

Lumbar Surgery

Patient
information

Contents

- 3 Introduction
- 4 Preparing for Admission
- 4 Pre-admission Clinic
- 5 Discharge Planning
- 6 Day of Admission
- 7 After your Operation
- 8 Pain
- 9 Complication
- 10 Going Home
- 11 Exercise Program
- 13 Notes
- 15 Agencies for Equipment Hire

If you have any concerns or questions, please do not hesitate to contact any of the following people:

Unit Nurse Manager

Ward 2C / (07) 55889359
Close Observations

Neurosurgeons

Dr L Tan (07) 55972899
Dr E Stephenson (07) 55648480
Dr N Cochrane (07) 55313600

Physiotherapist

Paul Hunt (07) 55889381

Introduction

This booklet has been compiled to aid and inform you of aspects of your proposed operation. We believe that a patient who is well informed is better able to participate in his or her own care during their hospital stay. This ensures that you will gain full benefit from your lumbar spinal surgery.

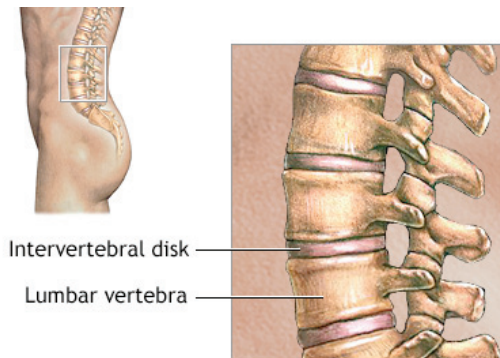
Lumbar surgery itself can be a major procedure.

Its main aims are to:

- Give back quality of life
- Relieve pain
- Provide a stable spine
- Improve function
- Correct deformity

Thus improving your exercise tolerance, and way of life.

This booklet will focus on lumbar spinal surgery which encompasses the lumbar vertebrae (L1-L5) and sacral vertebrae (S1-S5).



Preparing for admission

You and your family need to start making plans about how you will manage at home after discharge from hospital. If you foresee any difficulties, you can talk to the nursing staff or physiotherapist, either at the Neurosurgical Pre-Admission Clinic, or while in hospital (the earlier the better), and help will be arranged as necessary.

Pre-admission clinic

Pindara Hospital has a pre-admission clinic for neurosurgical admissions. The clinic is conducted one day a week (Monday), and attendance at this clinic will assist you to prepare for your surgery and discharge. A staff member from the clinic will phone you to disclose the time for you to attend. Attendance at the pre-admission clinic means that admission on the day of surgery is possible.

The activities of the pre-admission clinic include:

- Completion of a detailed nursing history (which includes details of your past and present health problems, your current and recently ceased medications).
- Weight.
- Measure and fitting of elastic (TED) stockings – if applicable.
- Given a medisponge to take home.
- Discuss discharge planning, home modifications, equipment use and hire, helpful hints.
- You will meet the Physiotherapist, who will teach you the goals you need to accomplish before discharge home, as well as discuss walking aids with you and start your exercise program.
- Answer any questions you might have.

Discharge planning

Discharge From Hospital

- Discharge time from Hospital is **9am**. You are asked to please ensure you have someone available to pick you up by this time.

Home modifications and aids to assist in activities of daily living

It is important that we have a clear understanding at the pre-admission clinic of what your discharge destination is, and of what may be required to be organised before you go home.

Common points of interest are:

- The number of stairs inside and outside your home.
- The set up of your bathroom, toilet, and kitchen.
- The suitability of your bed and household chairs.
- The assistance available to you at home on discharge (related to hygiene cares, meal preparation, cleaning etc).

The Physiotherapist or Clinic Nurse or Occupational Therapist can help to arrange:

- (a) Modifications such as: rails at stairs
ramps
rails in toilets or bathrooms
- (b) Equipment such as: over-toilet seat/shower chair
walking frame/crutches
- (c) Adaptive Devices such as: urinals
long handled reacher
shoe horn
toe washer/wiper

Medications

You will be required to stop taking any anti-inflammatory medications one week prior to your surgery, unless otherwise directed by your surgeon. He will also advise you if your dosage of anticoagulant (blood thinning) medication needs to be altered before your operation (if applicable).

