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Shock wave therapy relieves plantar fasciitis pain

Wed Nov 26, 2008

NEW YORK (Reuters Health) - Patients with a common and painful heel condition called plantar fasciitis benefit from a new type of shock wave therapy in which energy is delivered across a broader area of the foot, German researchers report.

The treatment, called radial extracorporeal shock wave therapy (ESWT), "can be strongly recommended for patients with therapy-resistant plantar painful heel syndrome," Dr. Ludger Gerdesmeyer of the Mare Clinic in Kiel-Kronshagen and colleagues write. "Especially in the cases of failed nonsurgical treatment, ESWT represents an excellent alternative to surgery because anesthesia is not required and long recovery times are avoided."

Plantar fasciitis is an inflammation of the tissue supporting the arch of the foot. About 10 percent of patients may need surgical treatment, which can require an extended recovery period, Gerdesmeyer and his team note in their report.

ESWT is increasingly being used as an alternative to surgery for plantar fasciitis, Gerdesmeyer and his team note, but clinical trials comparing it with placebo have yielded contradictory results. Standard ESWT delivers focused shock waves to the most tender point on the patient's foot, they explain, while ESWT covers a larger area and does not penetrate as deeply into tissue.

To investigate the effectiveness of the new treatment, the researchers randomly assigned 245 patients with chronic plantar fasciitis to undergo three

treatments 2 weeks apart with ESWT or a sham treatment with a device that did not transmit shock waves.

After 12 weeks, patients who underwent the real treatment had a 72.1 percent reduction in their heel pain scores, while the reduction for the placebo group averaged 44.7 percent.

One year after treatment, pain scores were 84.8 percent lower than at the study's outset for the treatment group, while the placebo group's pain scores dropped by 43.2 percent. Patients assigned to rESWT also showed significantly greater improvement in their quality of life and ability to function in daily life compared with those who received the sham treatment.

"Thus, there is evidence for benefit of patients with painful heel by ESWT treatment not only through reduced pain but also generally improved well being," Gerdesmeyer and colleagues conclude.

The maker of the radial ESWT device, Switzerland-based Electro Medical Systems, funded the study but was not involved in collecting or analyzing the data, according to the researchers. They also disclosed a potential conflict of interest of one or more of the study authors.

SOURCE: American Journal of Sports Medicine, November 2008.