HIGH TIBIAL OSTEOTOMY REHABILITATION PROTOCOL

This protocol was developed for patients who have had a high tibial osteotomy. Please note this protocol is a guideline. Patients with additional surgery will progress at different rates. Achieving the criteria of each phase should be emphasized more than the approximate duration.

**PHASE I: ~0-2 WEEKs POSTOPERATIVE**

**GOALS:**
- Pain/effusion control
- ROM—0 to 90 degrees

**AMBULATION, BRACING, AND DRESSING:**
- 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

**EXERCISES:**
- 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

**PHASE II: ~2-4 WEEKS POSTOPERATIVE**

**GOALS:**
- ROM 0-120 degrees
- No extensor lag

**AMBULATION AND BRACE USE:**
- Brace – Open to available range
- Crutches – NWB

**EXERCISES:**
- 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

**PHASE III: ~4-8 WEEKS POSTOPERATIVE**

**GOAL:** FULL ROM

**AMBULATION AND BRACE USE:**
- Brace – Open to available range
- Crutches – NWB x 6wks then Partial weight bearing (PWB)

**EXERCISES:**
- 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
PHASE IV: ~8-12 WEEKS POSTOPERATIVE

GOALS:
- Normal gait
- Walk 2 miles at 15min/mile pace

AMBULATION AND BRACE USE:
Brace – Continue until 12 weeks post-op
Crutches – Weight bearing as tolerated (WBAT) (D/C when gait is normal)

EXERCISES:
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

PHASE V: ~3-4 MONTHS POSTOPERATIVE

GOAL: Jog 2 miles at easy pace

AMBULATION AND BRACE USE:
D/C crutches and brace

EXERCISES:
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

PHASE VI: ~4-6 MONTHS POSTOPERATIVE

GOAL: Return to all activities

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

No contact sports until 6 months post-op

**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.**