Examples of anti-inflammatory drugs are:

- Voltaren
- Dolobid
- Naprosyn
- Brufen
- Feldene
- Celebrex
- Orudis
- Indocid
- Mobic
- Nurofen

Examples of anticoagulant drugs (blood thinners) are:

- Warfarin
- Plavix
- Aspirin
- Iscover
- Persantin

Again, if you are unsure about the above, please ask your doctor or nursing staff to clarify the matter for you.

What to bring into hospital

- Signed consent form (if not already returned to the hospital)
- All relevant X-rays
- All medications you take regularly (including details of those you have recently stopped, as well as herbal/natural remedies) in their original packets
- Personal toilet articles (soap etc)
- Night garments
- This information guide
- Your normal walking aid
- Comfortable flat enclosed shoes

On the day of your admission

When you come to the hospital to be admitted, please go to the front foyer. An admissions clerk will escort you to the Peri-Operative Unit.

The day of your operation

- Your surgeon will inform you of the scheduled time for your surgery and subsequent 'nil by mouth' time. This means **nothing** to eat or drink, including water, prior to your operation.
- You will have showered with a Medisponge at home, you will then change into a theatre gown and pants before transfer to the operating theatre. You will be weighed, routine urine test performed, your skin will be checked for cuts, abrasions or inflamed areas.
- All jewellery (except your wedding ring) should be removed, along with nail polish and hairpins. If you have false teeth, you may keep them in.
- You may be given a premedication before transfer to operating theatre.

After your operation

The recovery room

When you wake up in the Recovery Room after your operation, you will find that:

- You will have an oxygen mask on your face;
- Nursing staff will be continually checking your vital signs; (blood pressure, pulse etc)
- A dressing will extend over your surgical incision;
- One or two drains may be in place to remove any excess blood and fluid from the operation site;
- You will have an intravenous line ('drip') which will supply replacement fluid into your vein.
- A pain relief system (see Page 8 for more information).
- You may have a urinary catheter inserted into your bladder. Some analgesia can effect how your bladder works, and therefore to avoid any problems with you being able to pass urine after the operation, a catheter (or 'IDC') will drain your urine away. This catheter is usually removed between 24 – 48 hours after surgery. You will be transferred back to the neurosurgical ward once your condition is stable (i.e. you are awake and your pain is well controlled). It is common for this close observation in the Recovery Room to last an hour or more before transfer back to the ward.

After your operation

- If you have a pain relief system, wound drains or Intravenous therapy – these are routinely removed within the first 24 – 48 hours, depending on your progress and your surgeon's preferences.
- If having fusion surgery a check x-rays/ct scan will be performed the first or second morning after your surgery.
- A physiotherapist will see you daily.
- You will be sat out of bed and assisted to walk with the use of a frame as early as 4hrs post surgery, once again depending on your condition, and your surgeon's preferences.
- It is very important to regularly perform deep breathing and foot and ankle exercises. The nursing staff will remind you, but you should also use your own initiative. These exercises will help to prevent respiratory/breathing problems and clots in your legs.
- Each day you will be encouraged to be more independent with your own care.
- You should sit out of bed for all meals and mobilize frequently as tolerated.
- You will progress from the forearm support frame to an appropriate walking aid.
- Your independence will increase until you are well enough for discharge and you are managing safely with or without the appropriate walking aid.
- You will be taught to negotiate stairs safely.

