



## Anterior Cruciate Ligament Reconstruction REHAB Protocol

### Days 1-7

#### **Weight Bearing and Range of Motion:**

WBAT with brace locked in 0 degrees of extension

#### **ROM:**

Days 0-2 CPM use immediately post op if tolerated. ROM from 0-60 degrees. Initial speed is at the lowest setting. Days 3-7 use CPM 6-8 hours per day at slowest setting (1-2 cycles/ min)

#### **Brace Use:**

Locked in full extension at all times other than PT and CPM machine. If able to do 10 reps of SLR, may ambulate WBAT without the extension lock or in a functional brace. Gradually progress WB

#### **Therapeutic Elements:**

Modalities as needed

Patella Mob; SLR's with electric stim.; co-contractions, prone hangs

Wall slides

#### **Goals:**

ROM: 0 degrees of extension, 90 degrees of flexion

Control pain/swelling

### Day 7-2 weeks

#### **Range of Motion:**

Continue to use CPM 4-6 hours per day.

#### **Brace Use:**

At all times locked in extension except PT and CPM.

#### **Therapeutic Elements:**

Continue above

Gentle hip adduction

quadriceps sets with support

Hamstring sets and/or curls

Leg press using surgical or rubber tubing for resistance. Start with the band with least resistance

Modalities to reduce pain and effusion

Joint mobilization techniques as needed.

#### **Goals:**

ROM: maximum available CPM flexion



## **Weeks 2-6**

### ***Range of Motion:***

Discontinue CPM at 2-3 weeks if able to reach and maintain maximum range

### ***Therapeutic Elements:***

Heel slides, at least 120-125 degrees flexion

Continue above exercises, hip abduction if no patellar tracking problems, otherwise start at week 4

Hip extension

Stationary bicycling if patient has 115-120 degrees of flexion.

Active knee extension at 4 weeks post op

May add toe raises

Leg presses with weight resistance at 4 weeks post op

Start stairmaster at week 4-6

### ***Goals:***

Flexion to 120 degrees by week 2

## **Weeks 6-8**

Discontinue brace

Continue lower extremity strengthening exercises with emphasis on the quadriceps, hamstrings and calf musculature.

## **Months 2-3**

Begin isokinetic strength (270/240/200 degrees per second) and endurance (300 degree/sec) training  
Progress to jogging on a trampoline

## **Months 3-4**

First monthly isokinetic strength and endurance test may be performed at (270/240/200 degrees per second) and endurance (300 degree/sec)

Proceed to treadmill running gradually progressing toward running for 10-15 mins at a pace of 6-8 mins per mile and 3-5% grade. Steadily advancing to outdoor running.

In addition to closed chair and isokinetic exercises, continue strengthening exercises using isotonic weight machines.

## **Months 4-5**

Continue progression in running program. Begin agility drills when able to run 2-3 miles. Agility drills include lateral and backward running, vertical jumping, jumping rope, carioca, stair climbing, high knee drills and figure eight running.

## **Months 5-6**

Begin practicing the drills of the sport, gradually progressing to full participation.