

## **Medial Patellofemoral ligament (MPFL) Reconstruction Protocol**

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### **Initial PT evaluation and treatment begins post-op day 2**

#### **Weeks 0-6**

- Weight bearing as tolerated in hinged knee brace
- Wean crutches as tolerated
- Brace locked with ambulation ONLY until patient is stable
- Unlock brace with all other activities (i.e. sleeping, exercise, resting)
- Progress to a minimum of 90 degrees of flexion by 6 weeks. If not progressing appropriately, notify physician IMMEDIATELY – BEFORE 6 WEEK APPOINTMENT.

#### **Weeks 1-3**

##### **Exercises:**

- ROM
  - o Seated Active Assisted Knee Flexion
  - o Towel Extension
  - o Hamstring/Calf Stretches
  - o Heel Slides
  - o Stationary Bike
- Manual Therapy
  - o Flexion & Extension (**90 degrees of flexion by 6 weeks**)
  - o Patellar Mobilizations, no lateral glides
- Strength
  - o Isometrics
  - o SLRx4
  - o Resisted Ankle Pumps
  - o Pillow Squeezes
  - o Weight Shifts
- Modalities
  - o E-stim muscle re-education

#### **Weeks 4-6**

##### **Exercises:**

- Manual Therapy

- Flexion & Extension (**90 degrees of flexion by 6 weeks**)
- ROM
  - Continue ROM for Weeks 1-3
  - ITB Stretch
- Strength
  - Leg press
  - Step-ups
  - Mini squats
  - Retro Treadmill
  - Hip Abductors and Adductors with tubing
  - External Rotation with Tubing
  - Clamshells
  - Heel Raises
  - Prone Hamstring Curls
  - Bridges
  - TKE (Standing)
  - BAPS
  - Ball toss off trampoline with single leg stance

### **Weeks 7-12**

#### **Exercises:**

- Progress ROM to full ROM
- VMO strengthening
- Step-downs
- Lunges & side lunges
- Stairmaster
- Knee Extension
- Short Arc Quads
- Standing Hamstring Curls
- Double Leg Squats on Unstable Surface
- Single Leg Stance on Unstable Surface
- Single Leg Calf Raises (+/- Mini Squats)
- Standing hip flexion, extension, abduction, adduction (with tubing around uninvolved extremity)

### **Weeks 12+**

#### **Exercises:**

- Running Progression – **NO running on back-to-back days**

- Treadmill walk/jog intervals
- Treadmill Running
- Track-run straight and walk turns
- Track-run straight and run turns
- Run on the road
- Low-level plyometrics and progress as tolerated
  - o Straight line jumping
  - o Backward, forward, side-to-side jumping (progress to diagonals)
  - o Side-to-side jumps with BOSU
  - o Quick lateral shuttles from cone-to-cone
- Lunges on BOSU
- Single leg squats on trampoline
- Single leg stance on unstable surface with ball toss
- Running Drills
  - o Shuttle sprints
  - o Stop and go drills
  - o Zig-zag running, sideways, and backwards drills
  - o Sprinting with cutting and pivoting drills
- Single leg exercises with perturbations
- Box hops
- Toe/heel walking