Consider Testing Vitamin D Levels in Winter

BY BETSY BATES
Los Angeles Bureau

SANTA BARBARA, CALIF. — A "care collision" with vitamin D proponents can be avoided by ensuring that patients receive supplements to compensate for their lack of exposure to ultraviolet light, a California-based dermatologist suggested.

"Patients are getting this mixed message about whether they are supposed to go out in the sun or not go out in the sun. There's a lot of confusion," said Dr. Jeffrey Ashley, a dermatologist in private practice who also directs the nonprofit organization Sun Safety for Kids.

While Boston University endocrinologist Dr. Michael Holick recommended intentional sun exposure or time in the tanning booth in his book "The UV Advantage" (Ibooks Inc., 2004), many dermatologists insist on sun protection, despite evidence of the multifaceted benefits of vitamin D sufficiency, he said.

Inadequate vitamin D is a leading contributor to osteoporosis, diagnosed in 10-12 million Americans, according to Dr. Ashley. It has been proved directly or indirectly to control the expression of more than 200 genes, including regulation of cellular proliferation, differentiation, apoptosis, and angiogenesis.

And current studies are examining its association with recurrent melanoma and cancers of the colon, breast, pancreas, prostate, and ovary, as well as autoimmune diseases, cardiovascular diseases, hypertension, and even schizophrenia.

"I think the bottom line is, until we have more evidence about this, we need to err on the safe side … and make sure our patients have sufficient levels of vitamin D," he said during the annual meeting of the California Society of Dermatology and Dermatologic Surgery.

"Who should you suspect of being vitamin D deficient in your practice?"

The standard answer: elderly people, whose thin skin does not contain as much vitamin D precursor; people with dark skin tones, who require sixfold as much UV light to produce vitamin D; obese patients, because vitamin D is sequestered in adipose tissue; and breastfed babies, who receive little vitamin D from their mothers' milk.

However, not everyone who is vitamin D deficient fits the classic profile, as evidenced by a recent study of skateboarders in Hawaii, a quarter of whom had blood levels less than 30 ng/mL and 10% of whom had levels less than 10 ng/mL—a level associated with rickets (J. Clin. Endocrin. Metab. 2007;92:2130-5).

When he began routinely ordering vitamin D blood level tests, Dr. Ashley was surprised to find many patients with at-risk blood levels of lower than 20 ng/mL and a number of elderly patients with levels so low they equated to adult rickets, at less than 10 ng/mL.

He recommends that his sun-safe patients make sure they are taking 1,000 IU per day of cholecalciferol (vitamin D_3). His patients have welcomed the information, he said, since it addresses conflicting information they have heard about touted benefits of unprotected exposure to the sun.

"I think we've reached the point where there's a care collision between those of us really concerned about skin cancer prevention in the one corner, and [in the other corner] those whose primary concern is maintaining vitamin D sufficiency in the population," he said.

The American Academy of Dermatology maintains that a well-balanced diet and incidental sun exposure are sufficient to fulfill vitamin D needs, said Dr. Ashley.

"I take exception to that," he said. Spending time in the sun to obtain ideal levels of vitamin D is an "inaccurate, unreliable, complicated" proposition, because people absorb and metabolize ultraviolet light differently.

Through diet alone, patients would have to eat wild salmon daily to get 1,000 IU of vitamin D—the level recommended by the Canadian Cancer Society and many nutritionists and endocrinologists.

Dr. Ashley now orders vitamin D blood level tests for every patient each winter, unless his or her primary care physicians have already done so. He tells patients, "If we can keep your level up in winter, you'll probably be okay all year-round."

While he recommends supplementation daily for all of his patients, he is particularly careful about monitoring those whose blood levels fall below what he considers to be the "preferred range for optimal benefit": 32-60 ng/mL, he said.

Dr. Ashley had no conflicts of interest to disclose. ■