

## Greater Hartford Orthopedic Group, P.C.

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### Postoperative Rehabilitation Protocol: Anterior Cruciate Ligament (ACL) Reconstruction HAMSTRING GRAFT

#### **Weeks 0 to 3: Protective Phase**

**GOALS OF PHASE:** ROM, Control swelling/inflammation, Quad control

**Brace:** Knee immobilizer when walking

**Weight Bearing:** Full, with crutches for safety

**ROM: Extension:** Full  
**Flexion:** 110 degrees

**Strengthening:** Quad sets  
Four-way SLR  
Ankle pumps  
Closed chain: squats, heel raises, etc

**Manual Therapy:** Patella and joint mobilization  
Passive knee flexion to 100 degrees  
Peri-patellar soft tissue mobilization  
No excessive stretching of hamstrings

**Cryotherapy:** Six to eight times/day 20 minutes

#### **Weeks 3 to 6: Early Strengthening Phase**

**GOALS OF PHASE:** ROM to 90 Full extension, no effusion, Quad contraction, progress to full weight bearing

**Brace:** May DC brace when quad control returns. May supplement with Functional brace as needed

**Weight bearing:** As tolerated

**ROM: Extension:** Full extension  
**Flexion:** 135 degrees

**Strengthening:** Quadriceps setting  
Closed chain exercises zero to 30 degrees  
Straight leg raising  
Mini squats  
Step downs

**Proprioception:** One leg balance

**Core Strengthening:** Abdominal and lumbar strengthening

**Conditioning:** Stationary bike, UBE

**Manual Therapy:** Patellar and joint mobilization  
Passive knee flexion to 125 degrees  
Peri-patellar soft tissue mobilization  
Prone quadriceps stretching  
No hamstring stretching  
Patient must have full ROM, non antalgic gait and no effusion to progress.

## **Weeks 6 to 12: Advanced Strengthening Phase**

**GOALS OF PHASE:** Full ROM 0-130, Normal Gait, Good quad control proprioception

**Strengthening:** Advancement of multi-plane closed chain activities  
Begin hamstring strengthening exercises gently

**Proprioception:** BAPS

**Core strengthening:** Functional standing trunk activities

**Conditioning:** Stationary bike, elliptical

**Manual Therapy:** Joint mobilization as needed  
Soft tissue flexibility maintenance  
May begin hamstring stretching

## **Weeks 12 to 16: Early Return to activities Phase**

**GOALS OF PHASE:** Increase strength and Endurance, Enhance proprioception and muscle control, Prepare to run

**Strengthening:** Advancement of multiplane closed chain activities  
Progress with Proprioception program

**Conditioning:** Continue biking  
May begin jogging program as tolerated

## **Weeks 16-24: Return to play Program**

**GOALS OF PHASE:** Increase muscle strength and proprioception, Restore confidence and muscle control, Perform sport specific activities, Return to play

**Exercises:** May add controlled open chain exercises  
Plyometric training as tolerated  
Sport specific activities begun after 16  
Agility drills and cutting after 20 weeks

**Note:** Return to sport based on appropriate testing

**Guidelines for returned to sport:** Quadriceps/Hamstring strength 80% of normal leg  
Equal single leg hop test  
Full ROM  
No swelling  
Good stability