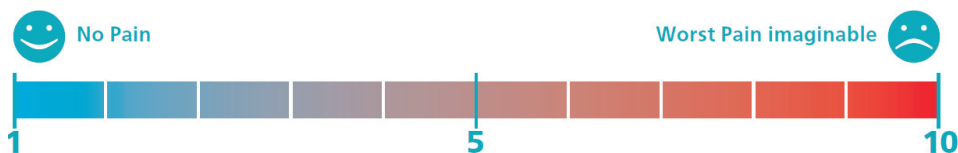
Pain

During surgery nerves can be manipulated and muscles split to allow for access and this can result in pain. There are many things we can do to help control the pain you may have. Pain control options include:

- **Patient Controlled Analgesia (PCA)** The pain medication is delivered via a PCA machine that is attached to the drip in your arm. You will be able to control the level of pain relief by simply pressing the PCA button.
- **Oral Medications** There are many types of tablets that can be given. Oral medications may be given in conjunction with injections or infusions to help control different sorts of pain.
- **Intramuscular/subcutaneous injections** These are used for fast relief of pain but have more side effects with frequent use.
- **Intrathecal Morphine** Injecting morphine into the spinal canal where it reaches the CSF. It can provide pain relief for up to 24hrs.
- **Local Anesthetic** Local anesthetic will be injected in and around the wound area during your procedure.

Scoring your pain

In order for nurses to give you adequate pain relief, it is extremely important that you tell the staff when you have pain. To assist in keeping your pain under control your nurse will ask you regularly in the hours following surgery to 'score your pain'. A number is used to describe the amount of pain you have. The numbers range from 0 to 10. 0 means no pain, and 10 the worst pain imaginable.



Remember

Nurses are very aware that the operation you have had will produce pain. It is unrealistic to expect to be totally pain free. However, it is your responsibility to inform staff as to the effectiveness of the pain relief that you have been given.

The advantages of having adequate pain relief are:

- It enables you to perform your exercises effectively.
- It will speed up your recovery.
- It will improve your ability to rest.

Nausea

Anesthetics and pain relieving medications can make you feel nauseated. Effective anti-nausea drugs are available. It is important that you ask for them if needed to control the nausea and they can be given in conjunction with pain relieving medications. Avoiding or controlling nausea is important, as it is important to begin having a well balanced diet that will help to promote faster healing and improve your tolerance to exercise.

Complications

Nerve Damage

Nerve damage is a complication which can occur which is specific to any spinal surgery. A nerves' origin is the spinal cord and therefore at risk during spinal surgery. It can occur during the surgery via manipulation by the surgeon or post operatively due to bleeding or operation failure. As the nerves in the lumbar region can effect leg control or bladder function any interruptions to these need to be acted on swiftly. Please let the nursing staff be aware of any changes or loss of function you may experience.

Deep Vein Thrombosis (DVT)

A DVT may occur when blood flow becomes sluggish within the veins of the lower limbs, leading to clot formation (thrombosis). The symptoms of a DVT may include pain, redness and/or swelling in the lower leg. These steps are taken to decrease your risk of developing a DVT:

- Lower limb exercises (eg foot and ankle exercises).
- Early mobilisation.
- Anti-thrombotic support stockings (TED) – depending on your surgeon's preference.
- Anticoagulant medication (tablets and/or injections) – depending on your surgeon's preference.
- The use of Sequential Compression Devices (as per your surgeon's preferences), which rhythmically squeeze your legs, returning blood to your heart.

Note: DVT's can occur up to 6 weeks after your operation, although the risk is highest early.

If you are worried in any way that you may have a DVT, please ring your GP or surgeon.

Infection

Infection is a risk with any surgical procedure because it involves the disruption of your main defense against infection – your skin.

The following steps are taken to decrease your risk of infection:

- Keeping your dressing intact.
- Taking care not to wet your wound until after your clips/sutures (if used) are removed.
- Antibiotics (as per your surgeon's preference).

Constipation

To help avoid this becoming a problem:

- Drink plenty of fluids.
- Mobilise.
- Tell the nurses if you are having trouble with your bowels.
- Medications (stool softeners which are usually given during your stay).

Going home

Pain medications

At home pain relief will continue to be necessary. On discharge you will receive a prescription/ supply of pain medication. Once this supply has run out, you should require only Panadol for pain relief. If you require a longer period of pain control, it is best to see your local doctor. Anti-inflammatory and anticoagulant medications can be recommenced on the approval of your surgeon.

