

REHABILITATION PROTOCOL

## Medial Patellar Femoral Ligament (MPFL) Repair or Reconstruction

### Guidelines/Precautions

Full weight bearing / Weight bearing as tolerated

### Phase I (1-5 days post-op)

**Wound care:** Observe for signs of infection. OK to remove dressing on post-operative day 5 and begin showering. **Keep covered** until day 5. Cover incision with gauze and ace wrap.

Modalities: prn for pain and inflammation (ice, IFC)

Brace

Gait

- Locked in full extension for **all activities except** therapeutic exercises and CPM use
- Locked in full extension for sleeping

ROM

- **WBAT** with **two** crutches
- 0-30 **degrees** of flexion
- **Ankle AROM**

Strengthening: none

### Phase II (5 days - 4 weeks post-op)

**Wound care:** Observe for signs of infection. OK to remove dressing on post-operative day 5 and begin showering. **Keep covered** until day 5. Cover incision with gauze and ace wrap.

Modalities: Modalities PRN for pain and inflammation (ice, IFC)

Brace

- 0-4 **weeks** locked in full extension for **all activities except** therapeutic exercises
- Locked in full extension **for sleeping**

## REHABILITATION PROTOCOL

### Gait

- FWB/WBAT with two crutches

### ROM

- 0-2 weeks: 0-30 degrees of flexion
- 2-4 weeks: 0-60 degrees of flexion
- 4-6 weeks: 0 - 90 degrees of flexion

### Strengthening

- Quad **sets** with biofeedback and E-stim for VMO. Goal of regaining active quad and VMO control by end of 6 **weeks**.
- Heel slides to recommended ROM, SLR in four planes with brace locked in full extension
- **Resisted** ankle ROM with Theraband
- **Patellar** mobilization (begin as tolerated)

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

### 4 weeks to 6 weeks:

Brace: Removed for sleeping, locked in full extension for ambulation

ROM: 0-90 degrees of flexion

Strengthening: continue same as phase II

### 6 weeks to 8 weeks:

Brace: Discontinue use for sleeping, unlock for ambulation as allowed by physician.

Gait: wean from crutches, normalize **gait**

ROM: Increase flexion **gradually** to normal range for **patient**

Strengthening: : Continue NMES as needed

- Progress to weight-bearing gastroc, soleus stretching
- Closed chain **balance exercises** - avoid deep knee squatting **greater than 90 degrees**
- Stationary bike, low resistance, high-seat
- **Wall slides** progressing to **mini-squats**, 0-45 **degrees** of flexion

## REHABILITATION PROTOCOL

### 8 weeks to 10 weeks

Brace: D/C

Gait: **May** D/C crutches if no extension **lag** is present, patient is able to **achieve** full extension, and gait pattern is normalized with one crutch.

Strengthening: Should be **able** to demonstrate SLR without **extension lag**

- **May** begin closed chain strengthening including step-ups (begin at 2 inch step)
- Moderate **resistance** for stationary bike
- Four way **resisted** hip strengthening
- Leg press for 0-45 degrees of flexion
- Swimming **and/or** stairmaster for **endurance**
- Toe **raises**, hamstring curls and proprioceptive exercises
- Treadmill walking
- Flexibility exercises continued

### 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 (60 degrees), leg press, **forward** and **lateral** lunges, **lateral** step-ups, bicycle and/or stepper.
- Functional progression, sport specific activities
- Functional 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) Wilk KE, Reinold MM, Andrews, JR. Rehabilitation Following **Lateral** Retinacular Release and Medial Retinacular Thermal

Shrinkage/Plication. Winchester, MA: Advanced Continuing Education Institute, 2004.