

Shoulder Pain from a UTI?

Ravin Patel, D.O. PGY-II, Devyn Gibby, D.O. PGY-I, Nicole Zucconi, D.O..

Department of Family Medicine, Inspira Health Network

<u>Abstract</u>

Fluoroquinolone use is associated with a variety of tendinopathies. The achilles tendon is the most commonly involved, however, any tendon in the body can be affected. The incidence of cases is considered to be generally low, approximately 3 to 4 cases per 100,000 for the Achilles tendon. The incidence of ruptures to tendons, other than the Achilles, are considerably lower and haven't been well established. This case is unique in that it represents a rare complication of a distal biceps tendon rupture shortly after finishing a course of Ciprofloxacin.

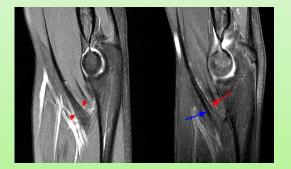


Figure I. MRI w/ and w/o contrast showing distal biceps tendon rupture

Discussion

The patient is a 70 year old female with a past medical history of insulin dependent diabetes with neuropathy, hyperlipidemia, carpal tunnel syndrome, and fundic gland polyp of the stomach who presented the family medicine clinic with right arm pain. 2 weeks prior, she was pulling up her jeans when she heard a pop and felt acute stabbing pain in the region of her distal right biceps tendon. Since the event, her pain has not resolved and she has limited range of motion. The patient denies any history of this type of injury in the past. Over the counter medications have not provided relief. The patient's history is significant for Ciprofloxacin use for the treatment of a urinary tract infection a few weeks prior. She took Ciprofloxacin 250mg twice daily for 7 days and completed the course.



Figure II. Demonstrating anatomy of biceps tear location

Discussion

Physical exam was significant for limited range of motion of the right upper extremity at the shoulder, elbow, and wrist secondary to pain. She was tender to palpation at the insertion site of the distal biceps tendon. Ecchymosis was noted. She had reduced strength of the right upper extremity.

No further imaging was performed and she was clinically diagnosed with a distal biceps tendon rupture. She was prescribed Naproxen and a lidocaine patch for pain, with close follow-up to monitor for GI side effects due to her history of stomach polyps. Also, she was referred to orthopedic surgery and physical therapy for evaluation. She had already completed her course of Ciprofloxacin, otherwise the medication would have been discontinued. She was advised to avoid Fluoroquinolone use in the future due to the adverse reaction she developed.

References

"Vishwanathan, K., & Soni, K. (2021). Distal biceps rupture: Evaluation and management. *Journal of clinical orthopaedics and trauma*, 19, 132–138. <u>https://doi.org/10.1016/j.icot.2021.05.01</u> Caekebeke, P., Duerinckx, J., & van Riet, R. (2021). Acute complete and partial distal biceps tendon ruptures: what have we learned? A review. *EFORT open reviews*, 6(10), 956–965. <u>https://doi.org/10.1302/2058-5241.6.200145</u>.

Morales, D. R., Slattery, J., Pacurariu, A., Pinheiro, L., McGettigan, P., & Kurz, X. (2019). Relative and Absolute Risk of Tendon Rupture with Fluoroquinolone and Concomitant Fluoroquinolone/Corticosteroid Therapy: Population-Based Nested Case-Control Study. *Clinical drug investigation*, 39(2), 205–213. https://doi.org/10.1007/s40261-018-0729-y Ong S. G. (2013). Spontaneous biceps tendon rupture in a patient with mixed connective tissue disease. *Malaysian family physician : the official journal of the* Academy of Family Physicians of Malaysia, 8(3), 31–33.