

Extracorporeal shockwave therapy (ESWT) in near-the-bone soft tissue pain

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Device and producing company:

SIEMENS SONOCUR Basic

Introduction:

Extracorporeal shock wave therapy (ESWT) is now employed worldwide for the treatment of musculoskeletal complaints. Although ESWT has become increasingly popular there is still controversial debate as to its appropriate usage and efficacy. The purpose of this study was to evaluate efficacy of low energy shockwave therapy in wide range and short term change of near-the-bone soft tissue pain.

Methods:

A total of 939 patients (256 Shoulders 91 Elbow, 31 Plantar Fasciitis, 296 Knee, 139 Myofacial Syndrome, 60 Ankle and Achillodynia, 35 Wrist, 31 Hip) were treated from August 2006 to January 2007. The patients underwent treatment on three spots per session, once a week for 3 weeks, and received 2000 impulses of the energy density 0.04-0.12mmJ / mm² (total 3 sessions 18000 impulses).

Results:

The patients treated with ESWT have clinically and statistically significant ($p < 0.005$) improvement in function and an important reduction of pain. On the average 80% of the patients had excellent and good results (81 % of Shoulder, 80% of Elbow, 84% of Plantar Fasciitis, 78% of Knee, 87% of Myofacial Syndrome, 87% Ankle and Achillodynia, 72% of Wrist, 74% of Hip). Twenty percent of the patients had no improvement but no complications were noted in this study.

Discussion:

A large number of musculoskeletal disorders show benefit from extracorporeal shock wave application in the treatment of patients with no response to regular therapy.

Conclusion:

These results suggest that extracorporeal therapy is an effective and noninvasive therapeutic strategy for near-the-bone soft tissue pain.