

Orthopaedic Surgery Sports Medicine Physical Medicine & Rehabilitation Spine Care Joint Replacement

GALLAND/KIRBY PATELLAR TENDON REPAIR POST-SURGICAL REHABILITATION PROTOCOL

<u> POST-OP DAYS 1 – 14</u>

- 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

<u>GOALS</u>

- Full passive extension
- Good quad control
- Pain/effusion controlled

<u>Weeks 2 - 4</u>

- 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

<u>GOALS</u>

- 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)

<u>GOALS</u>

- Normal gait
- ROM 0-90 degrees

<u>WEEKS 6 - 8</u>

- 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)

<u>GOAL</u>

• 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

<u>GOALS</u>

- Full ROM
- Walk 2 miles at 15 min/mile pace

<u>MONTHS 3 - 4</u>

- 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

<u>GOALS</u>

- Equal thigh girth
- Equal quad flexibility in prone (heels to buttocks)
- Run 2 miles at easy pace

<u>MONTHS 4 - 6</u>

- Continue appropriate previous exercises
- Agility drills / Plyometrics
- Sit-up progression
- Stairmaster

- Running progression to track
- Transition to home / gym program

<u>GOAL</u>

• 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

Active Assisted Motion

Ice Position 15 minutes 2-3 x per day

