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SCIENTIFIC LETTER

Lane Hamilton Syndrome

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To the Editor: Lane Hamilton syndrome is known for five decades; however, it is yet to be proved as either an association or co-occurrence of celiac disease (CD) and diffuse alveolar hemorrhage (DAH) [1]. Indians have much varied/atypical presentations of CD, for example, anemia and short stature are more common in Indians than Western children [2]. The described syndrome may be a varied presentation of CD. We report a case of delayed diagnosis of Lane Hamilton syndrome who recovered with regular gluten free diet (GFD).

A 16-y-old-boy from Delhi presented with 8-y history of steatorrhea, failure to gain weight and stunted growth. Last 3-mo, he suffered from cough with scanty expectoration, two episodes of mild hemoptysis and progressive exertional breathlessness. He was pale and undernourished (weight, 35 kg; height, 155 cm). His hemogram revealed severe anemia (Hb, 2.6 mg/dL) of microcytic hypochromic type. Serum iron profile suggested iron deficiency state. Chest imaging (X-ray and CT) revealed DAH. Bronchoalveolar lavage and transbronchial lung biopsy showed hemosiderin-laden macrophages confirming DAH without any vasculitis. 2D–echocardiography was normal except mild pulmonary artery hypertension. Autoimmune workup was negative. Urine and stool routine microscopy did not reveal anything. Hormonal analyses revealed Vitamin-D deficiency (serum level, 11.2 ng/ml). Immunoglobulin levels were normal. IgA anti-tTG antibodies were elevated (151.41 U/ml, negative < 20 U/ml) along with positive anti-endomyseal antibodies. Duodenal biopsy suggested CD. Hence, a diagnosis of Lane Hamilton syndrome was made. He was treated with GFD and other micronutrients. Within 4-d of the specific diet, his diarrhea improved markedly. Steroid/immunosuppressant was not started due to absence of active alveolar hemorrhage. On his last follow-up after 1-y of GFD, he had gained weight of ~10 kg without any symptoms and normal chest X-ray and pulmonary function tests, but with same height.

Among few published cases of Lane Hamilton syndrome, six cases are Indian with male predominance and being diagnosed very late similar to our case [3, 4]. Furthermore, suspicion for both components of the syndrome is very low despite higher disease prevalence (1%) of CD in North India [2]. This leads to unnecessary delay in primary diagnosis and counter productively permanent short stature as in the index case.

Few cases require immunosuppressant for DAH to control, however symptoms recur once GFD non-compliant [5]. All six reported Indian cases got symptoms free with GFD alone, not requiring any immunosuppression. Hence, diet compliance is the single factor in deciding the outcome of the syndrome.

Compliance with Ethical Standards

Conflict of Interest None.

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