

Medial Patellar Femoral Ligament (MPFL) Repair or Reconstruction

*If surgery was performed by Dr. VanThiel, please see www.orthoillinois.com/find-a-provider/geoffrey-s-van-thiel-md/therapy-protocols for therapy protocol.

Precautions: FWB/WBAT

Phase I (1 – 5 days post-op)

- Wound care: Observe for signs of infection. Keep covered until post-op day 5
 - On day 5, OK to remove dressing and begin showering. Cover incision with gauze and ace wrap
- Modalities: prn for pain and inflammation (ice, IFC)
- Brace:
 - Locked in full extension for all activities except therapeutic exercises and CPM use
 - Locked in full extension for sleeping and ambulation
- Gait: WBAT with 2 crutches
- ROM:
 - Knee: 0 – 30 degrees (no active, open-chain extension)
 - Ankle AROM
- Exercises:
 - Hamstring and calf stretches
 - Quad sets

Phase II (5 days – 4 weeks post-op)

- Wound care: Observe for signs of infection.
 - On day 5, OK to remove dressing and begin showering. Cover incision with gauze and ace wrap
- Modalities: prn for pain and inflammation (ice, IFC)
- Brace:
 - Weeks 0 -4, locked in full extension for all activities except therapeutic exercises
 - Until 2 weeks post-op, locked in full extension for sleeping
- Gait: FWB/WBAT with 2 crutches
- ROM:
 - Weeks 0 – 2: 0 – 60 to 70 degrees
 - Weeks 2 – 4: 0 – 75 to 80 degrees
 - Weeks 4 – 6: 0 – 90 to 105 degrees
- Strengthening:
 - Quad sets with biofeedback and e-stim for VMO

- By 6 weeks, goal of regaining active quad and VMO control
- Heel slides to recommended ROM, SLR in 4 planes with brace locked in full extension
- Resisted ankle ROM with theraband
- Patellar mobilization, as tolerated

Phase III (4 weeks – 10 weeks post-op)

- 4 – 6 weeks:
 - Brace
 - Removed for sleeping
 - Locked in full extension for ambulation
 - ROM
 - 0 – 105 degrees week 5
 - 0 – 115 degrees week 6
 - Strengthening: Continue same as Phase II
- 6 – 8 weeks:
 - Brace
 - D/C for sleeping
 - Unlock for ambulation as allowed by physician
 - Gait: Wean from crutches and normalize gait
 - ROM: Increase flexion gradually to normal range for patient
 - Strengthening
 - Continue NMES as needed
 - Progress to WB gastroc and soleus stretching
 - Closed chain balance exercises
 - AVOID deep knee squatting greater than 90 degrees
 - Stationary bike: low resistance and high seat
 - Wall slides progressing to mini-squats 0 – 45 degrees of flexion
- 8 – 10 weeks:
 - Brace: D/C
 - Gait: D/C if no extension lag is present, patient is able to achieve full extension, and gait pattern is normalized with one crutch
 - Strengthening:
 - SLR without extension lag
 - Closed-chain strengthening including step-up (begin at 2-inch step)
 - Moderate resistance for stationary bike
 - 4-way resisted hip strengthening
 - Leg press 0 – 60 degrees of flexion
 - Swimming and/or stair master for endurance
 - Toe raises, hamstring curls, and proprioceptive exercises

- Treadmill walking
- Flexibility exercises

Phase IV (10+ weeks post-op)

- Criteria:
 - Clearance from physician to begin more concentrated closed-kinetic chain exercises and resume full or partial activity level
 - At least 0 – 115 degrees AROM with no swelling and complete voluntary contraction of quad
 - No evidence of patellar instability
 - No soft tissue complaints
- Strengthening:
 - Progression of closed-kinetic chain activities including partial squats (0 – 60 degrees), leg press, forward and lateral lunges, lateral step-ups, bicycle and/or stepper
 - Functional progression, sport specific activities
- Testing: Performance to <25% deficit compared to non-surgical side by D/C

Adapted From:

- 1) Brotzman SB, Wilk KE. Clinical Orthopedic Rehabilitation. 2nd Ed. Philadelphia: Mosby; 2003.
- 2) University of Miami. Postoperative Rehabilitation Protocols: MPFL Reconstruction.
- 3) Wile, KE. Medial Patellofemoral Ligament Reconstruction Rehabilitation Program. Advanced Continuing Education Institute. 2019.