



## **PCL Reconstruction**

**Pre-op Education:** Instruct the patient in ankle pumps, quad sets, seated knee flexion, supine SLR, hamstring stretches, gait training with crutches and protection of the graft

### **Post-op Program:**

#### **POD 1**

1. Ankle pumps: 20-25 per hour
2. Active flexion as tolerated
3. Gait with crutches and brace locked in full extension. (**WBAT**)
4. Patellar mobilizations
5. Polar care/ cryotherapy
6. Dressing change
7. Sleep with brace locked in full extension
8. Quad sets
9. Encourage full extension and flexion to 90

#### **POW 1-4**

1. Continue as above
2. Start SLR's: start standing, then sitting, then supine
3. May use e-stim to promote quad recruitment
4. Progress active flexion to 90 and encourage full extension
5. ROM 0 to 90

#### **POW 4-8**

1. Continue as above
2. Progress flexion to 120 as tolerated.
3. With good quad control, may wean from brace. Usually in 4-6 weeks.
4. Teach gait training, emphasizing heel-toe, good quad isolation, normal knee flexion and push-off.
5. Start the following open chain exercises
  - a. Sidelying hip abduction and adduction
  - b. Sitting hip flexion
  - c. Ankle theraband
  - d. Standing hamstring curls to tolerance.

6. Begin closed chain knee exercises: ENCOURAGE PROPER TECHNIQUE AT ALL TIMES.
  - a. Single leg stance: level to unlevel surfaces
  - b. Therakicks: progress resistance, speed, arc of motion
  - c. Walking forward, retro, and sidestepping
  - d. Standing calf raises, wobble board
  - e. Wall slides
  - f. Leg press
  - g. Stationary bike
7. Encourage upper extremity strengthening for overall conditioning
8. Continue modalities

### **POW 8-16**

1. Continue as above
2. Progress exercises for building strength and endurance
  - 4-6 sets of 15-20 reps
  - -Progress from double to single leg and concentric to eccentric
  - Emphasis on closed chain activities only
  - a. Leg press
  - b. Squats
  - c. Lunges (front/side/back)
  - d. Step-ups
  - e. Leg curls
  - f. Hip strengthening
  - g. Resisted walking
3. Exercises for balance and proprioception
  - Progress from local to whole body
  - a. Mini-tramp
  - b. Sport cord
  - c. Slide board
  - d. Swiss ball
4. Exercises for endurance
  - a. Bike
  - b. Stairmaster
  - c. Elliptical trainer
  - d. Treadmill walking
  - e. Aquatic exercise

### **POM 4-6**

1. Continue as above but slowly progress weight and decrease reps (8-10)

- a. Increase load
- b. Decrease time and increase power
2. Jog Progression
  - i. Fast walk
  - ii. High knee march
  - iii. Figure 8
  - iv. 4 way reaction drill
3. Begin jumping rope.

### **POM 6-return to sport**

1. Progress jump roping to line jumps, then box jumps, and then distance jumps
2. Begin sport specific drills
3. Progress speed and intensity of above activities

### **Return to Athletics Criteria-9 Months**

1. Satisfactory clinical exam
2. <10% isokinetic strength deficit (Leg Press)
3. Completion of sport replication activity
4. Single leg hop test