



Brian Bjerke, MD

# Distal Quadriceps Tendon Repair

## Post-Operative Protocol

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### Phase I – Maximum Protection (Weeks 0 to 6):

#### **Weeks 0-2:**

- **Brace** (immobilizer from surgery) worn at all times for first 2 weeks
- Weight bearing as tolerated when wearing knee immobilizer
  - Okay to remove brace for showering, however **MUST** keep leg straight
  - **NO** knee ROM
- Ice and modalities to reduce pain and inflammation
- Patellofemoral mobilizations
- **NO** knee ROM
- Begin submaximal quadriceps setting
- Straight leg raise series, heel slides

#### **Weeks 2-4:**

- Will be fitted for a **TROM** (hinged knee brace at 2 week post-op appointment)
- Weight bearing as tolerated with hinged knee brace locked in extension
- Continue with inflammation control
- Continue with aggressive patella mobility
- Range of motion – 0° to 30°

#### **Weeks 4-6:**

- Weight bearing as tolerated with hinged knee brace locked in extension
- Open and closed multiplane hip strengthening
- Range of motion – 0° to 90°

#### **Weeks 6+:**

- Gradually open hinged knee brace while walking based on progress and quadriceps muscle control

### Phase II – Progressive Stretching and Early Strengthening (Weeks 6-12):

#### **Weeks 6-8:**

- Full weight bearing

- Open brace to 45°- 60° of flexion week 6, 90° at week 8
- Continue with swelling control and patellar mobility
- Range of Motion - 0° to 90°
- Normalize gait pattern
- Bilateral squat progression and gym strengthening program (leg press and hamstring curls)
- Step-up progression
- Begin stationary bike, begin pool program if available

**Weeks 8-10:**

- Wean out of brace
- Normalize gait pattern
- Restore full ROM
- Progress closed chain program
- Increase intensity on stationary bike add elliptical and swimming

**Weeks 10-12:**

- Full ROM with terminal quadriceps stretching
- Advance closed chain and gym strengthening program

**Phase III – Advanced Strengthening (Weeks 12-16):**

**Weeks 12-16:**

- Advance open and closed kinetic chain strengthening
- Increase intensity on bike, treadmill, and elliptical trainer

**Phase IV – Advance Strengthening and Functional Drills (Weeks 16 to 20):**

**Weeks 16-20:**

- Begin pool running program advancing to land as tolerated
- Bilateral progressing to unilateral plyometric progression

**Phase V – Plyometric Drills and Return to Sport Phase (Weeks 20 to 24):**

**Weeks 20-24:**

- 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

**Return to full sports participation without restrictions is anticipated at approximately 5-6 months depending on sport.**

\*Please feel free to contact Dr. Brian Bjerke's office with any questions or concerns. Dr. Bjerke's care coordinator Andria Larson is available by phone at 952-456-7095.