

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

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## 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.

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## Author contributions:

PSB and KK design and framing of manuscript, literature review

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**Conflict of interest:** None

**Key Clinical Message:**

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.

### Case presentation:

74-year-old male with past medical history of obstructive sleep apnea, GERD 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, 2) and right Achilles tendon (Figure 3), as well as a low-grade partial tear of right semimembranosus tendon origin (Figure 4). Patient was managed conservatively. He was recommended to weight bear as tolerated, continue physical therapy and follow up closely with orthopedics. Fluoroquinolones mediated tendinopathy commonly affects weightbearing joints which are subjected to greater mechanical force.<sup>1</sup> Nearly 90% of fluoroquinolone-associated tendinitis and tendon rupture cases involve the Achilles tendon with bilateral involvement in up to 50% of cases.<sup>2</sup> To our knowledge our case is first reported case of concomitant full thickness Achilles and Iliopsoas, and partial semimembranosus tendon rupture.

### Figure/Legend:

1. Coronal T2 MR image of the left hip with fat saturation demonstrating the iliopsoas tendon with the torn aspect surrounded by edema (\*).
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.
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.
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 towards the lesser trochanter.

### References:

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