



Postoperative Distal Biceps Tendon Repair Rehabilitation Protocol

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If you have any questions about this protocol or about the patient, do not hesitate to email Dr. Metzler at: ametzler@orthonky.com

ACUTE REPAIR

PHASE I: 1-3 WEEKS

- For the first post op week, the patient is in a posterior splint that is not to be removed.
- Beyond that point, the patient wears a hinged elbow brace locked at 70 degrees.
- This brace is removed or unlocked for the exercises as described below, and showering only for 3 weeks
- **NO RESISTIVE BICEPS FLEXION OR SUPINATION X 6 WEEKS, but active motion is OK from the beginning.**
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Clinical Goals

- Elbow ROM from 30 degrees of extension to 130 degrees of flexion x 3 weeks out of brace for therapy and for home PT
- Encourage HEP
- Maintain minimal swelling and soft tissue healing
- Achieve full forearm supination and pronation

Exercises

- Patient should perform passive and ACTIVE ROM exercises from 30 degrees of extension to 130 degrees of flexion 5-6 times per day for 25 repetitions.
- Apply ice after exercise sessions.
- Shoulder ROM exercises are encouraged.

PHASE II: 3-6 WEEKS

Clinical Goals

- Full elbow and forearm ROM by 6 weeks.
- Scar management.
- Encourage HEP
- **Brace on and unlocked with ROM restrictions. Braces should be fully opened by week 5. DO NOT LEAVE BRACE LOCKED AT 70 DEGREES AT THIS POINT NOW!**

PHASE II: 3-6 WEEKS-

Exercises

• Week 3

- Active extension limit changed to **20 degrees**. Passive and ACTIVE flexion may be increased to full flexion as tolerated. Brace is worn at all times except when exercising or bathing.
- Scar massage 3-4 times per day.
- Active wrist flexion / extension.
- Active ROM of hand in neutral position.
- Supination / pronation through pain-free range.

• Week 4

- Active extension limit changed to **10 degrees**.
- Continue same exercises.
- Putty may be used 3 times per day to improve grip strength.
- Ladder with arm supported by unaffected extremity.
- Gentle pulley while limiting elbow extension to -10 degrees.

• Week 5

- Full active extension is permitted.
- Brace is worn for full 6 weeks.
- Supine scapula stabilization with no weight.
- Alphabet door / clockwise / counterclockwise circles with ball.

• Week 6

- At the end of 6 weeks, the brace may be discontinued around the house and to sleep, but must be worn when outside of household for 3 months from surgery (brace can be unlocked with full motion)
- **Light strengthening exercises are started with light thera-bands or 1-kg weights for elbow flexion, extension, forearm rotation and wrist flexion and extension.**
- Shoulder Theraband strengthening exercises are started.
- Supine scapula stabilization with 1kg weight.
- Ball toss / trampoline chest pass 1kg weight.
- Ice after strengthening exercises.

PHASE III: 6 WEEKS TO 6 MONTHS

Clinical Goals

- The strengthening program is gradually increased so that the patient is using full weights by 3-4 months.
- It may be as long as 6 months before a patient returns to heavy work.

Exercises

- Elbow ROM exercises if ROM is limited.
- Strengthening exercises to wrist, forearm, and possibly shoulder, depending on sport and/or work requirements.

Clinical Follow-up

- The patient is seen as needed to monitor the progress with strengthening programs.

ALLOGRAFT RECONSTRUCTION

This program is delayed when allograft is used.

- Patient is placed in a posterior splint with the elbow at 90 degrees of flexion and forearm in neutral rotation for ~ 7days.
- At 7 days post op: Splint is removed and replaced with a removable posterior splint or a hinged elbow brace locked at 90 degrees.
- Passive forward flexion is allowed (90 – 150 degrees). Full flexion is permitted based on pain. Passive exercises are repeated 2 times per day, 25 repetitions.
- Passive extension is allowed to 30 degrees from the first week after surgery.
- Weeks 3-6
 - Passive assisted motion is begun.

- Avoid full extension until after 6 weeks.
- Weeks 6-12
 - Active motion for activities of daily living allowed.
 - 3-6 Months
 - Activity as tolerated progress