



Indiana University Health

IU Health Physicians Orthopedics & Sports Medicine

TIBIAL EMINENCE FRACTURE (NON-OP)

NON-OP PHYSICAL THERAPY PROTOCOL

Bryan M. Saltzman, M.D.

Chief, Division of Sports Medicine & Shoulder/Elbow Surgery
Indiana University Health Physicians
Assistant Professor of Orthopaedic Surgery, Indiana University
Sports Medicine, Cartilage Restoration, Shoulder/Elbow Surgery
IU Health Methodist Medical Plaza North (MSK) – 201 Pennsylvania Pkwy #100,
Carmel, IN 46280

IU Health Methodist Hospital – 1801 N Senate Ave, Indianapolis, IN 46202 317-944-9400

www.bryansaltzmanmd.com

Patient Name:	<u>Date</u> :
X Evaluate and Treat	X Provide patient with home program
Frequency: <u>2-3</u>	x/week x <u>4</u> weeks

OVERVIEW:

• Focus on the protection of fixation in Phase I (0-6 weeks postop).



- Brace: 8 weeks total
 - Weeks 0-4: Non-Weight Bearing (Full Extension)
 - Weeks 5-6: Toe-Touch Weightbearing / PWB (Full Extension, d/c crutches after 6 weeks) ... Unlock brace in 30 degree increments beginning Week 5 in weekly increments but locked during ambulation through Week 6
 - Weeks 7-8: WBAT (Brace unlocked and then off after week 8)
- Sleep with brace ON & LOCKED in extension for 6 weeks.
- Crutches: 6 weeks total (0-4 NWB, 5-6 TTWB/PWB, 7-8 WBAT)

Phase I: Weeks 0-6

Goals:

- Protect fracture fixation with the use of brace and specific exercises.
- Minimize effects of immobilization, inflammation & edema (ice x2 weeks)

Brace:

- Weeks 0-4: Non-Weight Bearing (Full Extension)
- $^{\circ}$ Weeks 5-6: Toe-Touch Weightbearing / PWB (Full Extension, d/c crutches after 6 weeks) ... Unlock brace in 30 degree increments beginning Week 5 in weekly increments but locked during ambulation through Week 6
- Weeks 7-8: WBAT (Brace unlocked and then off after week 8)

Weight-Bearing:

- Weeks 0-4: Non-Weight Bearing (Full Extension)
- Weeks 5-6: Toe-Touch Weightbearing / PWB (Full Extension, d/c crutches after 6 weeks) ... Unlock brace in 30 degree increments beginning Week 5 in weekly increments but locked during ambulation through Week 6
- Weeks 7-8: WBAT (Brace unlocked and then off after week 8)

Range of Motion:



- \circ AAROM \to AROM as tolerated after 4 weeks of immobilization within the confines of the brace incremental increase allotment
- Maintain full extension and work on progressive knee flexion.
 - 0-90 degrees by Week 6
 - 0-125 degrees by Week 8

Exercises:

- Patellar mobilization/scar mobilization
- Quad sets, Hamstring curls, Heel slides
- Non-weight bearing stretching of Gastro-Soleus
- Straight-leg raise with brace in full extension until quad strength returns (no extension lag)

Phase II: Weeks 7-12

Goals:

- Advance to Full WB, wean off crutches, obtain motion
- Maintain full extension, obtain full flexion
- Increase hip, quadriceps, hamstring and calf strength
- Increase proprioception

Brace:

- $^{\circ}$ Begin unlocking in 30 degree increments (every 1 week) after Week 4 as above. Locked during ambulation through Week 6. Unlocked when weight bearing by the start of Week 8.
- Discontinue after Week 8 (once patient has full extension and no lag).

Exercises:

- Begin stationary bike
- Continue with ROM/flexibility exercises as appropriate



- Closed chain extension exercises
- Weight bearing Gastroc-Soleus stretching
- Toe raises, start proprioception program

Phase III: Weeks 13-18

Exercises:

- Begin straight-ahead, treadmill running after Week 12
- Continue flexibility and ROM exercises as appropriate for patient
- Progressive hip, quad, hamstring and calf strengthening
 - Mini-Wall Squats (0-60 degrees)
 - Lateral Lunges & Step-Ups
 - Hip Abduction/Adduction
 - Short-Arc Leg Press
- · Cardiovascular/endurance training via stair master, elliptical and bike
- Advance proprioceptive activities and agility drills

Phase IV: Months 5-6 - 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 & Two Leg Jumping
 - Cutting/Accelerative/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

By signing this referral, I certify that I have examined this patient and physical therapy is medically necessary. This patient $\underline{\underline{X}}$ would not benefit from social services.		
	Date:	
Bryan M. Saltzman, MD		