Extra Vitamin D Fails to Cut Fibromyalgia Pain

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SAN DIEGO — Vitamin D supplementation did not lessen fibromyalgia symptoms in a small trial, a finding that casts doubt on the theory that vitamin D deficiency underlies some patients' pain and that screening vitamin D levels would identify patients who would benefit from supplementation, Dr. Ann Warner said in a poster presentation at the annual meeting of the American College of Rheumatology.

She performed two studies examining the vitamin D hypothesis. In one study, Dr. Warner, a rheumatologist who practices in Kansas City, Mo., took 50 fibromyalgia patients with insufficient serum levels of vitamin D (a 25-hydroxyvitamin D level less than 20 ng/mL) and randomized them to weekly doses of 50,000 IU of vitamin D or to placebo for 3 months.

The 25 patients who were randomized to supplementation had a higher mean pain score on a visual analog scale at baseline compared with the patients who received placebo (74 mm vs. 61 mm). The mean pain score of patients given supplemental vitamin D improved after 3 months, falling to 64 mm.

However, the mean visual analog scale score of the control patients fell to a similar degree, to 54 mm, and neither group's changes were statistically significant.

Patients in the control group showed a slight, but significant improvement on the functional pain score, while the supplemented group did not.

In the second study, Dr. Warner compared 25-hydroxyvitamin D levels in 104 patients with osteoarthritis with levels in 184 fibromyalgia patients.

There was no statistically significant difference in mean levels between the groups—28.76 ng/mL for the osteoarthritis group versus 29.16 for the fibromyalgia group—even though there was a slightly higher percentage of patients with fibromyalgia who were insufficient, 29% versus 20%.

In an interview, Dr. Warner said the vitamin D hypothesis achieved some credibility in 2003 when an article in the Mayo Clinic Proceedings reported that 93% of a group of 150 patients with diffuse musculoskeletal pain were vitamin D insufficient. The article was accompanied by an editorial suggesting that vitamin D insufficiency is so common that all patients with diffuse pain should perhaps have their levels checked.

The theory seemed to make sense, since vitamin D deficiency causes osteomalacia.

Her studies had some possibly confounding features, Dr. Warner said. In the supplementation study, even the control patients had an improvement in their vitamin D levels during the course of the study because the weather turned warmer. And in the second study, the osteoarthritis patients were significantly older (an average of 60 years versus 54 years).

Still, neither group in the first study had a significant change in their visual analog scale pain scores, and age did not correlate statistically with vitamin D level in the second study.

"I would conclude we don't need to be checking vitamin D levels in patients with fibromyalgia," Dr. Warner said. ■

Shedding Weight Aids Fibromyalgia

Behavioral weight loss treatment benefited overweight and obese women with fibromyalgia syndrome, reported Jennifer R. Shapiro, Ph.D., and her colleagues at the University of Albany, State University of New York.

In a 20-week pilot study, 31 overweight or obese Caucasian women with fibromyalgia syndrome lost an average of 9.2 lbs, or more than 4% of their initial body weight. Most who lost weight shed at least 5% of their initial body weight (J. Psychosomatic Res. 2005;59:275-82).

The intervention entailed small group meetings every week for 1.5 hours, along with use of guidelines for diet and exercise.

Weight loss treatment at week 20 was significantly associated with improvements in depression, anxiety, pain, body concerns, support, and quality of life, the investigators said. "The amount of weight loss, as opposed to both absolute weight and treatment participation in general, is a better predictor of pain improvement," the researchers said.

—Kevin Foley