## MPFL Reconstruction Post Op Rehab

## Pre-Op

- Physical Therapy 2 weeks prior to surgery, insure full ROM, increase quad/hamstring strength, normalize gait
- Schedule a PT visit for 3-7 days after surgery

## Post-Op Days 1-7

- Ankle Pumps every hour
- Post-op brace to maintain full extension
- Quad sets and SLR (Brace on) with no extension lag
- Pillow or towel roll under heel to regain full knee extension
- Patellar mobilization exercises
- Heel Slides 0-40 as tolerated
- AAROM off the end of the table (using non-surgical leg for assistance)
- PWB with brace locked in Full Knee Extension 0-25%. Brace locked in Full Extension for sleeping. Brace can be unlocked for sitting
- PROM 0 to 40 of Knee
- Ice or Cryo-cuff (use a pillow case or thin towel over the bladder portion to give thin barrier between skin and bladder) for 20 minutes on and 30 to 40 minutes off

#### Weeks 2-3

- Supervised PT 2-3 per week (may need to adjust based on insurance)
- Progress ROM flexion gradually to 90 ° by 4
- Continue SLR's in brace (until patient is able to without any Extension Lag), Quad isometric sets, ankle pumps, patellar mobilization, heel slides, AAROM off the end of the table, passive knee extension with towel roll under heel
- Patient should have full Passive Knee Extension and slight hyper extension equal to non-surgical leg
- PWB 0-25% with brace locked in Full Knee Extension for weight brearing. Brace locked in Full Extension for sleeping. Brace can be unlocked for sitting.
- May remove brace for HEP, Except for SLR (if patient has Extension Lag)
- Quad E-Stim for muscle re-education (use until Excellent Quad Control& No Extension Lag)
- Stationary Bike for ROM start with seat elevated and work toward normal seated biking position. Minimal resistance
- Leg Press (Two legs, Single Leg, Eccentric Single Leg)
- Closed Chain Lower Extremity Exercises (per WB restriction), 90 degrees of flexion limit for first 6 weeks
- Balance and proprioception (per WB restriction)
- Progressive Resistive Hamstring Exercise
- Heel Raises
- Hip Strengthening Exercises
- Core Exercises

# Weeks 4-8

- Continue above exercises and ice as necessary.
- Can begin Scar massage / mobilization
- Progress knee flexion to full by 6 weeks

- Can progress from 50 100% WB (to progress needs Excellent Quad Control/ No Extension Lag, minimal edema, and normalized gait) (Goal 100 % by 4 to 6 wks) Continue to keep brace locked in extension for weight bearing through 6 weeks
- At 6 weeks allow ambulation with brace 0-90 for WB if excellent quad control/ no extension lag and minimal edema if quad control is good
- Continue to progress LE Closed Chain Exercise with 90 degree flexion limit till 6 wks, then no deeper than 100 after 6 wks (working towards passing Leg Press Test ) Sagittal Plane and Minimal Frontal Plane Exercises (TB Lateral Steps) No Transverse

### 8 weeks to 3 months

- Continue all exerises
- Discharge Tscope brace if good quad control and patellar stability
- Continue ROM to maintain full range of motion

#### Months 3-5

- Continue to progress LE Closed Chain Exercise (working towards passing Leg Press Test and Single Hop Test)
- Progress to Home Jogging Program when cleared by MD/PA
- Allow Aquatic Therapy if requested (all incision are completely scarred over/ Flutter Kick only.
  No whip Kicks)

### Month 5-6

- Continue to progress LE Closed Chain Exercise (working towards passing Leg Press Test and Single Hop Test)
- Agilities (can begin once they have passed there Leg Press Test and Single Leg Hop Test)
- Light Sagittal Plane and Frontal Plane Plyometric (criteria to begin Quad Strength > 80% contralateral side, Full AROM, Swelling <1 cm at joint line, no pain)</li>
- Agilities (can begin once they have passed there Leg Press Test and Single Leg Hop Test)

# Month 6-9

- Continue to progress LE Closed Chain Exercise (working towards passing Leg Press Test and Single Hop Test)
- Progress to Sport Specific Agilities and Sport Related Plyometrics (once they have finished general agility program and passed Leg Press Test and Single Leg Hop Test, Satisfactory MD exam)

<sup>\*\*</sup> This is strictly an outline of the major exercises and progression we would like incorporated. The two main goals are that appropriate progress is made weekly and that communication between patient, therapist, and doctor occurs frequently.