Clinical Assessment of Extensor Tendon Tear in Patients with Epicondylitis.

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Introduction: Patients looking for care because of lateral epicondylitis is high with near a 3% of population experiencing an elbow injury and up to 40% of tennis player during their lifetime (1,2). Kocaushear and Nirsch suggested 4 stages in epicondylitis with a partial or complete tear of the tendon in stages 3 and 4 (3). The importance of recognizing a tear tendon is based that in this cases other treatments could be advised (PRP, Shockwaves, Surgery)(4)

Hypothesis: With two clinical findings in physical examination you could diagnose extensor tendon tear in patients with Lateral Epicondylitis.

Method: Patients with clinical history of lateral Epicondylitis were evaluated in an outpatient clinic. Clinical findings that were established to be associated with extensor tendon tear were fail to resist wrist dorsal extension against resistance (New Test, image 1 and 2) and nocturnal pain. In all patients the Cozen test was recorded. After evaluation all patients were studied with ultrasonography, the radiologist was blind to the clinical evaluation. Statistical analysis was made with Fisher’s Exact Test.

Results: 38 patients were evaluated. There were no statistical difference between the Cozen Test and ultrasound with a tendon tear (p=0,157). There where statistical differences between the “New Test” with an ultrasound with a tendon tear (p=0,007). Statistical difference was also significant with nocturnal pain an a tendon tear in the ultrasound in patients with Lateral Epicondylitis.

Discussion: Clinical diagnosis of epicondylitis is achieved with the combination of pain in the lateral epicondyle associated with clinical a test like Maudsley, Cozen and Mill’s (2). Non of them allows us to determine which is the stage of the injury. With the New Test associated with nocturnal pain you can achieve high degree of suspicion of tear, which may optimize your indication for complementary exams like ultrasonography(5) and may help you decide for a treatment such as platelet rich plasma injection and discard the use of steroid injection that would not give any improvement because of the degenerative and not inflammatory cause in this stages of epicondylitis (4,6).

Conclusion: The “New Test”, fail to resist wrist extension against resistance and nocturnal pain correlates with the presence of a tendon tear in the ultrasound evaluation in patients with Lateral Epicondylitis.

REFERENCES: