



Successful conservative treatment of a complete rectus femoris myotendinous junction rupture in a handball player

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Background:

Although quadriceps muscle injuries are common among athletes, isolated rupture of rectus femoris distal myotendinous junction is considered to be exceptionally rare. These injuries occur during powerful contractions of the muscle required for extension of the knee and flexion of the hip. Therefore, common symptoms of quadriceps muscle injury are exquisite local tenderness and pain followed by swelling. According to the majority of the most recent published clinical cases, surgical repair is the gold standard but it is still debatable due to lack of evidence for positive outcome in terms of return to sport.

Case presentation:

A 24-year-old semi-professional handball player was diagnosed with complete distal rectus femoris myotendinous rupture, confirmed via ultrasound. The injury occurred as a result of compensatory movements for pain caused by earlier inflammation of the Achilles tendon. The patient described the pain as a powerful whip-hurt sensation which caused an immediate fall. Diagnosis was confirmed by following clinical examination. Due to the patient's early ability for active extension, conservative measures such as local magnetotherapy and exercises for muscle strengthening were a treatment of choice and resulted in early return to sport.

Conclusion:

The primary aim of this case report was to present advantages of non-surgical treatment of this potentially career-changing injury. Cooperation with the patient should be pivotal in the process of making a decision about the type of treatment, especially when conservative treatment is an option, since most of the athletes have unfortunately already undergone some type of surgical repair.