
Title

Management of medial tibial stress syndrome using extracorporeal shockwave therapy and exercise: A case report; [Manejo del síndrome de estrés tibial medial mediante ondas de choque extracorpóreas y ejercicio terapéutico: estudio de caso]

Abstract

Background and objectives: Medial tibial stress syndrome (MTSS) is an overuse injury that frequently affects people who practice physical activity (PA) associated with running. Conservative treatment is insufficient, so other therapeutic options have been studied. It has been postulated that extracorporeal shockwave therapy (ESWT) added to a training program (TP) could be a beneficial effect on the intensity of pain, as well as accelerate return to sports. The purpose of this report is to describe the management of a patient with MTSS using radial ESWT and TP. Material and method: 24-year-old man presents pain in the medial edge of both tibial shafts associated with running. The intensity of pain at rest and movement, pressure pain threshold and functional capacity were evaluated. In addition, the involved area was explored using ultrasonography. The radial ESWT were applied using 2000 pulses, 14 Hz and 1.4 bar continuing with 2000 pulses at 8 Hz and 3.0 bar. Training program included stationary bike, stretching and specific muscle strengthening. Eight sessions were held distributed over 7 weeks. Results: Considerable improvements were evident in pain perception and functional capacity, especially in actions that involve jumping or running. Return to PA was achieved at the 5th week of treatment. Conclusion: A dual intervention plan based on ESWT and PT could be considered a valid option for management in people with MTSS. © 2024 Asociación Española de Fisioterapeutas

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