



INOVA[®]

Sports Medicine

Dr. Robin West
Dr. Robert Najarian
Dr. Brandon Bryant
Dr. Jeffrey Giuliani

8100 Innovation Park Drive Suite 110, Fairfax, Virginia 22031
1005 N Glebe Road, Suite 410, Arlington, Virginia 22201
22505 Landmark Court, Suite 235, Ashburn, Virginia 20148

Physical Therapy Protocol Following Distal Biceps Tendon Repair

Sling: x 2 Weeks (West)

Splint: For first 7-10 days at 90⁰ then hinged elbow brace until week 6 (Najarian/Giuliani)

ROM Brace: From Day 1 – Gradually progress (Bryant)

Post-Op Week 1-4:

Goals:

1. Protect repair
2. Minimal to no edema
3. Maintain active scapular stabilizers
4. Ball squeezes for edema control

Exercises:

1. PROM shoulder flexion, abduction, ER- AVOID EXTENSION
2. PROM of elbow as follows:
 - * Upon splint removal, ROM from 70⁰ to full flexion
 - * Can increase extension by 10⁰ every 4-5 days, until full extension is reached

Criteria before Phase 2: At least 75% elbow PROM, completion of Phase 1 without pain or difficulty

Post-Op Weeks 4-6:

Goals:

1. Tolerate increases in elbow extension
2. Achieve gradual restoration of AROM

Exercises:

1. Putty or finger web for grip strength
2. Initiate scar tissue mobilizations as needed
3. PROM elbow flexion, supination
4. PROM shoulder flexion
5. AAROM shoulder abduction, ER, IR, extension progressing to AROM as tolerated by week 6

Criteria before Phase 3: Full AAROM shoulder and elbow, no edema or exacerbation with bicep isometrics/ROM

Post-Op Weeks 6-8:

Goals:

1. Discontinue brace at week 6 (if applicable)
2. Continue with elbow full ROM

Exercises:

1. AAROM elbow flexion, supination, shoulder flexion
2. Initiate UBE forward direction, using vertical handholds
3. Prone scapular stabilizing exercises - AVOID LOADING THE BICEPS
4. Initiate submaximal elbow flexion and supination isometrics
5. Begin rhythmic stabilization- supine, multi-angle
6. Side lying or Thera band IR/ER strengthening
7. Triceps and posterior deltoid strengthening

Criteria before Phase 4: Tolerate forearm hanging dependently and extended out of sling

Post-Op Weeks 8-12:

Goals: 1. Maintain AROM of elbow and shoulder
2. Initiate progressive, resistance exercises (PRE's)

Exercises: 1. Shoulder and elbow PRE's (submaximally)
2. Progress scapular stability
3. UE weight shifts on table

Criteria before Phase 5: 5/5 shoulder flexion, abduction, IR/ER strength, full ROM in elbow supination and extension, no reactive effusion/exacerbation with bicep PRE's

Post-Op Weeks 12-20:

Goals: 1. Continue to strengthen biceps and surrounding musculature
2. Progress both WB and NWB strengthening activities

Exercises: 1. Integrate functional strengthening
2. Initiate light plyometrics- chest pass to rebounder, impulse

Criteria before Phase 6: 5/5 biceps strength testing, no reactive effusion with unrestricted ADLs

Post-Op Weeks 20-24:

Goals: 1. If ROM is full and pain free and patient tolerates PRE's, may begin free throwing and ballistic activities as well as unrestricted lifting
2. Criteria to begin throwing:
* Good functional ROM and strength
* 65% IR/ER isokinetic strength ratio
* No less than 15% difference in functional testing compared bilaterally

1. Single arm hop- patient in single arm push up position. Hops with that one UE to small step and then return to starting position. This is performed 5 times as quickly as possible.
2. Line test- Patient in push up position with each hand on piece of tape. Upon start of test, patient removes one hand from tape, touches the opposite line, then returns to the starting piece of tape. This is performed with alternating hand touches. One test is maximal touches in 15 seconds.

Criteria for release to sport(s):

1. Biodex/isokinetic testing for supination-pronation or elbow flexion/extension
2. Within 15% of contralateral upper extremity
3. No complaints of pain