

**Ronak M. Patel, MD**

## **Posterior Cruciate Ligament (PCL) Reconstruction Rehabilitation Guidelines**

### **Acute/Immediate Post-Operative Phase (Early/Maximum Protection) 0-3 weeks**

#### **GOALS:**

- Joint Protection
- Increase quadriceps and hip activity
- Edema and pain control

#### Guidelines

- Bracing: PCL Brace/hinged brace locked at zero.
- WB status: NWB
- ROM: PROM as tolerated to 90 degrees (prone only – no tibial sag, no hamstring activity)
- Exercises: Quadriceps setting (full extension - prone), SLRs – flexion, abduction and adduction in brace, patellar mobility, calf stretching, no hamstring stretching, core strengthening (towel under proximal tibia for any supine activities)

\*\*If in combination with ACL surgery, use PCL guidelines until POW 6, then progress through Dr. Patel's ACL guidelines beginning with phase 1.

### **Sub-acute Phase (Maximum Protection Phase) 4-6 weeks**

#### **GOALS:**

- Minimize external forces to protect graft
- Prevention of quadriceps atrophy
- Edema control

#### Guidelines

- WB status: TTWB, Progress to WBAT by end of Week 6 with crutches
- Bracing: PCL Brace
- ROM: Active ext to 0 degrees/PROM flexion as tolerated (no hamstring activity)
  - Seated or prone assisted only
- Exercises: Continue isometric quad strengthening in prone, CKC mini-squats, shuttle, bike, SAQs 0-90 degrees without external weight, proprioception training, weight shifts

\*\*All exercises to be performed in brace until 3 months post-op

### **Moderate Protection Phase (Progressive ROM/Strengthening) 7-12 weeks**

#### **GOALS:**

- Full knee flexion and extension ROM
- Good quadriceps control
- Good proprioceptive control
- No edema

#### Guidelines

- WB status: WBAT without assistive device
- ROM: as tolerated
- Exercises: Continue quad strengthening (0-60 degrees), begin leg press (0-60 degrees), front and lateral step-ups (up-up, down-down), sport cord walking, rowing in limited range, elliptical, progress proprioception activities (ball toss, steamboats, wobble/foam balance) and hip strengthening with proximal resistance

\*\*All exercises to be performed in brace until 4-6 months post-op if PCL brace

\*\*No Hamstring PRE's until 10-12 weeks post-op

### **Minimal Protection Phase (Light Activity Phase) ~13-20 weeks**

#### GOALS:

- Return to light jogging without edema
- Step downs on 4 inch step at 90% of uninvolved side

#### Guidelines

- Lateral step downs/heel taps beginning at 2 inch → 4 inch step as strength and form allows
- Balance and reach activities
- Continue functional hip strengthening activities
- Progress proprioception activities
- Initiate jogging in straight line (protected – treadmill) as ready – no cutting

### **Return to Activity Phase ~21-36 weeks**

#### GOALS:

- Return to sport-specific activities without edema
- Hop testing at 85% of contralateral leg

#### Guidelines

- Light agility activities (figure 8's, carioca, lateral movements)
- Plyometrics (bilateral jumps → hopping, box jumps)
- Sport-specific activities

\*\*Modalities as needed for pain control and quadriceps strengthening are permitted.