ACL RECONSTRUCTION

Preparing for surgery

Once you have decided to undergo surgery, it is important that you prepare yourself both mentally and physically for the procedure. The following information is intended to answer some common questions that may apply to all patients. Specific considerations for you as an individual may require different preparation or expectations – if you require further clarification please seek this from Dr Mandziak or his secretary before your operation.

Please also read my ‘Considerations Before Surgery’ information sheet.

When Should ACL Reconstruction be Performed?

Some patients who have low functional demands may not require surgery. Surgery is considered when a patient has symptoms of knee instability, and particularly if they wish to return to sports that require twisting manoeuvres or changes in direction.

Aims/Benefits of ACL Reconstruction

- Restore knee stability
- Allow participation in high functional demand activities and sports
- Possibly reduce the risk of future osteoarthritis.

Expectations of Surgery/Recovery Time

Patients are happiest after their surgery when they have clear understanding of their surgical recovery, and realistic expectations of their rehabilitation. ACL reconstruction has excellent outcomes when used for appropriate patients who are committed to their recovery and rehabilitation.

The complete healing time for the ACL graft to the bone is 9 months, so return to sports takes this duration of time. Physiotherapy input after surgery is critical to a good outcome, for the duration of their 9 months rehabilitation period.

Every patient is different and it is quite common for two patients with exactly the same treatment to experience a very different recovery.

How is ACL Reconstruction Performed?

Knee arthroscopy or ‘keyhole’ surgery is performed to address any cartilage issues and remove the ends of the torn ACL. Three small incisions or portals are made in the front of the knee to allow access for a specialised camera and instruments. A fourth small incision is made to obtain the inner hamstring tendons and these are used as the graft to reconstruct the ACL.

Preparation for Surgery

Every patient is unique. Dr Mandziak will discuss with you the suitability, benefits and risks of the procedure that are important to you as an individual.

Please see my ‘Considerations Before Surgery’ information sheet.

What to Expect After Surgery?

MOBILITY

I usually advise walking with crutches for the first 2 weeks after surgery. You can take weight on the leg as comfort allows. I do not routinely use knee braces. Patients stay in hospital for 1 night – the physiotherapist sees you the morning after surgery to start the rehabilitation. The most important early goal is to maintain full knee extension (‘straightness’).

SWELLING

Swelling is normal after surgery. After surgery on your knee, swelling is greatest for the first 6 weeks, but may persist to some degree for months. You may notice the swelling worsens throughout the day due to the effect of gravity.
BLOOD CLOT PREVENTION
Blood clot risk is low following ACL reconstruction, as patients can move and walk soon after the procedure.

Simple exercises such as ‘ankle pumps’ and short walks further assist in preventing clot formation.

Medications to thin the blood in order to prevent clots are generally not required unless the patient has a history of blood clotting problems.

PHYSIOTHERAPY
A good working relationship with your physiotherapist is critical to a good outcome after ACL reconstruction. The rehabilitation generally progresses for a period of 9 months. Before you return to full sports after 9 months I also ask you to see your physiotherapist to check your knee, hip muscles and thigh muscles have recovered adequately – otherwise you may increase your risk of ACL re-rupture.

DISCOMFORT
Pain is a very individual experience, and each patient reports differing levels of discomfort. Some discomfort after surgery is unavoidable, however many different measures are taken to ensure you are as comfortable as possible.

I use local anaesthetic techniques for reducing pain after surgery. Patients often find ice packs useful to help sooth the discomfort and swelling.

TRAVEL
It is safe for you to fly within a few days of your surgery. If you do fly, go for short walks up the aisle regularly and keep your calf muscles pumping while seated, to help prevent deep vein thrombosis.

SUTURES AND INCISION CARE
I routinely place dissolving sutures in each of the small incisions. A sterile waterproof dressing will be placed on your incision in the operating theatre, and ideally this stays on for 2 weeks (you can shower with this clear dressing intact). The dressings are removed by the Orthopaedics SA nurse at your 2 week checkup.

If you notice persistent discharge or ooze of fluid from your wound after leaving hospital, or have other problems with your dressing you should phone (08) 8267 8287 and ask to speak with an Orthopaedics SA nurse.

SHOWERING
You may shower with the clear waterproof dressing intact on your knee. If the dressing comes off or water is getting onto your incisions please call us or arrange for a new dressing to be fitted. Do not soak your incisions in a bath, pool or spa for the first 2 weeks post-operatively.

Potential Risks
Operations are safer than ever, though some small risks of surgery are unavoidable. These include:

- Infection (Approximately 1 in 1000 patients)
- Nerve or blood vessel injury (Note: a small area of numbness around each incision is normal)
- Blood clots - Deep vein thrombosis or pulmonary embolism
- Stiffness
- Re-rupture of the ACL (1 in 10 patients).

When Will I Go Home After My Operation?
Patients stay in hospital for one night after their ACL reconstruction.

What Do I Do Once I’m Discharged From Hospital?

- Keep your clear waterproof dressing intact until your 2 week nurse check
- Oral pain tablets as directed
- Ice the joint (ice cubes wrapped in a tea towel; do not place ice directly on skin)
- Make sure you can fully straighten your knee – do not get tempted to rest with your knee bent all the time, or it may become stiff
- Walk short distances with your crutches, as much as is comfortable
- Ankle ‘pumps’ – keep your muscles moving to help prevent clots.

Post-Operative Follow Up

- 2 weeks post-operative wound check and progress check by Orthopaedics SA nurse and Dr Mandziak
- 6 week post-operative review by Dr Mandziak
- Ongoing physiotherapy input for 9 months postoperatively.

If you have any questions please phone the Orthopaedics SA nurses or Dr Mandziak’s secretary on (08) 8267 8287.
Rehabilitation Overview Following an ACL Reconstruction

Note: This is the fastest recommended progression through rehabilitation, due to the healing and maturation time of ACL grafts. Some patients may require slower progression if they do not reach the milestones outlined in each time period.

Before Surgery

Regain pain free knee motion, especially full straightness, and allow swelling/bruising to settle (minimises stiffness complications).

After Surgery

WEEK 1-2
- Achieve full knee extension (straightness)
- Walk/weight-bear with crutches
- Gentle ‘closed kinetic chain’ exercises
- No need for bracing unless multiple ligament injuries.

WEEK 3-6
- Muscular control - ‘Closed kinetic chain’ exercises
- Range of motion.

WEEK 7-12
- Proprioception
- Gentle ‘open kinetic chain’ exercises, starting at 40-90° & progressing to 10-90° over 6 weeks
- Don’t forget core & hip strengthening
- Can begin jogging short distances on flat ground, cycling, swimming.

MONTH 4-6
- ‘Open kinetic chain’ exercises
- Sport specific strengthening, work on good ‘landing techniques’ if involved in jumping sports.

MONTH 7-9
- Continue sport-specific strengthening and drills
- Remove sprigs from shoes
- PEP Program (15-20 minute program for warm up, strengthening, plyometrics etc. to prevent further injury).

MONTH 9+
- I suggest physiotherapist review at this stage prior to returning to high-level competitive sports, for final review that your leg muscles, hip muscles, core strength and landing techniques are all sufficient, to prevent further injury.

Dr Daniel Mandziak
MBBS, FRACS, FAOthA
Orthopaedic Surgeon

APPOINTMENTS AND ENQUIRIES
P 08 8267 8287 E mandziakadmin@orthosa.com.au

For more information visit: www.orthosa.com.au