

Therapy with Radial ESWT Combined with Physiotherapy in the Treatment of Soft Tissue Diseases

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The aim of this study was to clinically evaluate the effectiveness of Extracorporeal Shockwave treatment in soft tissue pathologies.

The study was conducted in the Clinic of Physiotherapy and Sports Injuries Rehabilitation in Athens in collaboration with METROPOLITAN HOSPITAL utilizing the EMS device. From January 2005 until June 2005 we treated 42 patients (7 women and 35 men) with Radial Shockwaves for the following diseases: 27 Patients with Plantar Fasciitis (10 athletes basketball A1 category, 8 athletes A2 category, 2 athletes soccer, 1 athlete tennis National team level, 6 patients non-athletes) 8 patients with calcaneal tendonitis, 4 patients with Epicondylitis, 3 patients with Tibial periostitis (1 athlete basketball, 2 athletes tennis) Inclusion criteria were at least 3 months of unsuccessful conservative treatment (cortisone injection, ultrasound, microwaves). The mean follow-up was 9 months. To evaluate the intensity of pain the outcome was assessed in 4 categories using the VAS (Visual analog scale) and Roles and Maudsley. The protocol of treatment included 5-7 treatments with shockwaves 2 times per week. In each treatment we applied 1,700 shockwaves with an intensity of 1.8 bar for the first 600 shocks and 2.5 bar for the remaining 1,100. Once a week kinesiotherapy and massage were applied for the Plantar Fasciitis in the Guff region and Achilles tendon as well as in the fascia around this region. No local or other anaesthesia was administered. All the participants signed an agreement to participate in this study.

The results of the study were as follows: Diseases / Results excellent good moderate poor
Plantar Fasciitis 58,3% 25% 16,7% 0
Tendinitis Calcaneal 33,4% 33,4% 22,1% 11,1%
Epicondylitis 50% 25% 0 25%
Periostitis 100% 0 0 0.

The results of this study lead us to the conclusion that treatment of the above diseases with the use of Radial Extracorporeal Shockwave combined with physiotherapy is safe and effective.