

Dr. Schlesinger replies

To the Editor:

Risk factors and comorbidities associated with erectile dysfunction (ED) in patients with gout include diabetes mellitus, hypertension, advanced age, obesity, hyperlipidemia, metabolic syndrome, certain medications, and tobacco abuse. We suggested¹ that hyperuricemia and inflammation may be independent risk factors for ED in addition to the conventional ones. Lv and Chen² suggest another possible independent risk factor for ED in patients with gout: low levels of Vitamin D, and they question the need to give Vitamin D supplementation to these patients.

Vitamin D might have both positive and negative effects on the cardiovascular system and thus on ED, depending on the doses used. In 2007, Zittermann, *et al*³ suggested a “U” curve to explain the potential dual effect of Vitamin D on the cardiovascular system — an increased cardiovascular risk at both the low (mainly secondary to the reduced antiinflammatory and endothelial-protective effects) and high (secondary to the increased calcemic and phosphatemic effects and stimulation of FGF23) Vitamin D levels. For the dual effect to be studied, the study duration should be sufficiently long; although the antiinflammatory effect might be evident in a short time, to see the effects related to calcium and phosphorus metabolism might require a longer observation time.

The evidence base for effects of Vitamin D on bone health is strong and supported by randomized clinical trials. However, the evidence base for the effects of Vitamin D on nonskeletal disease such as cardiovascular disease

and ED is inconclusive, inconsistent, and unable to support such conclusions⁴. Thus, the question of the effect of Vitamin D levels as well as Vitamin D supplementation on serum urate and ED in patients with gout is interesting and may warrant further study.

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