Pellagra complicating Crohn’s disease

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Summary
We report a 53-year-old patient with clinical features of pellagra as a complication of Crohn’s disease. His symptoms improved rapidly on taking oral nicotinic acid and vitamin B complex. We suggest the paucity of reported cases of pellagra in Crohn’s disease is a reflection of poor recognition of this complication.

Keywords: pellagra, Crohn’s disease

Pellagra is derived from the Italian words ‘pelle agra’ meaning rough skin and was first described in 1735 by the Spanish physician Casal. The disease is a result of deficiency of nicotinamide or disturbance of other pathways of tryptophan metabolism. Pellagra was originally of epidemic proportions in areas where maize was the principal component of the diet. However, with appropriate food supplements, pellagra is now rarely seen in developed countries, but is still relatively common in poorer areas. Other causes include carcinoid syndrome, treatment with isoniazid and Hartnup disease.

Case report
A 53-year-old caucasian man presented with a two-month history of a pruritic photosensitive
Pellagra in Crohn’s disease

There have been infrequent reports of pellagra in Crohn’s disease. Malabsorption and inadequate dietary intake have both been implicated, although other biochemical features of chronic malabsorption were not present in our patient. High-dose oral supplements are usually adequate but there are no studies specifically looking at the effect of Crohn’s disease on the absorption and metabolism of niacinamide. As the disease is rare in developed countries, the degree of clinical suspicion is likely to be low. The diagnosis of pellagra is usually established on clinical grounds and we suggest the paucity of reported cases does not reflect its true prevalence in patients with Crohn’s disease. Greater awareness of this complication and direct questioning regarding skin problems is vital if the correct treatment is to be offered.

Learning points

- pellagra is caused by a deficiency of niacin
- inadequate diet is the most common cause in developing countries, but it is also seen in chronic alcoholics and those with gastrointestinal disease
- rare causes include carcinoid syndrome, Hartnup disease, and isoniazid therapy
- the triad of dermatitis, diarrhoea, and dementia is classical of pellagra. The skin changes usually appear on areas exposed to sun, heat and pressure
- pellagra is rarely reported in patients with Crohn’s disease. A high degree of clinical suspicion is required to establish the diagnosis