

## Information and exercises following microdiscectomy

This information is designed to help you get back to full fitness as quickly as possible after your operation. Before you leave the hospital a physiotherapist will run through all the exercises on this leaflet to ensure that you do not have any problems.

### Introduction

The vertebral disc is made of two parts, the annulus fibrosus (outer part) and the nucleus pulposus (the inner part). The annulus consists of layers of collagen fibres (similar to the layers of an onion), the fibres in each layer lying in the opposite direction to those of the next layer. The nucleus is a semi-fluid gel which can be deformed without losing volume. When a disc ruptures the nucleus is extruded posteriorly into the spinal canal resulting in compression of the spinal nerve. Due to the design of the annulus this material becomes trapped outside the annulus.

Microdiscectomy is the removal of this extruded material through a small incision using a microscope to enhance the field of view.

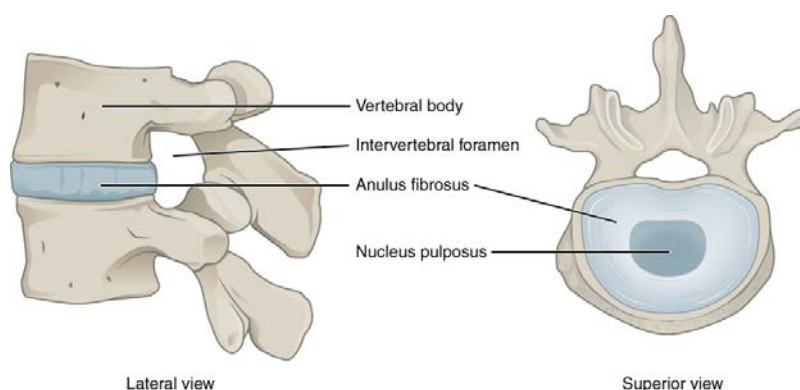
The surgery tends to relieve any referred pain into the legs immediately but results in pain in the muscles of the back.

Everybody's symptoms are different. Please ensure that you have adequate pain relief in order to mobilise.

If you do too much in one day and your back is very sore then you should continue with your exercises and gentle mobilisation until the pain settles before restarting more vigorous activities.

Altered sensation such as numbness takes longer than the pain to resolve and sometimes doesn't resolve fully.

You will be discharged home once your pain is well controlled, you can mobilise independently and manage stairs if required. Some patients will be fit for discharge within 24 hours of their surgery and some patients may require 2-3 days before they can be discharged.



Lateral view

Superior view

## On discharge

- You must avoid any lifting or prolonged bending for the first 6 weeks
- Avoid heavy lifting for 6 months
- Golf and light tennis can be introduced at 3 months
- Running should be avoided for the first 6 months
- Work – return to work is dependent on the nature of your job. If you have a desk job you may feel comfortable to return at 6-8 weeks post op; a heavy manual job your return to work is likely to be after a minimum of 3 months but maybe as long as 6 months. Always check with your surgeon before returning to work.
- Driving – you may drive once you can do an emergency stop and are comfortable sitting in the car long enough to get to your destination. This is likely to be at least 4-6 weeks after surgery.
- You will be referred for outpatient physiotherapy and they should offer you an appointment 2-6 weeks after your surgery.
- You will be reviewed by your surgeon 6-8 weeks after your surgery.

## Postural advice

If your back is painful always rest lying down rather than sitting as this reduces the stress on the soft tissues surrounding the spine. Here are some positions you may find comfortable.

- Lying on your front with or without a pillow under your stomach.
- Lying on your side with a towel in your waist and a pillow between your knees.
- Lying on your back with the hips and knees bent and lower legs supported on a pillow or chair.



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When sitting always try and sit with your knees lower than your hips and avoid slumping.



## Day 0 – discharge

- You may mobilise today if your surgeon is happy and you are not too uncomfortable to do so, frequent shorter walks are better than fewer longer ones.
- You may perch on the side of the bed or on a firm chair for meals ensuring that your knees are lower than your hips.
- You can begin the exercise program below; try and do the exercises 3-4 times a day.

The best technique for getting from lying to sitting on the edge of the bed is:

- Roll onto your side with your knees slightly bent.
- Bring your legs off the edge of the bed.
- Push up with your uppermost hand in front of you and your other elbow.
- Do not try to sit straight up as this will stress the healing tissues.

