

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 mediallylateral 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
- Initiate proprioception drills

Continued

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 antigavity 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

Adapted from:

Brotzman SB, Wilk KE. Clinical Orthopedic Rehabilitation Second Edition. Philadelphia: Mosby; 2003

Wilk KE, Reinhold MM, Andrews JR. Rehabilitation Following Unilateral Patellar Tendon Repair. Winchester MA: Advanced Continuing Education Institute, 2004.