

Lumbar Discectomy Surgery

Information for patients

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The purpose of this manual

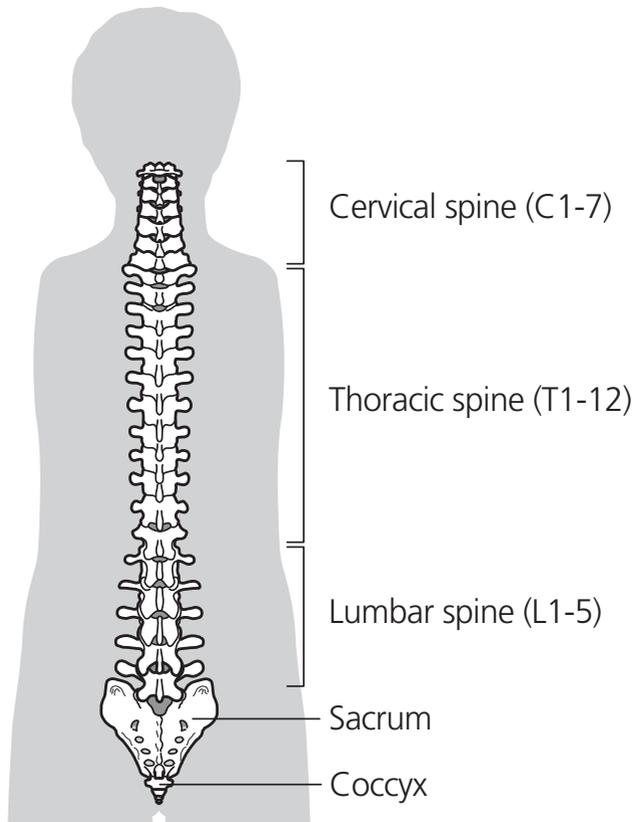
This manual provides information about your back, your surgery and your recovery after lumbar disc surgery, also called a lumbar discectomy. You might receive this manual before or after your operation, however, the manual is phrased as though your operation has not been done yet.

An understanding of what has happened better equips you to recover from your surgery, become more active, and prevent the same thing happening again.

What is the spine?

The spine has four parts, starting from the top they are:

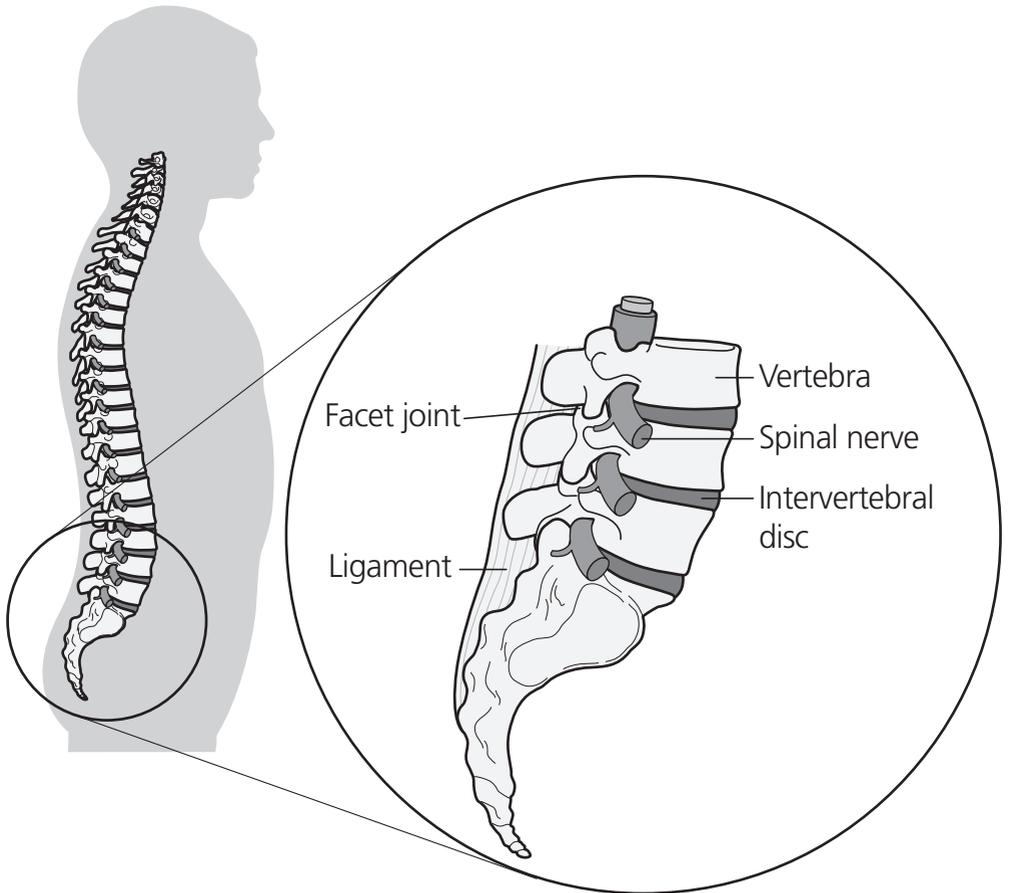
1. Cervical
2. Thoracic
3. Lumbar
4. Sacrum and coccyx



