Royal Surrey
County Hospital
NHS Foundation Trust

Spinal surgery

Orthopaedic Department

Patient information leaflet

Spinal surgery

You are about to have spinal surgery. Any alternatives to surgery will have been discussed with you prior to now. The name of your operation is a discectomy, decompression or fusion. These types of operation are common and have a high success rate, over 90%.

What is a discectomy?

A discectomy is the standard procedure for a disc prolapse. It involves the removal of a portion of the disc and usually a small amount of bone.

What is a decompression?

A decompression is the standard procedure to release a compressed nerve. The material, usually bone, is removed to free up the nerve, thus decompressing it.

What is a spinal fusion?

A spinal fusion is surgery to join together two bones (vertebrae) in the spine together so there is no longer movement between them.

What are the aims of surgery?

1. To relieve your leg pain by removing whatever is pressing on your nerve i.e. disc, bone or scar tissue.
2. Improve quality of life and return to work/sport as soon as possible.

What happens?

Normally you are admitted to hospital on the day of your operation. The operation will take approximately 2 hours. You are usually on a ward for 1-2 nights after your operation depending on your progress.

The operation

An incision (2-4cm) is made over the area requiring the discectomy / decompression / fusion. The ligament and part of the bone overlying the disc and nerves are removed to allow access. The bulging disc/ compressing bone is removed to relieve compression on the nerve or in the case of a fusion the two bones (vertebrae) are fixed together.

When you wake following your operation you can expect any or all of the following:

- You will be lying flat on your back with a dressing over the wound.
- A drip for fluids may be attached to your arm until you start eating and drinking.
- A wound drain may come from your back to minimise bruising and swelling.
- Pain control may be administered via a drip in the arm or by tablet form.
- Occasionally a catheter may be fitted to assist you to pass urine.

Are there likely to be any complications?

Unfortunately there are occasional complications. These may affect up to ten percent of people. The potential risks and complications of your surgery will be discussed with you by your consultant prior to surgery.

The main complications for spinal surgery include:

1. **Further disc prolapse:** It is still possible that more disc material can prolapse out in the future, causing back or leg symptoms. This rarely happens in the first three months but can occur after this period.

2. **Nerve scarring:** Scar tissue will form in the area following the operation as part of the normal healing process. If this is excessive it can constrict the nerve and prevent it moving normally, this can cause production of leg pain.

3. **Back pain:** It is possible that back pain is developed following surgery due to the cutting of muscle and removal of disc material. This is common in the first few weeks however usually settles. Occasionally the back pain can become constant and severe.

4. **Nerve damage:** Nerve damage may occur, especially if the disc prolapse is large or the spinal canal is narrow. Such damage usually recovers over a period of time. There may be a period of time that there is increased pain and possible weakness of the muscles in the leg that the nerve supplies. If the nerve is accidentally cut during the surgery there will be permanent weakness of those muscles and altered sensation to the area of the leg the nerve supplies.

5. **Haematoma:** There is occasionally bleeding into the spinal canal or within the wound causing a blood clot. This usually settles independently but it may be necessary to return to surgery to have it removed.

6. **Infection:** To minimise the risk of infection you are given antibiotics in theatre. Infection is most common to the wound but you can also get an infection of the disc, which is rare but more serious.

7. **Deep vein thrombosis (DVT blood clot in the leg):** There is a small risk following surgery of developing a DVT. This is minimised by early mobilisation.

Will I receive Physiotherapy?

A physiotherapist will see you on the day of, or the day after, your operation. You will be assessed and shown the best way to get in and out of bed and be encouraged to mobilise as soon as possible. You will also be taught a home exercise programme and given some advice on how to progress your general activity at home.

Once home you will receive an outpatient appointment for 2-3 weeks following your operation (or once you are able to sit comfortably in a car) at your local physiotherapy department. Outpatient physiotherapy will continue for about 8 weeks or until you have reached a good level of function.

How can I manage pain?

Medication: Immediate pain after your operation can be managed with a combination of non-steroidal anti-inflammatory drugs (NSAID's) and pain killers. These will be prescribed to you for one week following your discharge from hospital. If you require further medication after this please contact your GP.

It is important to take your medication regularly to gain maximum benefit, and not only when you have a flare up of pain. As your pain levels become less, you should gradually reduce your dose of prescribed medication, beginning with your pain killers, as this will help reduce a flare up of symptoms. Once you have stopped all medication, if you have a flare up of symptoms restart the NSAID's as these should help reduce both the inflammation and the pain.

Ice: Ice packs applied to your back can be especially useful in helping to reduce pain during the first few days after surgery. Apply a bag of frozen peas or a commercial ice pack for 20minutes, every 1-2 hours. Be careful not to apply the ice directly to the skin as this can cause an 'ice-burn'. Always cover your skin with a covering (i.e. a tea towel/ pillow case).

General advice

- **Transferring from lying to sitting/standing:** When moving from lying to sitting do not sit up using your abdominal muscles! If you can, roll onto your side trying to maintain a neutral position of the spine.

  Bring your uppermost arm across your body (a), placing your hand on the bed. Push through both arms to help you sit up as your legs lower to the floor (b&c). Try to gently contract your abdominal muscles during the movement.

a

b

c

- **Lying down:** Spend short and regular periods of time lying down on your bed in any position you find comfortable.
- **Sitting:** Sitting can be a stressful position for your back. You should gradually build up the length of sitting time to approximately 30 minutes. On discharge from hospital, you may find perching on a high stool or chair may be more comfortable. You can use a lumbar roll, or a small rolled up towel to support the curve of your lower back.
- **Wound Dressing:** Your wound will be covered by steri-strips and a dressing. This dressing will need to stay dry until the wound has healed. The dressing can usually be taken off after 6-7 days by a district nurse or the practise nurse at your GP's. Please contact your local GP if you have not heard from them.
- **Shower:** You can shower on day 6 following your operation – or sooner if you have a waterproof dressing.

