



LETTER TO THE EDITOR

Disease location and severity may predict Vitamin D deficiency in Crohn's[☆]



KEYWORDS

Crohn's disease;
Vitamin D;
Stricturing disease;
Ileal disease

We read with interest the article entitled "Vitamin D deficiency in Crohn's disease and healthy controls: A prospective case-control study in the Netherlands" by de Bruyn JR et al.¹ This article describes a high incidence of Vitamin D deficiency among both Crohn's disease patients and controls in the Netherlands and highlights the importance of sunlight exposure in maintaining an adequate Vitamin D level. However, Crohn's disease phenotype also plays an important part in Vitamin D status among these patients.

In a study analysing Vitamin D levels in 101 Maltese Crohn's disease patients (mean age: 39.9 years), mean Vitamin D levels were 36 ng/mL with only 6 patients having documented vitamin D deficiency. Vitamin D deficiency in Crohn's appears to be associated with typical disease phenotypes. In fact, all 6 patients had evidence of ileal involvement, with 4 patients having ileal disease and 2 patients having ileocolonic disease while only 64% of patients with normal Vitamin D levels had ileal involvement (ileal disease in 21% and ileocolonic disease in 43%). Three patients with low Vitamin D levels (50%) had undergone small intestinal surgery secondary to Crohn's disease complications versus 14 patients (15%) of patients with normal Vitamin D levels.

In addition, patients with low Vitamin D levels also had more severe Crohn's disease types with 4 patients having stricturing disease (66%) and 1 patient (17%) having fistulating disease. Twenty patients with normal Vitamin D levels (21%) had stricturing disease and 6 patients had penetrating disease types (6%). The mean bone mineral density T score at the hip among patients with low Vitamin D levels was -1.61 (range:

-3.24 to 0.97) and the mean T score at the spine was 0.15 (range: -0.98 to 1.78) while the mean T score (hip) among patients with normal Vitamin D levels was -1.22 and the mean T score (spine) was -0.80 .

The low incidence of Vitamin D deficiency among Maltese Crohn's disease patients confirms that adequate sunlight exposure is important in maintaining Vitamin D levels with the mean monthly sunshine hours in Malta being nearly double that in the Netherlands (3054 h of monthly sunshine in Malta versus 1601 h in the Netherlands). However, the disease site and disease severity are important in Vitamin D deficiency with ileal involvement, intestinal resection and stricturing and penetrating disease types being commoner in patients with low Vitamin D levels. Vitamin D levels also appear to be associated with disease activity in Crohn's with Vitamin D levels increasing following treatment with infliximab.^{2,3} Patients with particular Crohn's disease phenotypes should therefore undergo regular screening for vitamin D deficiency, especially in countries with low levels of sunshine exposure.

Conflict of interest

The authors declare no conflicts of interest.

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