

Long-term Results of Extracorporeal Shockwave Treatment for Plantar Fasciitis

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Background: Extracorporeal shockwave treatment has shown mixed short-term results for plantar fasciitis. However, the long-term results are not available. Hypothesis: Long-term results of shockwave treatment are comparable with short-term results. Study Design: Randomized controlled clinical trial; Level of evidence, 1. Methods: This prospective study consisted of 149 patients (168 heels) with an established diagnosis of chronic plantar fasciitis, including 79 patients (85 heels) in the shockwave treatment group and 70 patients (83 heels) in the control group. In the shockwave group, patients received 1,500 shock wave impulses at 16 kV on the affected heel in a single session. Patients in the control group received conservative treatment consisting of nonsteroidal anti-inflammatory drugs, orthotics, physical therapy, an exercise program, and/or a local cortisone injection. Patients were evaluated at 60 to 72 months (shockwave group) or 34 to 64 months (control group) with a 100-point scoring system including 70 points for pain and 30 points for function. The clinical outcomes were rated as excellent, good, fair, or poor. Results: Before treatment, the groups showed no significant differences in the scores for pain and function. After treatment, the shockwave group showed significantly better pain and function scores as compared with the control group. The overall results were 69.1% excellent, 13.6% good, 6.2% fair, and 11.1% poor for the shockwave group; and 0% excellent, 55% good, 36% fair, and 9% poor for the control group ($P < .001$). The recurrence rate was 12% (9/81 heels) for the shockwave group versus 55% (43/78 heels) for the control group ($P < .001$). There were no systemic or local complications or device-related problems. Conclusion: Extracorporeal shockwave treatment is effective and safe for patients with plantar fasciitis, with good long-term results.

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