The lumbar area has the largest bones and bears the most body weight; it is capable of bending and twisting more than any other part.

The spine is made up of flexible intervertebral discs which lie between the bones called vertebrae.

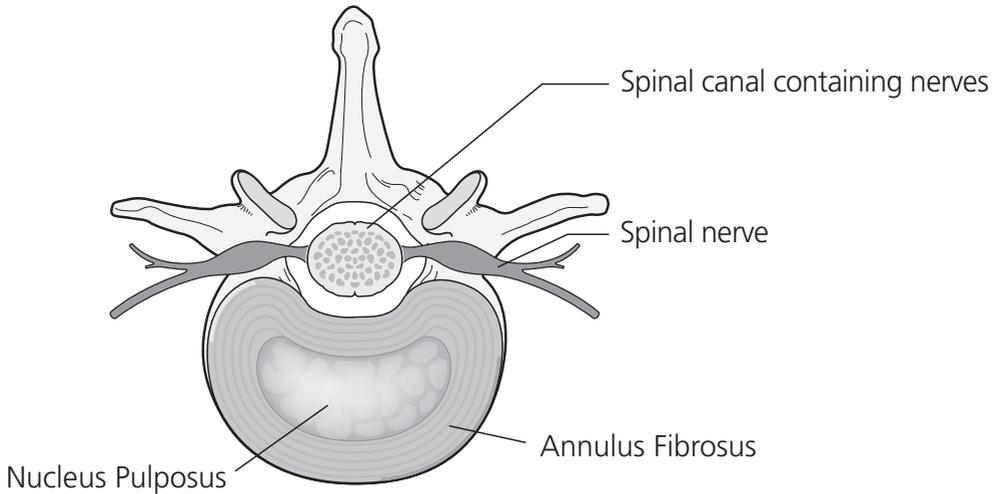
Spinal nerves pass between the vertebrae next to the discs and travel to the legs. The nerves send messages to allow our muscles to move and to allow us to feel things.



What is a disc?

Discs are tough yet flexible and allow the spine to bend and twist. They are often described as similar to a jam-filled doughnut. Discs have a central part filled with a rubbery substance called the nucleus (the jam).

The outside wall is called the annulus which is made from tough and flexible fibres (the dough). The annulus is a very strong structure which is usually able to heal and 'reseal' itself after surgery.

