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Tibial Tubercle Osteotomy Rehab Protocol

| | WEIGHT BEARING | BRACE | ROM | EXERCISES |
|------------------------|--|--|--|--|
| PHASE I 0-2 weeks | TTWB with brace locked and crutches | Locked in full extension for ambulation and sleeping May remove for hygiene, exercises, & CPM | • 0-90° as tolerated STRESS EARLY EXTENSION | Quad sets, straight leg raises in brace locked at 0°, e-stim, biofeedback, hamstring isometrics, heel slides, gastroc stretch, ankle pumps |
| PHASE II 2-6 weeks | TTWB with brace locked and crutches | Locked to ambulate May remove for sleep Progressively open to 0-90° for sedentary positions | Goal: at least 90° by week 4, 120° by week 6 PROM: 90° flexion at each therapy session Maintain full extension | Progress Phase I exercises Progress NWB ROM Begin floor-based core, hip, and gluteal work Patellar mobilization Advance quad sets |
| PHASE III 6-8 weeks | WBAT Wean off crutches as gait normalizes (normal gait and adequate quad control) | Discontinue brace when able to SLR without lag | • Full AROM & PROM | Progress phase II exercises Advance closed-chain quads Progress balance Core/pelvic and stability work Begin stationary bike Start with high seat and progress to normal height when able, resistance as tolerated |
| PHASE IV 8-16 weeks | • Full | • None | • Full | Progress flexibility & strengthening Progress functional balance Progress core and gluteal work 10 Weeks: leg extensions ok to begin, keep resistance proximal 12 Weeks: May begin outdoor cycling, elliptical, and swimming 14 Weeks: treadmill walking forward and retro, single leg stands, chair/wall squats (tibia perpendicular to floor), unilateral step-ups (start 2" then progress to normal) |



| | WEIGHT BEARING | BRACE | ROM | EXERCISES |
|--------------------------|----------------|--------|--------|--|
| PHASE V 16-20 weeks | • Full | • None | • Full | Maximize single leg dynamic and static balance Gluteal/pelvic-stability/core + closed-chain quad program & HEP independent Criteria For Jogging At least 16 weeks post-op Pain < 3/10 Within 2° normal knee extension and 125° knee flexion At least 1 minute of single-leg squats MD or PT approval |
| Phase VI 20-24 Weeks | • Full | • None | • Full | Progress running as tolerated Lateral movement supervised PT Isokinetic exercises Criteria for plyometrics and sport-specific drills At least 20 weeks post-op Pain < 2/10 Quad & Ham strength ≥ 80% normal; ≥50% H/Q ratio for females At least 2 minutes of resisted SL squats ≤ 5 on LESS MD or PT approval |
| Phase VII 24-32 Weeks | • Full | • None | • Full | Progress as above Single-leg hops testing Interval sprints workouts Unpredictable cutting & contact Criteria for return to play Pain < 2/10 Quad & Ham strength ≥ 90% normal; ≥60% H/Q ratio for females At least 3 minutes of resisted SL squats 90% normal on all single-leg hop tests 95% normal on figure of 7, 5-10-5 pro-agility, & S-L vertical jump MD approval |

- Do NOT change bandages unless instructed by physician
- Encourage home exercise program
- For any questions or concerns please contact Dr. Tauberg's office (see above)



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