

ORIF TIBIAL TUBERCLE PROTOCOL

I. ***Immediate Postoperative/Max Protection Phase (Weeks 1-4)***

Goals: Restore full passive knee extension
Diminish pain and joint swelling
Restore patellar mobility
*Control forces on repair site

Postoperative Weeks 1-4

- Brace: brace locked at 0 deg extension with compression wrap except for PT and showering for first 2 weeks
Sleep in brace locked until week 3, then unlocked when sleeping week 4, ambulate in brace always locked in extension
- Weight bearing: Toe touch WB with crutches, brace in full extension, ok to progress to Partial WB (<50%) at week 3
- Range of motion: Immediate AROM as tolerated, begin AAROM at week 3, PROM at week 5
- Exercises: Ankle pumps
Quad sets
Patellar mobilization
Hip abd/adductions
- Ice and elevation: 20 minutes of each hour at elevate

II. ***Motion Phase (Weeks 5 to 8)***

Goals: Control forces on healing tendon
Gradually increase knee flexion
Restore full passive knee extension
Restore patellar mobility
Retard muscular atrophy

Week 5:

- Brace: Continue use of locked brace when ambulating (6 weeks), unlocked and on when awake otherwise
- Weight bearing: WBAT
- Range of motion: Full passive knee extension

Patellar mobilization

- Exercises: Electrical muscle stimulation to quads
Quad sets
Ankle pumps
Hip abd/adductions
Gravity eliminated SLR flexion
- Continue ice, elevation and compression

Week 6-8:

- Continue above mentioned exercises
- ROM: Goal for full ROM by week 6-8
- Normalize stiff legged gait without crutches
- Single leg stance balancing and weight shifts
- Exercises: Initiate mini-squats (0-45°)
Initiate weight shifts
Partial wall sits
Initiate proprioception drills
Active knee extension 90-30°
Multi-angle isometrics knee extension (subnex)
Continue all exercises listed above
- Continue ice, compression and elevation as needed

III. ***Moderate Protection Phase (Weeks 9-12)***

Goals: Control forces during ambulation and ADL's
Progress knee flexion ROM to normal
Improve lower extremity muscular strength
Restore limb confidence and function

Range of motion: Full

- Exercises: *Gradually increase muscular strength
Straight leg raises (flexion)
Hip abd/adduction
Knee extension 90-0
Quarter to half squats
Hamstring strengthening
Leg press

Wall squats
Front lunges
Lateral lunges
Calf raises
Hamstring curls (restricted ROM)
Proprioception drills, balance board
Bicycle

IV. Return to Sport Activity Phase (Week 13 and on)

Goals: Enhancement of strength, endurance
Initiate functional activities
Improve tensile strength properties of tendon

Criteria to Return to Activities:

1. Satisfactory clinical exam
2. Satisfactory strength
3. Proprioception test 80% > of opposite leg
4. Appropriate rehab progression

Goals: Gradual return to full-unrestricted sports
Continue strength program
Continue functional/agility drills

Exercises: Initiate lateral step-ups
Initiate front step-downs
Initiate backward lunges
Walking program progress to jog (month 4) to run (month 5)
Continue strengthening exercises
Continue emphasis on eccentrics and functional exercises
*May initiate plyometrics (month 5)
*May initiate agility drills (lateral shuffle) month 5

Sport specific training