

TIBIAL EMINENCE FRACTURE POST-OP PROTOCOL

DR ELRASHIDY – TRI-VALLEY ORTHOPEDICS

OVERVIEW

- Focus on protection of fixation in primary phase (Weeks 0 - 6)
- Ok to shower on post-op day 3. **NO bathing/soaking knee** until cleared by physician
- **Elevation, Cryocuff** x 2 weeks
- **TROM Brace:** 8 weeks Total
 - Week 0-2: Toe-Touch WB (Full Extension)
 - Week 3-4: Partial WB (Full Extension, D/c crutches after 4 weeks)
 - Week 5-6: WBAT (Full Extension)
 - Weeks 7-8 (Unlock brace in 30° increments, unlocked and off after Week 8)
- Sleep with brace on & locked in extension x **2-3 weeks**
- **Crutches:** 4 weeks total (0-2 = TTWB, 3-4 = PWB, 4-6 = WBAT)
- Supervised Physical Therapy for 3-4 months

PHASE 1: Post-Op Through Week 6

Goals:

- Protect fracture fixation with use of brace and specific exercises
- Minimize effects of immobilization, inflammation & edema (cryocuff x 2 weeks)
- Advance to Full WB, Wean off crutches, Obtain Motion

Brace (Total Length = 8 weeks):

- **Week 0-3: Brace locked in full extension for ambulation and sleeping**
- **Weeks 4-6:** WBAT in extension. Ok to d/c brace when sleeping
- **Week 6-8:** Begin unlocking in 30° increments every 3-4 days. Unlocked by start of Week 8 and d/c after Week 8

Weight-Bearing:

- Week 0-2: Toe-touch WB
- Week 3-4: Partial WB
- Week 5-6: Wean from crutches as patient demonstrates normal gait mechanics and improving quad control

Range of Motion (see exercises below):

- AAROM → AROM as tolerated
- Maintain full extension and work on progressive knee flexion
 - 0° - 90° by Week 3
 - 0° - 125° by Week 6

Exercises

- Patellar mobilization/scar mobilization
- Quad sets, Hamstring Curls, Heel slides
- Non-weight bearing stretching of Gastroc-Soleus
- Straight-Leg Raise with brace in full extension until quad strength returns (no extension lag)

TIBIAL EMINENCE PROTOCOL

A. Extension (straightening knee)



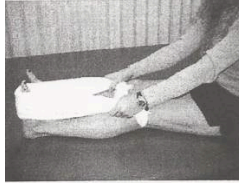
Lie on your stomach with your knee and lower leg hanging over the edge of the bed to stretch your knee straight. Hold 5-10 minutes, 4-5 times per day.

and

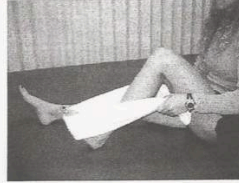


Lie on the bed with your ankle on a pillow. Let your knee relax down to stretch your knee straight. Avoid tightening your thigh muscle. Hold 5-10 minutes, 4-5 times per day.

B. Flexion (bending knee)



→



Lie on your bed with a loop of towel under your foot. Bend your knee **no more than 90 degrees** by sliding your heel toward your buttocks. Sustain the stretch for 3-5 seconds. Do 25 reps 4-5 times per day.



Flexion: Knee bending can also be accomplished by sitting in a chair. Slide your foot backwards with the help of your other foot. **Stretch no further than 90 degrees** Hold 10 seconds. Repeat 25 times 4-5 times daily

PHASE 2: Weeks 7 - 12

Goals:

- Maintain full extension, obtain full flexion
- Increase hip, quadriceps, hamstring and calf strength
- Increase proprioception

Brace:

- Begin unlocking in 30° increments (every 3-4 days) after Week 6. Unlocked when weight-bearing by start of Week 8
- Discontinue after Week 8 (once patient has full extension and no lag)

Exercises:

- Begin stationary bike
- Continue with range of motion/flexibility exercises as appropriate
- Closed chain extension exercises
- Weight-bearing Gastroc-Soleus stretching
- Toe raises, Start proprioception program

PHASE 3: Weeks 13 To 18

Exercises:

- Begin straight-ahead, treadmill running after Week 12
- Continue flexibility and ROM exercises as appropriate for patient

TIBIAL EMINENCE FRACTURE POST-OP PROTOCOL

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- Progressive hip, quad, hamstring and calf strengthening
 - Mini-Wall Squats (0° - 60°)
 - Lateral Lunges and Step-Ups
 - Hip abduction/adduction
 - Short-arc leg press
- Cardiovascular/endurance training via stairmaster, elliptical, bike
- Advance proprioceptive activities and agility drills

PHASE 4: Month 5 Through Month 6 – Return to Sport

Exercises:

- Progress flexibility/strength program based on individual needs/deficits
- Initiate plyometric program as appropriate for patient's athletic goals
- **Agility** progression including:
 - Side steps + Crossovers, Figure 8 and Shuttle running
 - One and two leg jumping
 - Cutting/Acceleration/Deceleration/Springs, Agility ladder drills
- Continue progression of running distance based on patient needs
- Sport-specific drills as appropriate for patient
- Gradual return to activity as tolerated

Hany Elrashidy, MD
Sports Medicine, Arthroscopy
Department of Orthopedic Surgery
Tri-Valley Orthopedic Specialists
www.hanyelrashidymd.com