

Quadriceps Tendon Repair Rehabilitation Protocol

The intent of this protocol is to provide the clinician with a guideline of the postoperative rehabilitation course of a patient that has undergone an arthroscopic Quadriceps Tendon Repair procedure. It is not intended to be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam/findings, individual progress, and/or the presence of post-operative complications. If a clinician requires assistance in the progression of a post-operative patient they should consult with Dr. Fullick.

Phase One- Maximum Protection (Weeks 0-6)

Weeks 0 to 2

- Brace locked in full extension for 6 weeks
- Partial weight bearing for 2 weeks
- Ice regularly to reduce pain and inflammation
- Aggressive patella mobility
- Range of motion- 0° to 45° knee flexion (or as dictated by physician)
- Begin submaximal quadriceps setting

Weeks 2 to 4

- Weight bearing as tolerated; progressing off of crutches
- Continue with inflammation control
- Continue with aggressive patella mobility
- Range of motion- 0° to 60° (or as dictated by physician)
- Continue with submaximal quadriceps setting

Weeks 4 to 6

Full weight bearing

Continue with ice and aggressive patella mobility

Range of motion- 0° to 90° by week 6 (or as dictated by physician)

Increase intensity with quadriceps setting

Phase Two- Progressive Range of Motion and Early Strengthening (Weeks 6-12)

Weeks 6 to 8

- Full weight bearing
- Open brace to 45°-60° of flexion week 6, 90° at week 7
- Continue with swelling control and patella mobility
- Gradually progress to full range of motion

- Begin multi-plane straight leg raising and closed kinetic chain strengthening program focusing on quality VMO function
- Initiate open kinetic chain progressing to closed kinetic chain multi-plane hip strengthening
- Normalize gait pattern, Begin stationary bike

Weeks 8 to 10

- Wean out of brace
- Continue with patella mobility
- Normalize gait pattern
- Restore full ROM
- Progress open and closed kinetic chain program from bilateral to unilateral
- Increase intensity on stationary bike
- Begin treadmill walking program forward and backward
- Begin elliptical trainer

Weeks 10 to 12

- Full ROM
- Terminal quadriceps stretching
- Advance unilateral open and closed kinetic chain strengthening

Phase Three- Progressive Strengthening (Weeks 12 to 16)

Weeks 12 to 16

- Advance open and closed kinetic chain strengthening
- Increase intensity on bike, treadmill, and elliptical trainer
- Increase difficulty and intensity on proprioception drills
- Begin gym strengthening: leg press, hamstring curls, ab/adduction; avoid lunges and knee extensions
- Begin multi-directional functional core program

Phase Four- Advanced Strengthening and Functional Drills (Weeks 16 to 20)

Weeks 16 to 20

- Begin pool running program advancing to land as tolerated
- Progressive strengthening, avoid overloading; Walk to job progressions
- Step down stairs gradually

Phase Five- Plyometric Drills and Return to Sport Phase (Weeks 20 to 24)

Weeks 20 to 24

- 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
- Jump training after 24 weeks postop