DISTAL BICEPS TENDON REPAIR PROTOCOL

Philosophy

The following is an outline of the standard post-operative rehabilitation program following a distal biceps tendon repair. This protocol is to be used as a guideline. There will always be individual differences regarding progression and/or tolerance of specific activities.

Progression through the protocol will depend on successful accomplishments of set milestones as assessed by the physician and physical therapist’s confidence level. The physical therapist and patient must constantly be aware of changes in condition, including but not limited to signs and symptoms of elbow joint irritation, tendonitis, effusion, and deviation from normal elbow motion. The patient’s home exercise program is of utmost importance and should be monitored and emphasized.

Remember, basic rehabilitation is nothing more than creating the optimal environment for the natural response of healing to occur without compromising function of tissue healing.

If you have any questions regarding this protocol, please contact the office.
**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
- Wound management

**Testing**

- Bilateral elbow and forearm ROM

**Exercises**

- Wrist AROM as tolerated
- Modalities as needed
- Patient should perform **passive** 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.
- 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)**

**Goals**

- Full elbow and forearm ROM by 6 weeks.
- Scar management.

**Testing**

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

Week 3

- **Active** extension limit changed to 20 degrees.
- **Passive** 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.
- Passive elbow extension exercises may be started if needed.
- Light strengthening exercises are started with light tubing or 2 lbs weights for elbow flexion, extension, forearm rotation and wrist flexion and extension.
- Shoulder Theraband strengthening exercises are started.
- Supine scapula stabilization with 2 lbs weight.
- Ball toss / trampoline chest pass 2 lbs 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 months. It may be as long as 6 months before a patient returns to heavy work or athletics.

**Testing**

- Grip strengthening
- Elbow ROM

**Exercises**

- Elbow ROM exercises if ROM is limited.
- Strengthening exercises to wrist, forearm, and possibly shoulder, depending on sport and/or work requirements.
- Start with 5 lbs for elbow flexion strengthening (biceps curls) and advance 2.5 to 5 lbs per week as tolerated
- If patient is a throwing athlete, may begin throwing program at 3 months post-op if the elbow has full ROM