

## LUMBAR MICRODISCECTOMY

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**DEFINITION:** An operation to trim/remove a disc prolapse or disc fragment, which is compressing a nerve in the lower back supplying the leg.

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**INDICATIONS:** Lumbar radicular pain (*sciatica*)  
Lumbar radiculopathy (*leg pain, numbness & weakness*)  
Cauda equina syndrome (*pressure on the nerves supplying the bladder, bowel and genital region*). This causes problems with passing urine, incontinence and numbness around the genitals & buttocks.  
Lumbar microdiscectomy is intended to relieve leg pain and weakness. It does not improve back pain. There is a 5% chance microdiscectomy may worsen existing back pain.

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### SUCCESS OF THE OPERATION:

80 - 90% success rate for improvement in leg pain, numbness and weakness. The outcome is lower depending on severity and how long you have had the signs and symptoms before having the operation. 10% of patients experience no change in symptoms.

If cauda equina syndrome is present, surgery should be performed urgently. Even with surgery complete recovery can not be guaranteed.

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### RISKS OF THE OPERATION:

2% risk of the following:

- Infection, bleeding, CSF leak (*fluid leak from the nerve lining*)
- Nerve root damage causing leg numbness and weakness
- Recurrent disc prolapse (*usually occurs within the first 4 weeks post operatively*)

General medical risks associated with surgery:

- General anaesthesia complications and drug reaction
- Blood clots - DVT (*legs*) & pulmonary embolus (*lungs*)
- Pneumonia
- Urinary tract infection
- Heart attack and stroke
- 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, pre-operatively:

- Aspirin (*Cartia, Asasantin*) and Clopidogrel (*Plavix, CoPlavix*) = 10 days prior to surgery.
- Warfarin (*Coumadin*) = 5 days prior to surgery.
- Xarelto (*Rivaroxaban*) and Eliquis (*Apixaban*) = 3 days prior to surgery.

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

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**THE OPERATION:** The operation is performed under general anaesthesia.

Your positioned face down on a special operative frame. The level of the operation will be checked by an intra-operative x-ray with the skin marked. The skin is cleaned with antiseptic and is made numb with a local anaesthetic.

A skin incision is made followed by dissection between bone and back muscles, allowing a tube retractor to be inserted holding the muscles out of the way. The correct spine level is checked with an intra operative x-ray.

Under the microscope, a special drill is then used to make a small bone opening, allowing exposure of the compressed nerve. The bony opening where the nerve exits the spine is widened, therefore allowing the disc prolapse/disc extrusion compressing the nerve root to be trimmed/removed. Any further damaged disc is then removed from the disc space, freeing the nerve root from any compression. Healthy disc is left.

A dissolvable pad called Gelfoam is soaked in local anaesthetic and anti-inflammatory steroid and placed over the nerve to reduce inflammation and bruising.

The lining around the muscles is closed with dissolvable stitches and the skin closed with vdisolvable sutures. A wound dressing is applied.

You are then taken to recovery.

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**AFTER SURGERY:** You are carefully watched in the recovery ward for 1 hour after the operation, then transferred back to the neurosurgery ward. Your breathing, heart rate, blood pressure and leg strength will be monitored. Your bowel sounds are also monitored to indicate that your stomach & 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 the ward with the nurses and physiotherapist. Once you are comfortable walking independently you will be discharged home, normally 4-5 days after the operation.

Pain relief usually comes in the form of regular tablets. You will be provided with a prescription on discharge from the hospital.

You may require rehabilitation as an inpatient or outpatient to help your recovery. This will be discussed with you, if appropriate, prior to your surgery.

Leg pain, numbness and weakness will slowly improve after the surgery over the next 4 weeks. Of course this depends on the severity and duration of your symptoms prior to the operation.

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### RECOVERY AT HOME:

It is preferred that you do not drive until your post-operative appointment. You may travel as a passenger with the seat reclined to 30 degrees for up to 20 minutes. Be careful getting in and out of the car.

Do not perform bending/twisting activities or heavy lifting.

No sitting, standing or walking for longer than 30 minutes each time. You will be encouraged to walk 3-4 small walks a day (*building up with time & distance*) of up to 30 minutes each walk.

Mr Malham will review you in the consulting rooms 4 weeks following the operation to assess your progress. Return to work timing will be discussed.

RECOVERY TABLE:			
Weeks	Sit, Stand & Walk (min)	Lifting (kg)	Activities
0-4	30	5	Recovery @ home
4-8	45	10	Light: drive car, swim
8-12	60	15	Medium: jog
>12	-	20	Normal: sprint/run, golf, cycling