

Quadriceps Tendon Repair

Name: _____ Date: ____/____/____

Phase I: Maximum Protection (Weeks 0 to 6)

Weeks 0 to 2

- Brace locked in full extension for six weeks
- Partial weight bearing for two weeks
- Ice and modalities to reduce pain and inflammation
- Aggressive patella mobility drills
- Range of motion: 0 to 30 degrees knee flexion
- 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 degrees
- 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 degrees (by week six)
- Increase intensity with quadriceps setting

Phase II: Progressive Range of Motion and Early Strengthening (Weeks 6 to 12)

Weeks 6 to 8

- Full weight bearing
- Open brace to 45 to 60 degrees of flexion week six, 90 degrees at week seven
- Continue with swelling control and patellar 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
- Initiate pool program

Weeks 8 to 10

- Wean out of brace
- Continue with patella mobility drills
- 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 III: 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 cord program

Phase IV: Advanced Strengthening and Functional Drills (Weeks 16 to 20)

Weeks 16 to 20

- May begin leg extensions; 30 to 0 degrees progressing to full ROM as patellofemoral arthrokinematics normalize
- Begin pool running program advancing to land as tolerated

Phase V: 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 Dr. Roberson
- Sports test for return to competition