**Distal Biceps Tendon Repair**

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This protocol was developed for patients who have had a distal biceps tendon repair. The goal of this protocol is to advance range of motion and strength as directed while protecting the repair to ensure optimal healing.

Patients will begin physical therapy after their first post operative visit with the physician. The dressing will have been removed and patients will be in a hinged elbow brace.

Primary goals in the early weeks are to begin increasing ROM while protecting the repair.

**Initial Post-operative Immobilization**

* Posterior splint, elbow immobilization at 90° for 5-7 days with forearm in neutral (Unless otherwise indicated by surgeon)

**Hinged Elbow Brace**

* Elbow placed in a hinged ROM brace at 5-7 days postoperative. Brace set unlocked at 45° to full flexion.
* Gradually increase elbow ROM in brace
	+ Hinged Brace Range of Motion Progression (ROM progression may be adjusted based on Surgeon’s assessment of the surgical repair.)
* Week 2: 30° to full elbow flexion
* Week 4: 20° to full elbow flexion
* Week 5: 10° to full elbow flexion
* Week 6: Full ROM of elbow
* Week 8: Full ROM of elbow; discontinue brace if adequate motor control

**Range of Motion Exercises (to above brace specifications)**

* Weeks 2-3
	+ Passive ROM for elbow flexion and supination (with elbow at 90°)
	+ Assisted ROM for elbow extension and pronation (with elbow at 90°)
	+ Shoulder ROM as needed based on evaluation, avoiding excessive extension.
* Weeks 3-4
	+ Initiate active-assisted ROM elbow flexion
	+ Continue assisted extension and progress to passive extension ROM
* Week 4
	+ Active ROM elbow flexion and extension
* Weeks 6-8
	+ Continue program as above
	+ May begin combined/composite motions (i.e. extension with pronation).
	+ If at 8 weeks post-op the patient has significant ROM deficits therapist may consider more aggressive management, after consultation with referring surgeon, to regain ROM.

**Strengthening Program**

* Week 1
	+ Sub-maximal pain free isometrics for triceps and shoulder musculature.
* Week 2
	+ Sub-maximal pain free biceps isometrics with forearm in neutral.
* Weeks 3-7
	+ Single plane active ROM elbow flexion, extension, supination, and pronation.
* Weeks 8-11
	+ Progressive resisted exercise program is initiated for elbow flexion, extension, supination, and pronation.
* Weeks 12-14
	+ May initiate light upper extremity weight training
	+ Non-athletes initiate endurance program that simulates desired work activities/requirements.