As mentioned previously you will be discharged once your pain is well controlled and you are mobilising independently.

## Exercises

### Transversus abdominus

This muscle is a deep support muscle for your spine. Whenever you move it contracts and stabilises the lower spine. Your physio will teach you to locate it.

Lie on your back with your knees bent up.

Keeping your back still, tighten your pelvic floor muscles/lower abdominal muscles. You should feel your fingers pushed out in the location where you have been shown by your physio.

Remember to keep your upper abdominal muscles and breathing relaxed.

Hold for 10 seconds if possible. Repeat 10 times.

### Knee rolling

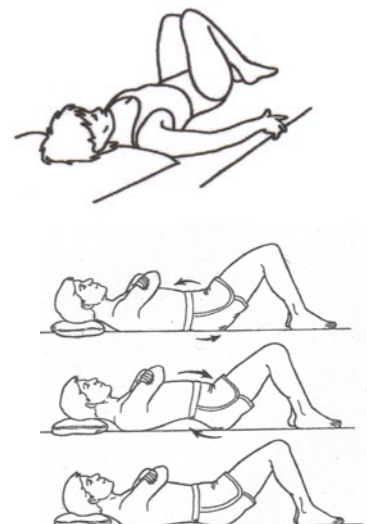
Lie on your back with your knees bent up and gently roll the knees from side to side as far as possible. Do not push through pain.

Repeat 10 times each side.

### Pelvic tilts

Lie on your back with your knees bent up and gently flatten the small of your back into the bed.

Relax, repeat 15 times.



### Prone lying

Initially try lying on your front for 3-5 minutes.

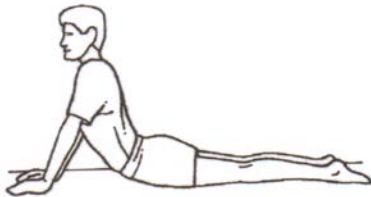


Once lying on your front is comfortable you may progress to resting on your elbow. Hold this position for 5-10 seconds and then relax.



Repeat 10 times.

Once resting on your elbows is comfortable you may progress to the full push up. Remember to keep your hips on the bed and to only go as far as comfortable. Hold this position for 5-10 seconds, relax and repeat 10 times. Remember to make your arms do the work, not your back muscles.

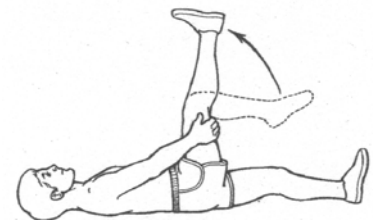


### Day 2– 3

Continue as for day 1 and add in the following exercises.

#### Sciatic nerve mobilising (if your pain was down the back of the leg)

Lie on your back with your affected leg pulled towards your chest. Keeping hold of the back of your thigh gently straighten the knee until you feel a pull at the back of the leg. Hold for a few seconds then relax. Repeat 10 times.



#### Femoral nerve mobilising (if your pain was down the front of the thigh)

Lie on your front, tighten your abdominal muscles and buttock muscles then bend the knees as far as you can. You should feel a stretch along the front of the thigh. Hold for a few seconds then relax. Repeat 10 times.



## After discharge

Gradually increase the amount of time you can perch for using a rolled up towel in your waist for support.

Ensure that when you are sitting that your hips are higher than your knees to keep the strain on your lower back to a minimum.

Go for regular short walks, maintaining an upright posture and gradually increase the distance as you feel comfortable.

Do your exercises 3-4 times a day as taught in the hospital.

You should receive a physiotherapy appointment between 2-4 weeks after discharge where your progress will be assessed and you will be advised about exercise progressions and activities.

You may start swimming at 4 weeks provided your scar has healed. Little and often is best to start with. Do not dive or jump in, or do butterfly stroke. Front crawl or back-stroke are the best strokes to begin with.

Cycling or exercise bike and vigorous walking can be started at 4 -6 weeks post op.

Remember – use your common sense and listen to your body. Mild aches after a new activity are acceptable but severe pain is not.

Making your back painful in the early stages of healing will increase the amount of inflammation in the tissues and delay your healing, however you are unlikely to cause further damage to your back unless twisting rapidly or lifting heavy items.

Gentle exercise and mobility will aid the healing process.

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Produced by: the Orthopaedic Physiotherapy Department, September 2017

Review Due: September 2019