



Bilateral rupture of the patellar ligament in a patient with chronic renal insufficiency

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Background:

The rupture of a patellar ligament, although rare, usually occurs due to a sudden and strong contraction of the extensor system of the knee, most often during sports activities. It typically has a unilateral presentation. Bilateral presentation is even scarcer and is usually a consequence of systemic conditions and steroid use, alongside additional risk factors such as lupus erythematosus, hyperparathyroidism and hyperuricemia. It occurs after minor trauma or rarely, spontaneously. Chronic renal insufficiency is a rare but often overlooked cause of this condition.

Case presentation:

A 37-year-old male was brought to the emergency room after slipping and falling on his back. The patient's knees were bent at a 90-degree angle, edematous and difficult to extend. The medical history was significant only for chronic kidney disease for which he is currently on hemodialysis. The combination of clinical presentation and the fact the accident occurred after a minor trauma raised suspicion of a pathological background. An ultrasound was performed, revealing a bilateral avulsion of the patellar ligament on the distal pole of the patellae. An X-ray revealed no fracture. A surgical treatment was indicated. The refixation of patellar ligaments to their attachment was performed with 2 bone anchors, followed by sutures of the surrounding retinaculum. It successfully achieved the continuity of the knee's extensor mechanism. In the postoperative rehabilitation period, knee-stabilizing orthotics were used, succeeded by a progressive weight bearing of both legs for 8 weeks. Along with advised physical therapy, the patient returned to normal daily activities in 6 months.

Conclusion:

Bilateral rupture of the patellar ligament is a rare, yet urgent musculoskeletal complication in individuals with chronic renal insufficiency, demanding immediate attention. It is often misdiagnosed and can lead to a series of complications such as longer hospitalization, additional surgical procedures and long-term disability if not recognized on time.