



# Non-Operative ACL Strain / Tear Rehabilitation Protocol

The intent of this protocol is to provide a guideline for progression of rehabilitation. Immediate supervised therapy will provide you with the proper guidance to rehabilitate your injury and resume normal activity as quickly and safely as possible.

## Phase I - Acute Phase:

### Goals:

- Diminish pain/inflammation
- Full pain-free range of motion
- Prevent muscular inhibition/re-educate inhibited muscles
- Resume normal gait pattern

### Precautions:

- Avoid full weight bearing until ambulation can be accomplished using a normal gait pattern with little to no pain.
- **All patients with grade II or III tears should consult an orthopedic surgeon to learn specific restrictions, surgical considerations, and determine the best individual course of treatment.**

### Treatment:

- RICE; rest, ice, compression, and elevation to reduce pain and inflammation
- Modalities (ultrasound, electrical stimulation) to reduce pain and inflammation
- Hinged knee brace for ambulation and activity
- Crutch use until a normal gait pattern is achieved
- Passive ROM: Wall slides or heel slides
- Patella mobilizations
- HS stretching
- Quad sets / SLR
- Stationary biking and aqua-jogging in a pool as tolerated

### Criteria for progression to phase II:

- Minimal swelling / pain
- Full or near full pain-free passive range of motion
- Normal gait pattern without crutches

## Phase II - Early Strengthening:

**Goals:**

- Full pain-free range of motion
- Resume normal gait pattern at varying speeds and on uneven surfaces
- Pain-free strengthening

**Precautions:**

- Avoid activity that causes pain rated greater than 3/10

**Treatment:**

- Modalities to reduce pain and inflammation as needed
- Continue bracing for activity
- Continue ROM exercises and HS stretching
- Double knee bends
- Double leg shuttle or leg press
- Double leg hamstring curls
- Initiate balance and proprioception exercises as tolerated (single limb stance, rocker board)
- Stationary biking and aqua-jogging

**Criteria for progression to phase III:**

- Minimal swelling / pain with light activity
- Full pain-free active range of motion
- Normal pain-free gait pattern at varying speeds and on uneven surfaces

**Phase III - Advanced Strengthening:****Goals:**

- Initiate intermediate and advanced strengthening
- Pain-free weight-bearing strengthening

**Precautions:**

- Avoid activity that causes pain rated greater than 3/10

**Treatment:**

- Progress to single leg squats, calf raises, and toe raises as tolerated
- Advance balance and proprioception exercises as tolerated - single leg stance, single leg balance drills, dyna disc, 5 point star
- Initiate elliptical trainer and treadmill walking as tolerated
- Initiate shallow pool jogging
- Progress to initial agility and absorption exercises in pool, progress to dry land as tolerated

- Begin straight plane dry land jogging when single leg strength and balance is good.
- Begin controlled lateral agility work when single leg strength and balance is good.

**Criteria for progression to phase IV:**

- Minimal swelling / pain with advanced activity
- Passing score on a functional return to sport test

**Phase IV Return to Sports:**

**Goals:**

- Full strength, range of motion, balance, and proprioception
- Prevention of future injury
- Pain-free return to sports

**Treatment:**

- Advanced single leg balance and proprioception exercises (dyna disc 5 point star, single leg squats on a dynadisc, BOSU)
- Continue with lateral agility exercises and advanced agility drills
- Resume sports activity as tolerated - starting with controlled low intensity activities

**Criteria for discharge:**

- Full unrestricted return to sports / competition with no pain, inflammation, or limitations