

# **Plantar fasciitis treatment: physical therapy with US versus ESWT**

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## **Device and producing company:**

Ossatron device, HMT s.r.l

## **Introduction:**

Extracorporeal Shock Wave Therapy (ESWT) was approved by the Food and Drug Administration (FDA) specifically for treatment of Plantar Fasciitis (PF) in 2001. In order to investigate the role of ESWT concerning the clinical evidence of efficacy, we performed a comparative study of ESWT versus other therapies, particularly Ultra Sound (US) physical therapy.

## **Methods:**

We have recently performed a systematic review of our clinical cases, evaluated over a three-year period in our ESWT out-patient clinic. We checked three patient groups treated, respectively, with ESWT only (group 1), US only (group 2) and ESWT after US with poor clinical results (group 3). We performed a comparison between the two therapies and an open study with a control group.

## **Results:**

Significant clinical improvement was obtained by both groups (group 1 and 2). We noted no statistical significance in the results of ESWT versus US. Good clinical and functional results of ESWT after US therapy were registered in the analysis of the control group.

## **Discussion:**

The result of the comparison of Group 1 versus Group 2 could be due to the different clinical conditions of the two groups. In the control group however, we performed a case control analysis and we avoided selection bias.

## **Conclusion:**

ESWT appears to reduce plantar fasciitis in patients who were previously treated with other physical therapies without clinical improvement. Even so there is not sufficient data to prescribe ESWT as first choice treatment.