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GUIDELINES FOLLOWING LUMBAR FUSION SURGERY

Please note that these are only general guidelines. Your specific problems may vary and instructions from Mr D'Urso may override these guidelines.

Spinal fusion surgery involves using metal or bone grafts to fix two or more vertebrae together in order to prevent motion between the segments. Often it is this excessive motion or instability that was causing your symptoms by compressing the spinal cord or by pinching the spinal nerves as they leave the spinal canal. Fusion surgery may be completed with a laminectomy or decompression procedure. Your surgeon will discuss your individual case with you. The aim of surgery is to relieve nerve compression that is causing leg pain, numbness, weakness and/or difficulty walking.

During the first 2 months postoperatively, it is essential that you avoid excessive or forceful back movements in order to prevent metal screws from loosening and to allow for soft tissue and bone graft healing.

After your surgery:

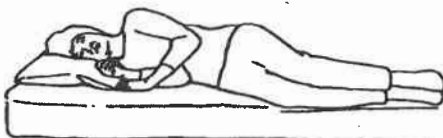
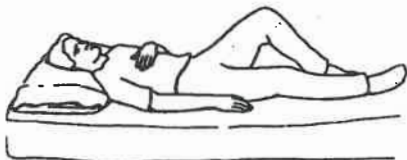
- You will start on a daily walking program. Aim to be walking at least 6-8 times daily before discharge home
- REST is very important to allow for healing
- Sit as long as you feel comfortable
- DO NOT bend or twist the back
- NO heavy lifting (nothing greater than 5kg)
- Complete any exercises given to you by your physiotherapist

Below are some general guidelines for this post-operative period of up to 12 weeks.

GENERAL ADVICE:

SMOKING significantly delays bone and tissue healing and can jeopardise the success of your spinal fusion surgery. **To optimise your outcome, you should not smoke.**

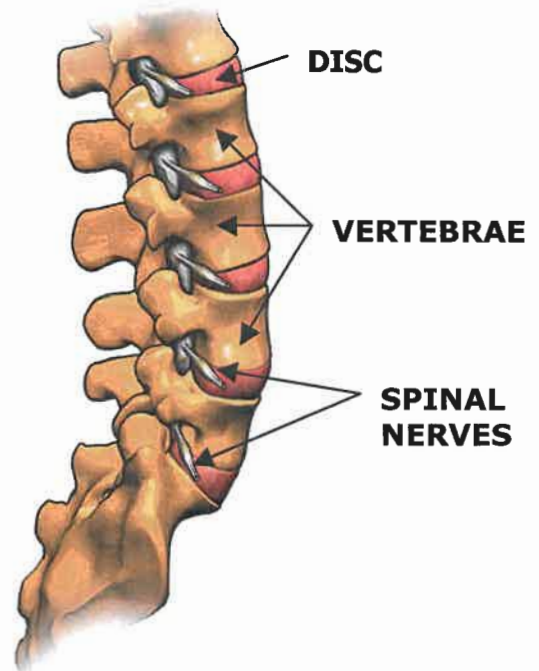
GETTING IN & OUT OF BED: THE "LOG ROLL"

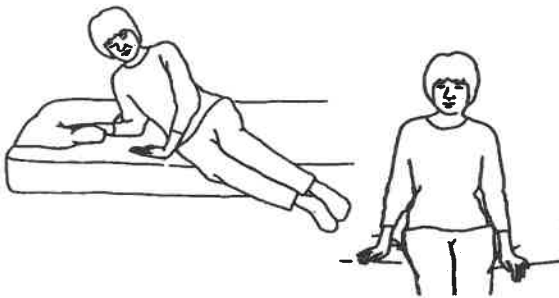


Your hips and shoulders must roll over together as a unit (or like a log) so that the spine does not twist.

Do not shuffle the hips back and forth; rather try to roll in one smooth movement

Once on your side, drop your legs off the edge of the bed and push up through your side using your elbow and hands





Once sitting, resist the urge to shuffle the hips forward one side at a time to get your feet on the ground— instead, slide your bottom forwards by leaning back on your hands. Move symmetrically.

To return to bed the process is reversed

Note

In the first few days following surgery you should notice some improvement in your leg pain or pins and needles. Numbness from prior to the operation often persists for a period of time (weeks to months). For patients who had significant leg pain, weakness or numbness for a long time prior to surgery, it may take several weeks or months for these symptoms to improve, and in some cases they may never fully recover.

