

MPFL RECONSTRUCTION WITH CARTILAGE
Physical Therapy & Strength and Conditioning
Chad Broering, M.D.

PHASE I – Maximum Protection (Weeks 0 to 6)

Weighting bearing as tolerated with brace locked in full extension for 6 weeks

Week 0-2

- ☐ Reduce inflammation
- ☐ Normalize patella mobility with manual mobilizations
- ☐ Begin submaximal quadriceps activation
- ☐ 0-30 degrees knee flexion
- ☐ CPM 0-30 8 hours daily

Weeks 2-4

- ☐ Reduce inflammation
- ☐ Continue patellar mobilizations
- ☐ Range of motion 0-60 degrees
- ☐ Continue submaximal quadriceps activation
- ☐ Isometric hamstring/groin exercises

Weeks 4-6

- ☐ Range of motion 0-90 degrees
- ☐ Begin straight leg raises
- ☐ Continue isometric hamstring/groin exercises
- ☐ Open chain hip strengthening

PHASE II – Progressive Range of Motion and Early Strengthening (Weeks 6-12)

Weeks 6- 8:

- ☐ Open brace to 60° of flexion with weight bearing during week 6, 90° at week 7
- ☐ Continue with swelling control and patella mobility
- ☐ Gradually progress to full range of motion
- ☐ Normalize gait pattern
- ☐ Multi-plane straight leg raising and closed kinetic chain strengthening program
- ☐ Begin stationary bike
- ☐ Initiate shallow and deep water pool program

Weeks 8-10:

- ☐ Wean out of brace
- ☐ Normalize gait pattern
- ☐ Restore full ROM
- ☐ Gradual bilateral closed chain progression
- ☐ Gradual step up progression

- ☐ Add light gym strengthening (leg press and hamstring curls)

Weeks 10-12:

- ☐ Full ROM
- ☐ Terminal quadriceps stretching
- ☐ Advance closed chain and gym strengthening program
- ☐ Add treadmill walking and elliptical trainer

PHASE III – Progressive Strengthening (Weeks 12 to 16)

- ☐ Full ROM
- ☐ Advance closed chain and gym strengthening
- ☐ Increase intensity on bike, treadmill, and elliptical trainer
- ☐ Initiate shallow water pool running program

PHASE IV – Advance Strengthening, Functional Drills (Weeks 16 to 20)

- ☐ Begin linear land based running program
- ☐ Advance to lateral and rotational drills as tolerated

PHASE V – Plyometric Drills, Return to Sport (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 **6 months post-op** per physician's release