www.langdonspine.com
+44 1582 714 304
langdonpa@spirehealthcare.com

Microdiscectomy

What is a microdiscectomy?

A microdiscectomy is the surgical treatment of sciatica when it is caused by a prolapsed disc. A 'discectomy' is the surgical removal of the disc material that is irritating the nerve root. A microdiscectomy is a discectomy performed using an operating microscope. The microscope provides magnification as well as an excellent light source. The use of a microscope allows for a smaller incision as well as making the operation safer. A microdiscectomy is performed in patients who have persisting pain that has not been relieved by rest or injections, or who develop progressive neurological signs and symptoms such as weakness and numbness. Over 85% of patients are very satisfied with their outcome following a microdiscectomy.

How do we do it?

A microdiscectomy is done under a general anaesthetic. You will meet the anaesthetist on the ward prior to your surgery who will explain the anaesthetic to you. The operation takes about 75 minutes. Once asleep the patient is placed on their front on the operating table. X-ray is used to identify the correct area of the lower back, and a small incision is made. The muscle is separated off the spine, and a small amount of bone and the ligament covering the nerves is removed.

The nerves are then inspected and gently retracted to the side to allow access to the disc prolapse. A small incision is then made in the back of the disc and the disc prolapse is then removed. The rest of the disc is left behind.

At the end of the operation the wound will be closed with dissolvable stitches and covered with a dressing.

If you are on any medication that has the potential to thin your blood such as aspirin, clopidogrel, warfarin, rivaroxaban or any other blood thinning medication then we do need to know about this prior to the date of your operation as this will usually need to be stopped prior to your operation.

If you take anti-inflammatory tablets, then you must stop taking them seven days before your operation as these drugs can also affect blood clotting.

What are the risks of having a microdiscectomy?

Infection – The risk of infection is less than 1%. All patients receive a dose of intravenous antibiotics when they are going off to sleep. If you develop an infection it is most likely to be a superficial wound infection that will resolve with a short course of oral antibiotics. Occasionally an infection can spread into the disc space. This is called discitis. This is much more serious and may result in further damage to the disc. If this occurs you may require a prolonged course of intravenous antibiotics or additional surgery.

Bleeding – Blood loss is usually minimal with a discectomy. However, there are large blood vessels in front of the disc and there are reported cases of these blood vessels being damaged during surgery resulting in a very serious and potentially life-threatening blood loss. This type of bleeding is rare and is reported to occur in approximately 1 in 25,000 cases.

DVT – Developing blood clots in the legs (deep vein thrombosis – DVT) is a risk of any surgery. We worry about DVTs as bits can break off a travel around your body. This is called an embolus. An embolus can affect your breathing, cause you to have a stroke, and could potentially be fatal. DVTs occur in approximately one in 200 patients having back surgery. An embolus is a much less common occurrence. We minimize the risk of DVT by asking patients to wear hospital stockings following their surgery (TEDS), and by using mechanical pumps on the lower legs during and immediately after surgery. These pumps squeeze your lower legs, helping the blood to circulate. They are put on when you go to sleep and stay on until you start to mobilise. We encourage early mobilisation as this also helps to prevent DVTs. If a patient is considered to be high risk for a DVT then we will prescribe blood thinning medication for a couple of weeks after your surgery.

Please tell your surgeon if you take the oral contraceptive pill as certain types of pill need to be stopped pre-operatively as they increase the risk of blood clots.

Nerve injury – To expose your disc prolapse the nerve root needs to be retracted. In doing this there is a very small risk of physical damage to the nerve. This can lead to loss of nerve function with persisting leg pain, weakness (including a floppy foot), and numbness. It is possible that a nerve injury could affect your bladder and bowel function, as well as erectile function in men. Nerve injuries are usually temporary but may be permanent.

Dural tear – Occasionally the lining to the nerve (the dura) can be damaged causing the leakage of the fluid that surrounds the nerves (the cerebro-spinal fluid). Some tears are managed conservatively, whilst others require surgical repair. Patients who have had a dural tear may be asked to stay in bed for a short period of time following their operation on flat bed rest. This would normally be for between 24 hours and five days. Occasionally a persistent leakage of spinal fluid occurs which may require further surgery.

Recurrent disc prolapse – A discectomy is an operation to deal with your current difficulties. It is not a cure for a problem disc. There is a risk that further piece of disc material may prolapse. This

can occur at any time but is most common in the first few weeks following surgery. A recurrent disc prolapse is treated in the same way as the original disc prolapse and may require a repeat (revision) discectomy. The risk of a recurrent disc prolapse that requires further surgery is 10-15%.

Scar tissue – Scar tissue can form around the nerve and can mimic the symptoms of a disc prolapse. This is not common. We will usually try and treat this with injections rather than further surgery.

Back pain – A microdiscectomy is performed primarily for leg pain. During surgery the disc prolapse is removed, but we are unable to repair the already damaged disc. Consequently, there may be some on going back pain after a microdiscectomy. A small proportion (less than 10%) of patients who have a discectomy require treatment for back pain in the future.