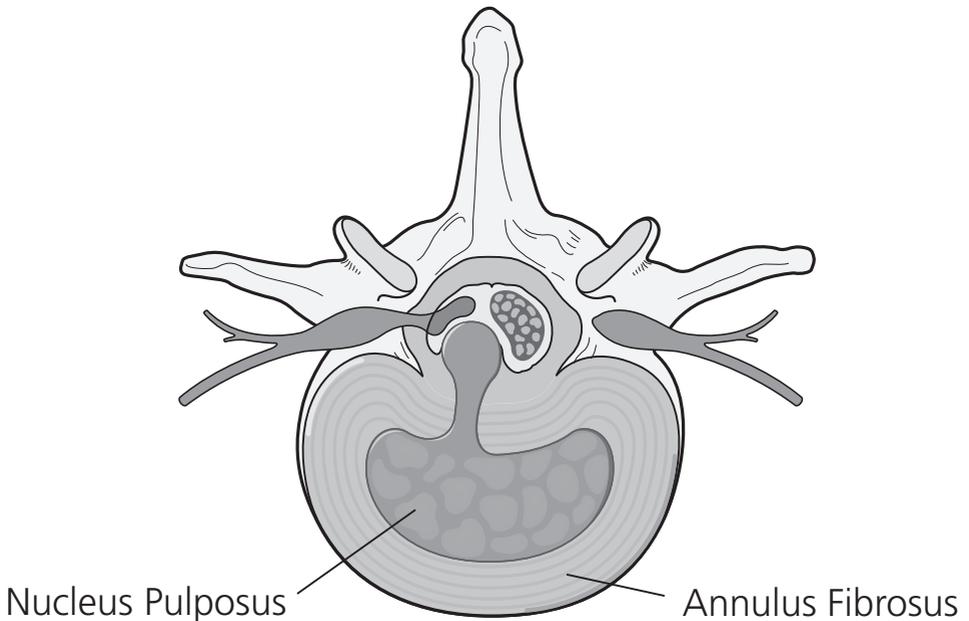


What has happened to my disc?

Disc herniation is sometimes also called a slipped disc, disc bulge, disc protrusion, or prolapsed disc.

If part of the annulus weakens it may bulge, or the nucleus might herniate or protrude through it. This can occur in lots of people without them knowing it.

However, the annulus or nucleus might press on the nerve that lies next to it and cause pain, sometimes with pins and needles, numbness or weakness in the leg. Secondly, chemicals from the disc can irritate the nerve further. When such leg symptoms develop, this is called sciatica.



What is the aim of lumbar discectomy surgery?

The aim of the surgery is to relieve your leg symptoms by removing the part of the disc that is pressing on the nerve.

What happens during surgery?

The surgery is performed under a general anaesthetic. This means that you will be asleep. A tube is inserted into your throat to help you breathe. The surgery usually takes about 45 minutes.

In the operating theatre you lie on your front, over an arched operating table. The surgeon makes an incision, usually about 3-5cm long, over the lower part of your spine.

The muscles are carefully moved to one side so the surgeon can see the lumbar vertebrae. A small amount of bone and ligament from the back of the spine are removed so the disc and nerve can be seen; this part is called a laminotomy.

Part of the nucleus is removed or the annulus is trimmed. Once the disc is no longer pressing on the nerve, the incision is closed with either stitches or clips and a sterile dressing is applied.

The benefit of lumbar discectomy surgery

The benefit of surgery is to take the pressure off the nerve and give the nerve a chance to recover. For the majority of people who undergo this operation, this means the leg and buttock symptoms improve, allowing them to return to their normal activities. The surgery may, or may not relieve your back pain.

What are the risks?

All surgery has its risks; lumbar discectomy surgery is very common and complications are rare. However:

- You may bleed more than expected
- The nerve can be accidentally damaged during the operation leading to some loss of movement, loss of feeling, loss of bowel and bladder control, or sexual dysfunction
- There is a risk of infection to the wound
- The annulus may bulge or the nucleus may herniate again
- The dura (membrane surrounding the nerves in the spinal canal) may be torn during surgery causing temporary headaches when standing or sitting

How should I feel after the surgery?

