

The intent of this protocol is to provide the therapist with a guideline for the postoperative rehabilitation course for a distal biceps repair patient. It is not intended to be a substitute for appropriate clinical decision making. The actual postsurgical physical therapy management must be based on the surgical approach, physical exam and/or findings, individual progress, and/or the presence of postoperative complications. If the therapist requires assistance with the progression of a postoperative patient, please consult with Dr. Kandil or his team.

## Phase 1: Post-operative 0-2 weeks

### Goals

- Reduction of inflammation and pain
- Protect repair

### Weight bearing status and sling use

- Non-weight bearing in splint and sling; may use sling for comfort and may remove sling as comfortable
- Immobilized in 90 degrees of flexion, neutral rotation

### Therapeutic exercises

- HEP
  - Edema control with elevation and compression as needed
  - Tendon gliding exercises for hand and digits, thumb AROM
  - Wrist AROM, keeping forearm in neutral rotation
  - Shoulder pendulums and AROM of the shoulder in the elbow splint
- PROM → AAROM → AROM of elbow (flexion, extension, pronation, supination) without resistance
- Maintain shoulder ROM by progressing from PROM → AROM without restriction
- No resisted motions until 4 weeks post-op
- Grip strengthening

## Phase 2: Week 2-6

### Goals

- Reduction of inflammation and pain
- Protect repair
- Gradual increase in elbow ROM

### Weight bearing status, and brace use

- Splint removed at 10-14 days post-op
- Place into a hinged elbow brace, to be worn at all times including sleep, except for hygiene purposes (may wear sling only to shower)
- Non-weight bearing in hinged elbow brace

### Therapeutic exercises

- Progression for hinged elbow brace:
  - Gradual increase in active elbow extension per below:
    - Week 2-3 ROM: 60dg extension stop
    - Week 3-4 ROM: 30dg extension stop
    - Week 4-5 ROM: 15dg extension stop
    - Week 5-6 ROM: Extension as tolerated.
  - Regarding elbow flexion
    - At 2 weeks post-op, gradual increase in PASSIVE elbow flexion as tolerated
    - No active elbow flexion until 6 weeks post-op
  - Regarding elbow pronation and supination
    - AROM in pronation as tolerated
    - PROM in supination as tolerated
- Home exercise program includes ROM within above restrictions
- Typically patient is seen 1-3x per week for progression.

## Phase 3: Week 6-8

### Goals

- Protect repair
- Gradual restoration of full PROM/AROM elbow extension, flexion, pronation, supination

### Weight bearing status, and brace use

- Discontinue hinged elbow brace
- Non weight-bearing

### Therapeutic exercises

- Restore full passive and active extension as tolerated
- Gradual restoration of full passive and active elbow flexion
- Gradual restoration of full passive and active pronation/supination
- Add sub-maximal wrist flexion/extension isometrics with elbow in 90 degrees of flexion and forearm in neutral.
- Begin gentle grip and pinch strengthening with elbow in 90 degrees flexion.
- Typically patient is seen 1-3x per week for progression.

## Phase 4: Week 8-12

### Goals

- Protect repair
- Normalize elbow ROM
- Hand, wrist and shoulder strengthening

### Weight bearing status

- No weight bearing > 2lbs

### Therapeutic exercises

- Full passive and active elbow flexion/extension/pronation and supination
- Continue wrist isometrics, grip and pinch strengthening
- Begin sub-maximal shoulder isometric exercises in extension, external rotation, internal rotation, abduction and adduction
  - No active shoulder flexion until week 9 post-op.
- Typically patient is seen 1-3x per week for progression.

## Phase 5: 3-6 months

### Goals

- Normalize strength
- Return to activities as tolerated

### Weight bearing status

- Progressive weight bear as tolerated

### Therapeutic exercises

- Begin gradual isotonic strengthening of elbow and forearm.
- Gradually return to function, consider formal work conditioning program for high demand workers.
- Typically patient is seen 1-3x per week until full grip/UE strength required for ADL/Work is achieved