

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Patellar Tendonitis

Permalink

<https://escholarship.org/uc/item/7sf2102r>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 12(1)

ISSN

1936-900X

Authors

Zaia, Brita
Gharahbaghian, Laleh

Publication Date

2011

Copyright Information

Copyright 2011 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial License, available at <https://creativecommons.org/licenses/by-nc/4.0/>

Peer reviewed

Patellar Tendonitis

Brita Zaia
Laleh Gharahbaghian, MD

Stanford University Medical Center, Palo Alto, CA

Supervising Section Editor: Rick A. McPheeters, DO

Submission history: Submitted August 4, 2010; Accepted October 11, 2010

Reprints available through open access at http://scholarship.org/uc/uciem_westjem

[West J Emerg Med. 2011;12(1):139-140.]

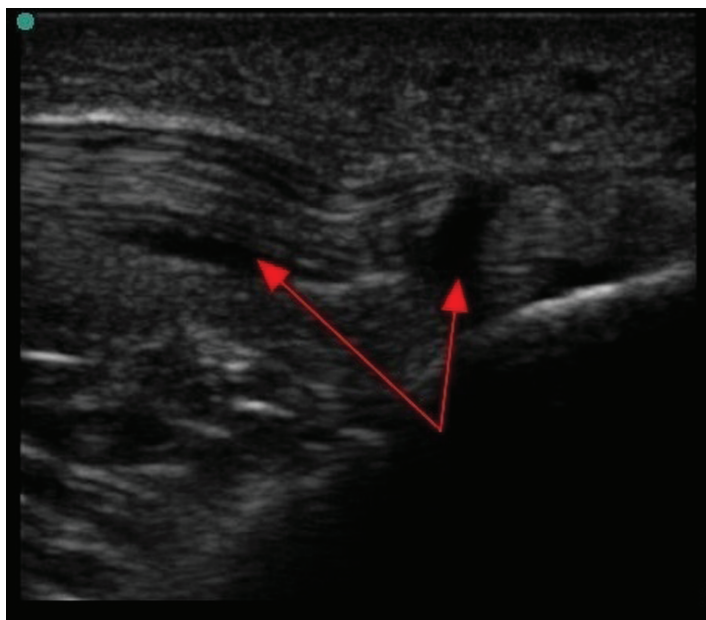


Figure 1. Dark, anechoic areas within the tendon and surrounding the tendon bundle represent fluid from inflammation (red arrows).^{1,2}

A 51-year-old female with a history of gout, hypertension and diabetes presented to the emergency department with one week of increasing pain and swelling of her left knee, just below the patella. She denied trauma, fever and calf pain. She took Ciprofloxacin for 14 days for a urinary tract infection. She was afebrile with stable vital signs, and the exam revealed mild swelling, increased warmth, and tenderness overlying the left tibial tuberosity. There was full range of motion at the knee. A bedside ultrasound (US) confirmed the diagnosis (Figure 1 and 2).

Patellar tendonitis (PT) is characterized by well-localized anterior knee pain, along the patellar tendon distribution. The pain is often exacerbated by moving from sitting to standing or walking uphill.³ Causes of PT include repetitive use, jumping sports, trauma and fluoroquinolone use.³ Fluoroquinolone-associated tendinopathy and tendon rupture

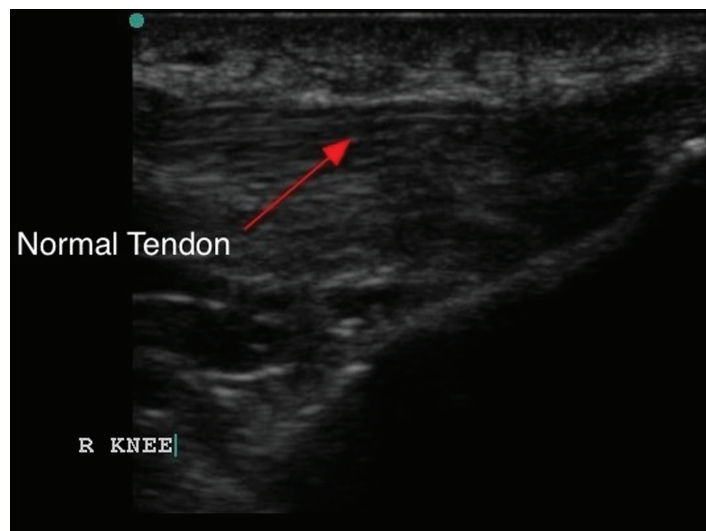


Figure 2. Normal patellar tendon appears as a tightly packed, fibrillar tissue bundle represented by bright, hyperechoic parallel lines (red arrow) which attaches to the tibial tuberosity.^{1,2}

occurs days to weeks after starting the medication.⁴ The risk increases in the following patients: older than 60 years, taking steroids, renal disease and recipients of kidney, heart, or lung transplants.⁴

Bedside US can be used to evaluate musculoskeletal injuries, including fracture, dislocation, joint effusion and tendon tears.⁵ A high frequency linear transducer was used first in longitudinal plane, placed over the tibial tuberosity evaluating the patellar tendon and then laterally in transverse plane evaluating for joint effusion. It illustrated absence of knee joint effusion and presence of inflamed patellar tendon. This patient was instructed to stop taking Ciprofloxacin, and was treated with anti-inflammatory pain medications and rest.

Address for Correspondence: Laleh Gharahbaghian MD FAAEM, Director, Emergency Ultrasound Fellowship, Clinical Instructor, Stanford University, Division of Emergency Medicine.

Conflicts of Interest: By the WestJEM article submission agreement, all authors are required to disclose all affiliations, funding sources, and financial or management relationships that could be perceived as potential sources of bias. The authors disclosed none.

REFERENCES

1. Bianchi S, Martinoli C, Abdelwahab IF. Ultrasound of tendon tears. Part I: general considerations and upper extremity. *Skeletal Radiol.* 2005;34:500-12.
2. Sisson C, Nagdev A, Tirado A, et al. Ultrasound diagnosis of traumatic partial triceps tendon tear in the Emergency Department. *J Emerg Med.* 2009 Feb 5. Epub ahead of print.
3. Schmidt MJ, Adams SL. Tendonopathy and Bursitis. In: Marx J, Hockberger R, Walls R, eds. *Rosen's Emergency Medicine Concepts and Clinical Practice.* 7th ed. Philadelphia, PA. Mosby; 2009:1492.
4. Waknine Y. Fluoroquinolones Earn Black Box Warning for Tendon-Related Adverse Effects. Medscape Medical News website. Available at <http://www.fda.gov/medwatch/safety/2008>. Accessed May 9, 2010.
5. Rippey JC, Royse AG. Ultrasound in trauma. *Best Pract Res Clin Anaesthesiol.* 2009;23(3):343-62.