

# Dartmouth Hitchcock Medical Center ORTHOPAEDICS

# **Physical Therapy Protocol**

# MPFL Reconstruction

## Patient Checklist

#### Range of motion:

- No restrictions progress as tolerated
- Emphasis on full knee extension

### Weightbearing:

- WBAT post-op with crutches for 2 weeks
- Progress from crutches with no lag and normal gait

## **Bracing:**

- Bledsoe brace for first 2 weeks locked in extension
- Transition to PTO brace at 2 weeks post-op

Bilateral plyometric (progress as able)

Running Progression

Low level agility drills
Sport test exercises
Unilateral plyometric
Multi-plane agility
Return to sport

**Questions?**Orthopaedics: (603) 650-5133

Rehabilitation Medicine: (603) 650-3600

Phase I: 0-6 Weeks	1	2	3	4	5	6	7	8	9	10	12	16	20	24
EMS muscle re-education		•	•	•	•	•	•	•		•	•	•	•	•
Low load long duration knee extension stretching		•	•	•			•	•			•	•		
PROM/AAROM/AROM (stretching, heel slides physioball, seated etc.)		•	•	•	•	•	•	•	•	•	•	•	•	
Hamstring/quadriceps/hip flex/ITB/heel cord stretching		•	•	•	•	•	•	•	•	•	•	•		
Patella mobs (No Lateral)				•			•	•			•	•		
Ankle strengthening				•			•				•			
Isometric quad/hamstring/ glutes							•				•			
SLR 4 ways (add resistance without lag)		•	•	•	•		•	•		•	•	•		•
Terminal knee extensions							•				•			
Core strengthening and hip stabilization exercises				•	•		•	•		•	•	•		
Stationary cycling (with appropriate knee motion)		•		•	•		•	•		•	•	•		
Gait Training		•	•	•	•		•	•		•	•	•		•
Balance/ proprioception training			•	•			•	•			•	•		
Hamstring curls on physioball			•	•	•		•	•		•	•	•	•	•
Lateral/ forward/step down progressions			•	•	•	•	•	•	•		•	•	•	
Heel raises			•	•	•		•				•	•		
Squat progression/leg press (up to 90 degrees)				•	•		•	•						
Aquatic pool therapy (with healed incisions)						•	•	•	•		•	•	•	
Phase II: 6-12 Weeks	1	2	3	4	5	6	7	8	9	10	12	16	20	24
Single leg squats														
Lunges (forward and side)														
Progression of step downs										•				
Progression of previous exercise with weight										•				
Elliptical machine (no ramp)														



# Dartmouth Hitchcock Medical Center orthopaedics

# **Physical Therapy Protocol**

## MPFL Reconstruction

#### Phase I: 0-6 weeks

#### **Restrictions:**

- Weight Bearing and brace use:
  - ✓ 0 2 weeks: WBAT with crutches and Bledsoe brace locked in full extension
  - ✓ 2 6 weeks: WBAT progressing from crutches as able (no limp and no lag).
- Brace: Transition to PTO brace at 2 weeks post op

#### Goals:

- Control knee effusion and pain
  - Maintain full knee extension

Progress knee flexion as tolerated

- ✓ 90 degrees by week 2
- ✓ 130 degrees by week 4
- Restore quadriceps activation

#### Phase II: 6-12 weeks

#### **Restrictions:**

- Weight Bearing: WBAT progressing to full weight bearing
- Brace: PTO when weight bearing

#### Goals

- ROM: goal of full knee extension and flexion Enhance strength
  - Open chain knee extension strengthening at 8 weeks
  - Can begin lunging and squatting below 90 degrees at 8 weeks
- Enhance proprioception and balance

### Phase III: 12 - 24 weeks

### **Restrictions:**

- No cutting or pivoting sports
- Gradual return to unrestricted sports at 24 weeks if following the criteria are met:
  - Return to sport test

#### Goals:

#### Weeks 12 - 16:

- Sport test exercises
- Begin running progression at 12 weeks with following criteria:
  - ✓ No pain with ADL
  - ✓ No pain with SL squat
  - ✓ Ability to perform hopping without knee pain
- Begin bilateral low level plyometric progression as able
- Begin agility drills and sport specific activities as able

### Weeks 16 - 24:

- Single leg plyometric progression
- Introduce cutting and pivoting drills
- Progression back to full sport participation at 24 weeks

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