Post Operative Spinal Information Kit

core
PHYSIOTHERAPY &
EXERCISE CENTRES

Your Physiotherapist

Clinic locations for your follow up treatment needs:

- Taringa - Lvl 1 / 15 Morrow St
- Brisbane City - QUT Health Centre, Gardens Point Campus, Lvl 4 X Block, 1 George St
- Sunnybank Hills - 538 Compton Rd
- Kelvin Grove - QUT Health Centre. Kelvin Grove Campus, Lvl 2 / 44 Musk Ave
- Beenleigh - Shop 2 Post Office Plaza, 20 Main St
- Banyo - 182 Tufnell Rd
- Corinda - 625 Oxley Rd
- Geebung - 2 / 328 Newman Rd
- Southport - Spine Centre, 151 Smith St
- Upper Coomera - Coomera Village Medical Centre, 8 / 658 Reserve Rd
- Highland Park / Nerang - 95 Alexander Dr
- Tugun - 1st Floor, 451 Golden Four Dr
- Mermaid Beach - 2 / 2453 Gold Coast Hwy
- Sorrento - 68 Ashmore Rd

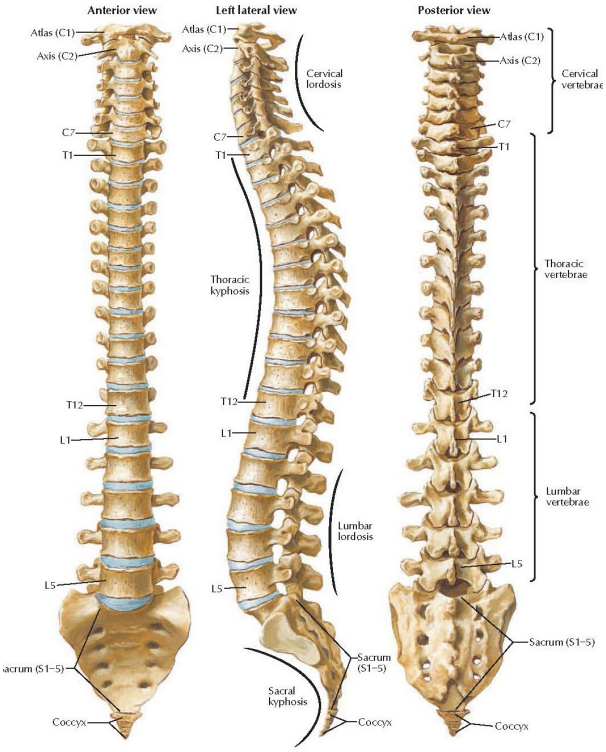
Your follow up appointment with your Core Physiotherapist:

Date: _____

Location: _____

Therapist: _____

Spinal anatomy and physiology



Your spinal column is a complex structure that consists of 33 individual vertebrae, divided into 5 areas; the cervical (neck), thoracic (upper back), lumbar (lower back) and sacrum and coccyx (tailbone).

The spine has 3 natural curves which aid in dissipating load. The 5 areas of the vertebrae consist of intervertebral discs, ligaments, nerves and muscles which interact to allow for mobility and stability.

There is a disc between each vertebrae. The disc has a soft centre (nucleus) and tough outer ring (annulus). When the discs are healthy they are flexible and springy and help absorb load from activities such as lifting and bending. Abnormal or excessive load on the spine can cause degeneration or damage to the disc.

Nerves can also become irritated, or compressed when there is not enough space for them to exit the spinal column. Irritated or compressed nerves can cause pain, pins and needles, and/or numbness sensations. Following back surgery these symptoms should ease, however the rate at which this occurs depends on a range of things including your fitness level, age, time since and degree of compression. It may take time for nerve function to recover.

The spinal column also has an abundance of muscles which provide movement of the spine and stability. Your large superficial muscles are equipped to move the spine, while your deep core muscles provide the scaffolding and the stability for your back and neck.

The deep core muscles are important in protecting ligaments, discs and vertebrae from excessive strain.

Following a bout of backor neck pain, the muscles have been shown to lose their ability to stabilise, and without proper retraining these muscles do not regain their full strength once the pain is removed. This leaves your spine vulnerable to further .

Following surgery you will need to retrain the deep muscle system to reduce your pain, increase your function, and reduce the likelihood of another.

Your Core Physiotherapist can help you to retrain these muscles in the weeks following surgery, through a progressive exercise programme.

Recovery

Recovery from surgery is different for everybody and depends on numerous factors such as:

- Extent of back and leg pain including perceived intensity and length of time has been present prior to surgery.
- Medical conditions, previous surgeries, or other injuries.
- General health and fitness.
- Area of and involvement of other segments of the spine.

