

Roidis Nikolaos, MD, PhD, DSc
Senior Consultant Orthopaedic Surgeon
3rd Orthopaedic Department
KAT Hospital

LATERAL/POSTERIOR LATERAL CORNER KNEE RECONSTRUCTION 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 resolved
- Brace – Locked in extension
- Crutches – Flat foot weight bearing (FFWB)
- Patellar mobilization (teach patient)
- AAROM, AROM 0-90 degrees
- Calf pumping
- Passive extension with heel on bolster or Prone hangs
- Electrical stimulation in full extension with quad sets and SLR
- Quad sets, Co-contractions quads / Hamstrings
- Straight leg raise (SLR) x 3 on mat, in brace (parallel bars if poor quad control)
- **NO ABD**
- Ice pack with knee in full extension after exercise

GOALS

- Pain / effusion control
- Good quad control

Weeks 2 - 4

- Brace – locked in extension
- Crutches – Partial weight bearing (PWB)
- Continue appropriate previous exercises
- Scar massage when incision healed
- AAROM, AROM 0-90 degrees
- Begin Total Gym for ROM – Level 1-3
- Passive flexion to 90 degrees (push up with opposite leg)
- Straight leg raise (SLR) x 3 on mat, no brace (no resistance) – **NO ABD**
- Double leg heel raises
- Stretches – Hamstring, hip flexors

GOALS

- ROM 0-90
- No extensor lag

WEEKS 4 - 6

- Brace – Open to available range
- Crutches – Weight bearing as tolerated (WBAT) (D/C when gait is normal)
- Continue appropriate previous exercises

- AAROM, AROM 0-110 degrees
- Standing SLR x 4 with Theraband bilaterally (no brace)
- May begin Hip ABD with Theraband if good LE control in full extension
- Mini squats in parallel bars – No knee flexion > 45 degrees
- Leg press with light resistance 0-45 degrees
- Hamstring curls 0-45 degrees – Carpet drags or rolling stool (closed chain)
- Proprioceptive ex – Single leg standing, double leg BAPS for weight shift
- Single leg heel raises
- Stationary bike for ROM – No resistance
- Pool therapy – Exercises in **sagittal plane only**

GOALS

- ROM 0-110 degrees
- No effusion

WEEKS 6 - 8

- Brace – Open to full range
- Continue appropriate previous exercises
- PROM, AAROM, AROM to regain full motion
- Wall squats – No knee flexion past 45 degrees
- Forward, lateral and retro step downs
- No knee flexion > 45 degrees (small step)
- Knee extension ex 90-30 degrees
- Hamstring curls 0-90 – Carpet drags or rolling stool (closed chain)
- Leg press 0-90 degrees with resistance as tolerated
- Hip weight machine x 4 bilaterally
- Proprioceptive ex – Progress to single leg BAPS, ball toss and body blade
- Stationary bike – Progressive resistance and endurance
- Elliptical trainer
- Treadmill – Forwards and backwards walking
- Pool therapy – Chest deep

GOAL

- Full ROM

WEEKS 8 - 12

- D/C brace
- Continue appropriate previous exercises with progressive resistance
- Forward, lateral and retro step downs – Medium to large step
- Hamstring curl weight machine through full range
- Knee extension weight machine through full range
- Stairmaster – Small steps
- Treadmill – Walking progression program
- Pool therapy – Unrestricted
- ITB stretch

GOAL

- Walk 2 miles at 15 min/mile pace

MONTHS 3 - 4

- Continue appropriate previous exercises
- Fitter
- Slide board
- Agility drills – Figure 8s, gentle loops, large zigzags

- Swimming
- Treadmill – Running progression program
- Quad stretches

GOAL

- Run 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

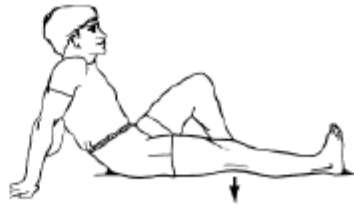
- Return to all activities

****NO CONTACT SPORTS UNTIL 9 MONTHS POST-OP****

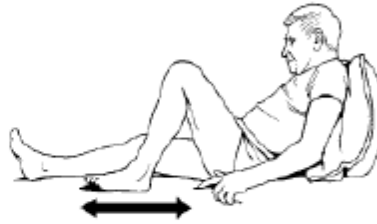
KNEE POST-OP PHASE I

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



ADAPTED FROM:

Mark Galland, MD Physical Therapy Section

Kenneth Kirby, PT, DPT William Beaumont Army Medical Center