

42. Effectiveness of Shock Wave Therapy in Patients with Chronic Achilles Tendinopathy

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Device and producing company:

Reflectron, HMT

Introduction:

A pathological Achilles tendon may in itself be symptomatic causing clinical morbidity or it may be the precursor of a catastrophic rupture. Three Brazilian centers for shockwave therapy participated in a retrospective study to evaluate the effectiveness and safety of shock wave treatment in patients with chronic tendinopathy of the Achilles tendon.

Methods:

One hundred forty-two (142) patients were evaluated (156 Achilles tendons) from May 2002 to November 2007. Each patient was treated after medial and lateral regional block anaesthesia, with 1000 pulses of shockwaves at 5 mm depth focus and 0.13mJ/mm² energy flux density. Only one treatment was required in 123 cases (78.8%), whereas 23 cases (14.8%) were subjected to a second treatment and 10 (6.4%) received a third treatment. The subjective analysis of pain was determined by visual analogical scale and clinical evaluation in agreement with the Roles and Maudsley Score.

Results:

One hundred and eighty (180) days after treatment the results were classified as: excellent in 28.8%; good in 40.4%; acceptable in 15.4% and poor in 15.4% of the patients. Minimal collateral effects were observed, related to transitory petechias and a few cases of initial worsening of pain after treatment. We did not observe any cases of worsening of the initial complaints. Three patients with bad results were advised to have surgery.

Discussion:

Extracorporeal shock wave therapy produces significant relief of pain and decreases incapacity produced by chronic Achilles tendinopathy.

Conclusion:

Shock wave therapy should be considered as an option for patients with chronic Achilles tendinopathy unresponsive to other conservative measures before undergoing surgery.