## Dr Daniel Biggs Orthopaedic Surgeon and Sports Injuries

# **ACL Repair - Lars Ligament**

The anterior cruciate ligament (ACL) is an important stabilizing ligament of the knee You have had your torn ACL repaired using a synthetic 'Lars' (Ligament Augmentation Reinforcement System) Ligament. The ligament has been passed through drill holes in your tibia (shin bone) and femur (thigh bone) and secured with screws.

The synthetic ligament is designed to act as an internal splint for the torn ACL, to allow the ACL to heal.

The advantages of this repair include not having to have a graft taken from your own hamstrings or patella tendon.

This should allow a faster, less painful recovery and rehabilitation

Your Operation:

1	 	 	
2		 	

3. \_\_\_\_\_

After Your Operation:

There is no restriction to range of motion

You will not require a brace

Once your wounds have healed and the swelling in the knee has settled, the graft is strong enough to allow unlimited movement of the knee, immediate full weight bearing and an early return to exercise and sport.

Keep your wounds dry for 7 days

You should make an appointment to see me 7 - 14 days following your surgery. You need to have an X-Ray of your knee prior to your first post-op review.

If you are from out of town, you should see your local Dr or physiotherapist 7 - 10 days post surgery for a wound check and removal of sutures and you should make an appointment to see me 6 weeks post surgery, with an X-Ray of your knee.

Icing the knee and Panadeine Forte or Digesic tablets is all that is required for pain and swelling for the first 5-7 days. Panadeine tablets, which can be bought over the counter, should then be enough to control the pain (especially at night).

If you are unsure about your exercise program after leaving hospital, you should see your physiotherapist.

If you experience problems with your knee, such as redness, increasing pain or fevers, do not hesitate to contact me. If I am unavailable, you should seek advice from the hospital or your general practitioner.

### Post – Surgery

The following is a guide to the rehabilitation program following a Lars ACL repair. The repaired ACL is protected by the Lars ligament

Unlike with a 'reconstructed' ACL, the repaired ACL does not go through a period of graft weakness.

Running is best avoided until most of the knee swelling has dissipated.

Sport specific activities, such as side-stepping, jumping and cutting should wait until there is adequate quads and hamstring strength (within 90% of the uninjured limb). Return to unrestricted sporting and recreational activities are allowed when the knee

has regained 90% strength and motion. This usually takes ~ 12 weeks

Week 1:

- 1. Ice your knee as directed by your physiotherapist
- 2. Full extension (make sure your knee comes out straight)
- 3. Full wt-bearing, wean off crutches
- 4. Quads and hamstrings co-contractions
- 5. Straight leg raises
- 6. Ankle ROM (range of motion) exercises

#### Week 2 – 6:

- 1. Full wt-bearing no limp gait training
- 2. Ice before and after exercise till swelling has dissipated.
- 3. Isometric quad exercise
- 4. Isokinetic closed chain exercises.
- 5. Step work, leg press, squats
- 6. Active knee flexion and extension
- 7. Stationary bike
- 8. Swimming no restriction
- 9. 21 days commence proprioception

#### Weeks 6 - 12:

- 1. Commence running
- 2. Progressive training
- 3. Step work, leg press, squats
- 4. Proprioception
- 5. Sport specific drills

Return to sport when you have regained 90% strength and motion of the knee.

## Good Luck!