



ROSENBERG COOLEY METCALF  
THE ORTHOPEDIC CLINIC AT PARK CITY

**Charles C. Lind, MD**  
**Patellar Tendon Repair**  
**Post-Operative Protocol**

**Phase I – Maximum Protection (Weeks 0 to 6):**

**Weeks 0-4**

- Brace locked in full extension for 6 weeks
- 50% weight bearing for 3 weeks. 75% weeks 3-4. Wean off crutches at 4 weeks.
- Ice and modalities to reduce pain and inflammation
- Patella and patella tendon mobility drills
- Range of motion – 0° to 30° knee flexion. Increase 10°/week until full range of motion is achieved.

**Weeks 4 to 6:**

- Full weight bearing
- Continue patella/patella tendon mobility

**Phase II – Progressive Range of Motion and Early Strengthening (Weeks 6 to 12):**

**Weeks 6 to 8:**

- Full weight bearing
- Open brace 0°-90°
- Continue with swelling control and patella mobility
- Gradually progress to full range of motion
- Begin quadriceps setting
- Begin multi-plane straight leg raising and closed kinetic chain strengthening program focusing on quality VMO function.
- Initiate open kinetic chain progressing to closed kinetic chain multi-plane hip strengthening
- Normalize gait pattern
- Begin stationary bike
- Initiate pool program

**Weeks 8 to 10:**

- Wean out of brace
- Continue with patella mobility drills
- Normalize gait pattern
- Restore full ROM
- May begin short arc quadriceps contraction 0-30°
- Progress open and closed kinetic chain program from bilateral to unilateral
- Increase intensity on stationary bike
- Begin treadmill walking program

**Weeks 10 to 12:**

- Full ROM
- Terminal quadriceps stretching
- Advance unilateral open and closed kinetic chain strengthening
- Initiate proprioception drills
- May introduce elliptical trainer

**Phase III – Progressive Strengthening (Weeks 12 to 16):****Weeks 12 to 16:**

- Advance open and closed kinetic chain strengthening
- Increase intensity on bike, treadmill, and elliptical trainer
- Increase difficulty and intensity on proprioception drills
- Begin gym strengthening: leg press, hamstring curls, ab/adduction; avoid lunges and knee extensions
- Begin multi-directional functional cord program

**Phase IV – Advanced Strengthening and Functional Drills (Weeks 16 to 20):****Weeks 16 to 20:**

- May begin leg extensions; 30° to 0°
- Begin pool running program advancing to land as tolerated

**Phase V – Plyometric Drills and Return to Sport Phase (Weeks 20 to 24):****Weeks 20 to 24:**

- Advance gym strengthening
- Progress running/sprinting program
- Begin multi-directional field/court drills
- Begin bilateral progressing to unilateral plyometric drills
- Follow-up appointment with physician
- Sports test for return to competition