

Extracorporeal Shock Wave Therapy (ESWT) for Treatment of Calcific Tendonitis of the Shoulder One-Year Experience

Author:

Capasso T. M, Gonzalez C. O, Guedez M.

Institution:

ORTHOSHOCK, Caracas- Venezuela

The purpose of this study was to assess the results of the extracorporeal shock wave therapy for calcific tendonitis of the shoulder.

This retrospective study was conducted at the Orthoshock Shock Wave Center based in Caracas, Venezuela. From January, 2005 to January 2006, 39 patients, aged 41 to 65 years old, were treated (28 female, 11 male) for a total of 44 shoulders (5 bilateral). Inclusion criteria included diagnosis of calcific tendonitis of the rotator cuff with chronic pain, restriction of over 50% in range of joint motion and resistant to conservative treatment for at least six months. Patients received shock wave therapy under the standard protocol; a weekly session for three weeks, level 7 of energy (3000 impact/0.36 mj/mm²) under sedation. The equipment used was a Dornier electromagnetic generator (Compact S and Epos Ultra) with a focus guided by ultrasound of 7.5 Mhz. Patients were evaluated according to a Visual Analog Scale and radiological monitoring following each session. Clinic, radiological and echographic scans were taken one month and one year after the end of the treatment.

A total of 37 patients (94%) had reduced pain after the therapy. Thirty-seven patients (94%) recovered significantly the joint motion range. Three patients (7.69%) showed total calcium resorption and 34 patients (87.1%) experienced partial calcium resorption (radiological and echographic scans). There were no adverse events.

High-energy focal shock waves proved to be an effective therapy for treatment of calcific tendonitis of the rotator cuff. Shock waves are a safe, effective choice for treatment of calcific tendonitis of the shoulder, reduced pain and better motion range.