GALLAND/KIRBY HIGH TIBIAL OSTEOTOMY POST-
SURGICAL REHABILITATION 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
- 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

MONTHS 4 - 6
• Continue appropriate previous exercises
• Agility drills / Plyometrics
• Sit-up progression
• Progressive weight training program
• Running progression to track
• Transition to home / gym program

GOAL
• Return to all activities

*NO CONTACT SPORTS UNTIL 6 MONTHS POST-OP*
KNEE POST-OP PHASE I

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