



MPFL RECONSTRUCTION REHABILITATION GUIDE

PHASE	SUGGESTED INTERVENTIONS	TO ADVANCE TO NEXT PHASE
<p>PHASE I EDUCATIONAL PHASE</p>	<p>Goal: -Explore a comprehensive overview that encompasses the anatomy, pre-existing pathology, postoperative rehabilitation schedule, bracing considerations, and anticipated progressions. This discussion will provide a holistic understanding of the subject, addressing the anatomical structures involved, any pre-existing conditions, the planned rehabilitation timeline following surgery, the role of bracing in the recovery process, and the expected advancements or progressions throughout the rehabilitation journey.</p> <p>Postoperative Instructions: -Maintain weight bearing exclusively in the brace, ensuring it is securely locked in full extension. Follow the Home Exercise Program (HEP) provided by the physician as directed for postoperative care. Adhere to proper care protocols for the incision sites.</p>	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Comprehend the surgical procedure and adhere to immediate postoperative restrictions.
<p>PHASE II PROTECTION PHASE 0-3 WEEKS</p> <p>0-1 EXPECTED VISITS</p>	<p>Goal: -Adhere to the specified range of knee flexion, typically within 0-30/45 degrees, in accordance with the preferences outlined by your medical provider. During weight-bearing activities, ensure the brace is securely locked in full extension to provide optimal support and stability. Additionally, incorporate modalities as necessary, with a particular focus on those proven to be effective in controlling edema. This combined approach aims to promote both controlled knee movement and edema management throughout the rehabilitation process.</p> <p>ROM: -None</p> <p><i>*Ask a healthcare provider for recommended exercises during this phase</i></p>	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Create a conducive environment for the optimal healing of the repair site. 2. Implement measures to prevent post-operative complications.
<p>PHASE III PROTECTED MOTION PHASE 3-6 WEEKS</p> <p>4-9 EXPECTED VISITS</p>	<p>Goal: -Commence formal therapy sessions to systematically address rehabilitation needs. Sustain continuity by adhering to the current exercise program, ensuring a seamless progression. During weight-bearing activities, securely lock the brace in full extension to provide essential support and stability. However, it is advised to refrain from participating in biking activities during this period to prevent any potential strain or complications. This integrated approach aims to optimize the therapeutic process while maintaining consistency and safety in the prescribed activities.</p> <p>ROM: -0-90 degrees, refrain from actively extending the knee.</p> <p>Recommended Treatments: -Employ modalities indicated for edema control, including compression (donut) pad. -Consider manual therapy, specifically patella mobilizations in superior, inferior, and medial directions.</p>	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Management of postoperative pain (aiming for 0-1/10 during activities of daily living while wearing a brace). 2. Reduction of postoperative swelling to minimal levels (trace to 1+). 3. Recovery of complete knee extension, aligning with the range of motion on the contralateral side.

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<p>PHASE IV MOBILITY & MUSCLE ACTIVATION PHASE 6-12 WEEKS</p> <p>9-21 EXPECTED VISITS</p>	<p>Goal: -Follow detailed instructions for rehabilitation, ensuring a seamless transition by maintaining continuity with the previously assigned hip and quad strengthening exercises. Uphold the prescribed weight-bearing activities to sustain progress in building strength and stability. As necessary, incorporate neuromuscular electrical stimulation (NMES) into the regimen to optimize muscle engagement and support the rehabilitation process. This cohesive approach integrates these components for an effective and comprehensive rehabilitation plan.</p> <p>ROM: -Progress the Range of Motion (ROM) program, incorporating biking for ROM exercises exclusively.</p>	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Perform straight leg raises independently without experiencing pain. 2. Achieve full hyperextension, comparing bilaterally, and achieve flexion up to 90 degrees. 3. Observe minimal swelling, categorized as trace. 4. Absence of pain.
<p>PHASE V ADVANCED STRENGTHENING & ECCENTRIC CONTROL PHASE 12-16 WEEKS</p> <p>22-30 EXPECTED VISITS</p>	<p>Goal: -Maintain continuity with the previously prescribed exercises. Advance through the progression of closed and open chain quad strengthening within the range of 0-90 degrees. Gradually transition to single-leg strength training based on the individual's increasing strength and control capabilities. Simultaneously, introduce non-impact cardiovascular training, incorporating activities such as aquatic running and agility exercises. This comprehensive approach aims to systematically enhance quadriceps strength, promote control, and introduce cardiovascular conditioning in a progressively challenging manner.</p> <p>ROM: -Progress the program, focusing on advancing closed and open chain quad strengthening within the range of 0-90 degrees.</p>	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Achieve 80% of the strength of the opposite limb in quadriceps through isometric testing using handheld dynamometry or biodex. 2. Attain an 80% performance level in Y balance compared to the opposite limb. 3. Ensure comparable and sufficient hip and hamstring strength when comparing both sides bilaterally.
<p>PHASE VI REFINED MOVEMENT & CONTACT PHASE 16-24 WEEKS</p> <p>30-34 EXPECTED VISITS</p>	<p>ROM: -Systematically advance rehabilitation with a gradual transition to a running program, ensuring proper bracing and emphasizing form enhancement and shock absorption, contingent upon medical clearance. Progress open and closed chain lower extremity strengthening exercises, with a specific focus on single-limb strength. Evolve the program to include multi-plane movements, tailoring it to individual control. Gradually introduce sport-specific functional skills, incorporating lateral shuffling, drop jumping, deceleration, hopping, and cutting, guided by considerations of both control and pain tolerance.</p> <p><i>*Ask healthcare provider for recommended exercises during this phase</i></p>	<p>Criteria:</p> <ol style="list-style-type: none"> 1. Achieve less than a 10% strength deficit in both the quadriceps and gluteal muscles. 2. Attain a minimum of 90% performance on functional hop tests and Y balance tests compared to the contralateral limb. 3. Score 45/50 on biomechanical functional assessment tests. 4. Experience no pain or complaints of instability during the functional progression of sport-specific skills. 5. Consider progression to isokinetic exercises around the 6-month mark.