

FAR LATERAL LUMBAR MICRODISCECTOMY

DEFINITION:

A Far Lateral Disc Prolapse occurs when the disc ruptures sideways (*lateral*), rather than the more common backwards (*posterior*) or backwards and laterally (*posterolateral*). This occurs in only 5% of disc prolapses and compresses the exiting nerve root (*rather than the descending nerve root*).

A Far Lateral Disc Prolapse causes more pain than a standard disc prolapse, because it compresses the dorsal root ganglion (*DRG*). The DRG is a small swelling on the nerve root that contains the nerve cells of the nerve fibres.

INDICATIONS:

Far Lateral Disc Prolapses causes:

- Severe lower limb pain (*radicular pain*), non-responsive to tablets or epidural injections;
- Persisting pain, weakness, numbness and/or muscle wasting (*radiculopathy = nerve root damage*).

The most serious levels for a far lateral disc prolapse are L3/4 or L5/S1 levels.

A Far Lateral L3/4 Disc Prolapse causes L3 radiculopathy with marked thigh muscle wasting and weakness, especially affecting squatting and climbing stairs.

A Far Lateral L5/S1 Disc Prolapse causes L5 radiculopathy with foot drop and difficulty walking without dragging the foot.

SUCCESS OF THE OPERATION:

The aim of the operation is to improve leg pain, numbness and weakness with a success rate of approximately 70 - 80%. The outcome will be lower the more severe and the longer you have the symptoms and signs before having the operation. No change in symptoms (*no better or worse*) occurs in 10 - 20% of patients.

RISKS OF THE OPERATION:

The total risk of Far Lateral Lumbar Microdiscectomy is approximately 2 - 3%.

Specific risks associated with lumbar microdiscectomy are infection, bleeding, fluid leak from the lining of the nerves (*CSF leak*), nerve root damage causing leg numbness and weakness, DRG damage causing burning pain and a recurrent disc prolapse (*which usually occurs in the first 2 - 6 weeks after the operation*).

General risks associated with any surgical procedure are general anaesthesia, drug reaction, clots in the legs, (*DVT*), which can travel to the lungs (*pulmonary embolus*), pneumonia, urinary tract infection, heart attack, stroke and death.

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BEFORE SURGERY: Tell Mr Malham about any medical conditions or previous operations. If you have a medical condition such as diabetes, heart problems, high blood pressure or asthma, Mr Malham may arrange for a specialist physician to see you for a pre-operative assessment and medical care following the neurosurgery.

Inform Mr Malham of medication that you are taking and/or have allergies to medications. Patient must stop using the following, 10 days pre-operatively:

- Aspirin
- Plavix
- Isocover
- Asasantin

Patient must stop using blood thinning medication (*such as Warfarin*), 3-5 days pre-operatively.

THE OPERATION: General anaesthetic with endotracheal (*breathing*) tube.

Positioned face down (*prone*) on padded frame on operating table.

A Wiltse approach which is a small vertical skin incision, approximately 3cms from the midline of the spine on the affected side. A small cut is made in the lining of the back muscles (*lumbar fascia*), so that the back muscles can be separated lengthways along their fibres and not cut. A tubular retractor is then inserted between the split muscles (*longissimus and multifidus*).

The operating microscope is then used to open the membrane between the upper and lower transverse processes. The exiting nerve root is identified, dissected and freed. Then the nerve root is protected with a nerve root retractor, enabling the compressive disc prolapse to be trimmed back. Only the damaged disc fragment will be removed or the disc rupture (*prolapse*) will be trimmed back. Normal or undamaged disc will be preserved. The trimmed area of disc will be washed to ensure no residual damaged fragments are left and to reduce any infection risk. The tube retractor is then removed.

The muscle lining (*lumbar fascia*) and deep layers of skin are sutured closed, and then dissolving skin sutures are placed.

A skin wound dressing will then be placed.

You will then be carefully turned onto your back, awoken from anaesthetic and the breathing tube removed.

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AFTER SURGERY:

You will be carefully watched in the recovery ward in theatre for 1 hour after the operation, and then be transferred back to the neurosurgery ward. The nursing staff will carefully monitor your breathing, heart rate, blood pressure and leg strengths regularly.

You will have pain relief from a drip into your vein, which you can control with a button to push (*PCA = patient controlled analgesia*). This has a safety cut out so that you cannot overdose on pain medication.

The nurses will give you sips of water until you get stomach rumbling (*return of bowel sounds*) or passing of wind, indicating that your stomach and intestines are working again. If you drink or eat too early you may feel sick or vomit.

The next day you will be able to get out of bed and walk around with the physiotherapist and nurses.

Once you are comfortable and walking, the drip will be removed from your arm and regular tablets and injections for pain relief will replace the PCA if required. You will be able to go home, which is normally 1 - 3 days following the operation.

You may require rehabilitation as an inpatient or as an outpatient to help your recovery. This will be discussed with you and arranged by Mr Malham if appropriate.

You will be provided with pain relief medication or a prescription prior to leaving hospital. Do not drive for a period of 4 weeks following the surgery or until you have seen Mr Malham for post-operative review. You can travel in a car as a passenger with the seat reclined 30 degrees in order to keep your back straight. Be careful getting in and out of a vehicle.

Do not perform heavy lifting or vigorous physical work for 4 weeks after the operation. You should avoid bending and twisting activities and sitting for greater than 20 - 30 minutes. Keep your back straight. You can stand, walk or lie down and sit for meals on a straight chair.

You will be encouraged to walk 3 - 4 small walks per day, building from 5 minute walks up to 20 - 30 minute walks per day over a 4 - 6 week period, rather than one long walk, as this will cause pain and stiffness.

The leg pain, numbness and weakness will slowly improve after the surgery. The pain and weakness will improve over a few weeks, depending on the severity and duration that you had problems before you had surgery. The numbness will reduce but may never return to normal because of damage to the small fine sensation nerves on the outside of the nerve root. These are damaged by pressure from the disc prolapse or bone spurs (*osteophytes*).

Medication may be given to you, as required, for any residual nerve pain or burning sensation in your leg. The most common used are Endep and Lyrica.

You will be reviewed at Mr Malham's rooms 4 weeks after the operation and an appointment will be given to you prior to discharge from hospital. You may wish to ring the rooms once you are home to obtain a time that suits you.