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## **Cartilage restoration (MACI/Microfracture) of Patella/Trochela without Tibial osteotomy Physical Therapy Protocol**

### **Weeks 0-6**

#### **Primary goals: Eliminate swelling; initial ROM**

- Touch down weight bearing in brace 2 weeks, then full weight bearing in brace
- Brace:
  - 0-2 weeks: locked in extension; off for CPM
  - 2-6 weeks: can remove to sleep, discontinue when quad control
- ROM:
  - 0-6 weeks: Use CPM 6 hours/day, begin @ 0-30 degrees for 2 weeks, then 0-60 for 2 weeks, then 0-90 for 2 weeks.
- 0-2 weeks: Quad sets, SLR, calf pumps, passive leg hangs to 45 degrees at home
- 2-6 weeks: PROM/AAROM to tolerance, patella and tibiofibular joint mobility, quad, hamstring and gluteal sets, SLR, side-lying hip and core

### **Weeks 6-8**

#### **Primary goals: Increase ROM, initial strength**

- Discontinue brace
- Advance strengthening exercises
- Full range of motion

### **Weeks 8-12**

#### **Primary goals: Full ROM, increase strength**

- Gait training
- Closed chain activities
  - Wall sits, mini-squats, toe raises, stationary bike
- Unilateral stance activities
- Proprioception

### **Months 3-6**

#### **Primary goals: Full painless ROM, advanced strength**

- Advance strengthening as tolerated
- Maximize core, gluteal strength, pelvic stability, eccentric hamstrings
- Advance to elliptical, bike, pool as tolerate

- Begin agility and cutting activities when strength adequate

### **Months 6+**

#### **Primary Goals: return to function/sport**

- Advance functional activity
- Return to sport specific activity when cleared by MD