If you have had a bone graft you will also notice discomfort from the donor site of your bone graft. It is very common to get occasional twinges of pain in the back, buttocks, hips or in one or both legs. Muscle cramping or spasms in the buttocks, back or legs may occur particularly at night. These will usually resolve by themselves.

As activity increases it is normal to get some back ache. This need not cause any alarm or cause you to stop exercising. Remember to increase your activity gradually and to “listen to your body” to help judge how quickly to progress. Remember, it is important to maintain an active lifestyle in order to make the most of your surgery.

POSTURE

You need to be aware of your posture at all times and practice good “body mechanics” so as not to strain your back.

SITTING

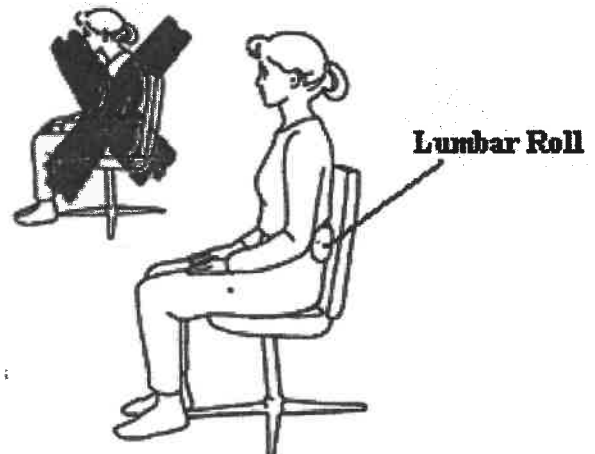
You should sit in a straight-backed chair with armrests. A higher chair is much better than a low chair.

Never sit in a recliner chair with your legs up as this puts the spine in an unnatural posture causing undue strain.

Otherwise, over the next 4-6 weeks you may gradually start to build up your sitting tolerance. Be guided by your comfort.

Sitting will make you stiff so get up and move around regularly. A small cushion or rolled towel positioned behind your low back (a “**lumbar roll**”) helps to maintain correct spinal alignment – use this if it makes you more comfortable.

When working at a desk keep your computer screen or reading material at eye-level.



TOILET

You should lower yourself slowly keeping your **back straight**. You may want to use a raised toilet seat or “over toilet frame” initially (please ask your therapist about this if you are not managing the standard toilet in hospital). It may help to brace with your hands on your upper thighs as you sit down. Ensure you do not strain on the toilet.

DAILY ACTIVITIES:

For the first three months post surgery you should avoid bending and twisting your back excessively. You will need to modify the way you perform your activities to ensure that you look after your back.

Personal Care & Dressing:

- Stand up in the shower
- Stand on a towel to dry your feet instead of bending down
- Choose clothes that fasten at the front and are easy to get into and out of
- Use a face-washer to wash your face so you do not stoop down to the tap
- Use a cup of water to rinse your mouth when brushing your teeth
- Wear shoes that you can slip on easily eg elastic sided
- You may need help/aids with socks and shoes or for picking up objects from the floor (ask your therapist about this if you need).

Meal Preparation:

- Ensure that bench heights are suitable (so that you do not have to stoop over). Perhaps sit on a high stool to work at the bench
- Avoid lifting heavy saucepans – slide them across benches
- Double handles distribute the load more evenly

Cleaning:

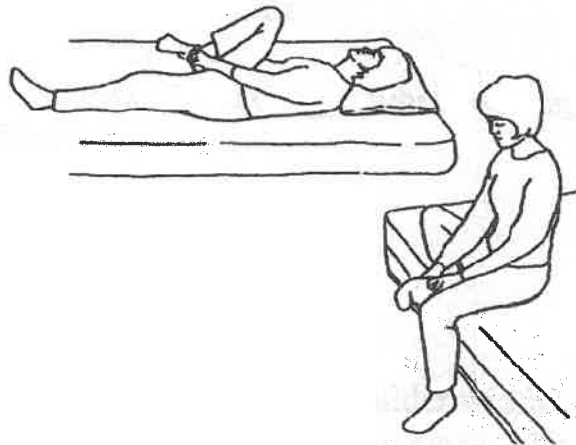
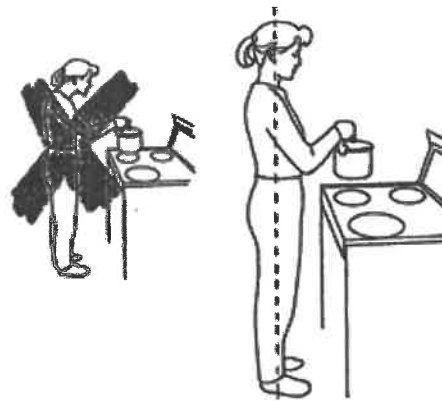
- Avoid heavy cleaning and vacuuming
- For easier jobs use long handled appliances

