CLINICAL IMAGE

WILEY

A rare case of Levofloxacin-related Iliopsoas and Achilles tendon rupture

Prabhjot Singh Bedi ¹ 🕩	Kiran Kuriakose ²	Jay Kim ¹	Paul B Lewis ³
Vikas K Singh ¹			

 ¹Department of Medicine, UPMC East, Monroeville, PA, USA
²Department of Medicine, UPMC McKeesport, PA, USA
³Department of Radiology, UPMC East, Monroeville, PA, USA

Correspondence

Prabhjot Singh Bedi, Hospitalist, UPMC East, UPP-CCHM, Hospitalist office, Suite 0174A, 2775 Mosside Blvd,, Monroeville, PA, 15146, USA. Email: bedips@upmc.edu

Funding information No funding to declare

Abstract

Achilles tendon rupture is a well-documented adverse effect of Fluoroquinolones; however, herein we present a case of complete iliopsoas and Achilles, and partial semimembranosus tendon rupture secondary to Levofloxacin.

KEYWORDS

achilles, Iliopsoas, levofloxacin, multiple tendon rupture, tendon rupture

1 | CASE PRESENTATION

A 74-year-old man with past medical history of obstructive sleep apnea, GERD, bronchiectasis, and right rotator cuff injury s/p repair was presented with pain in left hip for 2 days. It was preceded by a pop felt while lifting a heavy steel bar. Two months prior to this, he was treated for bronchitis with prednisone and levofloxacin, but the course was cut short a week into treatment as the patient developed pain in his right ankle, right shoulder, and left hip. Physical examination was significant for tenderness of left hip; tenderness and palpable dell right Achilles. MRI revealed a full-thickness tear of left iliopsoas tendon (Figure 1) (Figure 2) and right Achilles tendon (Figure 3), as well as a low-grade partial tear of right semimembranosus tendon origin (Figure 4). Both operative and nonoperative management of tendon rupture are described in literature, and trend is toward nonoperative management. Conservative approach was opted in our case. He was recommended analgesics, weight bear as tolerated, physical therapy, and close follow-up with orthopedics. He was discharged on CAM boot which he progressed out of 3 months postinjury. He had residual left psoas pain and weakness but otherwise made good progress with the ability to ambulate about 1500 steps without assistive devices 8 months postinjury. Fluoroquinolones-mediated tendinopathy commonly affects weightbearing joints which are subjected to greater mechanical force.¹ Nearly 90% of fluoroquinolone-associated tendinitis and tendon rupture cases involve the Achilles tendon with bilateral involvement in up to 50% of cases.² To our knowledge, our case is first reported case of concomitant full-thickness Achilles and Iliopsoas, and partial semimembranosus tendon rupture.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes. © 2021 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.





FIGURE 1 Coronal T2 MR image of the left hip with fat saturation demonstrating the iliopsoas tendon with the torn aspect surrounded by edema (*)



FIGURE 3 Sagittal fast spin echo STIR MR image of the right ankle. The full-thickness rupture of the Achilles tendon at the myotendinous junction is noted by the edematous cleft (*). This gap measures 2 cm. The paratenon (red arrows) remains intact. An os trigonum (OT) is incidentally noted



FIGURE 2 Left hip oblique-axial T2 MR image with fat saturation at the bare lesser trochanter with surrounding edema (*). A portion of the iliopsoas tendon stump is visible in this image

CONFLICT OF INTEREST

The authors do not have any conflict of interest to declare.

AUTHOR CONTRIBUTIONS

PSB and KK: designed and framed the manuscript, and reviewed the literature. PBL: involved in images. JK and VKS: reviewed, edited, and reviewed the literature.



FIGURE 4 Axial T2 MR image of the pelvis with multiple findings, including right greater trochanter bursal distention, partial tear of the right semimembranosus tendon at its ischial attachment and the left iliopsoas tendon stump with surrounding edema (*) that tracks posteriorly toward the lesser trochanter

ETHICAL STATEMENT

Patient consent was obtained.

ORCID

Prabhjot Singh Bedi D https://orcid. org/0000-0002-6129-2591

-WILEY

REFERENCES

- 1. Lewis T, Cook J. Fluoroquinolones and tendinopathy: a guide for athletes and sports clinicians and a systematic review of the literature. *J Athletic Train*. 2014;49(3):422-427. https://doi. org/10.4085/1062-6050-49.2.09
- Kim GK. The risk of fluoroquinolone-induced tendinopathy and tendon rupture: what does the clinician need to know? *J Clin Aesthetic Dermatol.* 2010;3(4):49-54.

How to cite this article: Bedi PS, Kuriakose K, Kim J, Lewis PB, Singh VK. A rare case of Levofloxacin-related Iliopsoas and Achilles tendon rupture. *Clin Case Rep.* 2021;9:e04335. <u>https://doi.org/10.1002/ccr3.4335</u>