

Phototherapy affects serum 25(OH)D levels

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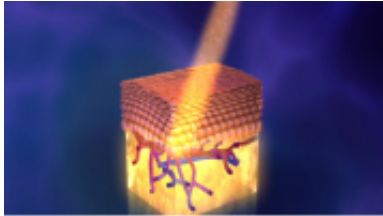


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For patients with inflammatory skin conditions, phototherapy with ultraviolet (UV) A1 radiation induces a reduction in serum 25-hydroxyvitamin D3 (25[OH]D) levels, whereas narrowband UVB (UVBnb) and UVA/UVBnb induces significant increases in serum 25(OH)D, according to a study published in the October issue of the *Journal of the American Academy of Dermatology*.

(HealthDay)—For patients with inflammatory skin conditions, phototherapy with ultraviolet (UV) A1 radiation induces a reduction in serum 25-hydroxyvitamin D3 (25[OH]D) levels, whereas narrowband UVB (UVBnb) and UVA/UVBnb induces significant increases in serum 25(OH)D, according to a study published in the October issue of the *Journal of the American Academy of Dermatology*.

Laurence Feldmeyer, M.D., Ph.D., from University Hospital Zurich, and colleagues examined the influence of UVA1, UVBnb, and UVA/UVBnb phototherapy on [serum levels](#) of 25(OH)D and related parameters in 116 patients with [atopic dermatitis](#), psoriasis, morphea, and other inflammatory skin conditions. The participants underwent UVA1 (38 participants), UVA/UVBnb (30 participants), or UVBnb (48 participants) two to three times per week for 53 to 90 days.

The researchers found that, after the therapy, UVBnb phototherapy correlated with a significant increase in serum 25(OH)D, from 22.1 to 39.5 ng/mL. Upon application of UVBnb phototherapy, the increase in 25(OH)D was steeper with a lower

baseline 25(OH)D. A significant increase in serum 25(OH)D was also seen with UVA/UVBnb therapy, from 23.9 to 50.3 ng/mL. In contrast, in the UVA1 therapy group there was a significant decrease in 25(OH)D serum levels, from 21.9 to 19.0 ng/mL.

"In conclusion, phototherapy has an impact on 25(OH)D levels in the serum," the authors write. "Our study data [call] for closer examination of a potential confounding effect of various [skin diseases](#) and the need for oral vitamin D supplementation in UVA1-treated patients."

The study was funded by Spirig Pharmaceuticals.

More information: [Abstract](#)
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