

# Extracorporeal Shockwave for Chronic Tendinopathies – Data Analysis.

## Author:

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## Device and producing company:

REFLECTRON – HMT

## Introduction:

We investigate the success of ESWT on patients who underwent treatment for Plantar Fasciitis, Achilles Tendinopathies and calcified lesions of the shoulder. Based on a sample of patients from a retrospective study we are able to provide the probability, with its associated uncertainty, of a patient recovering after 180 days of the treatment.

## Methods:

We analyzed a sample of 486 patients with chronic tendinopathies treated between March 2001 and February 2006 for Plantar Fasciitis, Calcifying Tendinosis of the shoulder or Achilles tendinopathies. The subjects were evaluated by means of a clinical evaluation according to the Roles and Maudsley Score and the Visual Analogue Scale. We fitted a logistic regression model that considers the effect of gender, side of application, age, and pathologies from the follow up after 45, 90, and 180 days of the completion of treatment.

## Results:

We clearly notice an increasing pattern on the proportion of patients who move to categories 1 and 2 by the end of the 180 days. Our model point that the estimated odds ratio (OR) with respect to the side (right or left) the patient was treated for is not significant; whereas, women seem to have a higher probability of recovering as compared to men (OR=0.53).

## Discussion:

Given the profile of a new patient, we can estimate his probability, with its associated uncertainty, of being in category 1 (“excellent”) after the end of the treatment.

## Conclusion:

Our statistical model provides evidence that the use of ESWT in Chronic Tendinopathies seems to significantly improve the condition of a patient after the treatment.