Vitamin D shows no impact on interferon response in SLE

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(HealthDay)—For patients with systemic lupus erythematosus (SLE), vitamin D_3 supplementation does not affect interferon (IFN) signature, according to a study published in the July issue of *Arthritis & Rheumatology*.

Cynthia Aranow, M.D., from the Feinstein Institute for Medical Research in Manhasset, N.Y., and colleagues examined the effects of vitamin D supplementation on the IFN signature (expression level of three IFN genes) in 57 patients with stable, inactive SLE. Patients were randomized into a 12-week trial of vitamin D_3 at doses of 2,000 or 4,000 IU, or placebo.

The researchers found that repletion of 25-hydroxyvitamin D (?30 ng/mL) was observed in 16 of the 33 patients receiving vitamin D_3, but in none of the patients receiving placebo. There was no difference between the treatment groups in the percentage of patients with an IFN signature response. Furthermore, the percentage of patients with an IFN signature response did not differ between those who remained vitamin D deficient and those who demonstrated repletion of vitamin D. No changes from baseline were seen in any of the treatment groups in modular microarray analysis of a subset of 40 patients; there were also no differences in expression among patients with vitamin D repletion versus those with persistent vitamin D deficiency.

"Vitamin D_3 supplementation up to 4,000 IU daily was safe and well tolerated but failed to diminish the IFN signature in vitamin D-deficient SLE patients," the authors write.

One author is an employee of Rho Federal Systems, a division of Rho, a contract research organization.

More information: Abstract
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