



# ACL INJURIES EXPLAINED

## OVERVIEW

The Anterior Cruciate Ligament (ACL) is one of four strong ligaments in the knee that runs at a diagonal through the middle.

The **Function** of the ligament us to prevent the femur (thigh bone) slide out in front of the tibia (shin bone) whilst also providing rotational stability and support in the knee.

## CAUSES AND SYMPTOMS

Sudden onset of pain. Common causes of injury are from change of direction, sudden / rapid, landing incorrectly or direct contact / collision. Common sports include football, rugby, skiing, netball.

- Common *symptoms* of the injury are:
- Acute pain
  - Rapid swelling
  - Loss of range of motion
  - Instability or 'giving way' of the knee
  - Popping sound or sensation at time of injury

If you suspect you have injured your ACL its important to elevate leg, apply ice and seek medical attention as soon as possible.

Weather or not surgery is required, physiotherapy and rehabilitation is required to help strengthen the surrounding muscles and regain range of motion.

The extend of the injury is determined by physical examination and an MRI scan.

## ACL RECONSTRUCTION

ACL reconstructive surgery removes the damaged ligament and replaces it with a graft that is usually taken from the hamstring tendon or in some cases the patellar tendon. The graft then acts as scaffolding for the new ligament tissue to grow, leaving you with a more stable and functional knee.

Following surgery, an extensive rehabilitation program should be followed, meeting certain criteria as the knee continues to heal, to ensure return to sport and the best functional outcome. The results are based on your discipline, motivation and perseverance.

The initial goal post surgery is to regain full range of motion at the knee.

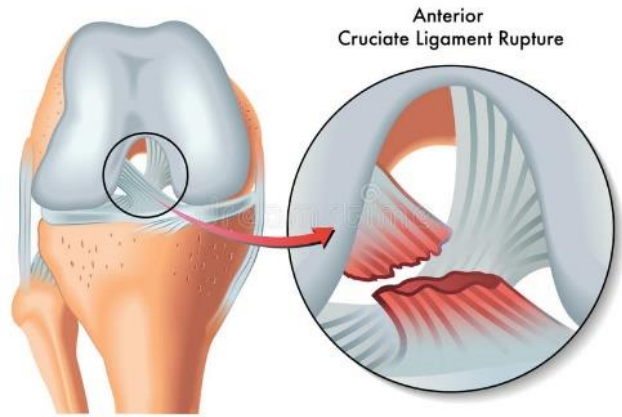




# THE PHYSIO CLINIC

Movement Health Performance

## ACL REHABILITATION



### PHASE ONE: 0 – 4 WEEKS

#### Rehab Goals for this phase:

- Reduce swelling
- Improve knee ROM – knee flexion
- Walking without aid, reduce antalgic gait
- Improve proprioception

#### End Phase criteria:

- Knee flexion to at least 100 degrees
- Active hyperextension
- Minimal assisted aid, fully weight bearing
- Swelling reduced

### PHASE TWO: 4 – 10 WEEKS

#### Rehab Goals for this phase:

- Full ROM
- Pain and swelling under control
- Normal gait
- Increased lower limb strength and proprioception

#### End Phase criteria:

- Normal walking gait
- Full range of flexion and extension
- Good eccentric strength

### PHASE THREE: 10 – 20 WEEKS

#### Rehab Goals for this phase:

- Increase single leg strength and balance
- Return to running

#### End Phase criteria:

- Single leg strength improved
- Returned to running with no pain or swelling

### PHASE FOUR: 20 WEEKS – 9 MONTHS

#### Rehab Goals for this phase:

- Continue increasing leg strength
- Single leg landing control
- Cardiovascular and agility training

#### End Phase criteria:

- Good landing mechanics – single and double leg
- Quad symmetry

### PHASE FIVE: 9 – 12 MONTHS+

#### Rehab Goals for this phase:

- Condition whole body for demands of sport
- Symmetry in strength and plyometric
- Return to sport

#### End Phase criteria:

- Pain free
- Full ROM
- Strength, balance and control

