



Kansas City Orthopedic Alliance

H. Scott Ellsworth, MD

Rehabilitation Protocol: Distal Biceps Tendon Repair

Phase 1: (0-1 weeks)

- Precautions:
 - Non-weight bearing on repaired upper extremity
 - AVOID active elbow flexion and forearm supination until week 4
 - NO lifting with repaired upper extremity until week 8
 - Hinge elbow brace should be locked from 90 degrees of flexion to full flexion, initiate elbow range of motion around days 5-7
- Activity:
 - Grip strengthening with forearm/wrist in neutral position

Phase 2 (Weeks 2-6):

- Precautions:
 - Non- weight bearing on repaired upper extremity
 - No lifting with repaired upper extremity
- Activity:
 - Week 2: set hinge elbow brace to 90 degrees to full flexion.
 - Elbow flexion/extension PROM within the hinge brace
 - Forearm pronation/supination PROM with elbow at 90 degrees in brace
 - Wrist and hand AROM
 - Shoulder AROM as needed
 - Week 3: set hinge elbow brace to 45 degrees to full flexion
 - Same elbow and forearm PROM as above
 - Week 4: set hinge elbow brace to 30 degrees to full flexion
 - Elbow flexion/extension AROM in gravity-eliminated plane in brace
 - Forearm pronation/supination AROM with elbow at 90 degrees flexion with forearm supported
 - Week 5: set elbow hinge brace to 20 degrees to full extension
 - Elbow flexion AROM in gravity eliminated plane in brace, progressing to against gravity in brace, and then removal of brace for AROM if motion is full and painless against gravity

- Forearm pronation/supination AROM with elbow at 90 degrees flexion without support

Phase 3: (7-10 weeks)

- Precautions:
 - Can begin gradual weight bearing with elbow flexed at week 8, progress to extended elbow by week 10
- Activity:
 - Begin combined motions (i.e. extension with pronation). If significant ROM deficits present at week 8, discuss progression to more aggressive PROM
 - Weight bearing exercises:
 - Wall push ups
 - Push ups on elevated table
 - Modified forearm plank with elbows bent
 - Quadruped progression with elbows extended
 - Scapulothoracic strengthening:
 - Prone scapular slides with shoulder extension to neutral
 - Serratus wall slides
 - Seated scapular retraction
 - Wall scapular protraction/retraction with elbows extended at week 10
 - At week 10, initiate submaximal isometrics of elbow flexors, extensors, supinators, and pronators

Phase 4 (weeks 11-15):

- Activity:
 - Continue with combined range of motion, focusing on proper mechanics
 - Over weeks 10-12, progress from submaximal isometrics to submaximal isotonic:
 - Resisted biceps curl (pronated, neutral, supine grip)
 - Resisted pronation and supination
 - Resisted triceps extension
 - Progress shoulder strengthening program with light upper extremity weight training:
 - Standing resisted shoulder elevation
 - Standing shoulder PNF diagonals
 - Resisted prone I, Y, T's
 - Rows
 - Resisted shoulder ER and IR
 - Supine shoulder protraction
 - Wall push ups
 - Quadruped stability progression

Phase 5 (4-6 months):

- Activity:
 - Continue phase 4 exercises

- Rhythmic stabilizations
- High plank stability progression
- Bilateral upper extremity plyometrics after week 16
- Single arm plyometrics after week 20-22
- After 6+ months, focus on progression of sport specific movements for full return to sport