



**PHYSICAL THERAPY PRESCRIPTION
TIBIAL TUBERCLE OSTEOTOMY**

Name: _____ Surgery Date: _____

PROCEDURE: Right Left Tibial Tubercle Osteotomy

Additional Procedures: Cartilage Procedure: _____

Lateral Release MPFL Reconstruction Hamstring Allograft

Other: _____

Weight Bearing: NWB with brace locked in extension with crutches/walker

Weight bearing modifications: NWB TTWB PWB

ROM: 0 – 30 degrees (advance to 0-60 degrees)

ROM Modifications: _____

Brace Instructions: brace locked in extension AT ALL TIMES (except when using CPM)

remove brace when using CPM machine

CPM Instructions: 0 – 30 degrees (advance to 0 – 60 degrees as tolerated, remove brace while using CPM)

Additional Instructions: _____

Frequency & Duration: 1-2 times per week for 6 - 8 weeks

Rx: MPFL Post-Op Rehab – Phase 1 (follow my protocol strictly)

Dressing change / wound check 2-3 days post-op

Emphasize early full passive extension to 0°

Quad sets and SLR

Precautions: Per my PT protocol

Physician's Signature:  _____, MD



PHYSICAL THERAPY PROTOCOL
TIBIAL TUBERCLE OSTEOTOMY

Progression is both criteria-based and patient specific. Phases and time-frames are designed to give the clinician a general sense of progression. Concomitant procedures such as cartilage procedures, lateral release, tibial tubercle osteotomy, as well as chronicity of the condition will alter the guideline

<u>Postop</u>	<u>Goals</u>	<u>Precautions</u>	<u>Exercises</u>
<p><u>Protection Phase</u></p> <p>Weeks 0-6</p> <p>PT 2-3 sessions HEP daily</p>	<p>Independence in HEP Promote healing Control pain/ swelling Prevent quad inhibition SLR without lag, pain free PROM KE</p>	<p>NWB with crutches Brace locked in extension at all times (except when using CPM) Avoid AA-AROM KE PROM with CPM</p> <p><u>Advancement to Next Phase:</u> Adequate healing on x-ray Clearance from surgeon Fair quad contraction Good patellar mobility ROM: 0 - 90° 0/10 pain at rest SLR pain-free without quad lag</p>	<p>CPM 2 hours 3x/day x 6 weeks</p> <ul style="list-style-type: none"> - Remove brace - Start 0-45°, increase to 0-60° - Increase to 0-90° <p>Sitting knee ROM exercises: A/AAROM KF, PROM KE Quad set with towel roll under knee Patella mobs per MD guidelines Hip progressive resisted exercises: Pain-free SLR with brace until no lag Distal strengthening Flexibility exercises (hamstrings, gastrocnemius)</p>
<p><u>Gait Phase</u></p> <p>Weeks 7-12</p> <p>PT 2-3x/week HEP daily</p>	<p>Independence in HEP Control pain, inflammation, Effusion Promote healing ROM: 0-110° - (8 weeks) 0-130° - (12 weeks) Good patellar mobility Good quad contraction Normalize gait without assistive device 0/10 pain with ADLs</p>	<p><u>WB progression per surgeon based on x-ray healing</u></p> <p><u>Week 7-8:</u> progress to WBAT with crutches, brace locked in extension <u>Week 9-10:</u> WBAT with brace locked in extension without crutches <u>Week 11-12:</u> normalize gait with brace open</p> <p><u>Advancement to Next Phase:</u> Normal gait without assistive device ROM: 0 - 130° Good patellar mobility Postural stability, alignment, nm control in single limb stance</p>	<p>Patellar mobs per MD guidelines ROM exercises: PROM – AAROM KE in pain free arc AROM – AAROM KF Hydro-treadmill or anti-gravity treadmill Retro-walking to encourage nm control Quad strengthening – leg press Bicycle: short crank to standard crank as ROM allows proximal/ core strengthening (hip extension with knee flexion, side planks, bridge) initiate balance and proprioceptive training double limb support on progressively challenging surfaces to single limb support on level surface</p>



<p><u>Strengthening Phase</u></p> <p>Weeks 13-24</p> <p>PT 1-2x/week HEP daily</p>	<p>ROM: WNLs Normal gait on level surfaces and stairs</p> <p>Good single limb dynamic balance</p> <p>Good eccentric quad control</p> <p>Pelvic control during step-down</p>	<p>WBAT without crutches and brace Full ROM</p> <p><u>Advancement to Next Phase:</u></p> <p>ROM WNLs No pain/ swelling Normal gait Control/ stability in single limb Stance Core stability Able to ascend/ descend 6-8" step</p>	<p>Quad strengthening Closed chain preferred Forward Step Up Eccentric leg press Progress to Forward Step Down Squat progression: chair squats to free Squats ROM exercises Gait training: heel-toe gait pattern Treadmill: small grade elevation Retro-walking Advance proximal strength strength Bridging progression Hip extension with KF Core training (plank, side plank) Balance progression Cross training: elliptical, bike, swimming</p>
<p><u>Advanced Strengthening and Function Phase</u></p> <p>Weeks 25-35</p> <p>PT 2-3x/week HEP daily</p>	<p>Control pain with sport specific movements</p> <p>Good single limb dynamic balance</p> <p>Cardiovascular fitness to meet demands of sport</p> <p>Movement strategy, symmetry, quality, control, and alignment</p>	<p><u>Advancement to Next Phase:</u></p> <p>Good single limb dynamic balance</p>	<p>Advance LE strengthening, flexibility, dynamic single limb stability & agility Advance core stability Cross training Initiate plyometric program Good eccentric quad control Vertical jumping progression Initiate running program Start with 30 second intervals</p>
<p><u>Return to Play</u></p> <p>Weeks 36-52</p> <p>PT 1x/week HEP daily</p>	<p>No apprehension with sport specific movements</p> <p>Maximize strength and flexibility to meet sporting demands</p> <p>Cardiovascular fitness to meet demands of sport</p>	<p>No RTP until: Passes RTP evaluation MD clearance</p>	<p>Advance LE strengthening, flexibility, dynamic single limb stability, core stability, & agility Advance plyometric program Advance cutting, deceleration training</p>

IF QUESTIONS: PLEASE CALL 469-800-7200 or email DrBlack@SheenaBlackMD.com