

POST-OPERATIVE REHABILITATION PROTOCOL

MPFL Reconstruction

William McLaughlin, MD | Sports Medicine Surgery | Advanced Bone & Joint

Phase 1 | 0-2 Weeks

GOALS FOR THIS PHASE

- Protect the MPFL graft with brace locked in extension.
- WBAT for ambulation.
- Achieve and maintain full passive knee extension.
- Progress flexion ROM to 0-30°.
- Initiate quadriceps activation.

Weight Bearing & Bracing

- WBAT.
- Brace locked at 0° for ambulation and sleeping.

Range of Motion

- ROM: 0-30° with emphasis on full extension.

Therapeutic Exercises

- SLR supine with brace locked at 0°; quad sets.
- Ankle pumps.

Phase 2 | 2-4 Weeks

GOALS FOR THIS PHASE

- WBAT with brace locked at 30°.
- Progress flexion ROM to 0-60° while maintaining full extension.
- Continue quadriceps activation.
- Initiate proprioception training.

Weight Bearing & Bracing

- WBAT.
- Brace locked at 30° for ambulation and sleeping.

Range of Motion

- ROM: 0-60° (maintain full extension).

Therapeutic Exercises

- Proprioception training.
- SLR, quad sets, ankle pumps.

Phase 3 | 4-6 Weeks

GOALS FOR THIS PHASE

- WBAT with brace locked at 60°.
- Progress flexion ROM to 0-90° while maintaining full extension.

Weight Bearing & Bracing

- WBAT.
- Brace locked at 60° for ambulation and sleeping.

Range of Motion

- ROM: 0-90° (maintain full extension).

Phase 4 | 6-14 Weeks

GOALS FOR THIS PHASE

- Discontinue brace and wean from crutches.
- Advance progressive squat and step-down programs.
- Introduce agility and cardiovascular conditioning.

Weight Bearing & Bracing

- Discontinue brace and wean from crutches.

Therapeutic Exercises

- Progressive squat program.
- Initiate step-down program.
- Leg press, lunges.
- Isotonic knee extensions (90°-40°, closed chain preferred).
- Agility exercises with sport cord.
- VersaClimber / NordicTrack.
- Retrograde treadmill ambulation.

Phase 5 | 14-22 Weeks

GOALS FOR THIS PHASE

- Initiate forward running program once 8" step-down is satisfactory.
- Advance sport-specific agility drills.
- Begin plyometric program.

Therapeutic Exercises

- Begin forward running (treadmill) program when 8" step-down is satisfactory.
- Continue strengthening & flexibility program.
- Advance sport-specific agility drills.
- Start plyometric program.

Phase 6 | > 22 Weeks

GOALS FOR THIS PHASE

- Advance plyometric program.
- Return to sport when MD-directed criteria are met.

Therapeutic Exercises

- Advance plyometric program.
- Return to sport — MD directed.

This protocol is a general guideline. Progression is patient-specific and at the discretion of William McLaughlin, MD.