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PHYSICAL THERAPY PROTOCOL

# Quadriceps Tendon Repair

Repair of the quadriceps tendon at the superior pole of the patella

The quadriceps tendon has been repaired to restore the extensor mechanism. Early care protects the repair with a brace locked in extension for weight bearing, limits knee flexion, and avoids active or resisted knee extension until the repair heals. Full passive extension is maintained throughout.

## General Precautions

- Brace locked in full extension for walking and sleeping for ~6 weeks; weight bearing as tolerated in the locked brace.
- Knee flexion limited and advanced gradually (commonly to ~90° by 6 weeks) per surgeon.
- No active or resisted knee extension until cleared (~6 weeks).
- No deep squatting; maintain full passive extension.

## Phase I — Protection Weeks 0-6

### Goals

- Protect the repair
- Full passive extension
- Restore quad activation
- Controlled flexion to ~90°

### Precautions / Restrictions

- Brace locked in extension for WB/sleep
- Flexion limited per surgeon
- No active/resisted knee extension

### Exercises & Interventions

- Quad sets and straight-leg raises (in brace until quad control)
- Patellar mobilizations
- Passive/assisted flexion within limits
- Ankle pumps
- Full passive extension (heel props)

### Criteria to Advance

- Full passive extension
- Good quad set with SLR (no lag)
- Swelling controlled

## Phase II — Motion & Early Strength Weeks 6-12

### Goals

- Progress flexion to full
- Unlock/wean brace
- Begin active extension

### Precautions / Restrictions

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- Advance flexion and active extension gradually per surgeon
- No deep loaded flexion

### Exercises & Interventions

- Progress knee flexion to full
- Unlock brace for ambulation per surgeon; wean crutches
- Begin active knee extension and closed-chain strengthening in limited range
- Stationary bike
- Balance/proprioception

### Criteria to Advance

- Flexion approaching full
- Good active quad control
- Normalizing gait

## Phase III — Strengthening Weeks 12–16

### Goals

- Restore strength and neuromuscular control

### Exercises & Interventions

- Progressive closed-chain strengthening
- Progress open-chain extension as cleared
- Low-impact conditioning
- Hip and core strengthening

### Criteria to Advance

- Full ROM
- Strength ≥70% opposite side
- No extensor lag

## Phase IV — Return to Activity Months 4–6

### Goals

- Return to full activity and sport

### Exercises & Interventions

- Progressive strengthening and neuromuscular training
- Running and agility progression as cleared
- Sport-specific drills

### Criteria to Advance

- Symmetric strength and functional testing
- Return to sport typically ~5–6 months, surgeon-cleared

*This protocol is a general guideline. Progression is criteria-based and may be advanced or slowed by Dr. O'Donnell based on intraoperative findings, tissue quality, fixation, and individual healing. Time frames are approximate. Direct questions to the office at (305) 393-8810.*