

Medial Patellofemoral Ligament Repair/Reconstruction Post-surgical Rehabilitation Protocol

The following is a protocol for post-operative patients following medial patellofemoral ligament repair or reconstruction. The primary goal of this protocol is to protect the repair/reconstruction while steadily progressing towards and ultimately achieving pre-injury level of activity. Please note this protocol is a guideline. Patients with additional surgery (i.e. collateral ligament repair, meniscal repair) will progress at different rates. Achieving the criteria of each phase should be emphasized more than the approximate duration. If a patient should develop an increase in pain or swelling or decrease in motion at any time, activity should be decreased until problems are resolved.

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
 - Days 1-7: Locked in extension
 - Weeks 1-2: Locked at 0-20 degrees
- Crutches – Weight bearing as tolerated (WBAT) (D/C when gait is normal)
- AAROM, AROM 0-20 degrees
- Patella mobilization (teach patient)
- 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 4 on mat in brace – (parallel bars if poor quad control)
- Double leg heel raises
- Gentle hamstring stretching
- Ice pack with knee in full extension after exercise

Goals

- Pain / effusion control
- No extensor lag

Weeks 2 - 4

- Brace:
 - Weeks 2-3: 0-45 degrees
 - Weeks 3-4: 0-60 degrees
- Continue appropriate previous exercises
- Scar massage when incision healed
- AAROM, AROM 0-60 degrees

- SLR x4 on mat, without brace – no resistance
- Single leg heel raises
- Stretches – Hamstring, hip flexors, ITB

Goals

- Normal gait
- AROM 0-60 degrees

Weeks 4 - 6

- Brace:
 - Weeks 4-5: 0-75 degrees
 - Weeks 5-6: 0-90 degrees
- Continue appropriate previous exercises
- AAROM, AROM 0-90 degrees
- Standing SLR x4 with light weight at ankle
- Weight shifts, Mini squats
- Short arc quads with light weight as tolerated
- Total Gym – Mini Squats (level 3-5) – No flexion >45 degrees
 - Passive flexion to 90 degrees (push up with opposite leg)
- Leg press 0-45 degrees with light resistance
- Hamstring curls 0-45 degrees – Carpet drags or rolling stool (closed chain)
- Proprioception ex – Double leg BAPS
- Stationary bike for ROM
- Pool therapy

Goals

- ROM 0-90 degrees
- No effusion

Weeks 6-9

- Brace:
 - Weeks 7-7: 0-105 degrees
 - Weeks 7-9: 0-120 degrees
- Continue appropriate previous exercises
- PROM, AAROM, AROM through full range
- Wall squats – No knee flexion past 45 degrees
- Standing SLR x4 with Theraband bilaterally
- Forward, lateral and retro step downs in parallel bars
 - No knee flexion past 45 degrees (small step)
 - Proprioceptive ex – Single leg BAPS, ball toss, and body blade
- Hamstring curls through full range – Carpet drag or rolling stool (closed chain)
- Stationary bike – Progressive resistance and time
- Elliptical trainer
- Treadmill – Forwards and backwards walking

Goal

- Full ROM

Weeks 9 - 12

- D/C brace
- Continue appropriate previous exercises with progressive resistance
- PROM, AAROM, AROM to regain full motion
- Hamstring curls on weight machine
- Knee extension weight machine
- Hip weight machine x4 bilaterally
- Forward, lateral, and retro step downs (medium to large step)
- Proprioceptive training – Single leg BAPS, ball toss and body blade, Grid exercises
- Treadmill – Walking progression program

Goal

- Walk 2 miles at 15 min/mile pace

Months 3 - 4

- Continue appropriate previous exercises
- Fitter
- Slide board
- Agility drills – figure 8's, gentle loops, large zigzags
- Swimming
- Stairmaster – Small steps
- Treadmill – Running progression program
- Quad stretches

Goal

- Run 2 miles at normal 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

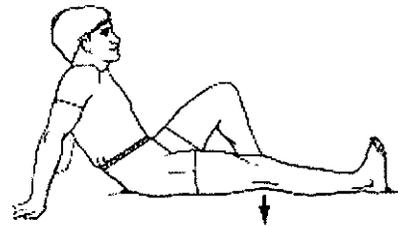
****NO CONTACT SPORTS UNTIL 6 MONTHS POST-OP****



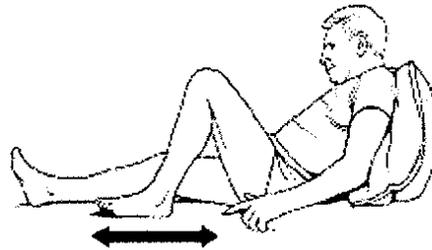
KNEE POST-OP PHASE I

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

