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**Patella Stabilization Rehabilitation  
(MPFL and Fulkerson Osteotomy)**

**Phase 1 Maximal Protection - Weeks 0 - 6**

**Goals:**

- Protect surgical repair
- Pain and swelling control
- Regain active quadriceps function
- Maintain full extension

**Range of Motion**

- Weeks 0-2: 0-30 degrees
- Weeks 3-4: 0-90 degrees
- Weeks 5+ : Advance to full ROM as tolerated

**Weight-bearing**

- Weeks 0-4: Partial WB with hinged brace locked in extension and crutches
- Weeks 5-6: May WB as tolerated with brace locked in extension

**Therapeutic Exercise**

- Quad sets
- Begin straight leg raises at week 5 with brace off
- Active and active-assist heel slides
- Calf pumps and stretches
- Ankle strengthening with therabands
- Hamstring isotonic and stretches
- Gentle patella **mobilizations** BUT NO LATERAL GLIDES

**Criteria for progression to next phase**

- Cleared by physician
- Flexion to 100 degrees
- Good quad control and able to do unassisted straight leg raises

**Phase 2 Beginning of Functional Rehabilitation - Weeks 7-10**

**Goals:**

- Obtain full Range of Motion



- Improve quad control
- Continue to protect repair avoiding valgus stress and lateral movements

### **Bracing and Weight Bearing**

- Transition to patella stabilization brace as directed by physician
- Full Weight Bearing

### **Therapeutic Exercises**

- Quad sets and straight leg raises
- Active heel slides
- PFJ mobilizations avoiding lateral glides
- Scar mobilization
- Stretching of hamstrings, gastrocnemius and soleus
- Bike - initiate with low resistance
- Wall squats 0 - 45 degrees
- Core body training

### **Criteria for advancement to next phase**

- Able to perform SLR without extensor lag
- Normal gait
- Able to perform squat from 0-45 degrees with good control and no pain

### **Phase 3 Advanced Functional Rehabilitation: Weeks 3 to 4 months post operative**

#### **Goals:**

- Progress strength
- Progress dynamic stability
- Improve single leg stability
- Full ROM
- Continue to protect surgical site with limited lateral movements
- Normal gait

#### **Brace**

- Continue with patella stabilization brace

#### **Therapeutic Exercises**

- Continue with all of the above exercises
- Leg press 0-45 degrees including single leg
- Begin single leg step ups progressing to higher steps as tolerated
- Partial lunges
- Bike with moderate resistance
- 4 way SLR
- Partial squats



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- Hamstring curls with machine and/or swiss ball

### **Criteria for advancement for Sports-specific training**

- No signs of patella instability
- Normal gait mechanics
- Good quad strength

### **Phase 4 Sports Specific Training Months 5-6**

#### **Goals**

- Return to sports safely

#### **Therapeutic Exercises**

- Continue all of the above
- Full squats to 90 degrees of knee flexion
- Leg press 0-90 degrees
- Agility drills
  - Single and double leg jumps
  - Teach the 3 L's
    - Soft **L**anding
    - Stay **L**ow while running and jumping (knees flexed not extending)
    - Keep knees in **L**ine with feet at all times including landing from jump
- Sport specific training

### **Return to sport is expected between 6 and 12 months depending on individual progression**

- Must display confidence in knee function and patella stability
- Must display adequate strength (operative leg must have 90% strength of non-op leg with single leg press)
- Must display 85-90% of single leg hop test