Correspondence

Vitamin D deficiency in hyperthyroidism

Sir,

I read the aricle by Jyotsana *et al*¹ with interest in which authors have described bone mineral homeostasis in subjects with hyperthyroidism¹. The most surprising element is lower vitamin D levels in controls compared to patients. Authors have failed to give adequate explanation of this finding. We have reported significantly lower vitamin D levels in Indian patients with hyperthyroidism². In this study, 30 patients with thyrotoxicosis were studied for vitamin D status and bone mineral density (BMD). The mean 25 (OH) vitamin D levels in patient group were 15.3±7.1 ng/ml and 30 per cent of patients had severe vitamin D deficiency (<10 ng/ml). We have postulated hyperpigmentation of skin, malabsorption and increased vitamin D metabolism as possible mechanisms of vitamin D deficiency in hyperthyroidism³. Authors of the present study¹ have not cited this important paper which was first reported study on this subject from India. Goswami et al⁴ have reported malabsorption in Indian patients with hyperthyroidism. According to this study significant number of patients (46%) with thyrotoxicosis in India had fat malabsorption⁴. Absorption of fat soluble vitamins such as vitamin D is likely to be hindered in such a state. It is worthwhile to study correlation between steatorrhea and vitamin D status in these patients with thyrotoxicosis. Also, in Table I mean age in two groups looks similar but has been shown as significantly different. The signs * and ** have not been explained.

Dinesh K. Dhanwal

Department of Medicine & Endocrinology Maulana Azad Medical College New Delhi 110 002, India dineshdhanwal@hotmail.com

References

 Jyotsna VP, Sahoo A, Ksh SA, Sreenivas V, Gupta N. Bone mineral density in patients of Graves disease pre- & posttreatment in a predominantly vitamin D deficient population. *Indian J Med Res* 2012; *135*: 36-41.

- Dhanwal DK, Kochupillai N, Gupta N, Cooper C, Dennison EM. Hypovitaminosis D and bone mineral metabolism and bone density in hyperthyroidism. *J Clin Densitom* 2010; *13*: 462-6.
- Banba K, Tanaka N, Fujioka A, Tajima S. Hyperpigmentation caused by hyperthyroidism: differences from the pigmentation of Addison's disease. *Clin Exp Dermatol* 1999; 24: 196-8.
- 4. Goswami R, Tandon RK, Dudha A, Kochupillai N. Prevalence and significance of steatorrhea in patients with active Graves' disease. *Am J Gastroenterol* 1998; *93* : 1122-5.