

Biceps tendon rupture associated with ciprofloxacin use for spontaneous bacterial peritonitis prophylaxis

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DESCRIPTION

A 70-year-old man with a medical history of alcoholic cirrhosis was sent from the skilled nursing facility to the emergency department with an abnormal haemoglobin value of 68 g/L (reference 125–165), compared with 103 g/L three weeks prior.

On physical examination, the patient's left upper extremity had pitting oedema from his hand to his shoulder, with ecchymoses even reaching the anterior and posterior axillary lines ([figure 1](#)). The patient related that he had been putting on his pants a few days prior when he heard a click, after which he had some mild pain and weakness in his left shoulder and arm. He had not been engaging in any physical activity more strenuous than usual and when pulling up his pants, he had done it like he always did. The patient continued everything as usual but after the

swelling worsened, asked to be evaluated by the physician, who sent him to the emergency department on account of the low haemoglobin.

Notwithstanding lack of any trauma, a tendon rupture was suspected from fluoroquinolone use.¹ Orthopaedic surgery was consulted and confirmed the diagnosis of left proximal biceps tendon rupture, most likely short head but possibly long head. As no operative intervention was planned, no musculoskeletal imaging was obtained.

The patient's ciprofloxacin, which was started 17 days prior after an episode of spontaneous bacterial peritonitis (SBP) for SBP prophylaxis, was discontinued.

Learning points

- ▶ Fluoroquinolones can cause QT prolongation, neuropathy, hypoglycaemia and cartilage problems (such as arthralgias, tendinopathy and tendon rupture).
- ▶ While tendinopathy and tendon rupture happen most commonly with the Achilles tendon, other tendons can be affected as well.
- ▶ In a study of millions of patients in California, tendinopathy and tendon rupture happened significantly more in quinolone users. It synergistically occurred more frequently in those of advanced age, reduced body mass index and with systemic corticosteroid use.

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REFERENCE

- 1 Wise BL, Peloquin C, Choi H, *et al*. Impact of age, sex, obesity, and steroid use on quinolone-associated tendon disorders. *Am J Med* 2012;125:1228.e23–e28.



Figure 1 The patient's left upper extremity, where he suffered a proximal biceps tendon rupture (most likely short head but possibly long head).



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