Laundry:

- You can load a top-loader washing machine, but avoid bending over and lifting out heavy loads of clothes.
- Place clothes basket on a table or chair to minimise bending

Shopping:

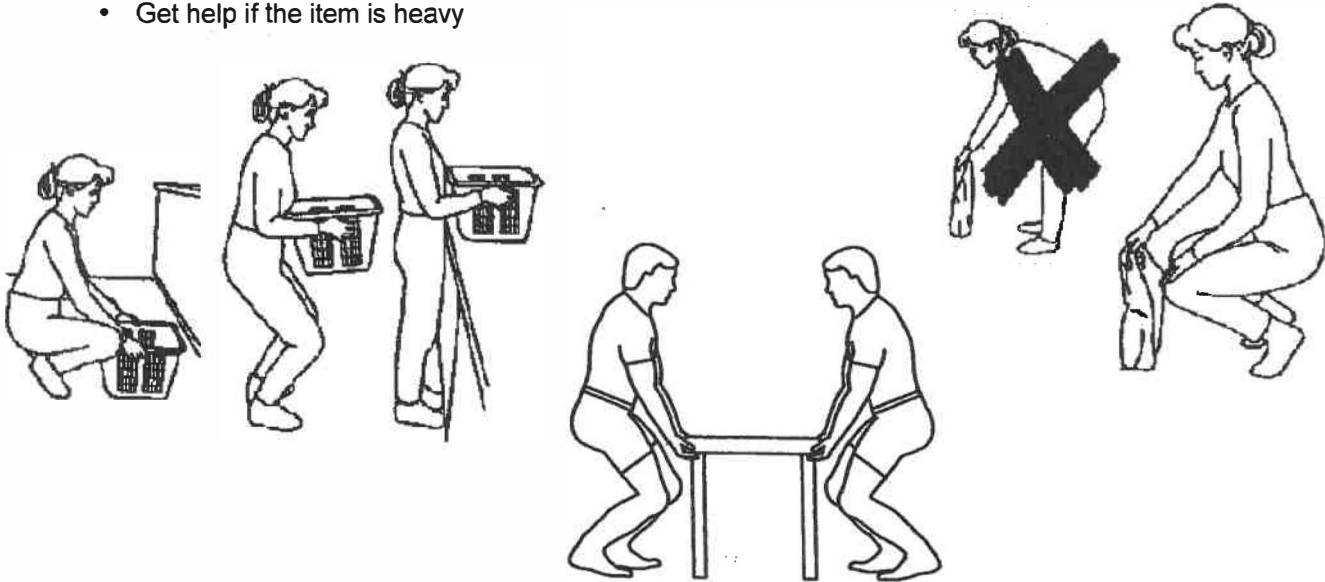
- Make use of home delivery
- Do not lift heavy bags
- Push rather than pull a trolley



SAFE LIFTING

You should not lift anything heavier than about 5kg for 6 weeks. Abide by the basic rules of lifting:

- Bend your knees and keep your back very straight. The muscles of your spine are quite small compared with the large thigh and buttock muscles, so use these for lifting.
- Hold objects in very close to your body. If held further out, more strain is placed on your back muscles, joint, ligaments
- Never lift and twist – move your feet to step around
- Pushing is better than pulling – keep your back straight and use your leg strength to move an object. Pulling places huge strain on your back.
- Divide a heavy load into two smaller loads if possible eg shopping bags
- Modify your environment to minimise the need to lift and move things.
- Get help if the item is heavy



DRIVING

Returning to driving depends on your functional level and comfort after surgery. Your surgeon will advise you when it is safe to return to driving. This will vary from person to person. (To drive against the advice of Prof. D'Urso could affect your insurance cover so it is important to clarify this prior to discharge). Try to avoid car travel all together in the first week, however if you must be a passenger, get in carefully as shown, and once in, recline the seat to about a 30-45 degree angle. Use a small lumbar roll if the car seat does not provide adequate support. Upon arrival, return the back rest to vertical and then swing your legs out and stand up.



