Spectrum Orthopaedics
Spectrum Healthcare Partners
PHYSICAL & OCCUPATIONAL THERAPY

BRUNSWICK
207.721.8411
PORTLAND
207.828.2121
SACO
207.710.5504
WINDHAM
207.553.7246

QUADRICEPS/PATELLAR TENDON REPAIR
With Repair of the Medial and Lateral Retinaculum

General considerations:

- Patients are touch-down weight-bearing for 2 weeks, and then weight-bearing as tolerated
- Patients will be in an immobilizer in full extension for 6-8 weeks, or per MD instruction
- PROM begins at 2 weeks, then AROM at 6 weeks
- Regular manual and self-mobilization of the patella, patellar and quadriceps tendon, and portals should be performed to prevent fibrosis, improve range of motion, and functional mobility
- Regular attention to proper VMO recruitment and patellofemoral mechanics will optimize outcome
    - o Return to sports and activities are dependent on passing a functional sports test; usually full return to activity by 8-9 months

Phase I (Week 1)

- Goals are to protect the repair, control pain/edema, instruct on safe gait training
- MD office visit for dressing change, review of medications, and instructions on a home program
- No ROM at this time to protect the repair
- TDWB gait training, pain and edema control
- Ankle pumps, isometrics, quad sets including NMES
- Light, pain-free stretching to hamstrings, calves, and lateral musculature to maintain extension range of motion
- Well-leg stationary cycling and UBE. Upper body weight machines and trunk exercises

Phase II (Weeks 2-6)

- Goals are to protect the repair, control pain/edema, progress gait training, initiate pain-free ROM
    - o ROM restricted to 90 degrees of flexion
    - o NO ACTIVE KNEE EXTENSION, active flexion is ok within ROM limits
- Progress WBAT with immobilizer, unless otherwise stated by MD
- Initiate PROM within ROM restrictions
- Submaximal quad, glute, and abduction/adduction isometrics within the range restrictions
- SLR only in gravity-eliminated planes
- Initiate CKC exercises, except no squatting or step-ups at this time
- Patella, suprapatellar pouch, and scar mobilization regularly

Phase III (Weeks 7-12)

- Goals are to protect the repair, progress to FWB, continue ROM and strength progressions
    - o No ROM restrictions but progress slowly
- Wean from immobilizer to FWB. Some patients may transition to hinged knee brace per MD
- Initiate knee extension AROM within pain tolerance
- Initiate SLR against gravity and short-arc quads
- Progress CKC to include mini-squats and step-ups. Squats not to exceed 70 degrees knee flexion
- Begin two-leg stationary cycling
- Progress balance/proprioception interventions as tolerated
    - o Single-leg balance withheld until week 10
- Patients should achieve full ROM by the end of this phase

BRUNSWICK
207.721.8411
PORTLAND
207.828.2121
SACO
207.710.5504
WINDHAM
207.553.7246

Phase IV (Weeks 13-16)

- Goals are to increase strength, power, and cardiovascular conditioning
    - Full ROM needed to transition into this phase
- Maximum eccentric-focused strengthening program
- Continue progression of more dynamic strength, balance/proprioception training
- Initiate light plyometric training (double-leg before single-leg)
- Functional assessment at 14 weeks per MD

Phase V (Week 17+)

- Goals are to develop maximum strength, power, and advance to sporting activities
- Advance more dynamic plyometric and agility training
- Advance sport training
- Return to running and jumping begins at 4 months, unless otherwise stated by MD