Katherine J. Coyner, MD UCONN Musculoskeletal Institute

Medical Arts & Research Building 263 Farmington Ave. Farmington, CT 06030 Office: (860) 679-6600 Fax: (860) 679-6649 www.DrCoyner.com

Avon Office 2 Simsbury Rd. Avon, CT 06001 Office: (860) 679-6600 Fax: (860) 679-6649



DISTAL BICEPS TENDON REPAIR GUIDELINES

I. ACUTE REPAIR

General Guidelines: A splint or locked brace will be placed in the operating room and will be removed at the first post op visit.

- □ Four weeks after surgery, the patient is allowed to flex and extend against gravity as able.
- □ At 6 weeks, a gentle flexion-strengthening program is allowed, starting with 1-kg weights.
- □ Activity as tolerated is permitted at 3 months.
- □ Full activity without restriction is allowed 6 months after surgery.

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 removable posterior splint or a hinged elbow brace locked at 90 degrees. This brace is removed or unlocked for the exercises as described here.

Clinical Goals

- □ Elbow ROM from 30 degrees of extension to 130 degrees of flexion
- □ Maintain minimal swelling and soft tissue healing
- Achieve full forearm supination and pronation

Testing

□ Bilateral elbow and forearm ROM

Exercises

 \Box Patient should perform **passive** ROM exercises from 30 degrees of extension to 130 degrees of flexion 5-6 times per day for 25 repetitions.

- \Box Apply ice after exercise sessions.
- □ A sling or "cuff and collar" may be used for the splint or hinged brace respectively
- □ Shoulder ROM exercises are encouraged.

PHASE II: 3-6 WEEKS Clinical Goals

- □ Full elbow and forearm ROM by 8 weeks
- □ Scar management

Testing

- □ Bilateral elbow and forearm ROM
- □ Grip strengthening at 4-6 weeks

Exercises

Week 3

- \Box Active extension limit changed to 20 degrees. Passive flexion may be increases to full flexion as tolerated. Brace is worn at all times except when exercising or bathing.
- \Box Scar massage 3-4 times per day.
- \Box 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.
- \Box Gentle pulley while limiting elbow extension to -10 degrees.

Week 5

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

Week 6

- \Box At the end of 6 weeks, the brace may be discontinued.
- □ Passive elbow extension exercises may be started if needed.
- □ Light strengthening exercises are started with light tubing or 1-kg weights for elbow flexion, extension, forearm rotation and wrist flexion and extension.
- □ Shoulder Theraband and strengthening exercises are started.
- □ Supine scapula stabilization with 1kg weight.
- □ Ball toss / trampoline chest pass 1kg weight.
- □ Ice after strengthening exercises.

CLINICAL FOLLOW-UP

Patients are usually seen at 1-week post op, then at 5-6 weeks post op, then 12 weeks, and 6months.

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 months. It may be as long as 6 months before a patient returns to heavy work.

Testing

- □ Grip strengthening
- Elbow ROW

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.

II. ALLOGRAFT RECONSTRUCTION

General Guidelines:

- \Box The program is delayed somewhat when an allograft is used.
- A splint or locked brace will be placed in the operating room and will be removed at the first post op visit
- □ Passive assisted motion is begun at 3 weeks and continued to 6 weeks.
- \Box Full extension is avoided until the 6th week.
- Active motion for activities of daily living is allowed at 6 to 12 weeks.
- □ Activity as tolerated progresses from the third to the sixth month.

At 7-14 days post op:

- □ Splint is removed and replaced with a removable posterior splint or a hinged elbow brace
- \Box locked at 90 degrees.
- \Box **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

 \Box Activity as tolerated progress.