SLEEP

Sleep in a firm bed if possible. Lying with a pillow under the knees is usually comfortable. If lying on your side place a pillow between the legs to help maintain a straight spine.



SEXUAL INTERCOURSE may be undertaken any time if comfortable. Lying on your back is generally easiest for the first few weeks.

BRACE

You may or may not be fitted with a brace post surgery depending on your particular surgical procedure. The brace is usually to be worn for the first 6-12 weeks following your surgery. You do not need to wear the brace in bed and you may remove the brace for showering, however it must be worn at all times when walking or moving around.

A brace is prescribed to:

- Protect against unexpected knocks/jarring/falls which may interfere with bone healing
- Prevent excessive spinal movement
- To maintain correct posture while walking and sitting

There are many ways of applying the brace. Follow the instructions given to you by your orthotist who fits the brace to you. Commonly patients are instructed to apply the brace while standing against a wall. The brace may be applied over light clothing. Ensure that you practise applying the brace yourself so that you are competent with this before discharge from hospital. Please also ensure that the brace is well-fitting and comfortable. If there are problems with the brace, please inform your Physiotherapist immediately. The Orthotist may be asked to come and review it if necessary.

REHABILITATION

A period of rehabilitation may be required post surgery to aid your recovery and to ensure a good return to independence and regular daily activities. Epworth has rehabilitation centres in Richmond (formerly Bethesda), in Brighton and in Camberwell. There are also other private facilities in Melbourne and regional centres around Victoria. Where you go will depend on where you live and your specific needs. In rehabilitation you will generally have 2 sessions of physiotherapy a day which may include hydrotherapy as appropriate.

You should bring casual, comfortable clothes, such as tracksuits and a comfortable supportive pair of shoes.

DISCHARGE

Please discuss with Prof. D'Urso whether this will be by car or ambulance.

Wound Care & Removal of Sutures

On discharge from hospital you will be provided with a fresh dressing for your wound. If the dressing were to become wet or stained, the dressing can be removed and gently cleaned and a new dressing applied. It is not uncommon for the wound to have some slight redness around it as it heals, but should you develop fevers, sweats, discharge, swelling or increasing pain this may be a sign of infection. If you were to have concern regarding infection you can either; contact Prof. D'Urso, ask your GP to inspect the wound, or return to the Epworth Emergency Department for immediate attention.

Prof. D'Urso will usually place a single blue stitch in the wound and this needs to be removed after approximately 10 days. The stitch needs to be cut and gently pulled out.

The removal of your suture can be performed by either:

- Your partner
- Relative
- General practitioner's nurse.

Once the suture has been removed, wait a further two days before swimming.

ACTIVITY ON DISCHARGE

WALKING

It is important to exercise daily. It is well-known that early activity after back surgery results in better recovery. Walking is the exercise of choice. Wear a pair of sensible, thick-soled shoes and walk on good footpaths and reasonably level ground. Have 2-3 exercise sessions per day, everyday, and very gradually increase the amount of walking you are doing, eg by 2-5mins per session per day. It is important that you start with a distance you can comfortably manage. Remember pain may come on after (and not necessarily during) exercise so it is wise to start any new activity slowly and build up your endurance. It is best to exercise regularly every day rather than a lot on day and nothing the next.

**** Healthy weight loss** – being overweight puts extra strain on your back as well as other joints and can place you at risk of further injury. As well as the cardiovascular benefits of keeping trim and fit, this is another good reason to get into a daily walking program! (The Heart Foundation recommends that we walk 30-45 minutes on most days of the week).

SWIMMING

Your wound should be fully healed before entering a pool (usually 2-3 weeks). You should consult Prof. D'Urso first before commencing swimming. You may start with walking in chest-depth water. Please be advised by Prof. D'Urso as to when you may commence lap swimming (usually after 6 weeks).

PHYSIOTHERAPY

Generally, physiotherapy is not required in the first 6 weeks post surgery. After your 4-6 week review with Mr D'Urso you may want to attend the physiotherapist to assist in progressing your exercises and general fitness, to advise and support you in returning to work or to assist with returning to sport or other physical activity.

You should get clearance from your surgeon first before attending the physiotherapist. Most private practice physiotherapists are familiar with spinal surgical patients and will be able to treat you effectively and safely.

