

## BILATERAL QUADRICEPS TENDON RUPTURE IN ESRF PATIENT

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**Introduction:** Bilateral quadriceps tendon rupture is very rare, but strongly associated with chronic illnesses such as chronic renal failure, and the rate is higher with longer period of dialysis. Collagen metabolism impairment, in which the collagen is replaced by elastin due to chronic metabolic acidosis will result in weakening of the tendon. It is a debilitating condition and surgical repair is mandatory for those patients.

**Discussion:** A 44-year-old Chinese man with underlying end stage renal failure (ESRF) on regular dialysis, presented to Orthopaedic clinic after unable to get up from the chair, one week prior, and complaint of weakness of bilateral lower limb. There was only minimal pain over the knees. Clinical examination revealed failure of extensor mechanism of bilateral lower limbs, with a gap at the suprapatellar regions around 3-4cm bilaterally. Surgical repair of bilateral quadriceps tendon was then performed, with bone tunnel method over patellar using Krackow technique and non-absorbable suture of the patella tendon. Long leg casts were applied, and gradual range of motion exercises were instituted after four weeks post-operatively. Patient was able to ambulate using walking frame after eight weeks.

**Conclusion:** Diagnosis of quadriceps tendon rupture is mainly based on history and clinical examination. Characteristic feature on clinical examination is failure of the extensor mechanism and the present of suprapatellar gap. Ultrasound can be a screening tool, whereas MRI is essential to assess the extent and site of rupture and any associated osteotendinous injury. Due to the rare incidence of this injury, early clinical diagnosis is essential to prevent complications such as tendon fibroses and joint contractures.