A Simultaneous Rupture Of The Patellar Tendon And Contralateral Quadriceps Tendon In End Stage Renal Failure

¹Shahibullah Shahir; ¹Mohd Yusof Nur Dini, ¹Kassim Ahmad Fauzey

¹Trauma & Orthopaedic Department, Hospital Sultanah Bahiyah, Alor Setar, Kedah

INTRODUCTION:

A simultaneous rupture of the patellar tendon and contralateral quadriceps tendon is a rare condition, associated with traumatic events in patients with end-stage renal failure and secondary hyperparathyroidism. Only few cases were reported.

REPORT:

A 24-year-old Malay male, known to have endstage renal failure secondary to neurogenic bladder due to congenital spina bifida presented to our center after a motorcycle skid. He claimed as low-velocity impact, however unable to walk with loss of extensor mechanism in both knees.

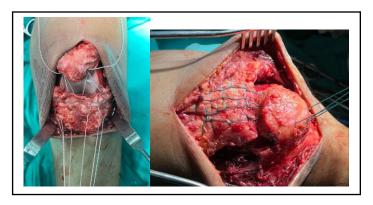
Clinically reavealed bilateral knee effusion, with a suprapatellar depression in the right knee and infrapatellar ecchymosis in the left knee. Both knees had unable to fully extend. Plain radiographs shown right patella baja, while the left knee patella alta. No obvious fractures were seen. Ultrasound was also performed and confirmed the diagnosis.

The case underwent surgical repair bilateral



knees once swelling subsided. Intraoperatively, in right knee there was a total quadriceps tendon rupture at the suprapatella insertion. Tendon repaired using the pull-through suture technique and the Krakow method (4-core), augmented with continuous locking suture. Right knee shown a complete patellar tendon rupture at the infrapatellar insertion, repaired using 2 anchor sutures and the Krakow method (4-core),

augmented with continuous locking suture. Both repair stable intraoperatively.



Postoperatively, the patient was fitted with knee braces locked in knee extension, and physiotherapy was started. The patient was allowed partial weight-bearing with gradual passive flexion of both knees. No wound complication and he was allowed full weight-bearing as tolerated after 2 months.

The patient was later found to have secondary hyperparathyroidism and underwent parathyroidectomy.

CONCLUSION:

We report a rare case of rupture of the patellar tendon and contralateral quadriceps tendon in a patient associated with chronic renal failure and hyperthyroidism. With early surgical intervention and good physiotherapy, the patient usually experiences a good recovery of function in both knees.

REFERENCES:

1. Garner MR et al. Extensor Mechanism Injuries of the Knee: Demographic Characteristics and Comorbidities from a Review of 726 Patient Records. J Bone Joint Surg Am. 2015 Oct