WORK

Returning to work depends on the type of work you do. Some people may not be able to return to the same roles they had before the surgery (eg very heavy work or work involving repetitive bending and rotation under stress) or will have to wait at least 3 months. Further discussion with Prof. D'Urso is necessary.

For office-based jobs, it depends on your functional level and comfort. A graduated return is recommended with certain duties modified so that you can perform them, for example, interspersing short (15-30mins) periods of sitting and typing with standing or walking tasks. A work place assessment could be organised through your employer or community physiotherapist. This looks at your work environment (eg. desk/ office/ workshop set up) and various tasks you are required to perform.

SPORT

You should not participate in any high-impact activities (including running and golf) until after your surgical review in 4-6 weeks. Gentle walking is the best exercise. You can be advised by a physiotherapist down the track if you wish to return to sport. Returning to heavy impact or contact sports must be first cleared with your surgeon.

REMEMBER:

- **Avoid twisting and bending. Maintain a good posture**
- **Log roll to get in and out of bed**
- **No heavy lifting (greater 5kg)**
- **No high impact sports**
- **WALKING is the best exercise**

FOLLOW-UP APPOINTMENT WITH THE SURGEON

This is generally at 3-6 weeks but for country patients, may be longer than this.

It is a good opportunity at this appointment to ask any questions you may have of Prof. D'Urso such as when you may return to certain activities. It is a good idea to keep a list of questions that may come up over the initial post-operative period.

If you would like to consult a physiotherapist after this appointment you should get clearance from the surgeon and take any documentation you have about your surgery to the physiotherapist.

A final note:

Contact Prof. D'Urso if you:

- develop any new or increased back or leg pain, numbness, weakness or pins and needles;
- have problems urinating or opening your bowels;
- develop a fever or if you notice any ooze/discharge from the wound.


EXERCISES AFTER SPINAL SURGERY

The exercises below are designed to maintain movement and restore muscle strength to your legs and trunk whilst recovering from your spinal surgery. Should any discomfort be caused please discontinue and consult your physiotherapist.

WALKING

Regular walking is crucial to a good recovery. Gradually increase the time and distance covered each day. You may start with just one or two short walks on your first day up and progress to hourly walks before discharge from hospital (this may vary).



DAYS POST-OP	1	2	3	4	5
Mark off walks eg. 					

DEEP ABDOMINALS/ PELVIC FLOOR

The deep muscles of the abdomen and the muscles lining your pelvic floor both play important roles in stabilising and protecting your back.

To begin:

Lie on your back with both knees bent up.

1) Locate the deep abdominal or "TA" (transversus abdominus) muscle by feeling the front of your bony hip crest on both sides with your fingers. Then move your fingers in slightly, off the bone and towards your belly button about 1-2cm. Do a small cough or throat clear to confirm that you can feel the right muscle under your fingers.



2) Gently draw your belly button in and down so that your lower stomach flattens out. You should feel the TA muscle below your fingers swell out. You should also draw the muscles of your pelvic floor up and in at the same time. These muscles help control bladder and bowel function, so to activate them, squeeze up and in as if you were preventing the flow of urine.

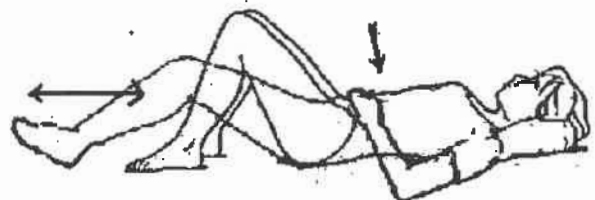
Do not "suck in" your stomach by taking a big breath in – instead your chest should remain relaxed and you should **continue to breathe!**

HOLD for 5-10 sec, Repeat x 10, 5 times a day

To progress:

If you can maintain a good contraction while **breathing normally**, then slowly slide one leg down. **Keeping the lower stomach tight**, slowly slide the leg back up and repeat with other leg.

The legs should only be moving. IF you have a stable middle and good TA contraction - you may need to stop and rest after a few repetitions
Progress to continuous movement for 1-2 minutes **5 times a day**



Incorporate core stability into everyday activities:

- Walking
- Lifting
- Climbing stairs etc

CALF RAISES

Squeeze your bottom and thighs and rise slowly up on your toes and SLOWLY down

repeat x, 3 x day



SQUATS

Keep your back vertical as you slowly bend your knees. Keep your bottom and thighs tight

repeat x, 3 x day

