

# Shockwave therapy for the treatment of the trochanteric bursitis with tendinosis of the gluteus

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## Device and producing company:

REFLECTRON - HMT- SWITECH MEDICAL

## Introduction:

Trochanteric bursitis has potential risk factors which include local trauma, overuse activities, and leg length discrepancies. These factors are thought to lead to increased tension of the gluteus maximus on the iliotibial band producing bursal inflammation and tears or tendinosis of the gluteus medius, present on magnetic resonance imaging (MRI) in over 63% of patients clinically diagnosed. 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 at the tendon-bone interface associated with the increase of angiogenic growth factors. The aim of this study was to evaluate the effectiveness and the safety of ESWT in the treatment of trochanteric bursitis with tendinosis of the gluteus in three Brazilian orthopedic center.

## Methods:

From June 2002 to February 2006, 56 cases with chronic trochanteric bursitis were treated - 50 patients, 6 with bilateral treatment; 41 women and 9 men. The age of the patients was between 27 and 95 years (average age = 61 years). The treatments were performed with an electrohydraulic device (REFLECTRON®). One treatment was performed on 52 cases and 4 underwent a second 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 41.1%, good in 48.2%, acceptable in 3.6%, and poor in 7.1%, 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 trochanteric bursitis which has been resistant to conventional procedures.

## Conclusion:

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