

Quad Tendon Repair/Unilateral Patellar Tendon Repair

*If surgery was performed by Dr. VanThiel, please see vanthielmd.com for therapy protocol.

Phase I (1 – 7 days post-op)

- Wound care: Monitor site for signs of infection
- Modalities: prn for pain and inflammation (ice, IFC)
- Brace: Hinged brace on and locked for all activities including sleeping for 6 weeks. Brace may be removed for bathing once surgical incision is healed
- Gait: TTWB with crutches and brace locked in full extension
- ROM:
 - Days 1 – 4 post-op: PROM 0-30 degrees
 - Days 4 – 7 post-op: 0-45 degrees NWB
- Exercises:
 - Quad/glut/hamstring sets and ankle pumps
 - Begin gentle patellar inferior/superior and medial/lateral glides

Phase II (2 weeks – 6 weeks post-op)

- Wound care: Monitor site for signs of infection and begin scar management techniques when incision is closed
- Modalities: prn for pain and inflammation (ice, IFC, elevation)
- Brace: Hinged brace on and locked for all activities including sleeping for 6 weeks. Brace may be removed for bathing once surgical incision is healed
- Gait:
 - At 2 weeks post-op, begin WBAT with crutches and hinged brace locked in extension
 - At 5 weeks post-op, D/C crutches
 - By 6 weeks post-op, progress to FWB, and unlock brace for ambulation
- ROM:
 - Week 2: PROM 0-60 degrees
 - Weeks 3-5: PROM 0-75 degrees
 - Week 6: 0-90 degrees
- Strengthening:
 - Week 2: Hip abd/add, ankle pumps, 4way SLR with brace locked in ext, quad/ham sets
 - Week 3: Hip abd/add, ankle pumps, 4way SLR with brace locked in ext, quad/ham sets
 - Week 4:
 - Begin partial squat 0-45 degrees. OK to unlock brace for mini squats only
 - Initiate proprioception drills

- Weeks 5-6:
 - Initiate open chain knee extension AROM 90-30 degrees
 - Initiate gravity resisted supine SLR flexion at 5 weeks

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

- Weeks 7 - 11
 - Gait: Progress to FWB with brace open to full ROM. D/C brace when sleeping
 - ROM:
 - Week 7: 0-100 degrees
 - Week 8: 0-105 degrees
 - Week 9: 0-110 degrees
 - Week 10: 0-115 degrees
 - Strengthening:
 - Heel raises, Fwd step-ups, Partial squats/leg press/wall slides (0-60 degrees), Fwd and lat lunges, Ham curls within ROM restriction, Balance and proprioception activities, Stationary bike, LE stretches for quads, hams, calf, and ITBand
- Weeks 12 – 16
 - ROM: 0-125 degrees
 - Strengthening: Initiate fwd step downs and posterior lunges

Phase IV (16 - 24 weeks post-op)

- Strengthening: Progress as tolerated
 - At 16 weeks post-op, initiate plyometrics and light running program
- Testing:
 - Final functional tests <25% deficit for non-athletes and <20% deficit for athletes

Adapted From:

- 1) Brotzman SB, Wilk KE. Clinical Orthopedic Rehabilitation Second Edition. Philadelphia: Mosby; 2003
- 2) Wilk KE, Reinhold MM, Andrews JR. Rehabilitation Following Unilateral Patellar Tendon Repair. Winchester MA: Advanced Continuing Education Institute, 2004.
- 3) UW Health, University of Wisconsin. Sports Medicine rehab protocol.