

# **Unilateral Patellar Tendon/ Quad Tendon Repair**

## Phase I (1 - 7 days post op)

- Wound care: Monitor site for signs of infection
- Modalities: As needed for pain and inflammation (ice, IFC)
- Weight bearing: Touch down weight bearing with crutches hinged brace locked in full extension.
- Brace: Hinged brace on for all activities including sleeping through postoperative week 6. The brace may be removed for showering or bathing once the surgical incision is healed.
- PROM: 0 30 degrees of knee flexion for postoperative days 1 4 with progression to 0 45 degrees postoperative days 4 7 (nonweight bearing)
- Therapeutic Exercises: Quad sets, ankle pumps, gluteal isometrics, and hamstring isometrics.
- Joint mobilizations: Begin gentle patellar inferiorsuperior and mediallateral glides.

## Phase II (2 - 6 weeks post op)

- Wound care: Monitor site for signs of infection and begin scar management techniques when incision is closed.
- Modalities: As needed for pain and inflammation
- Brace: As above until 4 6 weeks post operatively
- Gait: Begin weight bearing as tolerated with crutches and hinged brace locked in full extension at 2 weeks post operatively. Progress to full weight bearing by week 6.

#### Week 2

- \* ROM: PROM 0 60 degrees
- \* Exercises with brace on: Hip abduction, hip adduction, ankle pumps, and SLR gravity eliminated
- \* Continue ice, elevation, and compression
- \* Strengthening: Quad sets and hamstring sets

## Week 3

- \* ROM: PROM 0 75 degrees
- Exercises with brace on: Hip abduction, quadriceps isometrics, hamstring isometrics, hip adduction, ankle pumps, and SLR gravity eliminated
- \* Continue ice, elevation, and compression

### Week 4

- \* ROM: PROM 0 75 degrees
- \* Exercises: Continue previous exercises
- \* Begin partial squat (0 45 degrees). Okay to unlock brace for mini squats only
- I\* Initiate proprioception drills

#### Weeks 5 - 6:

- \* Weight Bearing: Discontinue use of crutch at 5 weeks postoperatively
- \* Brace: Unlock brace for ambulation at 6 weeks
- \* ROM: PROM at week 5: 0 75 degrees and week 6: 0 90 degrees
- \* Exercises: Continue previous exercises
- \* Initiate open chain knee extension AROM 90 30 degrees
- \* Initiate antigravity SLR flexion at 5 weeks
- \* Continue ice, elevation, and compression

## Phase III (7 - 16 weeks post op)

### Weeks 7-11:

- \* Brace: Progress to full weight bearing with brace set at full range of motion. Discontinue sleeping in brace
- \* ROM:
  - Week 7: 0 100 degrees
  - Week 8: 0 105 degrees
  - Week 10: 0 115 degrees
- \* Exercises:
  - Heel raises
  - Forward step ups
  - Partial squats (0 60 degrees)
  - Forward and lateral lunges
  - Hamstring curls within ROM restriction
  - Leg Press
  - Balance and proprioception activities
  - Wall slides
  - Stationary bike
  - Lower extremity stretches for quadriceps, hamstrings, calf, and IT Band

#### Weeks 12-16:

- \* ROM: Week 12: 0-125 degrees
- \* Exercises: Continue previous exercises
- \* Initiate lateral step ups
- \* Initiate forward step downs
- \* Initiate posterior lunges

## Phase IV (16-24 weeks post op)

- Exercises: Progress strengthening exercises as tolerated. Initiate plyometrics and light running program at 16 weeks postoperatively.
- Testing: Final functional tests <25% deficit for non-athletes, <20% deficit for athletes

#### Adated from:

Brotzman SB, Wilk KE. Clinical Orthopedic Rehabilitation Second Edition. Philidelphia: Mosby; 2003 Wilk KE, Reinhold MM, Andrews JR. Rehabilitation Following Unilateral Patellar Tendon Repair. Winchester MA: Advanced Continuing Education Institute, 2004.