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Distal Biceps Tendon Repair

Please follow the protocol along with the instructions listed on the patient's referral

This protocol was developed for patients who have had a primary repair of the **distal biceps** tendon. The goal of the rehabilitation is to gradually regain motion in the elbow joint and eventually regain strength. This will be a steady process to allow time to protect tendon to healing to the radial tuberosity. Patients with **distal biceps** tendon ruptures are usually vigorous and active patients that do very well. However, it is important to be sure that patients do not do too much and stress or disrupt the repair. Conversely, it is important to be aware of the appropriate progression during the post-operative recovery. Stiffness after repair can result in prolonged recovery and a potentially permanent loss of function and disability.

More specific instructions and limitations may follow if this is a repair of a chronic distal biceps tendon rupture, or if a tendon graft was used to augment the repair. If you have questions please contact Dr. Andrew Green's office (401) 457-1533 or the University Orthopedics Physical Therapy Department (401) 443-5000. You may also refer to www.universityorthopedics.com and go to Dr. Green's section to view video of the specific shoulder exercises:

<http://universityorthopedics.com/physicians/green/prepost.html>

Immediately after surgery the elbow is splinted in 90 degrees of flexion and forearm supination. In some cases when there is no tension on the repair the forearm is splinted in mid supination. When there is more tension, the forearm is positioned in full supination. This splint is maintained until the first post-operative visit, usually 1-2 weeks after surgery. At the first post-operative visit the splint and surgical dressing are removed, and the patients are placed in a hinged elbow ROM brace set at 30 degrees extension block to 135 degrees elbow flexion. The arm should rest in supination, and the patient should use the sling attachment. The brace will be worn at all times until the seventh week after surgery. At the first physical therapy evaluation patients should be taught a home exercise program to be performed five times daily. These should consist of PASSIVE SELF ASSISTED motion that follows the protocol.

Week 1-6

Passive Self Assisted Elbow Flexion
Active Assisted Elbow Extension
Passive Self Assisted Forearm Supination
Active Assisted Forearm Pronation

Hand, Wrist, Shoulder ROM to prevent stiffness

The elbow brace should be worn at all times with sling except to perform exercises until the 7th week after surgery. The brace is removed to perform exercises. Elbow extension should not be limited unless specifically indicated. For reconstruction with a tendon graft extension should be limited to 30 degrees until after the 6th post-operative week.

Each set of stretching exercises should be done for 5 repetitions, holding each repetition for 10 seconds.

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Patients may shower during this time.

Most patients have close to full elbow flexion arc motion after 6 weeks, as well as close to full forearm supination. There is usually still some limitation of forearm pronation.

Week 7

Brace is discontinued

Begin light activity. No aggressive or repetitious activity.

Continue passive stretching to achieve full range of motion

Begin active range of motion exercises elbow flexion and extension, and forearm supination, pronation

Week 7-8

Begin elbow flexion and extension, and forearm pronation and supination isometrics.

Continue passive stretching to achieve full range of motion.

Week 12

Begin progressive resistive strengthening: theraband, theraTube, grip strengthening, and progress to weights.

Continue passive stretches to achieve full range of motion.

Note: If stiffness is noted, strengthening should be delayed.

Full unrestricted activity is permitted after 6 months for most patients depending upon patient activity demands.