After a general anaesthetic you might feel drowsy, disorientated and experience a dry, sore throat; these are normal side effects from anaesthesia and will disappear.

You might experience discomfort in your back and hips from spending time in one position and your wound may be painful. These are normal consequences of the surgery you have had and will disappear.

After surgery, some patients find that their leg symptoms (pain and numbness) disappear immediately; others find it takes longer for them to subside. This is normal as everyone is different.

Some patients still experience symptoms of pain and numbness after surgery. Sometimes pain and sensation gradually improve but recovery may not be complete.

Going home

If you are travelling home by car, and sitting is uncomfortable, recline the seat a little. If you have a long journey, stop, stand up and walk around every 15-30 minutes.

Find out whether you have had clips or stitches to close your wound. Make sure you understand how to care for them and if you need to do anything about them when you leave hospital.

Your care team will explain arrangements for follow-up after discharge from hospital and will provide details of who to contact if problems are experienced.

Your rehabilitation might or might not involve seeing a physiotherapist at the hospital. Your rehabilitation will involve setting your own goals and being more and more active each day. Changing your lifestyle after surgery and reaching your goals is very much in your hands.

Being active

Everyone wants to know how soon they can start doing things – which is great. Timescales of when to start doing things can be helpful, but everyone is different. A common sense approach is best.

Being mobile as soon as possible improves your circulation and helps the healing process, leaving you with a stronger and more flexible back.

If you start with a daily routine, this will give you the best chance to lead the life you want after the surgery.

Timescales to guide you

Everyone is different and will recover at a different rate after an operation, therefore, use the times below as guidelines rather than exact timescales. You might be able to do more or less than it suggests against each timescale.

0-4 weeks after surgery

Start the exercises in this manual as soon as you have read about them.

During this period the disc and tissues involved in the surgery are healing. You can expect your leg symptoms to settle.

Avoid sitting for long periods. Only sit for as long as is comfortable. If your discomfort increases, your back is telling you to get up and move about.

Walk for as long as is comfortable. Regular daily walks are a good way to increase your general fitness and activity level. If any discomfort increases, your back is telling you to take a short rest, but then carry on. Make a note of how far you walked and try to improve next time.

It may be helpful to start planning your return to work within the first few weeks after surgery. Discuss returning gradually, for example beginning with shorter days or different tasks. Speak to your Occupational Health Department if you think this might be best for you.

Make sure you take your painkillers at regular intervals. This is helpful to keep any discomfort at bay and enable you to move and begin your exercises.

4-8 weeks after surgery

You might still experience periods of tiredness. This is normal and will disappear.

The exercises in this manual should be getting a lot easier now. Keep doing them.

If you have not done so already, think about returning to work. Practise work related tasks at home to see if you are ready. Many people who have office based jobs are able to return to work about this time.

Speak to your employer about how your absence might affect any benefits you may be receiving during your time off.

Start returning to hobbies, recreation and sport. Be guided by how your back feels, not how you think your back might feel.

Take your painkillers only when you are in discomfort.

8-12 weeks after surgery

The exercises in this manual should now be very easy but still part of your life.

You should be able to do most activities normally now.

Think about returning to work if you have an active job involving pulling, pushing and lifting. Practise work related tasks at home to see if you are ready.

Think about returning to more vigorous hobbies, recreation or sport. A staged return is best and pace yourself during the activity.

You should see a change in your lifestyle, your posture, the way you lift, how often you exercise and what little time you sit for.

You should be using painkillers infrequently now, if at all.

12 weeks onwards

Think about returning to more vigorous hobbies, recreation or sport. A staged return is best and pace yourself during the activity.

Think about a gradual return to heavy lifting if required as part of your job.

What exercises should I do and how should I do them?