Some general guidelines are:

- Basic scar healing takes up to 3 weeks for 50% healing and a further 3 weeks for approx. 80% healed.
- Further changes continue for up to 5 months in the soft tissues (muscles, ligaments, disc).
- Bone healing can take up to 12 months if a fusion has been performed.

These guidelines should be taken into consideration with your recovery. Even if you may not have any pain, your body will still be healing.
It is important not to overdo it during this time. If your back or leg symptoms return you should reflect on what you have done and make appropriate changes such as reducing activity or rest levels.
If symptoms persist or increase to a high level after you have allowed the symptoms to settle you should consult your doctor or physiotherapist. The following tips may be helpful post surgery:

Positioning when lying down

- Try to keep your spine neutral (not bent or twisted).
- Often it is comfortable to lie on your side with a pillow between the knees.
- If lying on your back, have a pillow running lengthways under your lower leg (so you are supported from your knees to your ankles).
- Lying on your back with your legs out straight can be uncomfortable as this position will sometimes create a slight stretch through your lower back.
- Avoid lying on your stomach
- At home ensure you have a mattress with sufficient support, and your pillow is at a height that keeps your head in a neutral position (ie. in line with the rest of your spine).

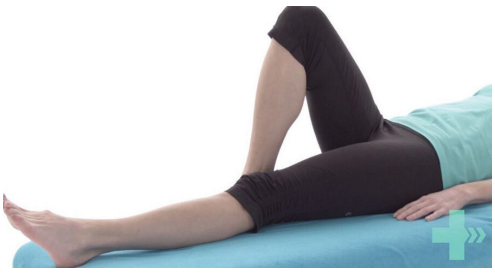
Getting out of bed

The key is to try to keep the spine in straight alignment when getting in and out of bed. The goal is to minimise any twisting and forward bending. Ensure you have someone available to assist you with this, particularly with your first few attempts to sit up following surgery.

Step 1

Rolling over onto your side – eg. from your back, onto your left side.

- Bend your right knee up and place your foot flat on the bed.
- Reach right arm across body in the direction that you are heading.
- Roll in one movement to the left.



Utilise the arm position and slightly push with your foot on the bed to log roll your body – all in one movement and keeping your spine in straight alignment

Step 2

Once on your side, bend both knees, move your legs gently towards and then off the side of the bed. Keep your body stiff and straight. Use your arms to help push yourself up into the sitting position.

Step 3

Once sitting up take a few deep breaths before trying to stand up. It is common to feel light headed and dizzy the first few times you attempt this following surgery, so remember to take your time.

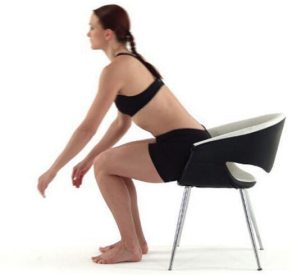
Sitting

Sitting places a lot of stress on your back and can be painful after surgery, because of this it is important to change positions often and not sit for long periods of time. You should limit sitting time to 20 minutes for the first 2 weeks post surgery, and slowly increase times the weeks following. You should also take care to:

- Avoid low, soft surfaces.
- Use a chair with arm rests to help you with transferring in and out when you are changing position.
- Avoid chairs with wheels or ones that swivel.
- Avoid crossing your legs while sitting.
- Ensure your feet can be flat on the floor with your knees the same level as your hips.
- Maintaining your normal spinal curves will reduce some of the stress on your back. A rolled up towel or small cushion may assist this.

Sitting to Standing

TO STAND FROM STITTING



- Footwear – don't try this in TED socks / hose. You need non slip footwear on your feet before you attempt to stand up.
- Shuffle forwards to the front of the chair / bed.
- Get your feet under you as far as possible and flat on the floor.
- Lean your body forwards.
- Pre tighten your buttock muscles, your core muscles, push down through your heels, push up with your hands and straighten up to standing.
- Pause and breathe, make sure you are not light headed before you start to walk.

TO SIT FROM STANDING

- Back up to the edge of the chair until you feel the edge touching the back of your legs.
- Reach back with one hand to the chair.
- Tighten your lower abdominal muscles and gluteal muscles before you start to sit.
- As you sit, bend your knees and hips (push your bottom backwards) and keep your spine straight.
- Use your arms to help to lower yourself down in a controlled manner.

STANDING

Standing with correct posture is important. The curves of the spine, muscles and discs are most efficient at spreading load when you are standing or sitting with optimal posture.