- **Bath:** You can have a bath after day 6, once you are able to sit comfortably with your legs outstretched in front of you, without increasing your pain. You may want to practice getting in and out of the bath before actually having a bath (i.e. when you are dressed and there is someone about who will be able to help if necessary).

Activity Levels

- **Mobility:** Gradually increase the frequency and distance you walk. Take regular short walks around the house or garden. As soon as you feel able to walk longer distances and go for a walk a few times a day. Build up slowly.
- **Lifting, twisting and bending:** During the first 6 weeks avoid lifting, twisting and bending as much as possible. If you are bending and lifting, make sure the object you are moving is as close to your body as is possible. Bend both your knees and try to keep your back straight. Always ensure you tighten your abdominal and buttock muscles when bending and lifting.
- **Daily activity levels:** Continue to gradually increase your normal daily activity levels. You should be working towards at least 3 times 30 minutes of cardiovascular exercise per week.
- **Return to work:** After your operation your return to work will depend on the nature of your job. Normally you can return to work after 4-6 weeks. If you are in a less than active job you may find you can return to work after 4 weeks, and after 6 weeks if your job is more physical. If you are in any doubt discuss it with your consultant or physiotherapist. For more extensive spinal fusion surgery, return to work should be discussed with your consultant or physiotherapist.
- **Driving:** Do not drive until after your first out-patient appointment as your physiotherapist needs to review your back first. You are okay being a passenger as long as the journey is short and you can sit comfortably for that period of time. Usually you will be okay to drive after 4 weeks. You must discuss with your physiotherapist/ consultant before you return to driving.
- **Sport:** If you take part in any activity or sport, your consultant or therapist will advise you on when to return to them, and how you can gradually build up your fitness.

Exercises for patients who have had spinal surgery (lumbar discectomy / decompression / fusion)

Your Ward Physiotherapist will tick which exercises are appropriate for you to start with. Your Outpatient Physiotherapist will then progress your exercise program. Please keep this booklet and bring to your Outpatient physiotherapy appointment.

These exercises are advised to help you become active again after your spinal surgery. When exercising remember:

- Only go to the point of pain, never push into the pain. You should only feel slight discomfort.
- Perform exercises slowly and rhythmically.
- Gradually increase the number of repetitions of your exercise.
- Gradually increase your range of movement with your exercise.
- If you have a flare up of your leg pain, reduce your level of activity and exercise gently until your symptoms have settled back to normal.

The following exercises should be started immediately after your operation, unless advised otherwise.

☐ 1. Early ankle mobilisation:

In lying, or sitting up in bed, pull your toes and foot up towards you, then point your toes and foot away from you. You may feel a stretch in the back of the calf, this is normal.

Repeat this 10 times, 4 times a day.

☐ 2a. Hip flexion and mobilisation

Lie on your back with your knees bent. Slowly raise one knee to your chest using your hands to guide movement. Keep your head and shoulders on the bed throughout the exercise. Slowly lower the leg down to the original position after 2-3 seconds. Then repeat this with the opposite leg.

Repeat this 10 times, 4 times a day.

☐ 2b. Back and hip flexion stretch (knees to chest).

Lying on your back with knees bent, bring both knees toward your chest and place your hands around your knees. Pull both knees gently toward your chest. Hold for a couple of seconds.

Repeat 10 times, 4 times a day.

☐ 3. Knee rolling:

Lie on your back with knees bent. Keeping your knees together, slowly lower your knees to one side. Allow your hips to turn with your knees. Hold for a count of 3, relax and repeat lowering your legs to the other side.

Repeat 10 times, 4 times a day.

☐ 4a. Pelvic tilts in lying

Lying on your back with knees bent. Tilt your pelvis so that your back flattens against the bed. Then return to the starting position.

Repeat 10 times, 4 times a day.

☐ 4b. Pelvic tilts in sitting

Sit fairly upright on the edge of a chair. Sit up as tall as you feel comfortable, arching your back. Hold this position for a few seconds, and then allow your back to slouch back down again. You should feel your pelvis tilting forwards and backwards during this exercise.

Repeat this exercise 10 times, 4 times a day.

☐ 4c. Pelvic tilts in standing

Stand so your back is supported by a wall with both hips and knees slightly bent, slowly tuck your bottom under and hold for the count of three.

Repeat 10 times, 4 times a day.

☐ **5. Lower abdominal strengthening in lying:**

Lie on your back with knees bent and feet shoulder width apart. Place your hand on your lower stomach, below the navel. Breathe in and out then slowly tighten and hollow your stomach away from your hand. Do not move your spine. Do not allow your stomach to hollow excessively. If you are having difficulty with this you can tighten your pelvic floor muscles at the same time to help. Try to breathe normally.

Repeat 10 times, hold 10 seconds, 4 times a day.

Reference source

www.nhs.uk/conditions

Please find out the following information prior to discharge

Contact physiotherapist

Telephone

Out patient physiotherapy appointment

Contact details

Physiotherapy Services
Royal Surrey County Hospital NHS Foundation Trust
Egerton Road, Guildford, Surrey GU2 7XX

Telephone: 01483 464153

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757

Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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