These exercises will improve circulation, spinal movement, nerve movement, trunk muscle strength, healthy scar formation and general fitness. Start slowly and increase the number of exercises you do every day.

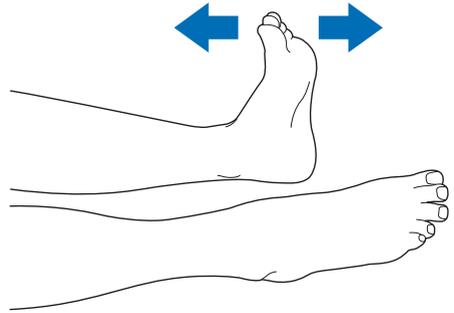
The physiotherapist will tick the exercises you should do and indicate how many to do and how often.

Ankle movements

Purpose: To help the nerves in your back and legs move freely and to help circulation.

Legs straight, bend and straighten ankles repeatedly.

Repeat times, per day.

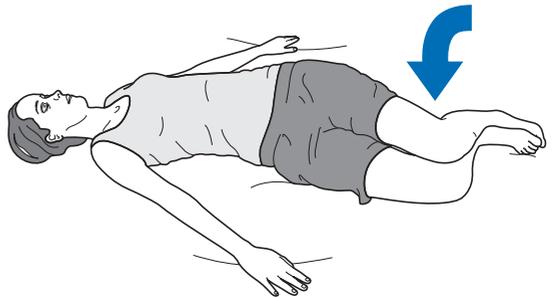


Knee rolling

Purpose: To reduce pain and increase movement in your back.

Lying on your back, knees bent towards the ceiling; keeping your feet on the bed, slowly roll both legs from side to side.

Repeat times, per day.

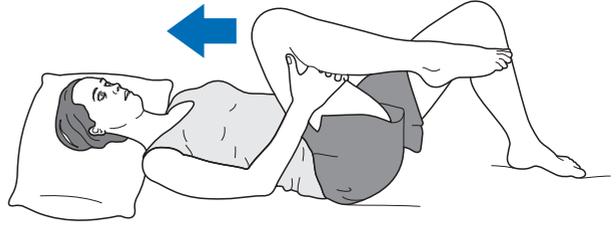


Hip and knee bends

Purpose: To help the nerves in your back and legs move more freely, reduce pain and increase back movement.

Lying on your back with a cushion under your head, pull your knee to your stomach with your hands. Hold for 10 seconds then straighten leg. Repeat with other leg.

Repeat times, per day.



Back arching

Purpose: To reduce pain and increase movement in your back.

Feet together, hands in the small of your back; looking forwards, arch your back as far as you can.

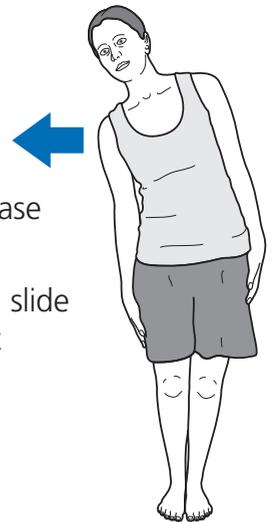
Repeat times, per day.

Back side bends

Purpose: To reduce pain and increase movement in your back.

Standing up straight, feet together; slide your left hand down outside of left thigh. Repeat on your right side.

Repeat times, per day.

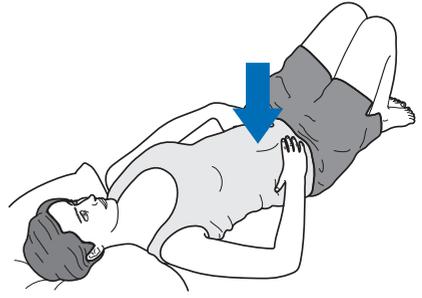


Transversus abdominus

Purpose: To increase the strength of the muscles that surround your lumbar spine.

