**MPFL/MQFL Reconstruction Rehabilitation Protocol**

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

**0 to 2 weeks:**

* Brace locked in full extension for 6 weeks during ambulation
* Partial weight bearing for 2-3 weeks
* Ice and modalities to reduce pain and inflammation
* patella and patella tendon mobility drills Gentle superior/ inferior only
* *\*\*No lateral patellar glides\*\**
* Gentle patella tendon med/lat mobs
* Quad sets in brace
* Start Range of motion – 0° to 30°, progressing slowly
* **ROM:**
* 0-30**°** (week 0-3)
* 0-45**°** (week 4)
* 0-60**°** (week 5)
* 0-90**°** (week 6)
* Begin quadriceps setting- when pt can perform strong QS, start with SLR without a quad lag; begin hip abduction and hip extension when pt masters SLR w/out lag.

**Weeks 3 to 4:**

* Weight bearing as tolerated; progressing off of crutches; knee brace locked in ext
* Continue with inflammation control
* Continue with patella mobility as above
* Continue with submaximal quadriceps setting

**Weeks 4 to 5:**

* Full weight bearing
* Continue with ice and patella mobility all planes
* Range of motion – 0° to 70°
* Increase intensity with quadriceps setting

**Weeks 5 to 6:**

* Continue with Patella Mobility
* Range of motion 0° to 90°
* Open brace to 45°- 60° of flexion for NWB activities

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

**Weeks 6 to 8:**

* Full weight bearing
* Open brace to 0°-90° of flexion week 6 for ambulation
* Continue with swelling control and patella mobility
* Gradually progress to 125° 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 week 8
* Initiate pool program

**Weeks 8 to 10:**

* Wean out of brace (week 9+)
* Continue with patellar mobility drills (\*\*no lateral glides\*\*)
* 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 forward and backward
* Begin elliptical trainer

**Weeks 10 to 12:**

* Full ROM
* Begin quadriceps stretching
* Advance unilateral open and closed kinetic chain strengthening

**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° as tolerated
* 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: 6 months when functional criteria are met

Golf: Short irons at 5 months, full swing with long irons at 6 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