia.

Bleeding into the area after the operation is not common but can happen. It causes compression of the nerve roots, resulting in acute leg weakness, pain, and bladder and bowel and/or sphincter dysfunction. This is called 'cauda equina' syndrome and this may require an urgent operation to remove the blood clot.

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Nerve root injury is very unusual but can happen especially if the nerve is under compression or surrounded by scar tissue as in surgery being performed for the second time; this can result in temporary or permanent sensory or power loss, problems with the bladder, bowel, sexual function, or worsening pain.

Infection after any surgery is a recognised complication which can be treated with antibiotics.

Sometimes, the covering surrounding the nerve roots, (the Dura) can be torn resulting in leakage of the fluid (cerebrospinal fluid (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 (around 3 – 5 days) to allow the Dura to heal and seal the CSF leak. Sometimes you may need a lumbar drain to divert the CSF flow to help the surgical wound healing, which may also prolong your hospital stay.

Other complications include, but are not limited to:

- Spinal instability or slip requiring further treatment
- Scarring around the nerve roots
- Chronic back pain which may require referral to a pain specialist
- Levels above or below the 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 happens during the operation?**

You will be placed face down with the chest, knees and back supported; the knees will be placed up near the chest and supported by a mattress.

The operation usually takes around 2-4 hours. The surgery is performed under general anaesthesia and X-ray guidance to check the correct level. A microscope is used to see the nerves better.

A cut (length 3-5 inches) is made in the middle of the lower back and the muscles separated from the bone. The bone is removed in small pieces until the Cauda Equine or nerve roots are freed up (decompressed).

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

A thin drainage tube may be inserted underneath the skin to drain away any blood that may collect around the wound. This is usually removed after 24-48 hours.

**Before you have your procedure, it is important to let the nurse know if you are, or think you may be pregnant. This is necessary due to the potentially harmful effects of radiation (from an X-ray as part of the procedure) to an unborn baby; the Nurse will be happy to do the test if you are not sure.**

### **Admission to hospital/length of stay**

You will receive a letter with your date of admission, and be advised to attend Ward 43 at 7:00 a.m. on the morning of your surgery. You will be asked not to eat or drink from 2.00 a.m. but you can drink clear fluids until 6.00 a.m.

Your stay in hospital will be 2-5 days depending on your Consultant.

### **Post op Management:**

**You will return to the ward after recovery from the anaesthesia.**

Your pain control is the highest priority. Sickness can also be an issue, usually due to the anaesthesia, and settles within 24 hours with anti-sickness medication.

Observations will be recorded at regular intervals and your limb strength and pain will be assessed.

If you experience difficulty in passing urine, we may have to insert a tube (catheter) into the bladder which is usually temporary for 24-48 hours. Sometimes it can take longer which means your stay in hospital will be prolonged.

### **Thromboprophylaxis - Clexane/Flowtrons/TEDS**

You will be able to mobilise very soon after surgery, usually the same day or the next day. You may be assessed by a physiotherapist if necessary.

The first few days after a major spine surgery are usually painful. You may find that you need to take regular painkillers for 2-3 weeks after the operation to ease the pain at the wound site. This should improve over time and you can begin to reduce the number of tablets you take. Beware of sickness and constipation as a result of too many painkillers. It is desirable to take pain killers when required, as you may feel you can reduce your analgesia as the symptoms improve.

### **Discharge**

**You will be reviewed by a doctor/consultant before your discharge routinely. Please take this opportunity to discuss any issues with the doctor such as: pain management, details of surgery, lifestyle issues (including employment etc.). You can ask your nurse for further information.**

On discharge you will be given 28 days' worth of medication; if you require any further medication you will need to visit your GP.

You must keep the wound clean and dry with a dressing in place until the clip/stiches are removed; if the dressing becomes wet it must be replaced. This will be 10-14 days post-surgery. After 24–48 hours of the clips/stiches being removed you may have a full shower/bath.

You must not drive for at least 4–6 weeks after surgery purely for comfort reasons. You need to be able to turn comfortably to check behind you and be able to reverse before you are able to drive. Contact your insurance company or the DVLA for further information about driving restrictions.

You must also avoid long-haul flights or car rides as these can lead to blood clots in your legs, especially up to 6 weeks after spine surgery. If you do have to travel long distances walk around once an hour within the plane and drink plenty of liquids to keep well hydrated. Seek medical advice if you develop any pain or swelling in the calves.

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You are advised not to sit for too long - around 30 minutes at a time - but to either walk around or lie flat on the bed for at least the first week to two weeks post-surgery. You should not undertake any form of exercise for at least 6–12 weeks.

You may find after the decompressive laminectomy that you can return to light activity (desk work and light housekeeping) within a few weeks of surgery. If you have had a spinal fusion with your laminectomy your recovery will take a little longer. You may be advised to refrain from work for 6–8 weeks depending on what type of employment you undertake.

You must limit your activities, especially bending, stooping or lifting, for at least 6 weeks. You should not undertake any form of contact sport for at least 6 months.

Do not let yourself become over tired or exhausted by doing too much too soon. Try doing more each day and see how you feel.

You will be given a letter for your GP informing them of the operation you have had.

You will be asked to attend an outpatient clinic at the hospital. We aim to see you within 12 weeks so that the consultant can check on your progress; an appointment will be sent to you in the post. If you wish to return to work it must be on a phased return; please contact your employer's Human Resource/Occupational Health department for advice.

**After discharge, if you develop any of the following symptoms, you must contact the ward immediately for advice:**

- Reoccurrence of leg pain;
- New symptoms, such as leg weakness or numbness, difficulty with bladder or bowel control or problems with sexual function;
- Any wound problems such as redness, excessive soreness or wound discharge.

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### Further Information

If you require any further information or would like to ask any further questions about your procedure or undergoing treatment then please contact Ward 43 telephone number 024 7696 5330.

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact Ward 43 on 024 7696 5330 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

To give feedback on this leaflet please email [feedback@uhcw.nhs.uk](mailto:feedback@uhcw.nhs.uk)

#### Document History

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