Clinical Studies with HMT Orthopaedic Shock Wave Treatment Device OssaTron

Plantar Fasciitis

Treatment of Painful Heel Syndrome With Shock Waves

In a prospective randomized study, the effectiveness of shock waves on painful heel syndrome in 80 patients (20 men and 60 women) with an average age of 48 years was investigated. Six patients had bilateral treatments. Each treatment consisted of 1000 impulses of shock waves at 14kV. A 100- point scoring system (70 points for pain and 30 points for function) was used for evaluation. The intensity of pain was measured with a visual analogue scale VAS from 0 to 10. The overall results were no complaints in 20.6 %, significantly better in 52.9 %, slightly better in 17.6 % and unchanged in 8.8 % of 64 patients (68 heels) with 12 weeks follow up; no complaints in 59.3 %, significantly better in 27.7 %, slightly better in 13 % of 52 patients (54 heels) with 6 months follow up.

None of patients' symptoms became worse. Seventeen patients (18 heels) who did not respond favorably to the first treatment had significantly better results after a second treatment. There were no device-related problems, and no systemic or local complications. Shock wave treatment is a new modality of therapy that is safe and effective in the treatment of patients with painful heal syndrome.

Plantar Fasciitis	Followup 6 weeks	Followup 12 weeks	Followup 6 months
Number of Patients/Heels	74/80	64/68	52/54
Complaint free	6 (7.5%)	14 (20.6%)	32 (59.3%)
Significant improvement	25 (31.3%)	36 (52.9%)	15 (27.7%)
Slightly improvement	38 (47.5%)	12 (17.6%)	7 (13%)
No improvement	11 (13.8%)	6 (8.8%)	-

Number of patients treated in the study: 80

Han-Shiang Chen*, Liang-Mei Chen**, Ting-Wen Huang* Clinical Orthopedics and Related Research, Number 387, pp.41-46, 2001

From the *Department of Surgery, and the **Department of Orthopedic Surgery, Chang Gung Memorial Hospital, Kaohsiung Medical Center, Kaohsiung, Taiwan