

MPFL Reconstruction Protocol

- Frequency: 1-3 times per week
- Duration: 12 weeks

	Phase I: 0-2 weeks	Phase II: 3-6 weeks	Phase III: 7-12 weeks
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> • Progress from TTWB to PWB (50%) in brace locked in full extension • Brace locked in full extension while ambulating and sleeping • Brace may be unlocked 0-90° while sitting. 	<ul style="list-style-type: none"> • Progress from PWB (50%) to WBAT and wean crutches as quadriceps strength and control allow • Unlock brace to allow full ROM as quadriceps strength and control allow and no extension lag 	<ul style="list-style-type: none"> • WBAT • Discontinue brace when excellent quadriceps strength and control, no extension lag, and normalized gait pattern
Aerobic	<ul style="list-style-type: none"> • None 		<ul style="list-style-type: none"> • Stationary bike (low resistance, elevated seat height initially, and normalize height as ROM allows)
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> • Focus on regaining full extension • Progress from PROM → AAROM → AROM from 0-90° • Heel slides 0-90° • Patellar mobilization • Ankle pumps • SLR and quadriceps sets (with brace locked in extension until able to do without extension lag) 	<ul style="list-style-type: none"> • Continue Phase I exercises • Continue progression toward full and symmetric ROM 	<ul style="list-style-type: none"> • Continue Phase II exercises • Begin closed chain knee extension exercises • Leg presses and lunges (begin with body weight only) • Progressive squat program (begin with mini-squats) • Weight-shifts • Initiate step-up and step-down programs • Begin proprioception and balance exercises
Other	<ul style="list-style-type: none"> • Modalities as needed to reduce pain and swelling and to improve muscle recruitment • Home Exercise Program (HEP) guided by Physical Therapist 		
Goals	<ul style="list-style-type: none"> • Pain control • Swelling control • Protect tissue healing • Minimize joint stiffness 	<ul style="list-style-type: none"> • Full ROM • Normalize gait pattern 	<ul style="list-style-type: none"> • Normalize gait pattern • Begin strengthening • Begin proprioception and balance program

	Phase IV: 3-4 months	Phase V: 5-6 months	Phase VI: 6+ months
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> • WBAT • Discontinue brace 		
Aerobic	<ul style="list-style-type: none"> • Progress stationary bike • Elliptical machine • Begin walk-jog-run progression 	<ul style="list-style-type: none"> • Progress home jogging/running program 	
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> • Continue Phase III exercises • Progress strengthening and ROM exercises • Progress closed chain exercises 	<ul style="list-style-type: none"> • Continue Phase IV exercises • Progress strengthening and ROM exercises • Begin general agility program after passing Leg Press and Single Hop Tests • Begin light sagittal plane and frontal plane plyometrics when: <ul style="list-style-type: none"> ▸ quadriceps strength >80% of contralateral side ▸ Full AROM ▸ No pain or swelling 	<ul style="list-style-type: none"> • Continue Phase V exercises • Begin sport-specific training, agility, and plyometric program after completing general program
Other	<ul style="list-style-type: none"> • Modalities as needed to reduce pain and swelling and to improve muscle recruitment • Home Exercise Program (HEP) guided by Physical Therapist 		
Goals	<ul style="list-style-type: none"> • Progress strengthening • Progress proprioception and balance program • Work toward passing Leg Press Test • Work toward passing Single Hop Test 	<ul style="list-style-type: none"> • Work toward passing Leg Press Test • Work toward passing Single Hop Test • Begin general agility and/or plyometric programs when above criteria met 	<ul style="list-style-type: none"> • Begin sport-specific training, agility, and plyometric program when above criteria met