

STEVEN CHUDIK MD

SHOULDER, KNEE & SPORTS MEDICINE

Tunnelless Repair of Distal Biceps Tendon Rupture

Indications for Surgery

Surgery is indicated for patients with a complete rupture, or painful partial rupture of the distal bicep's tendon. The tendon tears from the tuberosity of the radius bone (forearm bone) just below the elbow, retracts (pulls away), and does not heal. Surgery is recommended to repair the tendon, restore strength, and prevent later weakness and discomfort with lifting. Without repair, there is a permanent loss of elbow bending and forearm supination (rotation of the forearm to palm up position) strength and endurance.

Surgery is usually recommended as soon as possible following the injury. A delay in surgery for greater than three weeks may allow the tendon to retract further, resulting in permanent shortening of the biceps muscle. After the permanent shortening, the tendon may not be able to be reconnected to the bone without more complex surgery using a tendon graft to make up the gap.



Arrows pointing to site of distal bicep rupture on the radius (forearm bone)



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Contraindications to Surgery

- Infection of the elbow
- No functional impairment (elderly, sedentary persons, etc.)
- Inability or unwillingness to complete the postoperative program of limiting activity after surgery and to complete the rehabilitation necessary

Surgical Risks and Complications

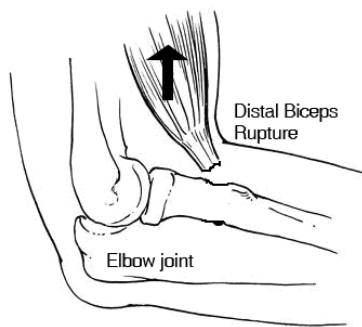
- Infection
- Bleeding or injury to blood vessels
- Injury to nerves (numbness, weakness, paralysis) of the elbow, forearm, and hand, especially the posterior interosseous nerve which supplies the muscles that extend the wrist and straighten the fingers and the lateral antebrachial cutaneous nerve which supplies sensation to the outer side of the forearm
- Re-rupture of the tendon from the bone
- Elbow or wrist and forearm stiffness and loss of some motion at the elbow, wrist, or forearm
- Heterotopic ossification, abnormal bone formation in the soft-tissues surrounding the repair

Hospitalization and Anesthesia

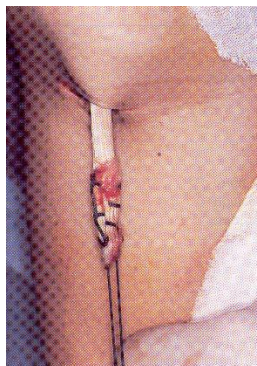
- Outpatient surgery (you go home the same day)
- General anesthesia with local anesthetic (numbing medicine at the surgical site)

General Surgical Technique

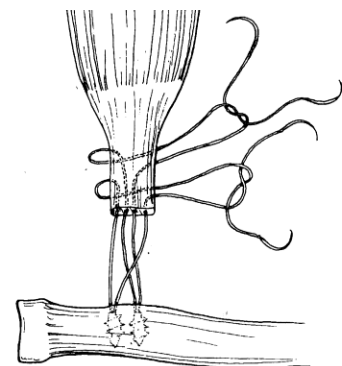
Dr. Chudik performs this surgery through one or two small incisions on the front of the elbow. Through one of the small incisions, the torn end of the tendon is retrieved, the tendon



Distal biceps rupture



Torn end of biceps



Repair back to the bone



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attachment site on the bone is prepared, suture anchors are inserted in the bony attachment site, and the sutures running through the anchors in the bone are passed through the torn end of the tendon and tied to reattach the tendon to bone. Dr. Chudik performs repair of the distal biceps at the elbow without creating large bone tunnels in the radius forearm bone as commonly done with this procedure. Creating tunnels or holes in the bone risks later fracture complications and surgical failure. The wound is closed, and the elbow is splinted in a flexed position to protect the repair.

Postoperative Course

- Splint is applied to the elbow from shoulder to hand for two weeks, followed by an elbow brace for an additional four weeks.
- You will **not** be allowed to actively move your repaired biceps and elbow for at least six weeks following surgery in order to protect the repair and allow healing.
- Keep the wound clean and dry for 10-14 days following open surgery. Showering lightly is allowed after 14 days (for open surgery) but wounds cannot be submerged under water for three weeks.
- Driving after six weeks and out of brace and sling.
- Return to school/sedentary work in less than one week as long as you are in your sling/splint and do not use the extremity. No typing, writing or purposeful movement.
- Physical therapy should begin two weeks after surgery after the splint is removed and continue for four to six months. The success of distal biceps repair is highly dependent on the post-operative rehabilitation. It is crucial to follow through on and maintain a proper therapy schedule

Return to Activity

- A return to sports depends on the type of sport and position and the quality of the tendon at the time of repair. A minimum of four to six months is necessary following surgery before return to heavy lifting.
- Full elbow and wrist motion and strength are necessary before returning to sports/heavy work.

Preoperative instructions

- Discontinue birth control pills
- Stop blood thinners such as aspirin, Coumadin[®], Lovenox[®], Xarelto[®], etc., according to the prescribing doctor's directions
- Stop anti-inflammatory medicines such as ibuprofen, Advil[®], Motrin[®], Naprosyn[®], Alleve[®], etc.)
- Stop Nutritional supplements and drinks Vitamin C, ginseng, ginkgo biloba, etc.)



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- Stop smoking for surgery and during the first six weeks postoperatively to allow proper healing of tissues
- Do not eat or drink anything from midnight, the evening before surgery

Scheduling Surgery

Contact Dr. Chudik's surgery scheduler at 630-324-0402 or contactus@chudikmd.com to:

- Schedule the date and location of surgery. The hospital will call you the day before with the time.
- Schedule an appointment with Dr. Chudik's assistant to complete pre-operative surgical education and other requirements.
- Schedule a post-operative appointment with Dr. Chudik's assistant to remove sutures, and review post-op instructions.

Contact My Office If Symptoms Worsen



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