John Dunn, MD

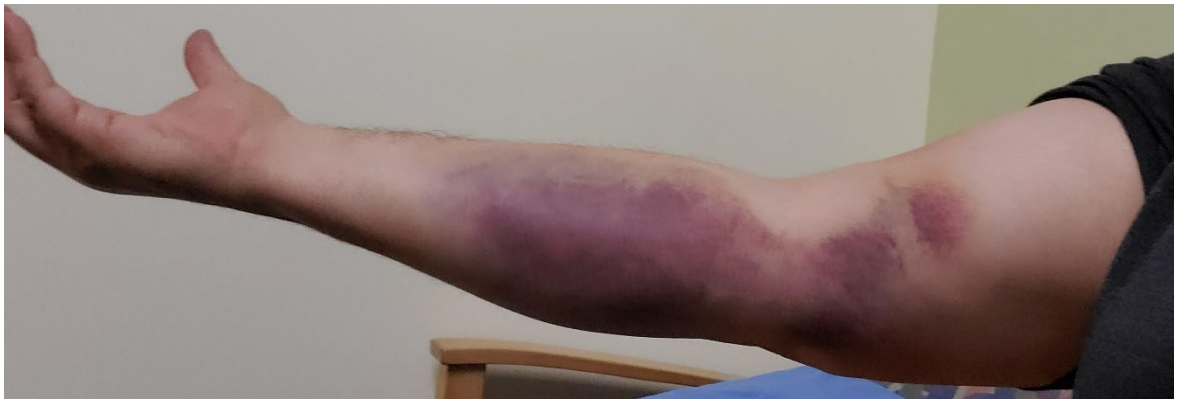
Double Board-Certified Hand, Wrist, and Nerve Surgeon

JohnDunnMD.com

DISTAL BICEPS RUPTURE

What is it?

- Distal biceps ruptures often occur when carrying a heavy object (like a sofa) and your arm slips into extension.
    - Can also occur when picking up a heavy object (like dead-lifting in the gym)
- Often hear/feel a pop and have significant bruising.
- The biceps may retract up the arm.
- Weakness/loss of endurance with flexion and forearm rotation.

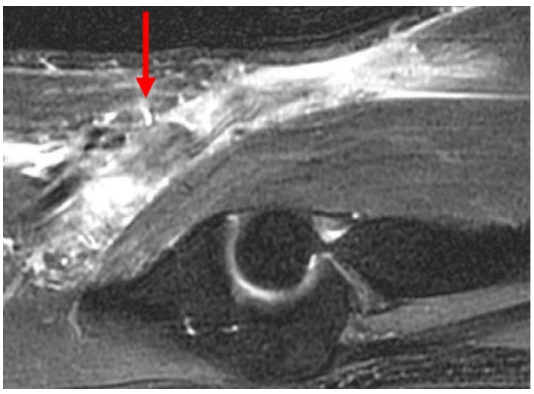


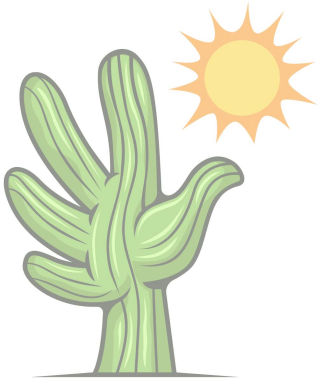
Who gets it?

- Dominant arm (86%), mostly men (93%) in 40s-50s
- Higher risk with anabolic steroid use, smoking (7.5x risk)

What can you do about it?

- In general imaging is not needed – but sometimes a MRI may be ordered.
    - MRI may show tendon retraction.
- X-Rays are usually obtained, but are almost always normal.
- Surgery isn't "required" – especially for lower demand patients.
    - Without surgery patients may have soreness and fatigue, especially with certain repetitive activities like turning a screw driver.
    - 50% loss of supination (forearm turning) strength and 30% of flexion strength.





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Surgery:

- Surgery is technically easier if done closer to the date of injury.
- In these cases, the tendon is less likely to retract up the arm.
- Surgery involves one or two incisions.
    - Dr. Dunn use a single incision 3cm in length in the forearm
- If the tendon is retracted up the arm, the incision is extended across the elbow.
- If the tendon is of poor quality, an allograft may be needed to get the tendon back to the bone.
- Dr. Dunn secures the tendon to the bone with small anchors into the bone that attach to the tendon.

Post-operative course

- Pain pills may be needed for the first 1-2 nights – but most people will be fine with just Tylenol.
- The black nylon sutures are removed at the first post-operative visit in 2 weeks.
- Either a sling only or a splint will be used after surgery – depending on the tendon quality.
    - If the tendon quality is poor, the time to surgery is longer (3-4 weeks), or the tendon is short – a hinged elbow brace may be used as well.
- This suture is inert (does not react with your body) and is sturdy.
- You can text, type, and do light duties with the hand before the sutures are removed while the dressing is in place.
- Therapy is beneficial.

Outcomes

- Outcomes are generally excellent with therapy.
    - ~90% strength as compared to non-injured side.
- Therapy expectations:
    - 3 weeks – full extension.
    - 3 months – activity as tolerated.

Complications

- Risk include loss of sensation around the incision (at least 10%) or damage to the motor nerve (2%) which extend the fingers, thumb, and wrist.
    - Most of these nerve palsies recover on their own at 3-6months.