Lumbar spinal decompression

Introduction

This leaflet will explain what will happen when you come to the hospital for your operation. It is important that you understand what to expect and feel able to take an active role in your treatment. There will be many different health professionals involved in your care during your stay and there will be a clear plan for any after care when you are discharged from hospital. This leaflet will answer some of the questions that you may have, but if there is anything that you and your family are not sure about then please ask your doctor and nurse.

What is lumbar spinal decompression surgery?

Spinal decompression surgery is performed under a general anaesthetic (you are asleep) and involves enlarging the space around the nerves so they do not have pressure on them. You will normally stay in hospital between one and three days following surgery, depending on how quickly you recover.

Why am I having this surgery?

Lumbar spinal decompression surgery is carried out on patients with a condition known as spinal stenosis. This is a medical condition where the spinal canal narrows and, in turn, compresses the spinal nerves. This is commonly due to normal ageing of the spine; all spines degenerate slowly with time. There are other causes of spinal stenosis but these are rare. The symptoms that commonly occur with spinal stenosis are pain, heaviness or altered sensation in one or both legs. These symptoms occur on standing and walking and restrict a person's ability to function as a result. The symptoms are usually reversed on sitting or leaning forwards, for example onto a shopping trolley.

Surgical treatment is done for those patients with symptoms which prevent them carrying out daily activities. It is mostly done to improve leg symptoms, but back pain caused by the condition is often improved by the surgery. The majority of patients who have spinal stenosis have slowly progressive symptoms. For most people a fusion (where the bones of the spine are fixed together) is not required but occasionally rods and screws have to be used to stabilise the spine if the scan shows that the spine is unstable and likely to move further out of line. Your surgeon will discuss with you whether a fusion will be required.

What are the alternatives?

You probably have tried most of the alternatives before considering surgery. They include: regular pain relief prescribed by your GP, avoiding heavy and physical activity, physiotherapy and a lumbar epidural injection.

How is the operation carried out?

The operation is done through a cut in the middle of the back. The length of the incision depends on how many levels of your spine are affected; this will be known pre-operatively and checked under x-ray during the operation. The muscles are moved to the side to expose bone and ligaments of the spine below. Bone and ligament are removed to allow access to the spinal canal and the spinal nerves below.

The operation will last approximately 45 minutes for a one level operation but you will be away from the ward for longer than this. Local anaesthetic solution is used around the operative site to relieve pain when you wake up after the operation.

What happens after the operation?

Once you have had your surgery, you will be taken to one of the orthopaedic wards to be looked after for the rest of your stay. You may return from theatre with a ‘drip’ until you are able to drink which, may be as soon as you recover from the anaesthetic. You will receive post-operative analgesia (painkillers) as required. Once you are eating and drinking you will be able to have tablet painkillers. Patients do not normally require a drain to remove fluid/blood from the wound) but this is sometimes necessary.

Immediately after your surgery: You may be required to lie flat for much of the day, and will be assisted to turn regularly to make sure your back/bottom does not become sore. This will mean using a bedpan/urinal as you will not be able to get out of bed. You may sit up for meals.

Day following your surgery: With if your surgeon is happy with your progress you will be able to mobilise with assistance. A physiotherapist may see you and assist you to move around. Your wound dressing will be changed if needed. The wound is usually left covered for five days or so after your surgery.

Going home

You will be encouraged to walk and manage stairs as quickly as possible and the treating doctors and physiotherapists will advise you when you will be able to go home. This varies between 1 and 3 days after the operation.

You may need to visit your GP/practice nurse for a follow-up appointment for a wound check and to remove your stitches. We will tell you if this is the case.

What are the possible risks or complications of this surgery?

Deep infection – 1 in every 100 cases of decompressions gets infected. Deep infection requires a biopsy (usually under CT guidance) followed by long-term antibiotic therapy. Antibiotics are given for 6 weeks on average.

Superficial wound infections – 4 in every 100 patients get this and may require a short course of antibiotics.

Bleeding – less than 1 in every 100 patients have a significant bleed which will require treatment.

Sensation change – is rare, but occasionally the feeling after the operation is reduced. There can be altered sensation the whole way down one or both legs, and can include the genital region.

Muscle weakness – less than 1 in every 100 cases. The muscle weakness is worse after surgery, and can cause foot drop. Occasionally, this is permanent. The ankle must be supported by a specially fitted brace if this occurs. Rarely, a spinal decompression may result in permanent paralysis of the lower limbs.

Nerve damage – the risk of damage to the nerves that supply your bladder and bowel is less that 0.2% (1 in 500 cases). This condition (cauda equina syndrome) may result in incontinence of bowel and bladder and sexual dysfunction. It is rare and not all cases will recover to have normal function. This complication may be permanent.

Pain – in less than 1 in 100 people the nerves stop functioning normally after the operation and cause significant pain. This usually settles down, but some need special drugs to help.

Recurrent narrowing – further narrowing can take several years to develop. Surgery may have to be repeated in the future if the spine deteriorates further.

Repeat surgery – 1 in every 10 patients have further back surgery during the 10 years that follow due to continued back degeneration at other levels.

Back pain – around 1-2 out of every 100 patients develop long-term low back pain after spinal decompression, and this can often be treated non-surgically. Occasionally, patients will require fusion surgery at a later date to help with their back pain.

For *elderly patients* some risks are slightly increased. Risk of blood clots, heart attacks, urine/chest infection, and heart failure are all increased with advancing age.

Please refer to the ‘Coming into hospital’ booklet given to you at your pre-operative assessment and refer to the physiotherapy leaflet for further information.

What will happen after I am discharged?

Pain: Some pain is usual during the first two weeks following surgery. This is usually managed with regular painkillers.

Wound care: Your wound dressing will be removed and your wound exposed before you leave hospital. You may be advised to see your GP's practice nurse for further wound care, for example if your stitches need to be removed. You should keep your wound clean and dry for 5 days following surgery. During this time you may have a shower using a waterproof dressing.

Activity and exercise: You will see the physiotherapist on the ward before you leave hospital and you will be advised on appropriate activity levels for you.

Work: You may return to work after two weeks if your progress is satisfactory and you have recovered well. A manual labourer will be off work much longer than those performing lighter duties. Several months' recovery may be required in patients who have a hard physical job. If you require a sick certificate please ask a nurse before you are discharged. Further certificates can be provided by your GP.

Driving: You will need to contact the DVLA and your insurance company to ensure you are able to drive and are covered. The medical team at the hospital are not qualified to assess when you are fit to drive but can give you guidance

Follow up outpatient appointment: You will be reviewed by the doctor in clinic approximately six weeks after the operation.

Further information

For further information about the Trust, visit our website www.royalberkshire.nhs.uk

Useful numbers

Redlands Ward	0118 322 7484
Pre-operative Assessment:	0118 322 6546
Royal Berkshire Hospital	0118 322 5111 (switchboard)

This document can be made available in other languages and formats upon request.

Dept of Orthopaedics
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