

POST-OPERATIVE REHABILITATION PROTOCOL

Tibial Tubercle Excision

William McLaughlin, MD | Sports Medicine Surgery | Advanced Bone & Joint

Phase 1 | 0-2 Weeks

GOALS FOR THIS PHASE

- WBAT with brace locked in full extension and crutches.
- Brace in extension during sleep.
- Achieve ROM 0-90° non-weight bearing.
- Initiate quadriceps activation and patellar mobility.
- Avoid weight bearing past 90° flexion.

Weight Bearing & Bracing

- WBAT with brace locked in full extension with crutches.
- Brace in extension during sleep.

Range of Motion

- Active/passive ROM 0-90° when non-weight bearing.

Therapeutic Exercises

- Heel slides, quad sets, SLR, calf pumps.
- Patellar mobilization.

Precautions

- No weight bearing with knee flexion beyond 90°.

Phase 2 | 2-6 Weeks

GOALS FOR THIS PHASE

- Weeks 2-4: WBAT with brace unlocked 0-90°.
- Weeks 4-6: WBAT without brace; may discontinue brace at 4 weeks.
- Full passive and active knee ROM.
- Initiate heel raises, closed-chain exercises, terminal knee extension.
- Begin stationary bike for ROM.

Weight Bearing & Bracing

- Weeks 2-4: WBAT with brace unlocked 0-90°. No weight bearing with knee flexion > 90°.
- Weeks 4-6: WBAT without brace; can discontinue brace at 4 weeks.

Range of Motion

- Full passive and active knee ROM.

Therapeutic Exercises

- Heel raises, closed-chain exercises, terminal knee extension.
- May begin stationary bike for ROM.

Phase 3 | 6-12 Weeks

GOALS FOR THIS PHASE

- Full, pain-free ROM.
- Progress closed-chain exercises and hamstring work.
- Lunges / leg press 0-90°.
- Begin stationary bike when able; swimming at 8 weeks.

Range of Motion

- Full, pain-free ROM.

Therapeutic Exercises

- Progress closed-chain exercises.
- Begin hamstring work.
- Lunges / leg press 0-90°.
- Proprioception exercises.
- Balance / core / hip / glutes.
- Begin stationary bike when able.
- May begin swimming at 8 weeks.

Phase 4 | 12-20 Weeks

GOALS FOR THIS PHASE

- Full, pain-free ROM.
- Progress Phase III exercises and functional activities.
- Advance to sport-specific drills and running/jumping after 12 weeks once cleared by MD.

Range of Motion

- Full, pain-free ROM.

Therapeutic Exercises

- Progress Phase III exercises and functional activities: single-leg balance, core, glutes, eccentric hamstrings, elliptical, and bike.
- Advance to sport-specific drills and running/jumping after 12 weeks once cleared by MD.

This protocol is a general guideline. Progression is patient-specific and at the discretion of William McLaughlin, MD.