

Arthroscopic Assisted Tibial Spine Avulsions PT Protocol

Overview:

- Focus on the protection of fixation in Phase I (0-6 weeks postop).
- Brace: 6 weeks total
 - Weeks 0-2: Partial Weight Bearing (Full Extension, d/c crutches after 2 weeks)
 - Weeks 2-6: WBAT (Full Extension)
- Sleep with brace ON & LOCKED in extension for 2 weeks.
- Crutches: 2 weeks total (0-2 PWB, 2-4 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)
- Advance to Full WB, wean off crutches, obtain motion

Brace:

- Weeks 0-2: Brace locked in full extension for ambulation & sleeping.
- Weeks 2-6: WBAT in extension. OK to d/c brace when sleeping.

Weight-Bearing:

- Weeks 0-2: PWB
- Weeks 2-4: Wean from crutches as patient demonstrates normal gait mechanics and improved quad control.

Range of Motion:

- AAROM → AROM as tolerated
- Maintain full extension and work on progressive knee flexion. → 0-90° by Week 2 → 0-125° by Week 6

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:

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

Brace:

- Discontinue after Week 6 (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°)
- 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/Sprints, 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