

Clinical Studies with HMT Orthopaedic Shock Wave Treatment Device OssaTron

Epicondylitis

Treatment of Lateral Epicondylitis of the Elbow With Shock Waves

In a prospective clinical study, the effectiveness of shock wave treatment for lateral epicondylitis in 56 elbows in 53 patients (27 men and 26 women) with an average age of 46 years was investigated. Three patients received treatment for both elbows. Each elbow was treated with 1000 impulses of shock waves at 14 kV. A 100-point scoring system was used for evaluation including 40 points for pain, 30 points for function, 20 points for strength, and 10 points for elbow motion. The intensity of pain was measured using a visual analogue scale from 0 to 10. The overall results were 13.2% excellent, 44.7% good, 36.8% acceptable, and 5.3 unchanged in 35 patients with 12 weeks follow up; 30.8% excellent, 42.3% good, and 26.9% acceptable in 25 patients with 24 weeks follow up. Considerable improvement was observed from 6 weeks to 6 months after the treatment. None of the patients' symptoms became worse. The results of nine patients who also received a second treatment were good in three patients, acceptable in five patients, and unchanged in one patient. There were no device-related problems, systemic, or local complications. Shock wave therapy may offer a new and safer nonoperative treatment for patients with lateral epicondylitis of the elbow.

Number of patients treated in the study: 53

| Lateral Epicondylitis | Followup 6 weeks | Followup 12 weeks | Followup 6 months |
|---------------------------|------------------|-------------------|-------------------|
| Number of Patients/Elbows | 47/49 | 35/38 | 25/26 |
| Complaint free | 1 (2%) | 5 (13.2%) | 8 (30.8%) |
| Significant improvement | 17 (34.7%) | 17 (44.7%) | 11 (42.3%) |
| Slightly improvement | 19 (38.7%) | 14 (36.8%) | 7 (26.9%) |
| No improvement | 12 (24.5%) | 2 (5.3%) | - |

Jih-Yang Ko, MD*; Han-Shiang Chen, MD**; Liang-Mei Chen, MD*
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From the * Department of Orthopedic Surgery, and the ** Department of Surgery, Chang Gung Memorial Hospital, Kaohsiung Medical Center, Kaohsiung, Taiwan