

Shockwave Therapy for Tendinosis Calcarea of the Shoulder : Retrospective Study

Author:

PR. Rockett, AC. Souza, PR. Santos

Institution:

Ortosom (Porto Alegre/RS); Cortrel (Rio de Janeiro/RJ); Orthomaster (Sao Paulo/SP), Brazil

The aim of this study was to evaluate the efficacy and safety of extracorporeal shock wave therapy for the treatment of tendinosis calcarea of the shoulder in three Brazilian Orthopaedics Clinics.

In a multi-center, retrospective study, the effect of shockwave therapy was investigated in 166 shoulders of 159 patients with tendinosis calcarea of the shoulder treated in the 51 months from April 2001 to July 2005.

Seven patients received treatment in both shoulders. There were 82 women and 77 men with an average age of 56 (range, 25-79) years. The criteria for inclusion were at least three months of unsuccessful conservative therapy or six months of pain and calcifications grade I or II from Gärtner´s classification.

Criteria for exclusion were inflammatory arthritis, corticosteroid injection within the previous 6 weeks, acute infection, gout, malignant diseases and blood coagulation disorders. Each patient was treated with 1,500 – 2,000 shock waves, a 35 mm focus depth, and with an energy flux density of no more than 0.14 mJ/mm² after local or regional anaesthesia. One treatment was performed on 145 shoulders, 17 underwent a second treatment and 4 shoulders underwent a third treatment. The subjects were evaluated by means of a clinical evaluation according to Roles and Maudsley score, subjective outcome on Visual Analogue Scale (VAS), X-rays and ultrasound analysis, 45, 90 and 180 days after the end of the therapy.

The study showed the efficacy and safety of ESWT were excellent in 26.5%, good in 38.6%, acceptable in 13.9%, and poor in 21%, 180 days after ESWT.