

Quadriceps Tendon Repair

Core Rehabilitation Guidelines

- Weight bearing as tolerated, crutches locked in extension in brace at all times for 4 weeks
 - Open up brace to 40° by 6 weeks, 90° by 8 weeks, and fully by 12 weeks
- Wean off crutches by 2 weeks
- Wean off brace by 12 weeks

Specific Timeline: Weeks 0-4

- Brace locked in extension at all times, WBAT with crutches, may wean after first post-operative visit
- Quad sets, straight leg raise with brace on, calf stretches
- Ice for swelling and pain
- Patellar mobilization (very important to about subsequent surgery and pain!)
- Start blood flow restriction immediately
- Wound care
- Assessment:
 - Precaution awareness, as listed above (brace at all times, even sleep!)
 - Gait pattern with assistive device (for first 2 weeks)
 - Brace maintenance

Specific Timeline: Weeks 4-6

- Goals: Minimize Swelling, full knee extension, PFJ mobility, quads 3/5
- Clinic Exercises:
- ROM Limitations: 0-40° only
- Continue brace locked in extension
- Quad Sets, SLR (all directions)
- Heel slides/wall slides to 40°
- Hamstring stretches
- Foot/ankle mobility
- Patella mobilization (all planes), use E-Stim as needed
- Ice/modalities PRN
- Home Exercises:
 - Quad Sets/SLR
 - Heel slides/wall slides to 40 deg
 - Hamstring Stretches
 - Foot/ankle mobility
 - Routine Ice
 - Hamstring Isometrics
 - Bilateral Calf Raises

Specific Timeline: Weeks 6-8

- Goals: Eliminate swelling, maintain knee extension, knee flexion to 90 degrees, quad strength 3+/5, equal hamstring length, maintain PFJ mobility
- Clinic Exercises:
 - ROM Limitations: 0-90°
- Continue brace locked in extension
- Quad sets +/- biofeedback
- Multi-hip
- Elliptical
- Single leg stance exercises
- Leg curls
- Step-ups & downs
- Quad Sets/SLR
- Bilateral semi-squats
- Step-up/step-downs
- Heel slides
- Bridges
- Hamstring tubing curls
- Hip extensions with tubing
- Single-leg calf raise
- Routing post-ex ice
- Advance ROM per PT

Specific Timeline: Weeks 8-16

- Goals
- Progress to full ROM
- May open brace to tolerance, and wean after 12 weeks
- Normalize Gait Pattern
- Quad 4/5
- Clinic Exercises
- ROM: Increase to FROM
- Same as weeks 4-6
- Stationary Bike - Full Rotation
- Elliptical
- Resistive equipment
- Proprioception: dynamic balance
- Scar massage
- Gait training

Specific Timeline: Weeks 16-20

- Goals
- Full strength, ROM and endurance of affected limb
- Return to sport-specific drills and restricted training

- Return to jogging/running
- Return to sport when operated leg = 85% of non-operated leg on functional testing
- Clinic Exercises
- Functional training
- Bike /Stepper / Treadmill
- Plyometrics
- Proprioceptions
- Pool running program advancing to land as tolerated

Specific Timeline: Weeks 20 and Beyond

- Advance gym strengthening
- Progress running/sprinting program
- Begin multi-directional field/court drills
- Begin bilateral progressing to unilateral plyometric drills
- Follow-up appointment with physician
- Sports test for return to competition