

University Orthopedics, Inc.  
Sports Medicine Division

## TIBIAL TUBERCLE OSTEOTOMY

### **PHASE I: ~0-2 Weeks Postoperative**

**GOALS:**

- WBAT with crutches/brace
- Monitor wound healing
- Full extension

**DRESSING:**

- POD 1: Debulk dressing, TED Hose in place
- POD 2: Change dressing, keep wound covered, continue TED Hose
- POD 7-10: Sutures out, D/C TED Hose when effusion resolved

**AMBULATION AND BRACE USE:**

Crutches: WBAT

Brace: locked in full extension x 6 weeks

**EXERCISE:**

CPM – Speed and ROM to patient tolerance, begin with 0-45  
AAROM, AROM as tolerated  
Passive extension with heel on bolster or prone hangs  
Patellar mobilization (teach patient)  
Calf pumping  
Short arc quads, 0-20 only, without resistance  
Standing Hamstring curls with upper extremity support  
SLR x 4 with brace locked in extension  
Electrical stimulation in full extension with quad sets and SLR exercises

**No Resisted Closed Chain ex x 6 weeks**

**No Resisted Open Chain ex x 6 weeks**

### **PHASE II: ~2-4 Weeks Postoperative**

**GOALS:**

- No extensor lag
- No effusion
- Good healing of surgical wound

**AMBULATION AND BRACE USE:**

Brace: locked in extension x 6 weeks

**EXERCISES:**

Continue appropriate previous exercises  
Scar massage when incision healed  
Stationary bicycle for ROM, seat adjusted high, no resistance (D/C CPM once patient is independent with stationary bicycle)  
AROM, AAROM as tolerated  
Co-contractions quads / Hamstring at 0, 30, 60, 90 degrees  
SLR x 4 on mat (d/c brace if patient can perform without lag) – Add light weight below the knee if good quad control  
Pool therapy – Deep water (chest/shoulder) walking and ROM exercises  
– Water jogging floating upright in deep water  
Stretches – Hamstring, hip flexors, ITB  
BAPS, ball toss, body blade  
Forward, backward, lateral walking with upper extremity support  
Double leg heel raises, progress to single leg

**PHASE III: ~4-6 Weeks Postoperative**

GOAL:

- Full AROM
- Advancing quad control

AMBULATION AND BRACE USE:

Brace locked in full extension

EXERCISES:

Continue appropriate previous exercises  
PROM, AROM, AAROM to regain full motion  
Standing SLR x 4 with elastic resistance bilaterally

**PHASE IV: ~6-8 Weeks Postoperative**

GOAL:

- Normal gait on levels
- Discontinue use of assistive devices
- Increase lower extremity strength

AMBULATION AND BRACE USE:

D/C brace/crutches

EXERCISES:

Continue appropriate previous exercises  
Leg press with light weight  
Mini squats, Wall squats  
Hamstring curls – Carpet drags or rolling stool  
(closed chain)  
Treadmill – Forwards and backwards walking

**PHASE V: ~8-12 Weeks Postoperative**

GOAL:

- Thigh hypertrophy
- Walk 2 miles at 15 min/mile pace

EXERCISES:

Continue appropriate previous exercises  
Hamstring curl weight machine  
Knee extension weight machine  
Proprioceptive training – BAPS, ball toss, body blade  
Fitter

Slide board

Forward, lateral and retro step downs  
Stationary bike – Minimal resistance  
Treadmill – Walking progression program  
Elliptical trainer  
Pool therapy – Waist deep water walking or slow  
jogging  
Quad stretches

**PHASE VI: ~3-4 Months Postoperative**

GOAL:

- Run 2 miles at easy pace

EXERCISES:

Continue appropriate previous exercises with  
progressive resistance  
Treadmill – Running progression program  
Stairmaster

**PHASE VII: ~4-6 Months Postoperative**

GOALS:

- Return to all activities
- No contact sports until 6 months post-op

EXERCISES:

Continue appropriate previous exercises  
Agility drills / Plyometrics  
Sit-up progression  
Progressive weight training program  
Transition to home / gym program

\*\*This protocol is designed to be administered by a  
licensed physical therapist and/or certified athletic trainer.  
Please do not hesitate to contact our office should you  
have any questions concerning the rehabilitation process.