

# Shockwave therapy for the lateral epicondylitis of the elbow

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## Device and producing company:

REFLECTRON - HMT - SwiTech Medical

## Introduction:

Lateral epicondylitis is a difficult and prolonged disease for which several modalities of conservative treatment do not seem to modify the illness' natural progression. The studies of basic research have demonstrated that the application of ESWT produces a biological response in the tissues, including the induction of neo-vascularization associated with the increase of angiogenic growth factors. The aim of this study was to evaluate the effectiveness and the safety of ES WT in the treatment of the lateral epicondylitis of the elbow in three Brazilian orthopedic centers.

## Methods:

From March 2001 to February 2006, 105 cases with chronic Lateral Epicondylitis were treated - 100 patients, 5 with bilateral treatment; 42 women and 58 men. The age of the patients was between 33 and 74 years (average age = 51 years). The treatments were performed with an electrohydraulic device (REFLECTRON®). One treatment was performed on 92 cases, 12 underwent a second treatment and 1 case underwent a third treatment (minimum interval of 90 days). The subjects were evaluated by means of a clinical evaluation according to Roles and Maudsley score and subjective outcome on Visual Analog Scale (VAS) analysis 45, 90 and 180 days after the end of the therapy.

## Results:

The study showed the efficacy and safety of ESWT were excellent in 41.0%, good in 31.4%, acceptable in 10.5%, and poor in 17.1%, 180 days after ESWT.

## Discussion:

Based in this new concept of "tissue regeneration," ESWT must be considered as an alternative in the treatment of chronic lateral epicondylitis of the elbow which has been resistant to conventional procedures.

## Conclusion:

ESWT must be considered as an alternative in the treatment of chronic lateral epicondylitis. ESWT has the advantages of being non-invasive: no significant complications, lower operating costs, and eliminating the substantial potential risks of traditional surgical procedures.