

# High Tibial Osteotomy Post-op Protocol

## 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 (or until physician directed)

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

1. Pain / effusion control
2. Protect the osteotomy & ensure wound healing
3. ROM – 0-90 degrees
4. Promote quadriceps muscle strength

## 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

## GOALS

1. Continue to protect the osteotomy
2. ROM 0-120 degrees
3. No extensor lag

## WEEKS 4 – 8

Brace – Open to available range

Crutches – NWB x 6wks then Partial weight bearing (PWB) **if approved by physician** based on x-ray

- Start at 25% WB & progress by 25% every week.

Continue appropriate previous exercises  
PROM, AAROM, AROM to regain full motion

**When approved to progress WB:**

SLR x 4 on mat, no brace – Light weight below the knee if good quad control  
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**

1. Full ROM
2. Regain muscle strength
3. Possibly begin partial weight bearing

**WEEKS 8 - 12**

Brace – Continue until 12 weeks post-op

Crutches – **Progress to Weight bearing as tolerated (WBAT) per physician orders** (D/C crutches when gait is normal)

Continue appropriate previous exercises

**Once fully WB:**

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**

1. Normal gait
2. Progress to full weight bearing

**MONTHS 3 - 6**

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

### ***GOAL***

1. Full strength & motion
2. Progression to sporting activities

***\*NO CONTACT SPORTS UNTIL 6 MONTHS POST-OP\****