



## PHYSICAL THERAPY SECTION

### HIGH TIBIAL OSTEOTOMY

*Revised November 2016*

*Adapted from William Beaumont Army Medical Center*

#### **Post-op Days 1 – 14**

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 is resolved

Brace – 0-90 degrees  
Crutches – Non weight bearing (NWB) x 6 weeks  
CPM in hospital – 0-90 degrees  
AROM, AAROM 0-90 degrees  
Patellar mobilization (teach patient)  
Calf pumping  
Passive extension with heel on bolster or prone hangs  
Electrical stimulation with quad sets and SLR  
Quad sets, Co-contractions quads/hams  
Straight leg raise (SLR) x 4 on mat, in brace (parallel bars if poor quad control)  
Stretches – Hamstring, Hip flexors, ITB  
Ice pack with knee in full extension after exercise

#### **Goals**

Pain / effusion control  
ROM – 0-90 degrees

#### **Weeks 2 – 4**

Brace – Open to available range  
Crutches – NWB  
AROM, AAROM 0-120 degrees  
Scar mobilization when incision healed  
Co-contractions quads/hamstring at 0, 30, 60, 90 degrees  
SLR x 4 on mat, no brace – Add weight above knee if good quad control  
Stationary bike for ROM

#### **Goals**

ROM 0-120 degrees  
No extensor lag

### **Weeks 4 – 8**

Brace – Open to available range  
Crutches – NWB x 6wks then Partial weight bearing (PWB)  
Continue appropriate previous exercises  
PROM, AAROM, AROM to regain full motion  
SLR x 4 on mat, no brace – Light weight below the knee  
Weight shifts, Mini squats – In parallel bars  
Leg press with light resistance  
Hamstring curls – Carpet drags or rolling stool (closed chain)  
Double leg heel raises  
Stationary bike – Progressive resistance and time  
Pool therapy – Chest deep exercises in sagittal plane only

**Goal** – Full ROM

### **Weeks 8 – 12**

Brace – Continue until 12 weeks post-op  
Crutches – Weight bearing as tolerated (WBAT) (D/C when gait is normal)  
Continue appropriate previous exercises  
Forward, lateral and retro step downs – No flexion > 45 degrees (small step)  
SLR x 4 with Theraband bilaterally  
Wall squats – No knee flexion past 45 degrees  
Single leg heel raises  
Proprioceptive training – Single leg standing in parallel bars  
    – Double leg BAPS for weight shift  
    – Progress to single leg BAPS, ball toss and body blade  
Treadmill – Forwards and backwards walking  
    – Walking progression program  
Elliptical trainer  
Pool therapy – Walk in waist deep water

#### **Goals**

Normal gait  
Walk 2 miles at 15 min/mile pace

### **Months 3 – 4**

D/C crutches and brace  
Continue appropriate previous exercises with progressive resistance  
Forward, lateral and retro step downs – Medium to large step  
Hamstring curl weight machine  
Knee extension weight machine  
Hip weight machine x 4 bilaterally  
Fitter  
Slide board  
Stairmaster  
Swimming  
Treadmill – Running progression program

**Goal** – Jog 2 miles at easy pace

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

**Goals**

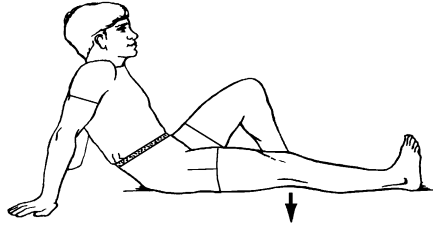
Return to all activities  
Pass APFT at 6 months post-op

***No contact sports until 6 months post-op***

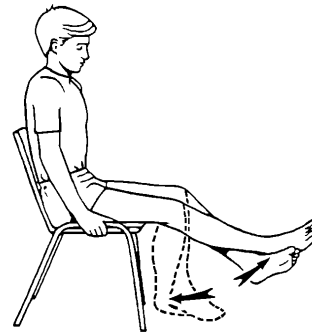
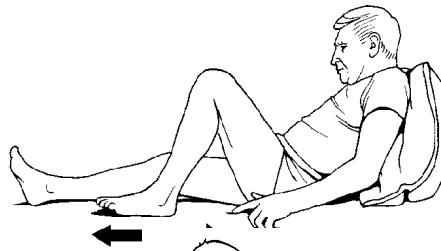
## Knee Post Op Phase 1

Perform exercises below frequently: 30 reps 3-5x a day

**Quad Isometrics**



**Heel Slides**



**Active Assisted Motion**

**Ice Position 15 minutes 2-3 x per day**

