

Steroid Induced Bilateral Quadriceps Tendon Rupture In A Lupus Nephritis Patient; A Case Report

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INTRODUCTION:

Quadriceps tendon rupture reported to have annual incidence of 1.37 patients per 100000 persons and usually is unilateral. Hence, the simultaneous rupture of both quadriceps tendons is uncommon and has rarely been reported in the literature. It mostly occurs in patients with chronic disease or long-term use of drugs (steroids, quinolones and statin).

REPORT:

The current case involves a 34-year-old lady with ESRF secondary to lupus nephritis grade 4 with TTP. She had been taking Prednisolones ranging dose 5-10 mg per day for 5 years since being diagnosed with lupus nephritis. She experienced a fall with knee in flexed position and presented with bilateral knee pain and unable to bear weight. Physical examination revealed bilateral suprapatellar palpable gapping defect and loss of active extension. Although plain radiographs of both knees showed no fracture or widening of the joint space, calcification over quadriceps tendon was observed. Ultrasonography confirmed the diagnosis of bilateral quadriceps tendon rupture over the insertion site of patella. The patient then underwent surgical intervention wherein the tendons were repaired using pull through sutures techniques which were passed through drill holes in the patella and sutured using Krackow Method with Ethibond 2/0. The knees were immobilized with cylinder slab for 6 weeks before starting physiotherapy. She subsequently regained full functional activity with active knee extension observed within 6 months.



Figure 1: Bilateral knee x-ray (lateral view) showing calcifications over quadriceps tendon.

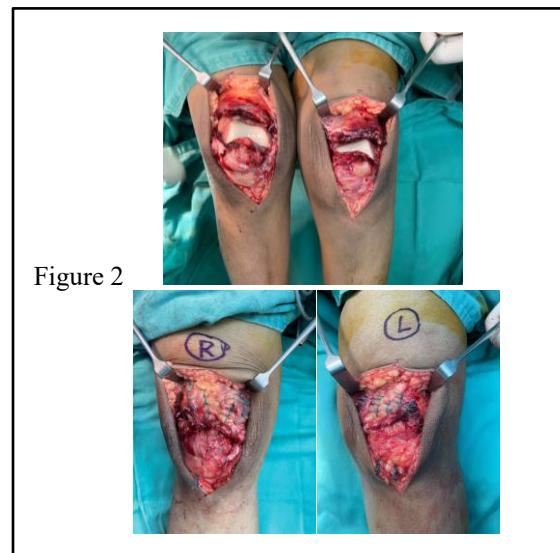


Figure 2: Intraoperative image of bilateral quadriceps tendon total rupture, repaired using pull through suture technique with Ethibond 2/0

CONCLUSION:

Corticosteroids are known to cause necrosis and disorganization of the fibrils weakening the collagen structures. As in our patient, long term corticosteroid use with underlying lupus nephritis has likely contributed to the bilateral quadriceps tendon rupture.

REFERENCES:

1. Halpern AA, Horowitz BG, Nagel DA: Tendon ruptures associated with corticosteroid therapy. West J Med 127:378-382, Nov 1977