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Title: Radial shock wave therapy (RSWT) for the treatment of chronic tendopathies, our experience.

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**Introduction:** The aim of this prospective study was to analyze the result obtained during the treatments with RSWT for chronic tendopathies pathology.

**Methods:** Prospective study. Between January 2002 to December 2004, 112 patients with mean aged 45+/- 14 years, and with diagnostic of chronic tendopathies pathology (patellar tendon, Achilles tendon, lateral epicondylitis, plantar heel pain, supraspinatus tendon with or without calcific deposit and bursitis trochanterics), with history of chronic symptoms at last 4 month (mean chronicity =18.22+/-17.67 months), and failure or poor results of two conventional treatments, were treated in our clinic with radial shock wave device Swiss Dolor Clast (EMS, Switzerland).

From the total of patients, 4 of them, didn't finished the therapy protocol and 13 couldn't be evaluated in the follow up propose (15% lost patients).

The other 95 patients were treated in 3 session, at interval of one week, with 2000 impulses per session, at 2.5-3.5 bar of intensity (Energy flux density: 0,1-0,16 mJ/mm) and 6 hz of frequency.

A visual analogue scale (VAS) evaluated the pain intensity during diary life activity (DLA) and during sports activity (SA). It was evaluated the functional impairment of the corporal segment injured by using functional test according to indicated pathology.

Evaluation was performed immediately before treatment at 4, 26 and 52 weeks after the last session. During the follow up the patients evaluated satisfaction by Roles and Maudsley scale (RM).

**Results:** The no parametric Wilcoxon test for dependent samples to compare means of VAS and functional test. The pain intensity of DLA and SA was decrease significantly ( $p < 0,001$ ) and functional test showed significant improvement ( $p < 0,001$ ) at 4, 26, 52 weeks post RSWT.

Excellent and good results have been obtained in 68 patients (73%) at 4 weeks post RSWT, remained approximately constant at 26 (74%) and 52 (70%) weeks of follow up.

Only minor side effects as swelling, petecheal and discomfort during treatment were detected.

**Conclusion:** The radial shock wave therapy is effective, safe and with minor side effects method, for the treatment of chronic tendopathies pathology with history of chronic symptoms at last 4 month, and failure or poor results of two conventional treatments.

