



**PHYSICAL THERAPY PRESCRIPTION**  
Tibial Tubercle Osteotomy

Name: \_\_\_\_\_ Surgery Date: \_\_\_\_\_

PROCEDURE:     Right     Left

Additional Procedures:     Cartilage Procedure: \_\_\_\_\_

Lateral Release     MPFL Reconstruction -     Hamstring Auto     Allograft

Other: \_\_\_\_\_

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

Weight bearing modifications:     TTWB     \_\_\_\_\_

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:    TTP 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>Weight Bearing</u>  | <u>Brace</u>  | <u>ROM</u>   | <u>Exercises</u>  |
|---|--|---|--|---|
| <b>Phase I</b><br><b>Weeks 0-6</b><br><br>PT 1-2x/week<br>HEP daily | NWB in brace w/ crutches   | Locked in full extension at all times (except when using CPM) | CPM 2 hours/ 3x/day x 6 weeks<br>- Remove brace<br>- Start 0 – 45°, advance to 0-90° | <b>Avoid AA-AROM knee extension</b><br>PROM with CPM<br>AA-AROM knee flexion<br><br>Quad sets<br>Patellar mobs (per MD guidelines)<br>SLR w/ brace until no lag<br>Side-lying hip/core  |
| <b>Phase II</b><br><b>Weeks 7-12</b><br>PT 2-3x/week<br>HEP daily   | <b>WB progression per surgeon based on x-ray healing</b><br><br><u>Week 7-8:</u> progress to WBAT with crutches & brace locked in extension<br><u>Week 9-10:</u> WBAT with brace locked in extension without crutches<br><u>Week 11-12:</u> normalize gait with brace open | Per weight bearing guidelines<br><br>May remove for sleeping  | 0-110° - (8 weeks)<br>0-130° - (12 weeks)  | Patellar mobs per MD guidelines<br>ROM exercises:<br>PROM – AAROM KE in pain free arc<br>AROM – AAROM KF<br>Hydro-treadmill or anti-gravity treadmill<br>Retro-walking to encourage NM control<br>Quad strengthening – leg press<br>Bicycle: short crank to standard crank as ROM allows<br>Proximal/ core strengthening (hip extension with knee flexion, side planks, bridge)<br>Initiate balance and proprioceptive training - double limb support on progressively challenging surfaces to single limb support on level surface |
| <b>Phase III</b><br><b>Weeks 13-24</b><br>PT 1-2x/week<br>HEP daily | WBAT without crutches and brace<br><br>Normal gait on level surfaces and stairs  | None  | Full   | Quad strengthening<br>-Closed chain preferred<br>-Forward Step Up<br>-Eccentric leg press<br>-Progress to Forward Step Down<br>-Squat progression: chair squats to free squats<br>Gait training: heel-toe gait pattern<br>-Treadmill: small grade elevation<br>-Retro-walking<br>Advance proximal strength<br>-Bridging progression<br>-Hip extension with KF<br>-Core training (plank, side plank)<br>Balance progression<br>Cross training: elliptical, bike, swimming  |



|  |      |      |      |   |
|--|------|------|------|---|
| <p><b>Phase IV</b><br/><b>Weeks 25-35</b><br/>PT 1-2x/week<br/>HEP daily</p> | WBAT | None | Full | <p>Advance LE strengthening, flexibility, dynamic single limb stability &amp; agility<br/>Advance core stability<br/>Cross training<br/>Initiate plyometric program<br/>-Good eccentric quad control<br/>-Vertical jumping progression<br/>Initiate running program<br/>-Start with 30 second intervals</p> |
| <p><b>Phase V</b><br/><b>Weeks 36-52</b><br/>PT 1x/week<br/>HEP daily</p>    | WBAT | None | Full | <p>Advance plyometric program<br/>Advance cutting, deceleration training</p> <p>Gradual return to sports participation after completion of RTS testing **</p> <p>Maintenance program based on RTS testing</p>   |

\*\* Completion of RTS (Return to Sport) testing not mandatory, but recommended for competitive athletes returning to play after rehab

**IF QUESTIONS: PLEASE CALL 469-800-7200**