



## PCL REPAIR

### Post-Operative Therapy

#### 0-2 Weeks:

- Non-weight bearing (NWB) for 6 weeks with crutches
- Use immobilizer for 3–7 days until sufficient quadriceps control is achieved, then transition to Dynamic PCL Brace (Rebound Brace).
  - Wear PCL brace for 6 months post-operatively.
- **Range of Motion (ROM) (Prone position only)** to avoid posterior tibial glide and tension on the PCL graft:
  - Passive flexion: 0-90°
  - Active assisted extension: 70-0°
  - Focus on maintaining full extension.
  - **Restrictions:** No active knee flexion or open-chain hamstring isometrics for 8 weeks.
- Patella mobilization
- Towel extensions
- Prone hangs
- Supine straight leg raises (SLR) with brace locked at 0°
- Quadriceps isometrics at 60° knee flexion
- **ROM (Prone only):**
  - Active assisted extension: 90-0°
  - Passive flexion: 0-90°
- Short-crank (90mm) ergometry
- Progressive resistance SLR in all planes
- Multiple-angle quadriceps isometrics (60° to 20°)
- **Weight Bearing:**
  - Begin weight-bearing as tolerated (WBAT) progression, advancing from toe-touch weight bearing (TTWB) to partial weight bearing (PWB) (25%, then 50%) starting at 6 weeks.
  - Full weight-bearing by 8 weeks post-op.
- **Crutch and Brace Usage:**
  - Discontinue crutches when gait is non-antalgic (6-8 weeks).
  - Initiate forward step-up program (6-8 weeks).

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**Weight Bearing Status:**

- NWB for 6 weeks

**Brace Settings:**

- Immobilizer for 3-7 days
- Transition to PCL brace once adequate quadriceps control is achieved
- Wear PCL brace for 6 months

**ROM Restrictions:**

- PROM 0-90° starting post-op day 1 in prone position
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**2-6 Weeks:**

- Continue progressing ROM as tolerated
  - Begin stationary bike with low resistance and leg presses (up to 70° knee flexion)
  - Initiate active-assisted range of motion (AAROM) exercises
  - Use stairmaster (6-8 weeks)
  - Begin proprioception training (e.g., Prop Board, BAPS)
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**6-12 Weeks:**

- Continue stationary bike and standard ergometry if knee ROM > 115°
  - Leg press and mini-squats (60-0° arc)
  - Initiate step-down program (8-10 weeks)
  - Continue AAROM exercises
  - Incorporate lunges and advanced proprioception training (perturbations)
  - Begin agility exercises (sport cord)
  - Use Versaclimber
  - Start retrograde treadmill running
  - Quadriceps stretching
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**12-20 Weeks:**

- Continue strengthening with leg press, mini-squats, and stationary bike
  - Focus on AAROM exercises, proprioception, and agility training
  - Start forward running if able to descend 8" step satisfactorily
  - Continue lower extremity strengthening, flexibility, and proprioceptive training
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#### **20-26 Weeks:**

- Initiate plyometric program (if strength base is sufficient)
  - Perform functional hop test (aim for >85% compared to the contralateral leg)
  - Discontinue dynamic brace if kneeling stress X-rays show <2mm of difference
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#### **>26 Weeks:**

- Continue advancing plyometric program, agility, and sport-specific training
- Progress lower extremity strengthening, flexibility, and proprioception training

**Note:** Progression through these phases should be based on individual recovery, with all exercises adjusted as necessary under the guidance of your surgeon and physical therapist. Regular follow-ups with the surgical team are crucial to ensure optimal recovery