



PHYSICAL THERAPY SECTION

Quadriceps/PATELLAR TENDON REPAIR

Revised November 2016

Adapted from William Beaumont Army Medical Center

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 x 8 weeks – Locked in extension for ambulation
Crutches – Partial weight bearing (PWB)
Patellar mobilization (teach patient)
Calf pumping
AAROM 0-45 degrees (passive extension, active flexion, heel slides)
Passive extension with heel on bolster or prone hangs
Electrical stimulation – sub-maximal quad sets for muscle re-education
Quad sets, Co-contractions quads / Hamstrings
Standing Straight leg raise (SLR) x 4 (in brace)
Gentle Hamstring stretch
Ice Pack with knee in full extension after exercise
Goals
Full passive extension
Good quad control
Pain/effusion controlled

Weeks 2 – 4

Brace x 8 weeks – Locked in extension for ambulation
Crutches – Weight bearing as tolerated (WBAT), D/C when gait is normal
Continue appropriate previous exercises
AAROM 0-70 degrees (passive extension, active flexion)
SLR x 4 on mat (in brace)
Hamstring curls 0-45 degrees on weight machine with light resistance
Double leg heel raises
Proprioceptive training (in brace) – Single leg standing in parallel bars
– Double leg BAPS for weight shift
Stretches – Hamstring, ITB
Goals
ROM 0-70 degrees
No extensor lag

Weeks 4 – 6

Brace x 8 weeks – Locked at 0-30 degrees for ambulation
Continue appropriate previous exercises
AAROM 0-90 degrees (passive extension, active flexion)
Standing SLR x 4 (in brace) with Theraband bilaterally
Hamstring curls 0-90 degrees on weight machine with light resistance
Forward, lateral and retro step downs in parallel bars (in brace 0-45 degrees)
– No knee flexion past 45 degrees (small step)
Single leg heel raises (in or out of brace)
Elliptical trainer (in brace)
Goals
Normal gait
ROM 0-90 degrees

Weeks 6 – 8

Brace x 8 weeks – Gradually open to available range
Continue appropriate previous exercises
AAROM, AROM through full range
Active knee extension without weight (no brace)
SLR x 4 on mat with light weight below the knee (no brace)
Leg press 0-60 degrees – Light resistance (no brace)
Mini squats, Wall squats 0-60 degrees (no brace)
Proprioceptive training (in brace) – Single leg BAPS, ball toss and body blade
Stationary bike (no brace) – Progressive resistance and time
Treadmill – Forwards and backwards walking (in brace)
Pool therapy (flutter kicks from hip with knee in extension)
Goal – ROM 0-110 degrees

Weeks 8 – 12

D/C Brace
Continue appropriate previous exercises and following ex without brace
PROM, AAROM, AROM to regain full motion
Short Arc Quads
Hamstring curls on machine through full range – Light to moderate resistance
Leg Press 0-90 degrees – Light to moderate resistance
Hip weight machine x 4 bilaterally
Fitter
Slide board
Treadmill – Walking progression program
Goals
Full ROM
Walk 2 miles at 15 min/mile pace

Months 3 – 4

Continue appropriate previous exercises
Knee extension weight machine with light to moderate resistance
Functional activities – Figure 8s, gentle loops, large zigzags
Treadmill – Running progression program
Pool therapy – Swimming laps
Quad and Hip Flexor stretches
Goals
Equal thigh girth
Equal quad flexibility in prone (heels to buttocks)
Run 2 miles at easy pace

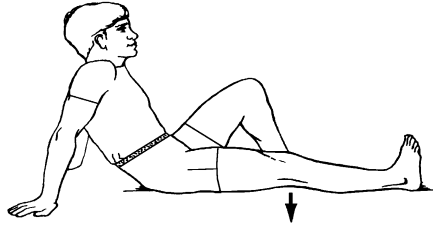
Months 4 – 6

Continue appropriate previous exercises
Agility drills / Plyometrics
Sit-up progression
Stairmaster
Running progression to track
Transition to home / gym program
Goals
Return to all activities
Pass APFT at 6 months post-op
No contact sports until 6 months post-op

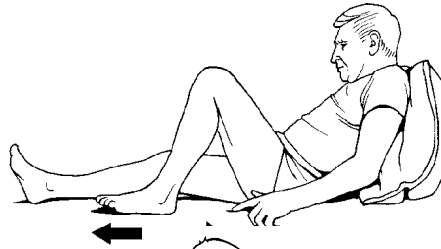
Knee Post Op Phase 1

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

