



Midland Orthopaedics

Anterior Cruciate Reconstruction Information

Below is some information regarding your operation, intended as a guide. Please read this. For any further clarification, or if you have any queries or issues, please contact my rooms as soon as possible on 9389 3855 or email: spenceradmin@hogwa.com.au

With kind regards,

Mr Jonathan Spencer

Soft Tissue Knee Surgery: Risks and Benefits

Aim of Soft Tissue Knee Surgery

- Reduce pain
- Improve function
- Improve overall quality of life and mobility

Overall success rate: 95%

What to Expect

- 1-2 days in hospital
- 2 weeks of swelling and discomfort requiring significant pain killers
- 6 -12 weeks for reasonable recovery
- 6-12 months for a good to full recovery

Risks

- 5% chance of minor complication
- 0.5-1% chance of serious complication
- Risk of dissatisfaction with the outcome of surgery

Possible Complications of Surgery

- Wound infection
- Deep joint infection
- Deep vein thrombosis (DVT)
- Fracture
- Nerve injury
- Failure of reconstruction
- Revision surgery
- Heart attack
- Chest infection
- Pulmonary embolism

Post Operation Wound Care

- Keep wool and crepe bandages on for 24 hours after the operation
- Keep wounds clean, dry and covered for 2 weeks or until the wound is completely healed. If the dressings get soaked through, they will need to be changed.
- Do not soak the incision (i.e. no bath or pool) until the wound is completely healed.
- Mr Spencer mainly uses dissolvable stitches.
- If you have any concerns about your wound please contact Mr Spencer's rooms.

After your Anterior Cruciate Reconstruction: A Rehabilitation Guide

Committing to a rehabilitation programme after your operation is essential to a good outcome. The time frames below are approximate, vary between individuals and are best guided by Mr Spencer or your Physiotherapist.

Initially **closed chain exercises** (where the foot is fixed e.g. squatting) are performed to minimize any strain on the graft.

Notes in italics below are guidelines intended for your Physiotherapist.

Weeks 0-2

Aim: Knee Bend 90 degrees, straighten as much as able

- Wear **Richard Splint for 2 weeks** (at night only) to help you achieve a straight leg.
- Use **crutches for the first 2 weeks** and weight bear as comfortable, aim for as close to “normal” walking as possible i.e. similar step length on each side. Progress off crutches as you are able to.
- **Minimize swelling.** In the first 2 weeks, **rest** as often as you can with your leg in **elevation** (ideally your leg should be higher than your heart). You can use a **compression** bandage (such as doubled Tubigrip). Minimise activities that make your swelling worse, such as excessive walking, for the first 6 weeks.

- **Minimise pain.** Ensure adequate pain relief medication. Use **ice** on your knee for 15-20 minutes 3-4 times/day (including after exercises). Continue to check that your skin is ok whilst using ice.
- **Regain full straightening** of your knee as soon as you are able to.
- **Regain as much knee bend** as you are able to.
- When resting your leg, ensure your knee is straight.
- Do **exercises 3-4 times/day**. Try to perform exercises with minimal pain. Ease off exercises if they cause an increase in pain and/or swelling.
- *If a Hamstring graft has been performed, don't overstress the Hamstrings with exercises for at least 6 weeks.*
- *Example Exercises – ankle pumps in elevation, knee flexion in sitting/long sit/prone, knee extension (eg 2 minutes 3 x/day) – towel under heel +/- VMO activation, +/- weight on knee; prone hangs, calf stretch, VMO activation long sit, co-contraction hamstrings and quadriceps throughout 0-30 degrees (pain free hamstring contraction), maintain hip strength, start proprioception exercises.*

Weeks 2-6

Aim: Knee bend 120 degrees, full straightening by 4 weeks

- **Weight bear as much as you are able to** and wean off crutches as able.
- When stair climbing/walking, do it slowly to ensure as much symmetry as possible.
- You may be able to return to **work** during this period. This is job dependent, discuss this with Mr Spencer. Try to continue to elevate your leg at work to avoid an increase in swelling.
- **Driving** may be possible if you feel safe and competent to do so. You may need to check with your insurance company to ensure that you're covered to drive.
- Start **stationary bike** if your knee range allows a full rotation of the pedals (normally at least 70 degrees of knee flexion). Gradually increase the duration and then the resistance over time as your pain allows.
- From 4 weeks onwards (and once the wound is 100 % healed) you can start an **aquatic exercise programme** (if desired) as guided by a Physiotherapist.
- *Start Hamstring stretch. **No isolated Hamstring resistance exercises until at least 6 weeks after your operation.***
- *Gait pattern: aim for knee extension with heel strike.*
- *Progress functional, closed chain exercises as able to improve VMO control (mini squat, modified lunge) wall slides, ball squats, proprioception exercises. **No open chain kinetic exercises.***
- *Maintenance exercises for core strength and gluteals.*

6-9 weeks:

Aim: Continue to achieve knee range of movement

- **Swimming** with a pull buoy between legs will help to maintain your cardiovascular fitness and upper body strength.
- **8 weeks:** Stepper Machine, Rowing Machine, Cross Trainer.

- **8 weeks** start a supervised, progressive **walking programme** on alternate days. Initially on a flat surface, start slowly with rests as required and increase duration.
- **8-10 weeks:** Bike ride on the path/road (if you feel safe).
- **Closed kinetic chain** (fixed foot) strengthening of muscles stabilising the knee (leg press, steps, lunges, squats) Progress to unilateral squat if controlled.
- Start **hamstring strengthening**.
- **Proprioception exercises** for knee progressing from 2 to 1 leg stance and eyes closed, start to challenge base of support and centre of gravity. Aim for operated leg to equal opposite side with proprioception, strength, range of movement.

10-12 weeks

- **Swim** with a light kick, straight legs, no frog kick.
- **Weeks 10-14:** Start a supervised jogging programme. Straight lines, flat surface, start with 1 km (or less) and gradually increase if painfree. Aim for good proprioception and good knee control with a jump, land, single squat before beginning jogging. Progress speed and duration slowly as able.
- Continue to increase strength, balance and proprioception exercises.
- Add lateral movements such as sideways squats, side step, grape vine, hopping.

3-5 months

- Knee has essentially returned to normal with everyday activities.
- **4 months onwards:** Introduce breaststroke/frog kick.
- Low impact step exercises classes.
- *Strength and agility exercises, sport specific activities/exercises.*
- **Open chain exercises allowed.**

6 months +

- **Sports specific** training and exercises: dynamic control, change in direction, COG and BOS sport specific exercises, figure 8 running, change direction with cones, interval training with sprints, variable pace, backward running in safe environment.
- **Return to sport** as advised by Mr Spencer or your Physiotherapist. Ensure sport **warm up involves alignment** and proprioception work to help prevent further injury. No contact sport until 9 months post operation.