

Clinical Image or Video

Traumatic Bilateral Quadriceps Tendon Rupture from a Ground Level Fall

Brian Tan¹, Dipal Shah¹, Joshua Walker¹

¹ Emergency Medicine, HCA Florida Ocala Hospital

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This is a clincal image submission depicting traumatic bilateral quadriceps tendon rupture from a ground level fall.

PATIENT PRESENTATION

A 62-year-old male presented to the emergency department with left shoulder pain and bilateral knee pain after a mechanical fall. Examination of the bilateral knees after passively extending them revealed swelling above the patellae with clearly defined patellae. The patient had 0/5 strength for extension at bilateral knees. His presentation was concerning for bilateral quadriceps tendon tears resulting in contraction of the quadriceps muscles and visualization of patellae without overlying tendon. The patient was admitted to trauma surgery. On admission, the patient had MRIs of bilateral knees performed that confirmed complete bilateral quadriceps tendon tears [Figure 1]. Orthopedic surgery was consulted, and the patient was taken to the operating room several days later for repair of the bilateral quadriceps tendons. The patient was then discharged to an acute rehabilitation facility with a plan for eventual discharge to home.

DIAGNOSIS

Traumatic Bilateral Quadriceps Tendon Rupture

DISCUSSION

The incidence of quadriceps tendon ruptures is relatively rare, estimated at 1.37 patients per 100,000 persons. The incidence of bilateral tendon ruptures is even rarer. Commonly, quadriceps tendon ruptures occur from traumatic falls, often there are underlying comorbidities that can weaken the tendon, such as overuse injuries. While not a





Figure 1. Clinical photograph of patient's leg (left) and corresponding MRI (right). Arrow demonstrates quadriceps tear.

surgical emergency, prompt repair within 72 hours has been shown to have improved outcomes over prolonged surgical intervention due to retraction of the quadriceps muscle.³ As such, timely identification of quadriceps tendon rupture and definitive surgical repair is key to patient recovery and patient satisfaction.

ETHICAL CONSIDERATIONS

Written informed consent was obtained for the publication of these clinical images and accompanying case details.

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