



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

### **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
  - 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, standing 4way SLR (gravity eliminated), quad/ham sets
  - Week 3: Hip abd/add, ankle pumps, standing 4way SLR (gravity eliminated), 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.