Wound care

Dressings are not usually required for your wound when at home. In most cases, there will be no sutures or clips to remove. **Contact your local doctor or Surgeon if you have any concerns.**

For example:

- An increase in pain
- Any swelling not reduced by rest and elevation
- Wound separation or discharge
- Elevated temperature / hot flushes and a reddened wound
- Pain in your calf
- Difficulty in breathing

Driving

It is important to check with your particular Doctor for individual recommendations regarding driving a car post surgery as some Doctors prefer that you do not drive for a minimum of 2 weeks.

Exercises

Please continue your exercises as indicated by your physiotherapist. See exercises attached.

Other activities

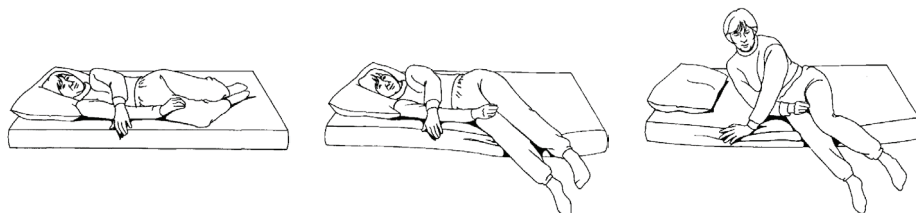
There will be restrictions on what you can do when discharged. Walking is encouraged to build up your strength. You will be instructed on discharge and at your follow-up appointment about the level of activity allowed. Please ensure that you undertake NO heavy lifting, bending or twisting post surgery until cleared by your Doctor.

Exercise program and tips for Lumbar Surgery

Getting in/out of bed

With the bed in the reclined position, bend both legs up so feet are flat on the bed. Keeping shoulders, hips and knees in line log roll onto your side.

From this position, lower your leg over the edge of the bed towards the floor. As your feet lower push up through your arms to raise your chest off the bed into the sitting position. The reverse order should be completed when returning to bed.



Positions of comfort

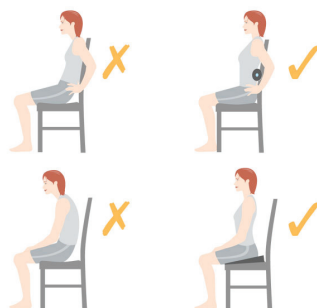


Posture

In order to minimise the loads placed on your spine and protect your back it is essential to focus on good posture at all times.

While sitting, avoid slumped postures where the lower back sags into a “C” position. Maintaining the normal “S” curve of the spine allows better load transfer through the spine and can help limit pain and stiffness.

- Adjust the height of the chair to allow your feet on the floor and knees positioned in line with hips.
- Choose seat with good lumbar support or use lumbar roll to prevent the lower back curving into a “C” position.
- Sit with bottom all the way back in the chair.
- Keep your head in neutral position and your shoulders straight.



Precautions

- No lifting, twisting or bending.
- Avoid prolonged positioning, eg. Sitting or standing.
- Avoid low, soft lounge chairs with deep seats. Choose a firm straight back chair instead.
- Avoid recliner chairs with legs up.
- Maintain adequate pain relief to allow required activity level.

Exercises

1. Walking

It is important following your surgery that you start a regular walking program. This should start from Day 1 following surgery. "Walk far, but not fast"

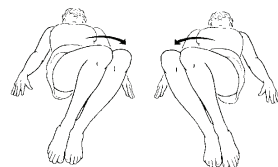
2. Hip and knee flexion

Lying on your back with knees straight, slowly bend one knee towards your chest and back down. Movement should be slow and pain free. Repeat 10 times each leg.



3. Knee rocking

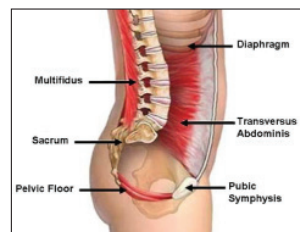
Lying on your back with knees bent, slowly rock knees side to side in a small pain free range. Allow the lower back to rotate slightly. Repeat 10 times each side.



