MPFL Repair/Reconstruction Rehabilitation Protocol

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**Diagnosis:** Right/Left MPFL Repair / Reconstruction

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**Date of Surgery:**

Frequency 2-3 times per week.

- No open chain or isokinetic exercises
- Provide patient with home exercise program per protocol

**Period of protection (Weeks 0-6)**

- Weight bear as tolerated in Hinged Knee Brace. Wean crutches as tolerated.
- Follow Brace Wear and ROM limits per chart below:

<table>
<thead>
<tr>
<th>Week</th>
<th>ROM for exercises</th>
<th>ROM for ambulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>0-30</td>
<td>Brace Locked in Extension</td>
</tr>
<tr>
<td>1-2</td>
<td>0-30</td>
<td>Brace Unlocked to 30 degrees</td>
</tr>
<tr>
<td>2-4</td>
<td>0-60</td>
<td>Brace Unlocked to 60 degrees</td>
</tr>
<tr>
<td>4-6</td>
<td>0-90</td>
<td>Brace Unlocked to 90 degrees</td>
</tr>
<tr>
<td>6-</td>
<td>Full ROM</td>
<td>Transition to Patellar Stabilization Brace</td>
</tr>
</tbody>
</table>

**Weeks 2-4 (Phase I):**

- ROM exercises – progress through passive, active and active assisted ROM within ROM limits detailed above.
- Extension board and prone hang with ankle weights (up to 10 lbs) if necessary to regain full extension.
- Strengthening – quad sets, SLRs with knee locked in extension in brace.
- Bilateral ¼ knee bends (Mini- Wall slide or Mini-Squat)
- Terminal Knee Extensions (TKE)
- No restrictions to ankle/hip strengthening. Begin core program for abdomen/lumbar.
- Modalities prn (ie electrical stimulation, ultrasound, etc) per discretion of therapist.
- Heat before therapy sessions.
- Ice after therapy sessions.
**Weeks 4-6 (Phase II):**

- ROM exercises—progress through passive, active and active-assisted ROM as detailed above.
- Strengthening – quad sets, SLRs out of brace
- Bilateral ½ knee bends (Wall slide or Squat)
- Terminal Knee Extensions (TKE) to ROM limit.
- Initiate Leg Press, Step Ups
- Stairmaster and/or Stationary Bicycle
- Proprioception Exercises in Brace (BAPS, bodyblade, ball toss)
- No restrictions to ankle/hip strengthening. Continue core program for abdomen/lumbar.
- Modalities prn (ie electrical stimulation, ultrasound, etc) per discretion of therapist.
- Heat before therapy sessions.
- Ice after therapy sessions.

**Weeks 6-12 (Phase III):**

- ROM exercises—progress through passive, active and active-assisted to full ROM
- Continue squats, leg press
- Advance to Step Downs, Lunges, Side lunges (In brace) and Slide Board (In brace)
- Stairmaster and/or Stationary Bicycle
- Begin forward treadmill running program in brace when 8” step down is satisfactory (No sooner than 8 weeks)
- Proprioception Exercises in Patellar Stabilization Brace (BAPS, bodyblade, ball toss)
- Advanced ankle/hip strengthening. Core maintainence program for abdomen/lumbar.
- Modalities prn (ie electrical stimulation, ultrasound, etc) per discretion of therapist.
- Heat before therapy sessions.
- Ice after therapy sessions.

**Months 3-6 (Phase IV):**

- Advance strengthening as tolerated, continue closed chain exercises. Increase resistance on equipment.
- Begin plyometrics and increase as tolerated.
- Initiate sport-specific agility training in brace (figure 8s, cutting drills, quick start/stop, etc.)
- Advanced core strengthening and maintenance program
- Begin to wean patient from formal supervised therapy encouraging independence with home exercise program.
- Continue modalities prn as indicated above.
- Heat before therapy sessions.
- Ice after therapy sessions
- Return to sports after 18+ weeks (MD clearance required)