



Clinical Report

Radial Extracorporeal Shock Wave Therapy for Relief of Arthralgia in Rheumatoid Arthritis

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Abstract

More than one-third of the population with rheumatoid arthritis requires adjuvant analgesic treatment after antirheumatic therapy. In addition to analgesics, another option is radial extracorporeal shock wave therapy (rESWT), a novel physical therapy that has been successfully used in the treatment of many types of chronic soft tissue pain. We report a series of 15 patients who suffered from arthralgia after being on disease-modifying antirheumatic drugs for more than 3 months. Participants received rESWT for 3 months as an adjuvant therapy. Compared to the pretherapy baseline, follow-up at 3 months post-therapy revealed a significant reduction in resting state visual analog scale scores from 2.90 ± 0.74 to 0.80 ± 0.79 ($P = 0.004$), active state visual analog scale scores from 5.70 ± 1.33 to 2.20 ± 0.63 ($P < 0.001$), morning stiffness duration from 2.25 ± 0.79 to 1.05 ± 0.69 hours ($P = 0.004$), disease activity score with 28-joint counts based on erythrocyte sedimentation rate from 6.34 ± 0.72 to 4.19 ± 0.59 ($P = 0.001$), and Health Assessment Questionnaire scores from 10.20 ± 2.35 to 5.00 ± 2.62 ($P = 0.005$). The pre-post changes in erythrocyte sedimentation rate and C-reactive protein were not statistically significant. By the end of treatment, 11 participants stopped analgesics completely; the other 4 participants were on a smaller dosage. No severe adverse effects related to rESWT were observed. To our knowledge, this is the first report using this therapy to treat arthralgia in rheumatoid arthritis.