4. Transversus Abdominis exercise

The Transversus Abdominis (TrA) muscle is the inner-most part of your abdominal muscles. It acts as the major stability muscle of your lower back. TrA forms a muscular corset around the trunk and when activated helps to stiffen and support the spine.

Lying on your back with your knees bent up. Take a breath in, then breathe out slowly, letting your tummy totally relax. Stop breathing for a moment. Slowly and gently draw in your lower abdomen (from the belly button down). Hold this contraction while you resume breathing in and out. Hold for 10 seconds then relax. Repeat 10 times.



References

- Hamlin, L, Richardson-Tench, M & Davis, M. (2009). Peri operative Nursing: An Introductory Text. Mosby Elsevier:Sydney.
- Pudner, R. (2005). Nursing the Surgical Patient. (3rd Edition). JK Elsevier:Sydney.
- Radford, M., County, B & Oakley, M. (2004). Advancing Peri operative Practice. Nelson Thornes Ltd:United Kingdom.
- Rothrock, J., Smith, D & Mcewan, D. (2003). Alexander's Care of the Patient in Surgery. Mosby:Michigan.

Notes

Local agencies for equipment hire

Arundel Amcal Pharmacy

230-232 Arundel Plaza
Napper Road
Arundel Qld 4214
Ph: (07) 5571 5564

Ashmore Health & Surgical

Ashmore Plaza, Cotlew Street
Ashmore Qld 4214
Ph: (07) 5539 2877

Austral Care

12 / 496 Gold Coast Highway
Tugun Qld 4224
Ph: (07) 5525 6133

Australia Fair Amcal Pharmacy

Shop G007, Scarborough Street
Southport Qld 4215
Ph: (07) 5532 9881

Domicare

Ph: (07) 5591 3535

Harbour Town Chemist

Brisbane Road
Biggera Waters Qld 4216
Ph: (07) 5529 3444

Helensvale Plaza Amcal Pharmacy

Shop 3/12, Sir John Overall Drive
Helensvale Qld 4212
Ph: (07) 5573 1770

Hinterland Chemist Day & Night

5 Price Street
Nerang Qld 4211
Ph: (07) 5596 4174

John Flynn Pharmacy

Inland Drive
Tugun Qld 4224
Ph: (07) 5507 9222

Morris Surgical

21 Nind Street
Southport Qld 4215
Ph: (07) 5532 9437

Pindara Pharmacy

1/12 Carrara Street
Benowa Qld 4217
Ph: (07) 5539 2073

Red Cross – Palm Beach

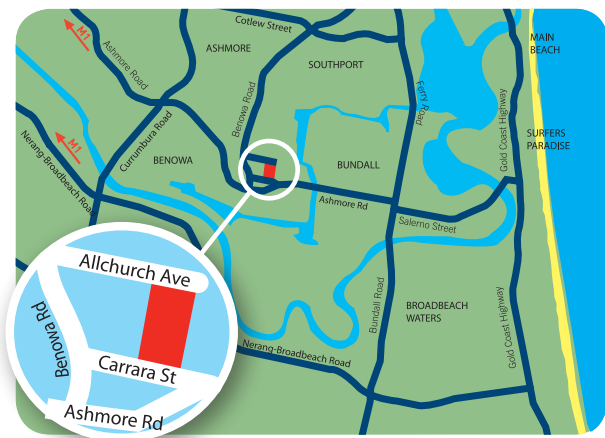
(9:30-4:00pm)
11th Avenue
Palm Beach Qld 4221
Ph: (07) 5576 0551

Red Cross – Southport

10 Lawson Street
Southport Qld 4215
Ph: (07) 5571 0966

Red Cross – Nerang

Ferry Street
Nerang Qld 4211
Ph: (07) 5596 6832



People caring for people

Pindara Private Hospital

Allchurch Avenue

Benowa QLD 4217

ph: 07 5588 9888 – fax: 07 5588 9811

www.pindaraprivate.com.au