Key points:

- Stand with feet hip width apart.
- Spread the weight evenly between both feet, and ensure the weight is going through the heels.
- Have a slight bend in the knee.
- Bring your shoulder blades back slightly and open up your chest.
- Tighten your abdominal muscles to keep your spine supported.
- Stand tall.
- Keep your head positioned over your shoulders (and not Poking forwards).

Walking

Walking is the best activity you can do for the first few weeks post surgery.

Walking helps:

- Reduce pain and improve mood (exercise releases feel good hormones called endorphins).
- Reduce joint stiffness and increase muscle activity.
- Improve heart and lung function and circulation which will allow for optimal healing.
- Improves bowel and bladder function.
- Increases blood flow and nutrition to healing area.

In the first days post surgery your Core Physiotherapist will help you get out of bed and go for a walk. You will probably need a walking aid in the first 1-3 days, as this will help support you and keep you upright. Ensure that you have someone there to assist you until the medical staff have advised that you are safe to try this on your own.

It is important for your recovery to take small walks frequently throughout the day. This may be only 2-3 minutes initially. Even a short walk is worth the effort and your tolerance will increase quickly with more practice.

WALKING PROGRAM

Your Core Physiotherapist will go into further detail about the amount of walking you should be doing as amounts can vary depending on the individual.

An example may be:

- Day 1 - 1/2 lap to 1 lap of ward (50-100m). 3-4 times (Supervised).
- Day 2 - 1-2 laps of ward. 4-6 times (Supervised).
- Day 3 – 5 minutes. 4-6 times.

There were

17,305

lumbar spine surgery admissions to hospital on average per annum from 2010 - 11 to 2012 - 13. representing 96 admissions per 100,000 people aged 18 years and over (the Australian rate).

BREATHING AND COUGHING

- Following your surgery, medications can reduce the depth of your breathing. Your Core Physiotherapist and nurse will provide you with additional breathing exercises. This aims to keep your lungs clear of secretions which can otherwise build up after surgery.
- Regular deep breathing is an important part of your recovery.
- Occasional coughing will occur which can be uncomfortable. Try using a pillow/cushion or a rolled up towel to brace your stomach before you cough. This helps to provide some additional support and may assist you being able to cough with less discomfort.

Physiotherapy following surgery while in the hospital

Physiotherapy begins the day after your surgery to help you:

- Control the pain.
- Improve your mobility and understanding of your new body mechanics. This will involve teaching you how to brace when you move, maintaining your back position and keeping your spine supported where possible.
- Increase your strength and endurance. This may include basic core exercises, leg and calf exercises and general strengthening.
- Teach you how to move around from sitting to standing, to walking. This may start helping you to get in and out of bed, or walking with a walking frame for support until you are ready to walk independently.

Precautions may include:

- Avoiding movements that twist your spine.
- Avoiding any excessive bending of your spine.
- Keeping your spine in a neutral (straight) alignment when moving.
- Avoid any lifting or unneccesary loading.

Day 1 Physiotherapy

- Body mechanics, safety when moving, basic exercises.
- Sitting up and moving to a chair.
- Review of back precautions.
- Walking short distance with walker if needed.
- Sitting in a chair formeals.
- Circulatory exercises and general motion exercises.

Day 2-3 Physiotherapy

- ontinue your exercise program using good spinal alignment.
- Continue walking (with a walker if recommended).
- Sit up in a chair and keep walking through the day with nursing staff assistance.
- Exercise progressions.

Day 4 onwards

More specific details will be provided by your Physiotherapist.

Tips for when you return home

SAFETY AT HOME

- Do not bend down and pick up objects from the floor. Use a reacher or ask for help.
- Clear objects that you may trip over. Be mindful of tables, mats, pets, cords.
- Avoid rushing as you could easily lose your balance and fall.
- Keep night lights on in the bedroom and bathroom.
- Ensure you ask for help.
- Avoid any lifting, carrying and reaching in early stages.
- Change positions frequently and gradually build your tolerance to sitting, standing and lying down. Aim for 20% increases every 2-3 days.

SHOWERING / BATHING / TOILET

- Consider a non slip shower mat to ensure you are not going to jar your back.
- Shower seat may be helpful for initial few weeks when returning home.
- Hand rails onto shower walls may also be helpful. Temporary suction rails with moderate support are able to be attached to tiles relatively easily.
- An over the toilet elevated seat with handles to assist you sitting and standing may be helpful for when you return home. Ensure you sit as high as possible on the seat. Try and keep your back straight and tilt forwards at the hips (instead of rounding your back) if you need to lean forwards. Use your knees for support if you need to.
- You should maintain a high fluid intake when you return home, targeting 2-3 litres of water per day. Consideration also for avoiding constipation with things like prune juice, porridge, fruit and vegetables may also help with your body functions.
- Pelvic floor exercises will help to restore normal bowel and bladder function.

