

Randomized Controlled Trial [Clin Rehabil.](#) 2019 Apr;33(4):670-680.

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Focused extracorporeal shock wave therapy for greater trochanteric pain syndrome with gluteal tendinopathy: a randomized controlled trial

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Abstract

Objectives:: To investigate if focused extracorporeal shock wave therapy (f-ESWT) is an effective treatment in a population affected by greater trochanteric pain syndrome (GTPS).

Design:: Randomized controlled trial, with blind outcome assessors.

Setting:: Outpatients, University Hospital.

Subjects:: A total of 50 patients affected by GTPS with gluteal tendinopathy.

Interventions:: The study group was assigned to receive f-ESWT, the control group received ultrasound therapy (UST).

Main measures:: We assessed hip pain and lower limb function by means of a numeric rating scale (p-NRS) and the Lower Extremity Functional Scale (LEFS scale), respectively. The first follow-up evaluation (2M-FUP) was performed two months after the first treatment session, the second (6M-FUP) was carried out six months later.

Results:: The mean age of the population was 61.24 (9.26) years. A marked prevalence of the female sex was recorded (44 subjects, 86%). The statistical analysis showed a significant pain reduction over time for the study group and the control group, the f-ESWT proving to be significantly more effective than UST ($P < 0.05$) at the 2M-FUP (2.08 vs 3.36) and at the 6M-FUP (0.79 vs 2.03). A marked improvement of the LEFS total score was observed in both groups as well, but we found no statistical differences in the comparisons between groups.

Conclusion:: Our findings support the hypothesis that f-ESWT is effective in reducing pain, both in the short-term and in the mid-term perspective. We also observed a functional improvement in the affected lower limb, but, in this case, f-ESWT showed not to be superior to UST.

Keywords: Greater trochanteric pain syndrome; shock wave; tendinopathy.

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