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BROC
BATON ROUGE ORTHOPAEDIC CLINIC

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BICEPS RUPTURE
DISTAL BICEPS REPAIR
[with ENDO-BUTTON®]

SURGICAL PROCEDURE

An anterior incision is made over the antecubital fossa. The ruptured tendon is identified and debrided as needed. Attention is turned to the proximal radius. A channel is drilled completely through the radius near the normal insertion of the biceps. The Endo-Button® (or arthrex toggle lock), which is an oblong plate of metal, approximately 2.5 cm by 1 cm, is passed through the channel lengthwise with a suture. The other end of the suture is passed through the tendon to be repaired. Once the Endo-Button® is through to the other side of the radius, the suture is passed back up through the channel, anchoring the Endo-Button® to the other side. The slack in the suture is taken up, which draws the tendon end into the channel. The suture is tied off and the skin reapproximated with sutures or staples. The patient is placed in a long arm bulky dressing. Greenberg, Jeffrey, "Management of Distal Biceps Tendon Ruptures", The Indiana Hand Center Newsletter 3:1, 1999

POSTOPERATIVE REHABILITATION 3

Day Postop

The bulky compressive dressing is removed. A light compressive dressing is applied above and below the elbow for edema control.

A posterior long arm splint is fabricated positioning the elbow in 90° of flexion, the forearm in supination and the wrist in neutral.

Active and PROM exercises are initiated to the elbow, forearm, wrist and digits 6 times a day for 10 minute sessions. Elbow extension is restricted to 30° with exercise. Wrist and forearm exercises should be performed with the elbow flexed.

10-14 Days Postop -

Within 48 hours following suture removal, scar mobilization techniques may be initiated. This may include Elastomer™, Rolyan 50/50™, or OtoformK™. In addition, scar massage with lotion is begun.

Assuming the edema has significantly subsided, 4" elastic stockinette may be used along the upper arm and 3" elastic stockinette for the hand and forearm.

3 Weeks Postop -
AROM exercises are initiated to the elbow out of the splint, with the splint continued between exercise sessions.

4 Weeks Postop -
PROM of the elbow in extension is permitted out of the splint. Gentle weighted stretches may be initiated within the patient's comfort level.
The long arm splint is continued between exercise sessions and at night.

6 Weeks Postop - The long arm splint is discontinued.
Dynamic splinting may be initiated for the elbow and/or forearm if PROM remains limited. Progressive strengthening may be initiated for the elbow, forearm, wrist and hand.

8 -10 Weeks Postop - A work conditioning program is recommended for patients with manual labor jobs that require heavy lifting.

CONSIDERATIONS

- Patients are cautioned against unrestricted use of the arm until 6 months postop.
- A loss of active elbow flexion between weeks 1 and 6 can be a sign that the repair is being stretched out or becoming loose. Any loss of active flexion that cannot be easily recaptured or attributed to elbow stiffness should be brought to the immediate attention of the surgeon. When a loss of motion is noted, active extension is limited to 60°, exercise sessions are reduced to 3 - 4 times a day, and the LAS is adjusted to 60° until the active flexion is recaptured. Typically, this occurs within 7-10 days.