IMPACT OF EXTRACORPOREAL SHOCK WAVE THERAPY IN THE TREATMENT OF CHRONIC LATERAL EPICONDYLITIS

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**Background and aim**

Radial shock wave therapy (RSWT) is a relatively new way to treat chronic tendinopathies, such as lateral epicondylitis. However, very few studies have been realized on this subject, and the results are very divergent. We aimed to observe the impact of this technique on chronic lateral elbow pain.

**Method**

Fifteen subjects who had a lateral epicondylitis for at least 3 months were included in the study. Two groups were formed: experimental (10 subjects) who received 6 sessions of physiotherapy and RSWT (fig. 1 and 2), and the control group (5 subjects) who received exclusively physiotherapy. Physiotherapy sessions were composed of massage, stretching, diacutaneous fibrolysis (fig. 3), and a muscular eccentric program of the wrist extensor muscles. We evaluated the subjects before the first session, and after 6 weeks of treatment with a pain visual analog scale (VAS), the painless wrist flexion amplitude (fig. 4), and the “Patient-Rated Tennis Elbow Evaluation” (PRTEE) questionnaire.

**Results**

The difference between initial and final evaluations was significant (regarding to the wilcoxon test) for all of the parameters studied (p=0,028 for the VAS, p=0,005 for the wrist flexion amplitude, and p=0,005 for the PRTEE) in the experimental group. It wasn’t significant in the control group (VAS p=0,144128, wrist flexion amplitude p=0,079617, and PRTEE p=0,067890) (fig. 5). The comparison between the two groups was not significant, neither in the beginning, nor in the end of the treatment (regarding to the Umann and Whitney test).

**Conclusion**

RSWT associated to physiotherapy is a more effective treatment for lateral epicondylitis than physiotherapy alone.

**References**

- De Labareyre H. “Que penser des ondes de choc dans le traitement des lésions tendinomusculaires en 2011?”. Journal de traumatologie du sport, 2011; 28 : 16-23