Spinal microdiscectomy

Introduction

Microdiscectomy is an operation to remove damaged disc material from the spinal canal and from the centre of an intervertebral disc (the jelly filled 'cushion' between the bones of the spine) to relieve the pressure on a nerve passing from your back to your leg. Once removed, the compression of the nerve root is relieved; the movement in the spine is not lost. The "micro" technique allows the surgeon to see the nerve and disc through a small incision (cut) and by using this technique, pain following surgery is less of a problem and movements return more quickly.

This leaflet explains what the procedure involves and aims to help you decide whether this treatment is suitable for you.

Key points

- The procedure is carried out under general anaesthetic (you are asleep).
- You are likely to stay in hospital overnight and up to three days.
- You will normally mobilise (start moving about) the day after surgery.
- You will be off work up to four or five weeks depending on the type of work you do.
- This operation is usually successful in relieving leg pain due to nerve compression.
- Lifting, twisting, excessive bending or stretching should be avoided for the first six weeks.

Who is suitable for this treatment?

This procedure is suitable for patients who have a damaged or herniated spinal disc, causing nerve pressure and pain.

When is surgery unsuitable? (contraindications)

This procedure is not suitable or safe for patients who:

- Are deemed not fit for surgery e.g. who have high blood pressure or a high body mass index (BMI) i.e. are morbidly obese.

What are the benefits

Relief of leg pain from nerve compression.

What are the alternatives, risks and side-effects?

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 spinal injections.

Risks and side-effects:

Deep infection – 1 in every 100 cases of microdiscectomy 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. Occasionally further surgery may be required.

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 microdiscectomy 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 disc herniation – further bulging of pieces of disc material causing nerve compression (1 in 100 cases per year afterwards, 10% risk at 10 years).

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 microdiscectomy, 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.

Helping you to decide

Please arrange a discussion with a consultant to help you decide if the procedure is suitable for your particular symptoms.

What to expect before, during and after this procedure

Before the operation

You will be booked in for a pre-operative assessment. At this appointment a detailed assessment is made by the nurses. Blood tests and infection swabs may be taken and a heart trace (ECG) carried out. Sometimes, you may need further tests. Information about your operation and hospital stay will be given to you at the pre-operative clinic.

Admission

The operation is carried out under a general anaesthetic (i.e. you are asleep). On admission you will be seen and assessed by the anaesthetist who will discuss your anaesthesia for the operation. When you have had all your questions answered you will be asked to sign a consent form before having your procedure.

The operation

During the procedure an incision (cut of 3-4cms long) is made in the lower back, directly over the problem disc. The skin and soft tissues are separated to expose the bones along the back of the spine. The nerve is gently moved aside for the surgeon to inspect the compressed disc; material from inside the disc is removed to reduce pressure on the nerve and make it less likely for the disc to herniate (rupture) again. Finally, the nerve root is gently wiggled to make sure it is free to move. Muscles and soft tissues are put back in place and the skin is stitched together with a dissolving stitch.

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: 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 one and three 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.

After discharge

- You will have a follow up appointment in the outpatient clinic around six weeks after their operation. The appointment will either be arranged before your discharge from hospital or sent to you in the post.

What can you expect to be able to do afterwards

- It is usual to stay off work for four to six weeks after discharge from hospital.
- Swimming, cycling (exercise bike) and walking can be started early on.
- Sporting pursuits that do not pound the spine can be introduced gradually after three months.
- Golf and light tennis can be introduced after three months.
- Jogging, running and heavy lifting should be avoided until six months after the operation.
- You may resume sexual relations as long as you remain the passive partner for the first six weeks.

Looking after your back

A prolapsed disc should be taken as a warning that your back is a bit worn. You should make sure you are not over your ideal weight to protect it in the future. You must make sure the lower part of the back is properly supported by the chair you usually sit in: especially if you work for long hours in a seated position. You should take gentle regular exercise to maintain strength in your muscles and general fitness.

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)

If you have any concerns during the first 24 hours following your discharge from hospital please phone the ward. After 24 hours: please seek advice from your GP.

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

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Review due: January 2020