Hands on your lower abdomen, pull your lower abdomen in as if a string were tied to the back of your belly button and someone pulled it toward your spine. Hold contraction for up to 10 seconds and maintain normal breathing.

Repeat times, per day.

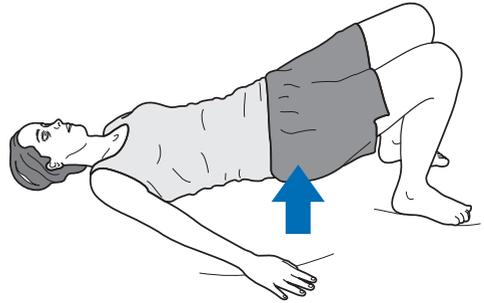


Bridging

Purpose: To increase the strength of the muscles that surround your lumbar spine and hips.

Lying on your back, knees bent, feet flat on the bed; pull your lower abdomen in and lift your pelvis and lower back off the bed. Squeeze buttocks together and hold for 5 seconds. Lower slowly returning to starting position.

Repeat times, per day.

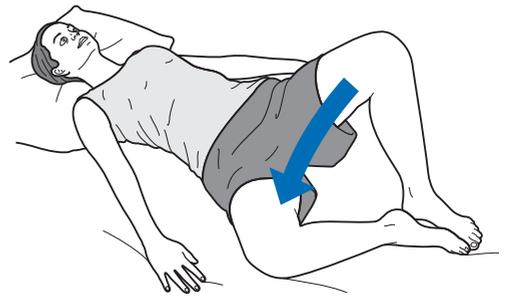


Bent knee dropout

Purpose: To increase the strength of the muscles that surround your hips and lumbar spine.

With knees pointing to the ceiling and lower abdomen pulled in, move one knee slowly outwards, whilst keeping the other knee still and then bring back to the middle. Repeat with other leg.

Repeat times, per day.



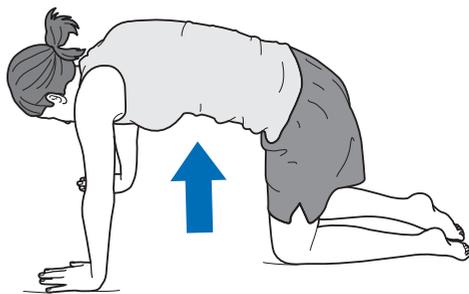
□ Back arches on all fours

Purpose: To increase the strength of the muscles that surround your lumbar spine, and to improve lumbar movement.

On all fours, pull your lower abdomen in and arch your back.

Hold for 5 seconds then lower slowly.

Repeat times, per day.



Day-to-day advice – prevention is better than cure

Quite often, discomfort will build up if you are in one position for too long.

You can change position wherever you are and whenever you think about it – sitting at work, on the train, in front of the television or in the car.

Start a daily routine. The lower back can become stiff overnight making getting up awkward and painful. Start your exercises before getting up, and then give yourself one or two easy jobs to do.

It is important not to become socially isolated when you are getting better. Invite friends and family round or arrange to meet friends. No one says you have to stay at home.

Pace yourself

Being back at home after a hospital stay can sometimes be overwhelming and you may be unsure of what you can do.

Pick an activity, something you will do regularly and for the foreseeable future (for example walking outside). Choose a 'comfortable' level (intensity) and time for which you can do this activity without causing too much discomfort the next day.

Start the activity by doing 20% less than your 'comfortable' level and do it regularly (2-3 times per week).

Slowly increase either the intensity or time of your activity.

Do not increase it in sudden, huge steps, even if you have a good day. Always stick to your exercise plan. Avoid overdoing things when you are feeling enthusiastic.

Accept that there will be less comfortable periods when you can do less than planned. If you experience this, reduce the intensity/time, but try to continue with a comfortable level.

For more advice on how to get fit and how to maintain your fitness, including physical activity guidelines for adults, visit the NHS Choices/Live Well webpages and speak to a GP and physiotherapist.

