Information and exercises following lumbar spinal fusion

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
A spinal fusion is any operation to join two or more bones in your back together. This can be performed, by using any combination of bone-graft, metal plates or screws. This is to provide stability at the operated level/levels.
You may be fitted with a corset, which should be worn at all times except for when you are lying down during the first 6 weeks.
The surgery can relieve any referred pain into the legs immediately but results in pain in the muscles of the back, trunk or abdomen depending on where the wound is. Everybody’s symptoms are different. Please ensure that you have adequate pain relief in order to mobilise.
Your spine has been stabilised by the surgery, gentle exercise and mobility will aid the healing process.
If you do too much in one day and your back/trunk or abdomen 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. If you have weakness in the legs due to pressure on the spinal cord rather than the nerves this weakness also may not fully recover.
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 or more before they can be discharged.

On discharge
Avoid any lifting or prolonged bending for the first 6 weeks.
Avoid heavy lifting for 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. In some circumstances it may be advisable not to return to a heavy physical job. 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 6-8 weeks after surgery.

You will be referred for outpatient physiotherapy and they should offer you an appointment 2-6 weeks after your surgery if you do not have a corset or after 6 weeks if you do. 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.

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

Day 1 – discharge

- You may be fitted with a corset.
- 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 also sit on the side of the bed or on a firm chair for meals ensuring that your knees are lower than your hips.
- You may be given a corset if necessary and this must be worn when sitting or mobilising.
The technique for getting from lying to sitting on the edge of the bed is:
1) Roll onto a side with your knees slightly bent
2) Bring your legs off the edge of the bed
3) Push up with your uppermost hand in front of you and lower elbow
Do not try to sit straight up as this will stress your back.
Start the exercises shown below.
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.
Keep 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.

**Sciatic nerve mobilisation (if the pain was down the back of your leg).**

Lie on your back with your affected leg pulled up towards your chest.
Keep hold of the thigh and extend the lower leg up to the ceiling until you feel a pull at the back of the leg.
Hold for a few seconds and then release.
Repeat 10 times.

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

Lie on your front, tighten your abdomen and your buttocks and bend the knee as far as is comfortable.
You should feel a stretch along the front of your thigh.
Repeat 10 times with affected leg.

Try to do all exercises three times a day.

You will be able to go home when you are comfortably mobilising independently on the flat and up and down stairs.
After discharge

1. You should not slump but try and sit with your knees below your hips for the first 6 weeks. Gradually increase the amount of time you can sit for each day.
2. Go for regular short walks, maintaining an upright posture and gradually increase the distance, as you feel more comfortable.
3. Exercise a minimum of 3 times a day as shown by your physiotherapist.
4. Rest lying down rather than sitting if you feel sore.
5. You will receive a physiotherapy appointment 2-6 weeks after surgery if you have no corset or after 6 weeks if you do. Your progress will be assessed and you will be advised about exercise progressions and activities.
6. You may start swimming after 4 weeks if your scar has healed provided you have no corset. Little and often is best to start with. Do not dive or jump in and avoid breast stroke and butterfly.
7. Cycling (or exercise bike) and vigorous walking can be started after 4 weeks.

Remember: Use your common sense and listen to your body. If it hurts, don’t do it. If you do too much 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. Making your back painful in the early stages is unlikely to do any harm but will increase the amount of inflammation in the tissues and delay your healing. Gentle exercise and mobility will aid the healing process.

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

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