# ACL Reconstruction Rehabilitation Protocol

The knee will be bandaged in Velband and crepe post op, which are reduced to a tubigrip bandage on discharge.

Crutches may be helpful for a week or two; you can walk full-weight bearing on the knee.

Calf exercises to prevent blood clots with anti-inflammatories on discharge.

DVT prophylaxis at surgeons discretion based on patient profile.

# WEEKS 0 TO 2

GOAL

* Reduce pain, swelling, begin muscle control rehabilitation and standing, weight bearing

PAIN AND SWELLING

* Control by simple pain killers: Panadeine, Panadol, Non-steroidal anti-inflammatories if required and **cold therapy** (4 to 6 times daily for 10 minutes and after physiotherapy).

WEIGHT BEARING

* Weight bearing as tolerated with or without crutches as needed.

EXERCISES

* Hamstring static contraction at 30/60/90°
* Hamstrings Quadriceps, co-contraction 30/60/90°and standing if possible.
* Calf pumps and core strengthening isometrics

# WEEK 2 TO 6

GOAL

* Attain full Range of motion (0 to 150°).
* Full weight bear
* Increase hamstring and quadriceps control.
* Decrease swelling use **cold therapy**.

WEIGHT BEARING

* Attain full weight bearing - as good quadriceps control as achieved.

HAMSTRINGS

* Begin active strengthening - concentric contraction initially side lying, progressing against gravity, and eventually to eccentric

CO - CONTRACTION

* Begin quarter squat, continue static co-contraction and also in full extension.

PROPRIOCEPTION

* Begin double leg stance proprioception work at week 4 to 6.

GAIT

* Begin gait re-education

SWIM

* Wounds healed and dry, may walk in pool and do laps with straight kicking (no breast stroke).

BIKE

* Begin static bike machine at week 4. No resistance. Minimum 5min and build up

# WEEK 6 TO 12

CO - CONTRACTION

* May proceed to half squats against gravity. Continue static program. May begin closed chain leg curls at gym, using and progressing to 5 to 20 kg weights. Step up/down exercises.

PROPRIOCEPTION

* Begin single leg stance proprioception
* Shift weight bearing from one foot to the other.

BIKE

* Increase resistance on stationary bike
* Thence begin ordinary bike (flat ground riding, no hills).

SWIMMING

Continue straight kick laps and walking, begin jogging in the pool.

GAIT

Progress to gentle jogging on firm ground (i.e. on grassy oval surface), no hills, no sprints and no stepping.

**12 TO 24 WEEKS**

STRENGTHENING

1. Half squats with progressive weights.

2. Leg Presses with progressive weights.

3. Leg Curls with progressive weights.

4. Step work with progressive higher steps.

PROPRIOCEPTION

Begin mini trampoline and progress to wobble board.

# 6 TO 12 MONTHS

STRENGTHENING

Continue to increase weight in gym from closed to open chain. Resisted leg extensions, squats and leg curls.

GAIT

Begin sport specific (running/training).

Begin figure of 8 cycles with progressive smaller 8's.

Begin side and backward running exercises.

Return over a 4 week lead-in to non-contact training.

FOOTBALL

No sprigs for 4 weeks, training for 4-6 weeks progressing to practise game then a normal game

SKIING

Bindings set on low release settings for 8 weeks.

POPRIOCEPTION

Mini trampoline - progress to single leg hop and gentle side to side step.

**@ 12 MONTHS**

**After review with surgeon :**

Return to sport as confidence, training and return of normal muscle strength tests allow.