Ask your Core Physiotherapist for further information on what you may require. Some of these items are able to be hired from local chemists or the hospital.

DRIVING AND TRAVELLING IN THE CAR

You will need to wait until you have clearance from your Specialist before you return to driving.

Getting into the car for the first time:

- Ensure seat is pushed back as far as possible.
- Recline the seat.
- Walk to seat, turn around and back up to the seat as far as possible before trying to sit down.
- Use one arm to hold the back of the seat.
- Other hand hold onto the dash board.
- Slowly lower by pushing hips back into the seat and keep your back straight.
- Sit first and then take legs in one at a time.
- Ensure when you commence driving that you keep distances relatively short (up to 20 minutes – in sync with your sitting tolerance at home in your chair).
- Use a lumbar support / cushion in the small of your back.
- Adjust seat position to have your legs a little more flexed than normal.
- Keep back of seat fairly upright so arms are not straining to reach the steering wheel.

MANAGING STAIRS

- Ensure that you use a handrail for support if this is available.
- You may require a walking aid to assist if only one handrail is reachable.
- If one leg is stronger than the other, always head up the stairs stepping with the stronger one first, and down the stairs with the weaker one first.
- As you get stronger, then progress onto alternate steps.
- Ask for assistance if you need it.

Physiotherapy Intervention

HOW CORE CAN HELP

Spinal surgery recovery is not just the physiological recovery and healing of the repaired structures, it also requires the rehabilitation of the muscular system to ensure that you restore your normal spinal strength, stability, mobility and endurance. This will help you achieve optimal results.

Just prior to your first review with your Specialist, you will also be booked in for a clinical review with one of our Core Physiotherapists.

The purpose of this visit will be to ensure that your exercises and recovery are on track, and your rehabilitation plan is in place. Sometimes this will include clinical physiotherapy techniques to help alleviate any of your symptoms. Other times it may include exercise guidance.

Throughout your healing process we will progress your rehabilitation to ensure optimal muscle and functional recovery following surgery.

Functional exercise may well be integrated into your home program and this may include:

A WALKING PROGRAM

Once you have returned home ensure:

- You have supportive shoes (eg, joggers with firm sole and good grip).
- You have someone to help put them on in the first few weeks.
- You walk at a comfortable pace in the first couple of weeks. Once confidence improves you may gradually increase your speed.
- Avoid hills as much as possible in the first month post surgery.

An example of a walking program may be as follows:

PERIOD	DURATION	REPITITION
Day 6-7	7 minutes	4-6 times
Week 2	10 minutes	4-6 times
Week 3	15 minutes	3-4 times
Week 4	20 minutes	3 times
Week 5	30 minutes	2 times

HYDROTHERAPY

The pool is a great tool for relaxation, fitness, muscle strengthening and reducing the load on the joints. It is suggested you begin exercising in the pool once your wound has healed (approx. 2 weeks post surgery).

Your Core Physiotherapist can assist you with this and ensure your exercises are specific for what you require for your rehabilitation.

For example, exercises could include:

- Gentle walking in the water – forwards and backwards; sideways; "high knees".
- Gentle squats.
- Cycling the legs (usually in pool corners).
- Arm motions and exercises through the water.

One year after post-op, Total Knee Arthroplasty (TKA) patients:

walk 18% slower

climb stairs 51% slower

CORE RETRAINING WITH REAL TIME DIAGNOSTIC ULTRASOUND FEEDBACK

The deeper muscles of the spinal stability system are very subtle. At Core we utilise real time ultrasound to assist with the education and retraining process. We then integrate a range of rehabilitation techniques that move beyond clinical exercises into functional rehabilitation and graded recovery. This is one of our specialities at Core and we have a range of providers that integrate a wide range of exercise techniques and can assist you with your physical recovery process.

Our Administration team will be in touch within days of your discharge from hospital to schedule your follow up appointment with one of our Core practitioners.

Our office contact phone number is
1300 012 273

For information on our Physiotherapy team – check out our website
www.corehealthcare.com.au

Rehabilitation Specific Notes

core
PHYSIOTHERAPY &
EXERCISE CENTRES

Specialising in:

- Pain Management Programs
- Occupational Rehabilitation
- Physiotherapy
- Clinical Pilates
- Injury Counselling
- Exercise Physiology

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