

# Plantar fasciitis: Follow up four years after ESWT

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## Device and producing company:

Minilith SL1, Storz Medical

## Introduction:

Plantar fasciitis is the most frequent cause of tallodinia in adults (1). It is linked to obesity and to calcaneal spur (2-3) and is characterized by severe pain with functional impotence more pronounced on awakening (4).

## Methods:

Twenty-five (25) patients (14 M and 11 F) mean age of 60, 15 years were followed at our clinic for plantar fasciitis and functional impotence in the morning. All patients had severe tallodinia for at least 6 months with no response at analgesic treatments. The patients were assessed by the Ankle-Hind Foot scale (AOAFS) at the beginning and the end of treatment; this evaluation was repeated at the 3-month, 2-year and 4-year follow up examinations. Twenty-one (21) patients completed the study. Exclusion criteria was: patients who had undergone surgery on the plantar fascia; previous fracture of the foot; ankle trauma or severe contusion and distraction, patients with rheumatoid arthritis; ankylosing spondylitis; Reiter's syndrome; severe osteoarthritis of the hip or knee; and diabetes. Processing consisted of shock wave treatment (ESWT) once a week for 4 sessions total. Each session consisted of 2,400 pulses at 0.04 mJ/mm<sup>2</sup> with the Minilith SL1 by Storz Medical. The statistical difference was conducted with the Wilcoxon test for paired samples. Minimum level of significance is  $p = 0.05$ .

## Results:

We found a clear reduction of pain and increase in functional improvement at different times during the study with results that are maintained at 2 and 4 years after treatment ( $p < 0.001$ ).

## Conclusion:

Our results seem to underline the usefulness of the treatment of plantar fasciitis with ESWT. The reduction of pain, the recovery of adequate support of the foot and walking suggest that ESWT is the most effective therapy for this disease, with good results even after 4 years.

## Bibliography:

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