Shock wave therapy may be effective for chronic noninsertional Achilles tendinopathy

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High-energy extracorporeal shock wave therapy may be an effective treatment option for patients with chronic noninsertional Achilles tendinopathy, according to a study by a sports medicine specialist in Pennsylvania.

John P. Furia, MD, evaluated outcomes for 34 patients treated with a single dose of high-energy shock wave therapy for chronic noninsertional Achilles tendinopathy. All procedures were performed using regional anesthesia, with 3,000 shocks applied at 0.21 mJ/mm² and a total energy flux density of 604 mJ/mm².

Furia compared the results for these patients to a control group of 34 patients also treated for chronic noninsertional Achilles tendinopathy. However, these control subjects received other forms of nonoperative treatment, according to the study, published in the American Journal of Sports Medicine.

He found that, during follow-up, patients treated with high-energy shock wave therapy showed significantly better mean Visual Analog Scale (VAS) scores for pain.

At 1 month, VAS pain scores averaged 6.5 points for control patients vs. 2.9 points for those treated with shock wave therapy (P < .001). Pain scores averaged 8.4 points for control patients vs. 4.4 points for shock wave therapy-treated patients at 3 months follow-up (P < .001), and averaged 5.6 points for controls vs. 2.2 points for shock wave therapy-treated patients at 12 months follow-up (P < .001), according to the study.
"At final follow-up, the number of excellent, good, fair and poor results for the shock wave therapy and control groups were 12 and zero ($P < .001$), 17 and nine ($P < .001$), five and 17 ($P < .001$), and zero and eight ($P < .001$), respectively," Furia reported.

"[A chi²] analysis revealed that the percentage of patients with excellent ('1') or good ('2') Roles and Maudsley scores, that is, successful results, 12 months after treatment was statistically greater in the shock wave therapy group than in the control group ($P < .001$)," he noted.

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