

ACL (Anterior Cruciate Ligament) REHABILITATION

ACL injuries are common occurrence. Not all ACL injuries will need immediate surgery. All patients with ACL injuries should ideally go through ACL rehabilitation unless in professional athletes who want to return to the season immediately. Some patients can be managed only with ACL rehabilitation and lifestyle modifications. However, majority of patients especially young and active individuals may need ACL reconstruction after rehabilitation. Following article covers the basic rehabilitation goals and exercises.

AIMS:

1. Improve Muscular Strength
2. Improve Proprioception
3. Gradual increasing load on joint to avoid re-injury caused by lack of proprioception.

PREREQUISITE:

These exercises should be done under supervision of trained physiotherapist to avoid fall and injuries.

EXERCISES:

- A. Obtain and maintain full range of motion.
- B. Develop muscle strength:
 1. Pre op Electric stimulation sessions
 2. Work on muscular strength. Examples of exercises are
 3. Swimming (avoid breaststroke)
 4. Low impact exercise machines such as an
 1. Elliptical cross-trainer



2. Stationary Bicycle and treadmill



3. Leg press machine



4. Leg curl machine or Leg Extension machine



5. Weight bearing exercises such as
1. Half Squats
 2. Superficial Lunges
 3. Steps up

All the above should be done in limits of pain and discomfort. Try to avoid exercises in extreme flexion especially beyond 90 degrees.

C. Improve proprioception:

1. One-leg- standing exercises.
2. One-leg standing exercises with balance cushions / cues for the arms (throwing or catching a ball, reaching targets...)
3. One-leg standing exercise in different planes (frontal, sagittal)
4. Preparation for controlled jumps

Courtesy:

https://www.physio-pedia.com/ACL_Rehabilitation:_Rehabilitation_Planning

DISCLAIMER: The purpose of this leaflet is simplification of the topic for patient understanding only. For any further understanding and interpretation issues kindly contact the owner for their final clarifications. All the above exercises should be done under supervision of trained physiotherapist.