



Dx:  Right  Left

Patient Name: \_\_\_\_\_

Date of Surgery: \_\_\_\_\_

PT/OT: Evaluate and treat. Follow the following protocol.

Signature/Date: \_\_\_\_\_

## **ACL/MCL Hamstring or Allograft Reconstruction**

The intent of this protocol is to provide the therapist and patient with guidelines for the post-operative rehabilitation course after multi-ligament knee reconstruction. This protocol is based on a review of the best available scientific studies regarding knee rehabilitation. It is by no means intended to serve as a substitute for one's clinical decision making regarding the progression of a patient's post-operative course. It should serve as a guideline based on the individual's physical exam/findings, progress to date, and the absence of post-operative complications. If the therapist requires assistance in the progression of a post-operative patient they should consult with your surgeon. **Progression to the next phase based on Clinical Criteria and/or Timeframes as appropriate.**

### **Weeks 0-3 weeks post-op = Advanced Protective Phase:**

**Brace:** Braced in full extension

**Weight Bearing:** Strict Non-Weight Bearing

**ROM Goals:**

**Extension:** Full **Flexion:** 0 degrees

**Therapeutic Exercise:**

**Strengthening:**

Three-way leg raises in brace (not flexion)  
Functional quadriceps electric stimulation

**Manual Therapy:**

Patellar mobilization  
Peri-patellar soft tissue mobilization

**Cryotherapy:** Six to eight times a day for 20 minutes

### Weeks 4 to 9: Early Strengthening:

**Brace:** Open to 30 degrees and progress 10-15 degrees per week.

**Weight Bearing:** Non-weight bearing until full 6 weeks after surgery, then progress gradually to full weightbearing. Patient can discontinue crutches when able to fully bear weight.

#### **ROM Goals:**

**Extension:** Full extension

**Flexion:** 60 degrees by end of week 6, 90 degrees by end of week 9

#### **Therapeutic Exercise:**

##### **Strengthening:**

Quadriceps setting

Four-way straight leg raising in brace.

Open chain calf with theraband

**\*\*No open chain hamstring strengthening.**

##### **Manual Therapy:**

Patellar mobilization

Passive knee flexion

Peri-patellar soft tissue mobilization

Prone quadriceps stretching to 60 to 90 degrees

### Weeks 10 to 14: Advanced Strengthening:

**Brace:** Brace can be discontinued.

**Weight Bearing:** Full weightbearing

#### **ROM Goals:**

**Extension:** Full extension

**Flexion:** Progress to full, although expect 10-15 degree loss of flexion with multiligamentous knee injuries.

#### **Therapeutic Exercise:**

##### **Strengthening:**

Quadriceps setting

Four-way straight leg raising in brace.

Half squats

Step downs

Slow progression of multi-plane closed chain exercises

**\*\*No open chain hamstring strengthening**

**Proprioception:** Balance activities

##### **Core strengthening:**

Trunk activities

Conditioning stationary bike

**Manual Therapy:**

Patellar mobilization  
Passive knee flexion to 125 degrees  
Peri-patellar soft tissue mobilization  
Prone quadriceps stretching to 125 degrees  
Soft tissue flexibility maintenance

**Weeks 14 Plus: Functional Training & Return to Sports:**

**Therapeutic Exercise:**

**Strengthening:**

Progression of multi-plane closed chain activities  
Proprioception  
Advanced core strengthening

**Conditioning:**

Stationary bike

**\*\*\*Running straight at 9 to 12 months**

**Note:** Return to sport based on provider team input and appropriate testing.

**NOTE: A loss of 10 to 15 degrees of terminal flexion can be expected in complex knee ligament reconstructions. This does not cause a functional problem for patients and is not a cause for alarm.**