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**MPFL (Medial Patellofemoral Ligament) Protocol**

**0-6 WEEKS POST OP:**

- Weight bearing as tolerated with brace
  - Knee locked in full extension until good quad control
- Brace
  - Locked in full extension during sleep 0-2 weeks or until maintained full extension
  - Locked in full extension for ambulation until good quad control
    - Once good quad control, may unlock for ambulation. May discontinue at night
- PROM 0-90 x 2wks, then full PROM
- Pain/Edema reduction
- Begin and Enhance normalization of quad recruitment
- Modalities as needed
- Teach patient to perform Home Stretching Exercises 2 –3x's daily
- Begin patella mobilizations (caution with lateral patellar mobilization)
- Scar management
- Quad sets/SLR in Brace at 0° (assist patient with this exercise until solid quad contraction developed)
- Seated calf ex's
- Teach Quad ex's for home program
- BFR- Initiate after post op day 14
- No active extension until 5 weeks, then start with light knee extension 0-60 until 8 weeks

**6 WEEKS POST OP:**

- Continue as above
- Stationary Bike to increase ROM, start with high seat and progress to normal height when able, resistance as tolerated
- Discontinue brace and normalize gait mechanics
- Begin hamstring sets, and toe/heel raises
- Avoid loading the knee at greater than 90 degrees until 12 weeks

**10 WEEKS POST OP:**

- Continue as above
- Leg press with both legs
- Leg bridges and balance squats
- Single leg deadlift
- Leg extensions with anti shear device or cuff weights progress weight as tolerated, keep resistance proximal
- Running progression at 12 weeks
- Avoid dynamic valgus movement until 12 weeks

## 14 WEEKS POST OP:

- Continue as above
- Sports test exercises
- Treadmill walking – forwards and retro
- Closed and Open Chain Tubing ex's
- Single leg stands for balance/proprioception
- Chair/Wall squats – keep tibia perpendicular to floor
- Unilateral step-ups – start with 2" height and progress to normal step height as able
- Advance running progression. Multi directional agility exercises at 16 weeks
- Return to golf, hiking, and non-pivoting sports 16 weeks

## 18 WEEKS POST OP:

- Continue as above
- ROM should be progressing, if not contact physician
- Stairmaster, Versa Climber, Nordic Track and Elliptical Trainers
- Slide Board – start with short distance and progress as tolerated
- Cable Column ex's – retro walking, lateral stepping, NO cross over stepping or shuffling
- Standing leg curls with cuff weights or seated leg curls
- Isokinetic Exercises
- Initiate plyometric program as appropriate to patient's functional goals
  - If plyometric exercise intensity is high the volume must be decreased, give ample recovery time between sets
- Initiate sport specific activities under supervision by ATC or PT

## 20 WEEKS POST OP:

- Continue as above
- Lateral Movement supervised by ATC or PT
  - Stepping, shuffling, hopping, carioca
- Advance strengthening for quads as tolerated
- Functional sports testing at 20 weeks

## 24 WEEKS POST OP:

- Continue as above
- Emphasize strength and power development
- Running and sport specific drills under ATC or PT supervision
- Continue strength testing monthly until patient passes functional testing
- Clearance by physician prior to return to sport

## RETURN-TO-SPORT CRITERIA:

*Full return to all sports and games*

- At least 5 months from surgery
- No functional complaints, full range of motion & no effusion
- Confidence when running, cutting, jumping at full speed
- >90% isometric quadriceps strength
- >90% contralateral values on hop tests
- >90% Quad Index LSI with Biodex or HHD
- >90% Quad peak torque/body weight on Biodex (if applicable)