

# Tibial Tubercle Osteotomy (Distal Realignment) Post-Operative Rehabilitation Protocol



Hospital for Joint Diseases  
NYU LANGONE MEDICAL CENTER

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Date of Surgery: \_\_\_\_\_



## Phase I: 0-12 Weeks

- **Weightbearing:**
  - Toe-touch weightbearing (20%) with crutches (0-6 weeks)
  - Advance to full weightbearing as tolerated (6-12 weeks)
- **Hinged Knee Brace:**
  - Locked in extension for all activities (including sleeping)– removed for PT and showering (0-2 weeks)
  - Unlocked for all activities – removed for PT and showering (2-6 weeks)
  - Wean from brace (6-8 weeks)
- **Range of Motion:** Immediate ROM as tolerated → AROM/AAROM/PROM: Goal of full ROM by 6 weeks post-op
- **Therapeutic Exercises:**
  - **Weeks 1-6:** quad sets, co-contractions, isometric abduction/adduction, ankle strength
  - **Weeks 6-10:** straight leg raises, partial wall sits, terminal knee extension with theraband (no greater than 45 degrees), continue previous exercises
  - **Weeks 10-12:** hamstring strengthening, theraband resistance 0-45 degrees, light open chain exercises, continue previous exercises



## Phase II: 12-16 Weeks

- **Weightbearing:** Full with a normalized gait pattern
- **Hinged Knee Brace:** None
- **Range of Motion:** Full/Painless ROM
- **Therapeutic Exercises:** Begin treadmill walking at slow pace, progress to balance/proprioception exercises, initiate sport-specific drills



## Phase III: 16-20 Weeks

- **Weightbearing:** Full with a normal gait pattern
- **Hinged Knee Brace:** None
- **Range of Motion:** Full/Painless ROM
- **Therapeutic Exercises:** Advance closed chain strengthening exercises, focus on single leg strength, progress to walking forward and backward on the treadmill, initiate light plyometric training



## Phase IV: 5-6 Months

- **Therapeutic Exercises:** Continue strength training, emphasize single leg loading, progressive running/agility program
  - **May return to impact activities/athletics at 12-16 months post-op with physician clearance**

Comments:

Frequency: \_\_\_\_\_ times per week

Duration: \_\_\_\_\_ weeks

Signature: \_\_\_\_\_

Date: \_\_\_\_\_