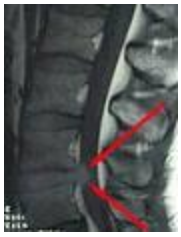
Microdiscectomy in the Lumbar Spine

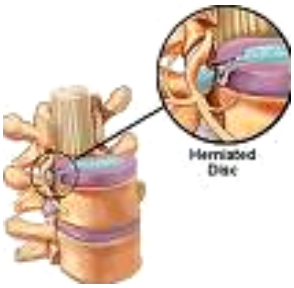
This is an operation performed to treat sciatica (leg pain). It is used when conservative methods of management such as rest, physiotherapy, anti-inflammatory drugs and blocks have failed to give adequate relief. Whether or not a patient is suitable for a microdiscectomy will depend upon the MRI scan or other investigations.



Before surgery

It is important to be as fit as possible for any operation (within the limits of your symptoms), so taking careful regular exercise, best as directed by a trained physiotherapist, on a regular basis, will help your recovery. Keeping your weight down and eating a healthy diet are important. Take all your scans/x-rays with you to the hospital.

On the day of surgery, do not eat or drink anything from the time specified on your admission letter. Food in the stomach, during an anaesthetic, is very dangerous and risks major complications such as pneumonia, if it is regurgitated. When you come into the hospital, the London Clinic, enter via the 20 Devonshire Place entrance, where you will be directed to the admissions office. Here you will be signed in and escorted to the ward – usually on the 6th floor. Your private room will be yours for the duration of your stay. You will have a busy time! The ward nurse looking after you will "admit" you, by asking a series of questions related to your health and medical problem. He/she will communicate any issues to the anaesthetist. The physiotherapist will see you and advise you of the likely pattern of exercising you will be asked to do after the surgery and will answer any questions about mobility etc. The anaesthetist will see you, to explain the anaesthetic and any risks involved in having this. You must let him know of any other medical issues, even if you do not feel they are relevant. You will be asked about previous anaesthetics you may have had and any problems with them, such as sickness afterwards, drug reactions or blood pressure issues. You must let him know of any dental problems, crowns or caps on your teeth, that otherwise could be damaged when the tube is put down to allow you to breathe during the anaesthetic. Some of these operations can be performed under an epidural anaesthetic, during which the patient is awake. If you wish, ask the anaesthetist about this option. You will be offered a pre-med (pre-operative medication) which will relax you, if you are very nervous. This cannot be given until the consent form has been signed.



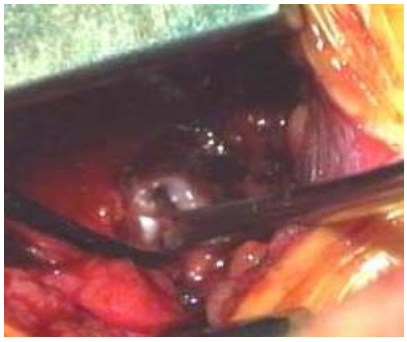
The surgeon, Mr. John Sutcliffe, who saw you in the clinic, will then see you and you will be asked to sign a consent form for the operation. You must be totally happy that you are doing the right thing. Ask any questions you need to – there is no pressure to proceed with surgery just because you are there. If, for example, your symptoms have improved a lot since your clinic visit, ask if the surgery is still necessary, or if other options may be

considered. If you wish to proceed and you understand all the risks involved, you should sign and date the form.

When your theatre slot becomes available (often several operations are performed on the same operating list by Mr. Sutcliffe), the nurse and a theatre porter will take you down to the basement where the theatres are located. You can travel down on a trolley, in a chair or simply walk down if you wish. Once in the theatre suite, you will again be checked in, your wrist band checked to confirm your identity and hospital number and you will be taken through to the anaesthetic room. Here you will lie down on a trolley, whilst the anaesthetist and operating department assistant, get you ready. A cannula is placed in the vein in one of your hands to administer the anaesthetic.

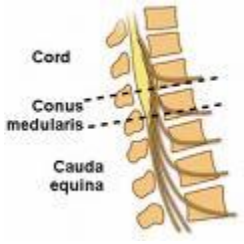
The Operation

The operation is performed under anaesthetic (usually a general anaesthetic, but an epidural can be used as an alternative) with the patient lying face down in the operating theatre. A small incision is made on the back, over the bad disc, which usually is only 2 - 3 cms in length and the spine is exposed by retracting the muscle slightly (only around 1.5 - 2 cms) and removing a small portion of the ligament (the *ligamentum flavum).* Then the surgeon can see the trapped nerve root using a microscope to obtain better vision and illumination and, and remove the bulging disc tissue below it. This frees up the nerve and allows the surgeon to empty any more disc material out of the disc space a needed.



Outcome of Surgery

The aim of the operation is not to completely remove the disc, but to remove the parts which are trapping the nerve and causing the pain. The emptying of the disc space is always only partial. There is, therefore, the risk of further disc material coming out of the space at a later date, but this is a rare complication. Other potential complications include infection, which can lead to long term pain in the back if the disc itself is involved or nerve root damage which can lead to weakness or pain or both in the leg. If all the nerves in the spine at that level are affected (the Cauda Equina – horse's tail) there could be loss of bladder, bowel and sexual function as well as leg problems. These complications are rare and microdiscectomy remains a very good treatment for sciatica if other treatments have failed.



After surgery

When you leave the hospital the back may still be sore. You may also, occasionally, have some twinges in the leg, but these should be much less marked than before. You may need pain killers, which the hospital can supply. It is important not to strain or damage the spine on the way home – timing is critical. Leaving central London on a Friday night, or during the morning rush-hour is likely to be a very unpleasant experience, due to the traffic conditions. It is much better to leave during the day, or later in the evening. Travel by car is fine, provided someone else is driving, but you must break up the journey if it is longer than 30 minutes. It is also important to take the strain out of the spine by reclining the seat or lying across the back seat, supported by pillows. Ambulance transfer home is a safe and easy option, although may be expensive and may not be covered by health insurers. The nursing staff on the ward are able to arrange this if you wish.

Most people recover from the surgery over around six weeks. They are, however, mobile and out of bed the same day and usually out of hospital within 1 - 3 days. The mainstay of treatment post-operatively is physiotherapy, with exercises to strengthen the spine and return normal patterns of movement. Most patients progress slowly with these over a few weeks, starting just with walking, developing their abdominal tightening exercises and then may need to attend the physiotherapy gym after discharge from hospital. You may return to sports after 6 weeks, but should avoid contact sports for up to 12 weeks. You should not drive a car for 6 weeks, as there is a risk of a further piece of disc being dislodged if you are jolted. A clinic visit for review is usually arranged for 6 weeks post-operatively.

Patients having the surgery under epidural anaesthetic often recover quicker and feel able to return to work on light duties a few days after surgery.

What are the risks of this operation?

Risk	**Cause**	**% Risk(figures vary)**
Nerve injury	Damage to the nerve whilst removing disc	<1
Cauda equina syndrome	Damage to the central nerves in the spinal canal, going to bowel, bladder and sensory functions (including sexual sensation).	<1
Fluid leak	Small tear in the nerve sheath allowing leakage of cerebrospinal fluid	<1 (But up to 10% if previous surgery
Infection	Contamination during surgery or, rarely, late infection via the blood	Approx 1
Recurrent disc	Persistence of small pieces of disc within the disc space - could come out later	1 - 2 (Literature suggests 6 -7). Up to 25% with a large bulge and a large defect in the ring of

		the disc
Wound pain	Surgery	All to some extent