**Patella Fracture ORIF Rehabilitation Protocol**

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

**ROM AND EXERCISES WITH THERAPIST ONLY!**

**0 to 2 weeks:**

* Brace locked in full extension for 6 weeks
* Partial weight bearing for 2 weeks
* Ice and modalities to reduce pain and inflammation
* Patellar mobility drills
* Range of motion – 0° to 30°knee flexion
* Straight Leg Raise in brace progressing to therapist assist

**ROM AND EXERCISES WITH THERAPIST ONLY!**

**Weeks 2 to 4:**

* Weight bearing as tolerated; progressing off of crutches
* Continue with inflammation control
* Continue with patellar mobility
* Range of motion – 0° to 30°
* Continue with Straight Leg Raise in brace progressing to therapist assist

**Weeks 4 to 6:**

* Full weight bearing
* Continue with ice and aggressive patellar mobility
* Range of motion – 0° to 60° (by week 6)
* Continue with Straight Leg Raise in brace progressing to therapist assist

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

**Weeks 6 to 8:**

* Full weight bearing
* Slowly increase ROM to 0°-90°
* Open brace to 45°- 60° of flexion week 6, 90° at week 7
* Continue with swelling control and patellar mobility
* Gradually progress to full range of motion
* 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
* Increase ROM as tolerated
* Continue with patellar mobility drills
* Normalize gait pattern
* Restore full ROM
* 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
* Aggressive 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° progressing to full ROM as patellofemoral arthrokinematics normalize
* 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

**RETURN TO ACTIVITIES**

Running: 5-6 months when functional criteria are met

Golf: Short irons at 4 months, full swing with long irons at 5 months.

Delay 4-6 weeks if lead leg.

Pivoting/cutting sport: When functional criteria are met and cleared by surgeon, typically

7+ months at earliest