

Magnet Therapy Reduced Fibromyalgia Pain, Reports Recent Study

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Magnet therapy reduced fibromyalgia pain according to a recent [2001] University of Virginia study published in the *Journal of Alternative and Complementary Medicine*. Although the overall results of the study were inconclusive, magnet therapy reduced fibromyalgia pain intensity enough in one group of study participants to be "clinically meaningful," the researchers said.

The researchers from the University of Virginia used three measures of pain in the study: functional status reported by study participants on a standardized fibromyalgia questionnaire used nationwide, number of tender points on the body and pain intensity ratings.

Data were compiled for 94 fibromyalgia patients randomly divided into four groups. One control group received sham pads containing magnets that had been demagnetized through heat processing. The second control group received only their usual treatment for fibromyalgia. Two other groups received active magnetic pads: one group used Pad A, which provided whole-body exposure to a low, uniformly static magnetic field of negative polarity. The other used Pad B, which exposed subjects to a low static magnetic field that varied spatially and in polarity. The subjects were treated and tracked for six months.

"When we compared the groups, we did not find significant statistical differences in most of the outcome measures," said Ann Gill Taylor, R.N., Ed.D., co-investigator for the study, professor of nursing and director and principal investigator of the Center for Study of Complementary and Alternative Therapies at the University of Virginia.

"However, we did find a statistically significant difference in pain intensity reduction for one of the active magnet pad groups. The two groups that slept on pads with active magnets generally showed the greatest improvements in outcome scores of pain intensity level, number of tender points on the body and functional status after six months."

Pad A group exhibited a consistent improvement across all four outcome measures at three and six months. Pad B group showed an improvement in all outcomes at three months, and these improved scores were maintained at six months. The sham pad group and the group receiving only usual care did not exhibit the same improvements.

The magnetic fields of the mattresses were tested thoroughly to quantify how much exposure, or dosage, study participants were receiving, the researchers said.

"Finding any positive results in the groups using the magnets was surprising, given how little we know about how magnets work to reduce pain," said the study's principal investigator Dr. Alan P. Alfano, assistant professor of physical medicine and rehabilitation and medical director of the U.Va. HealthSouth Rehabilitation Hospital. "The results tell us maybe this therapy works, and that maybe more research is justified. You can't draw final conclusions from only one study."

"To our knowledge, no other studies on magnet therapy have been done in as rigorous a clinical setting as U.Va., and this study was the largest conducted so far," Taylor said. "Nevertheless, larger studies are needed to find clear answers about magnets' safety and efficacy in treating pain." "Fibromyalgia is a common rheumatological condition for which there is no generally effective treatment," Alfano said. "People who have fibromyalgia try everything and magnetic mattress pads are one of the most popular complementary products they try. We did this study because we hoped to provide some useful information for them.

"In the past decade, people in this country have been using magnets for everything from tennis elbow to carpal tunnel syndrome. They want to do something for their pain that doesn't involve medication or injections, and magnets seem relatively benign. But people don't know how to evaluate magnetic products when considering what to buy. There are no standards for magnets yet. So researchers need to find out what dosage, field strength and period of exposure is proper, what side effects may occur and what conditions benefit most," Alfano said.

Two other basic science laboratory studies currently underway at U.Va. are investigating the effects of pulsed and static magnetic fields on neural processes and functions and the effects of magnetic fields on microvascular capillary blood flow. The study was conducted with partial support from a grant from the National Institutes of Health Center for Complementary and Alternative Medicine.