Risks associated with having an operation lying on your front – when getting you ready for surgery, care is taken to ensure that everything is protected. The does however remain a small risk of pressure damage. This can cause some temporary skin damage to areas such as the tip of your nose and chin as well as to your torso. This would be expected to recover within two to three weeks. There is a very small risk of some damage to your vision. Visual damage is reported as occurring in 1 in 100,000 cases.

Medical complications - Prior to being admitted to hospital you will go through a pre-operative assessment process. This is to ensure that you are as fit as possible for your operation. If you have a chronic condition that is found to be poorly controlled or if a new condition is identified by the pre-operative assessment, then your operation may need to be delayed in order for your medical condition to be optimised. General anaesthesia for elective surgery is very safe. Occasionally unexpected medical events (such as a stroke or heart attack) can occur under general anaesthetic or in the early post-operative recovery period. Fortunately, the risk of death under anaesthesia is very rare. Death as a direct result of general anaesthesia is reported as occurring in 1 in 100,000 cases.

Following any operation there is a small risk of post-operative medical complications, such as chest infections or urine infections.

What can I expect following my microdiscectomy?

When you wake up following your microdiscectomy your leg pain should feel better. You will feel bruised in your lower back at the site of the operation. We try and minimise the soreness in your back by injecting local anaesthetic around the wound. The post-operative back pain can occur on both the operative and the non-operative side. The post-operative back pain will normally take a couple of weeks to settle down. Before you go home, we will make sure that your pain is under control. You will also see the physiotherapy team on the ward who will give you lots of advice, some basic exercises to do, and will also make sure that you are safe to be discharged. You will be in hospital for one to two nights.

The wound will be closed with a dissolvable suture, so there will be no stitches that need to be taken out. Your wound will require minimal attention after discharge. You must keep your wound completely dry and covered for two weeks following your surgery. You will have an appointment to be seen back in the dressing clinic for a wound check two weeks after your operation. You must not soak your wound for at least four weeks following your operation. Before you go home the nurses

will explain how you need to look after your wound.

Following surgery, the leg pain is often immediately better. There may also be some short lasting 'memory' symptoms of pain in your leg that come and go. These will normally settle over a few days. If there was a return of severe pain in your leg and it was not settling then you must let us know, either by calling the ward or my secretary. However, many patients have residual, patchy numbness. This should not interfere with your function. If this does recover it may take up to 18-months to do so.

Returning to work – People with non-manual jobs will normally be able to return to work within three to four weeks, although often with some restriction of activity. If possible, initially it can be helpful to plan to do some work from home. It will be three months before you can return to manual work.

Driving – There is no restriction with the DVLA, though there will be with your insurance company. You will need to be able to undertake an emergency stop and be in complete control of your car at all times without being distracted by pain. If this is not the case, then your insurance will NOT be valid. Most patients are back to driving within two to three weeks of their disc surgery.

Flying – You should not fly short-haul for a minimum of two weeks following your surgery. You should not undertake any long-haul flights for six weeks. If traveling on a long-haul flight within six months of your operation, then you should wear your hospital stockings when flying.

Returning to exercise – For the first six weeks following surgery you will need to take things relatively easy. During this time, you need to avoid any prolonged sitting and standing, and we would advise that you avoid being in anyone position for more than 30 minutes without a movement break, apart from when you are asleep in bed. This is to try and minimise the discomfort that you get in your back at the surgical site. Once you are home, we would advise that you aim to get out for two walks a day. Initially these will only be for a few minutes, but they can gradually be increased as you feel able to do so. After four weeks you can start doing some gentle, low impact exercise such as cycling, using a cross trainer or swimming. You should try to avoid any un-necessary heavy lifting and high impact exercise for 12-weeks following your surgery. You should be back to your normal level of activity by 12-weeks.

What next?

Once your sciatica has resolved you must continue to look after your back. The fact that you have had a disc prolapse does not preclude a normal lifestyle. However, we would recommend that you:

Exercise: Undertaking an exercise program that aims to improve and maintain aerobic fitness is important. This may include regular brisk walking, swimming or cycling. Specific exercises to maintain flexibility and strengthen the abdominal and spinal muscles are important. Many patients find Pilates and yoga helpful following low back surgery.

Avoid smoking: Smoking is associated with increased back pain and poorer outcomes from spinal surgery.

Avoid obesity: Being overweight forces the spine to carry unnecessary loads and is associated with

back pain.

Avoid heavy lifting: Patients who have had major spinal problems or surgery should be cautious with heavy lifting and prolonged manual work, as this may cause a recurrent disc prolapse or further back injury. When you have to lift you should do so by bending your knees and keeping your back straight, rather than bending at the waist.

Follow-up

You will be seen back in the clinic three to four weeks after your microdiscectomy to see how you are getting on, and to answer any further queries that you may have. This appointment will be made for you before you are discharged from hospital.

More information can be found in the booklets section of the patient's area on the British Association of Spine Surgeons website (www.spinesurgeons.ac.uk)