



ARLINGTON
ORTHOPEDICS

After Quadriceps Tendon Repair Rehabilitation Protocol

Phase One- Maximum Protection (Weeks 0-6)

- ❖ 0 to 2 weeks
 - ✓ Brace locked in full extension for 6 weeks
 - ✓ Partial weight bearing for 2 weeks
 - ✓ Ice and modalities to reduce pain and inflammation
 - ✓ Aggressive patella mobility
 - ✓ Range of motion 0 degrees to 30 degrees 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 degrees to 60 degrees
 - ✓ Heel slides and total knee extension with ankle on towel
 - ✓ 4 way leg lifts with brace locked
 - ✓ Weight shifting with brace on
- ❖ Weeks 4 to 6
 - ✓ Full weight bearing
 - ✓ Continue with ice and aggressive patella mobility
 - ✓ Range of motion 0 degrees to 90 degrees (by week 6)
 - ✓ 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 degrees-60 degrees of flexion week 6, 90 degrees at week 7
 - ✓ Continue with swelling control and patella mobility
 - ✓ Gradually progress to full range of motion
 - ✓ Begin mutli-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
 - ✓ 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
 - ✓ Initiate core strengthening program

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

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
 - ✓ Sports test for return to competition