Extra Vitamin D Fails to Cut Fibromyalgia Pain

By Timothy F. Kirm
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 treating 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 Korea, in Mo, took the fibromyalgia patients with insufficient serum levels of vitamin D (a 25-hydroxyvitamin D level less than 20 ng/mL) and randomized them to twice a day of 50,000 U vitamin D or 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 supplementation 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 fibromyalgia patients. There was no statistically significant difference in mean levels between the groups—7.5 ng/mL in the arthritis group versus 29.16 for the fibromyalgia group—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 deficiency is so common that all patients with diffuse pain should perhaps have their levels checked.

The theory is difficult 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 Pain

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 26-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. Psychosom Res. 2005;59:273-82).

The intervention entailed small group meetings every week for 15 hours, along with use of guidelines for diet and exercise.

Weight loss treatment at week 20 was significantly associated with improvements in fatigue, anxiety, pain, sleep concerns, support, and quality of life, the investigators said. “The amount of weight loss, as opposed to both absolute weight and treatment group, appears to be a better predictor of pain improvement,” the researchers said.

—Kevin Foley