

MPFL Reconstruction with Tibial Tubercle Osteotomy

<u>Postop</u>	<u>Goals</u>	<u>Precautions</u>	<u>Exercises</u>
Weeks 0-1 PT 1-2x/week HEP daily	Full passive knee extension Diminish pain and effusion Protect osteotomy	NWB Brace locked at 0° except for approved exercises/PT ROM: 0-30°	Isometric quad sets SLR with brace locked straight Heel slides Ankle/Calf pumps Stretches: hamstring and calf/gastrocnemius
Weeks 2-6 PT 2-3x/week HEP daily	Full passive extension Control forces at osteotomy site Gradually increase knee flexion – 90° by 6 weeks Slow/prevent quad atrophy Edema and pain control Restore patellar mobility	NWB ROM: Weeks 2-3: 0-50° Weeks 3-4: 0-70° Weeks 4-5: 0-90° Weeks 5-6: 0-100° No open chain quadriceps	Continue above exercises Patellar mobilizations (gentle with lateral translation) Hip abd/adductions Begin supine/seated hip/glutes/core exercises May begin BFR 4 weeks – advance SLR outside of brace
Weeks 7-12 PT 2-3x/week HEP daily	Control forces during ambulation and ADL's Progress knee flexion ROM Improve lower extremity muscular strength Restore limb confidence and function	WBAT DC brace when adequate quad reciprocally Avoid descending stairs Avoid painful activities No running No kneeling Week 7: 0-110° Week 8: 0-120° Week 9: 0-130°	C rutch weaning / progress ambulation *Gradually increase strength Straight leg raises (flexion) Advance closed chain extension exercises – 90 to 0. ½ squats Leg press Wall squats Front lunges Lateral lunges Calf raises Hamstring curls (restricted ROM) Proprioception drills Bicycle

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Weeks 12-16 PT 2-3x/week HEP daily	Return to normal ADLs Improve endurance Descend 8" step with control 85% limb symmetry Improve strength/flexibility	WBAT Full ROM No running	Continue and advance above Progress squat program Leg press (emphasize eccentrics) Elliptical Retrograde treadmill Initiate lateral step-ups Initiate front step-downs Initiate backward lunges Walking program May begin swim *No sports!
Weeks 16-24 PT 1x/week HEP daily	Enhancement of strength, endurance Initiate functional activities Improve tensile strength properties of tendon	WBAT / Full ROM No cutting/pivoting No sports No running until: Strength >70% contralateral No agility training until: Strength >90% contralateral	Continue strengthening exercises Continue emphasis on eccentrics and functional exercises *May initiate plyometrics (month 5) *May initiate agility drills (lateral shuffle) month 5 *May initiate light running months 5-6
Weeks 24+	No apprehension with sport specific movements Maximize strength and flexibility to meet sporting demands	Avoid painful activities No return to sport until: Passes RTP evaluation MD clearance	Maintenance quadriceps and lower extremity strength home program