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## **Posterior Cruciate Ligament Reconstruction Rehabilitation**

### **Phase I: Immediate postoperative phase (days 1–7)**

#### **Goals**

- Work toward passive extension
- Restore patellar mobility
- Reestablish active quadriceps contraction
- Toe-t weight-bearing (50%)

#### **Brace/Modalities**

- Postop knee brace set at 0°–20° flexion
- Cryotherapy
- Myostimulation

#### **Exercises**

- Ankle pumps, straight leg raises
- ROM: Gentle progressive passive range of motion aiming for 0° – 20° at 1 week;
- Quad isometrics
- Independent home exercises above, 4 times / day

### **Phase II: Early Phase (weeks 2–4)**

#### **Goals**

- Full passive extension
- Restore patellar mobility
- Reestablish active quadriceps contraction
- Increase weight bearing to 50% at 4 weeks

#### **Brace/Modalities**

- Postop knee brace set at 0°–20° flexion, progress to 90° at 4 weeks
- Myostimulation

#### **Exercises**

- Ankle pumps, straight leg raises
- ROM: Gentle progressive passive range of motion aiming for 0° – 90° at 4 weeks
- Progress to light closed kinetic chain extension exercises: gentle squats/leg press
- Independent home exercises above, 4 times / day

### **Phase III: Intermediate Phase (weeks 5–12)**

#### **Goals**

- Restore range to 0 - 120° by end of week 6, 0 – 130° by end of week 8
- Progress to full weight bearing at 6 weeks
- Improved strength
- Enhance proprioception/balance
- Improve muscular endurance
- Add core strengthening

#### **Exercises**

- Ankle pumps, straight leg raises
- **avoid flexion greater than 130°**
- Begin stationary bike with gradual increase in resistance at 8 weeks
- Gradual progressive resistive exercises for quad, and hip strengthening from 0°–90° (avoid open chain exercises); and core strengthening along with gentle side lunges, bands, and stair stepper
- Neuromuscular proprioception: Tilt or, squats, light plyometrics @ week 8–10

#### **Phase IV: Functional Phase (weeks 13–32)**

##### **Goals**

- Normalize strength
- Enhance power and endurance
- Improve neuromuscular control
- Begin light sports specific drills
- Independent home program

##### **Exercises**

- Progressive resistive exercises as tolerated for knee, hip, and ankle
- **Avoid open chain hamstring strengthening**
- Begin jogging at 16 – 20 weeks
- Initiate agility exercises

#### **Phase V: Return to participation (weeks 33-36)**

##### **Criteria:**

- Minimal pain
- No swelling
- Full range of motion
- Exam: Negative Lachman, negative pivot shift; less than 2 cm side-to-side difference in quad girth
- Quad strength greater than or equal to 85% of normal side
- Single leg squat greater than 60% of normal side
- Successful single-leg hop test
- Clearance by Dr. Angelo