

## MPFL Reconstruction Rehabilitation Protocol w/ Graft

Phase/ Goals	Immobilization	ROM	Therapeutic Exercises
<p><b>Phase 1 (0-6 weeks)</b></p> <p>Goals:</p> <ul style="list-style-type: none"> <li>● Protect repair</li> <li>● Prevent muscle atrophy</li> <li>● Control post-op inflammation</li> </ul>	<p><u>Brace:</u> Unlocked 0-90 at all times for 4 weeks</p> <p><u>Weightbearing:</u> touchdown x 2 weeks</p> <p>50% weightbearing with crutches weeks 2-4</p>	<ul style="list-style-type: none"> <li>● Avoid lateralization of patella</li> <li>● Avoid AAROM knee extension with quad atrophy</li> <li>● Active assist and passive knee flexion 0-90 with NO forced flexion</li> </ul> <p>Modalities:</p> <ul style="list-style-type: none"> <li>● NMES if unable to perform SLR without lag</li> <li>● Cryocuff/Game Ready Compression/ Ice</li> </ul>	<ul style="list-style-type: none"> <li>● Quad recruitment</li> <li>● Flexion: heel slides, seated knee flex</li> <li>● Extension: heel prop, prone hang</li> <li>● Long sitting HS stretch</li> <li>● Quad sets, glute sets</li> <li>● SLR x4 with brace assist until no lag</li> <li>● Ankle pumps</li> <li>● Calf raises on leg press</li> <li>● Gait training week 4</li> </ul>
<p><b>Phase 2 (7-10 weeks)</b></p> <p>Goals:</p> <ul style="list-style-type: none"> <li>● Eliminate effusion</li> <li>● Normal ROM</li> <li>● Good patella mobility</li> <li>● Normal gait mechanics</li> <li>● ADLs WNL</li> </ul>	<p>Wean from brace if still using</p>	<ul style="list-style-type: none"> <li>● Begin AAROM and AROM</li> <li>● Limit flexion to 110° until 8 weeks</li> </ul> <p>Modalities:</p> <ul style="list-style-type: none"> <li>● Patellar mobs lateral to medial</li> <li>● Gentle prone quad stretch/knee flex</li> <li>● Manual assist extension/passive stretch</li> </ul>	<ul style="list-style-type: none"> <li>● Gait training with good quad control</li> <li>● Heel slides/wall slides/seated assist flexion</li> <li>● Lateral band stepping</li> <li>● LE stretching: HS, quads, ITB, piriformis (pain free)</li> <li>● Quad sets/glut sets, clams/mini-hydrants/glute pushes</li> <li>● RDL/squat progression</li> <li>● Calf raises on leg press</li> <li>● Leg press</li> <li>● Standing TKEs</li> <li>● Wobble board/Dyna-disc/Bosu balance</li> </ul>

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<p><b>Phase 3 (11-18 weeks)</b></p> <p>Goals:</p> <ul style="list-style-type: none"> <li>• Pain free ADLs</li> <li>• Normal knee ROM</li> <li>• Normal gait</li> <li>• Initiate running</li> </ul>	<p>Maintain ROM and full weightbearing</p>	<ul style="list-style-type: none"> <li>• Maintain Full A/PROM</li> </ul> <p>Manual:</p> <ul style="list-style-type: none"> <li>• Patellar mobs/ Scar STM with extractor</li> </ul> <p>Modalities:</p> <ul style="list-style-type: none"> <li>• Ice/stim PRN</li> </ul>	<ul style="list-style-type: none"> <li>• Bike, elliptical, stair master</li> <li>• Step ups/lateral step over's- progress to faster pace</li> <li>• Balance progression</li> <li>• Lateral walks with sport cord</li> <li>• SLS dynamic surfaces with ball toss and perturbation training</li> <li>• Begin walk-jog progression week 14 if full ROM/no edema/full strength and can perform SL hops x10 pain-free (SUPERVISED)</li> <li>• Bilateral leg plyometric program</li> </ul>
<p><b>Phase 4 (19-24 weeks)</b></p> <p>Goals:</p> <ul style="list-style-type: none"> <li>• Jogging without pain/swelling</li> <li>• No patellar apprehension</li> <li>• Demonstrate patellar tracking symmetry through movements</li> </ul>		<ul style="list-style-type: none"> <li>• Full A/PROM</li> </ul>	<ul style="list-style-type: none"> <li>• Continue everything in phase 3</li> <li>• Increase running progression</li> <li>• Advance LE strength and flexibility</li> <li>• Advance cross training</li> <li>• Muscular power – squats, split jumps</li> <li>• Advance plyometric program if has good eccentric capabilities: Jump down, horizontal jump, cutting and decelerations if getting back to sport</li> </ul>