



Anterior Cruciate Ligament Rehabilitation

This protocol is advisory only and should not be used except under the supervision of a qualified physiotherapy practitioner. It should serve as a guide but it is important to remember that the program must be tailored to each individual.

Preoperative

Check range of movement and muscle strength

Demonstrate Post-op exercises:

- Ankle, foot and toe circulatory exercises
- Static Quads (extension)
- Static Quads (30° flexion)
- Closed chain active flexion and extension (sliding board and donut 0-90°)
- Prone hamstrings curls

Demonstrate use of elbow crutches:

- Mobilisation
- Ascent and descent of stairs

Promote icing for pain relief

Post-Operative (0-2 weeks)

Check operation notes for special instructions

- Bracing is not used routinely. If required, apply range of movement brace locked at 0-90°. The duration of use will be specified. It may be removed at night and for supervised physiotherapy unless otherwise stated.

Assess patient's pain and apply cryocuff / ice as appropriate.

Observe post-op exercises as above and document range of movement achieved.

- Aim to achieve full extension
- Avoid hyperextension and flexion >90°.

If the patient can straight leg raise without a lag, they can do this to get in/out of bed. If not the patient must manually help their leg round using their hands or a towel.

Assist / Observe the patient mobilising with elbow crutches until independent and safe

If able to tolerate weight bearing, begin early weight-shifting with elbow crutches in standing to encourage proprioception

Goals:
Wound care and
reduction of swelling



Anterior Cruciate Ligament Rehabilitation

Rehabilitation Stage 1 (2 - 6 Weeks)

Mobility

- FWB
- Phase off crutches
- Driving 3-6 weeks

Range of movement

- 0-90° for 6 weeks
- Avoid hyperextension
- Avoid flexion >90°

Strength

- Closed chain quadriceps
- Open / closed chain hamstrings

Proprioception

- Single leg balance as able

Goals:

Regain range of movement and begin strength work.

Exercise examples:

Minidips
Hamstring curls
Heel raises
Step Ups
Step Downs
One leg dips
Static bike

**AVOID ALL TWISTING AND TURNING ACTIVITIES
THROUGHOUT REHABILITATION, DO NOT PROGRESS IF
INCREASED PAIN OR SWELLING**

Commence early out-patient physiotherapy (to start ASAP)



Anterior Cruciate Ligament Rehabilitation

Rehabilitation Stage 2 (6-12 Weeks)

Range of movement

- Achieve full range

Strength (as above)

- Closed chain quadriceps
- Open / closed chain hamstrings

Proprioception

- Single leg balance

Gym Based Activities

- Gradually introduce with caution

Pool based activities

- No swimming for 16 weeks
- Water-walking
- Swim using upper limbs with a float between legs

Goals:

Strength and early functional rehabilitation

Static bike

Rower

Stepper

Cross trainer

Rehabilitation Stage 3 (12-16 Weeks)

Range of movement, strength, proprioception, pool and gym based activities as above.

Increase rehabilitation intensity.

AVOID ALL TWISTING AND TURNING ACTIVITIES

Goals:

Functional rehabilitation

Examples:

Treadmill jogging

Jumping (2 legs)

Skipping

Rehabilitation Stage 4 (16-20 Weeks)

Range of movement, strength, proprioception and gym based activities as above.

Pool based activities

- Start swimming crawl (avoid breaststroke legs)

AVOID ALL TWISTING AND TURNING ACTIVITIES

Goals:

Consolidate

Examples:

Hopping drills

Jogging

Rehabilitation Stage 5 (20-24 Weeks)

Range of movement, strength, proprioception, pool and gym based activities as above.

Encourage stepping up of non-contact functional activities

AVOID CONTACT SPORT

Goals:

Return to non-contact sport

Examples:

Side stepping

Cutting and turning

Ball dribbling

Figure of 8 running



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Rehabilitation Stage 6 (24-28 Weeks)

Return to sport:

- Golf 5-6 months
- Racquet sports (tennis / squash) 6-7 months
- Contact sports (rugby, football, skiing, netball) 6-9 months

**NB: Progress should be ability and NOT time dependent.
Progression should not occur until the previous level has been mastered.**

Goals:

Return to sport

Examples:

Sport specific activities