

# Rehabilitation Protocol: Posterior Cruciate Ligament (PCL) Reconstruction with Achilles Allograft



NYU Hospital for Joint Diseases  
NYU LANGONE MEDICAL CENTER

**Eric J. Strauss, MD**  
Assistant Professor of Orthopaedic Surgery  
Division of Sports Medicine

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

Date: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

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

**Phase I (Weeks 0-4)**

- **Weightbearing:** As tolerated with crutches (may be modified if concomitant posterolateral corner reconstruction, meniscal repair/meniscal transplant or articular cartilage procedure is performed)
- **Hinged Knee Brace:**
  - Locked in full extension for ambulation and sleeping (**Weeks 0-1**)
  - Locked in full extension for ambulation – removed for therapy sessions (**Weeks 1-4**)
- **Range of Motion – Weeks 0-1:** None, **Weeks 1-2:** PROM 0-30°, **Weeks 2-4:** PROM 0-90° (MAINTAIN ANTERIOR PRESSURE ON PROXIMAL TIBIA AS KNEE IS FLEXED FROM WEEK 1-4—NEED TO PREVENT POSTERIOR SAGGING AT ALL TIMES)
- **Therapeutic Exercises**
  - Quad/Hamstring sets and ankle pumps
  - Straight-Leg Raise with brace in full extension until quad strength prevents extension lag
  - Hip abduction/adduction (RESISTANCE MUST BE PROXIMAL TO THE KNEE)
  - Hamstring/Calf stretch – Calf press with theraband progressing to standing toe raises with knee in full extension

**Phase II (Weeks 4-12)**

- **Weightbearing:** As tolerated with crutches-- discontinue crutch use at 6-8 weeks post-op
- **Hinged Knee Brace: Weeks 4-6:** unlocked for gait training/exercise only, **Weeks 6-8:** unlocked for all activities, **Discontinue brace at 8 weeks post-op**
- **Range of Motion**–Maintain full knee extension–work on progressive knee flexion (Goal of 110° by week 6)
- **Therapeutic Exercises**
  - **Weeks 4-8:** Gait training, wall slides (0-30°), Mini-squats (0-30°), Leg press (0-60°)
  - **Weeks 8-12:** Stationary bicycle (with seat higher than normal), Stairmaster, Closed-chain terminal knee extension, Leg press (0-90°), Balance and proprioception activities

**Phase III (Weeks 12-9 months)**

- **Weightbearing:** Full weightbearing with normalized gait pattern
- **Range of Motion** – Full/Painless ROM
- **Therapeutic Exercises**
  - Advance closed chain strengthening exercises, progress with proprioception/balance activities
  - Maintain flexibility
  - **Begin treadmill walking – progress to jogging**

**Phase IV (9 months and beyond)**

- Maintain strength, endurance and function – initiate plyometric program
- Begin cutting exercises and sport-specific drills
- **Return to sports as tolerated**

**Comments: AVOID ACTIVE HAMSTRING ACTIVITY AND ACTIVE KNEE EXTENSION FROM 90-70° UNTIL POST-OP WEEK 4**

Frequency: \_\_\_\_\_ times per week

Duration: \_\_\_\_\_ weeks

Signature: \_\_\_\_\_

Date: \_\_\_\_\_