Frequently asked questions

Will all my leg symptoms go after surgery?

60-90% of lumbar discectomy surgery is classed as successful ^{1,2,3,4}.

10-40% of lumbar discectomy surgery is viewed as unsatisfactory or patients are left with their symptoms ^{1,2,3,4}.

2-14% of patients have a recurrent herniated lumbar disc 3 months to 4 years after surgery, respectively ⁵.

How soon can I get up after my surgery?

You will be encouraged to get up and out of bed the same day as your surgery or the day after depending on the timing of your surgery.

Will I be in pain?

Because you have had a general anaesthetic you may feel drowsy, disorientated and might experience a dry, sore throat. You might experience discomfort in your back and hips from spending time in one position and your wound site might be painful. These are all consequences of the surgery you have had and will disappear.

Will I receive physiotherapy following surgery?

Most people have the opportunity to discuss their care with a physiotherapist either before or after their operation whilst in hospital, or

as an outpatient.

How long will I stay in hospital?

It depends on what time of day you had your surgery and how long it takes you to recover from the anaesthetic. You might go home the same day or stay overnight.

When do my stitches come out?

The stitches used in hospital are dissolvable and therefore are not removed. If the surgeon used clips to close your wound you should be advised when they will be removed. If you are in any doubt after being discharged home, contact your GP surgery to discuss this with the nurse practitioner.

How long will it take to recover?

This depends a lot on you, your attitude and the goals you set yourself. Set small goals, pace yourself during activities, get into a routine as soon as possible and make every effort to go out normally.

When will I be able to walk?

A member of staff will encourage you to get out of bed and walk for the first time after your operation. This is often on the same day or the day after your operation.

How soon can I have a bath after surgery?

Try and keep your wound dry until it has healed. At first, use a sponge to gently wash round the area.

When will I be able to walk up the stairs?

If you didn't have difficulty before you should have no difficulty after your operation.

When can I return to work?

This depends on what you do and your employer. Think about what you do at work and practise at home. As you increase your strength and fitness you should be able to gradually return to normal. If your job

involves lifting heavy items, start with light ones first and increase slowly. If you and your employer think a staged return would be best, contact your Occupational Health Department or equivalent.

When can I drive?

You must only drive when you can safely perform an emergency stop and your car insurance company allows you to. Please check with your car insurance company, before driving.

When can I have sex?

Return to sex when your back is comfortable. At first, choose a position based on comfort.

When should I return to low impact exercise and sport?

Low impact exercise, such as walking (in training shoes), static cycling, swimming or aqua walking or jogging can be started immediately. Begin hobbies, recreation and sport when your back allows you to; you don't have to wait until you are completely pain free. Practise the activity at home to see if you are ready. Be guided by how your back feels, not how you think your back might feel. A common sense approach is best.

When should I return to high impact exercise and sport?

High impact exercise is anything that involves running, jumping or twisting, for example, jogging, heavy gardening and some aerobics. You need time for the disc to heal which takes around 4 weeks. You then need to build up your back muscles ready to start high impact hobbies, recreation and sport. You don't have to wait until you are completely pain free. Build up slowly and practise the related tasks to see if you are ready. A common sense approach is best.

When can I lift?

Firstly, it is important to know how to lift without putting your back at risk. Secondly you need to be strong enough and be able to walk far enough to carry your load. Once you know this, practise at home. Don't start by carrying a heavy shopping bag, sport bag or briefcase. Start light and build up; pace yourself.

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Useful contacts

- BackCare is a national charity providing information, support, promoting good practice
www.backcare.org.uk
- NHS Choices has information about the symptoms, causes, diagnosis, treatment and prevention of a slipped disc
www.nhs.uk/conditions/slipped-disc/pages/symptoms.aspx
- NHS non emergency care services: telephone 111 for non emergency advice

Acknowledgements

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