

Uveitis: a rare presentation finding of celiac disease in childhood

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To the Editor,

Celiac disease is an autoimmune enteropathy triggered by ingestion of wheat, rye and barley in genetically susceptible individuals. The clinical presentation of celiac disease in children is highly variable¹. Typical symptoms are growth failure, chronic diarrhea, abdominal distention, and malabsorption. However, it is observed that presentation with atypical features is increasingly found to predominate. The most commonly encountered atypical symptoms are short stature, anemia, recurrent abdominal pain, and constipation. Extraintestinal manifestations such as dermatitis herpetiformis, osteoporosis, and infertility and associated disorders such as type I diabetes mellitus, Hashimoto thyroiditis and neurologic problems are also being diagnosed increasingly. Some of these disorders, such as osteoporosis and infertility, are thought to be the result of malabsorption, but a major group of associated disorders are immunologically related with celiac disease.

Uveitis is a rarely seen problem in children. The etiology remains obscure in most of the cases, but the most frequently identified underlying diseases are juvenile idiopathic arthritis and Behçet's disease. Infectious etiology such as toxoplasmosis and *Toxocara canis*, systemic diseases such as sarcoidosis, Kawasaki syndrome, ankylosing spondylitis, Crohn's disease, systemic lupus erythematosus, Vogt-Koyanagi-Harada disease, and celiac disease are described in the literature¹⁻⁴. Here, we describe a patient who presented with short stature and uveitis and was diagnosed as celiac disease.

An 11-year-old girl was referred to our outpatient clinic because of short stature. She had been diagnosed as uveitis of the right eye a month before. She did not have any gastrointestinal symptoms and no history of oral or genital ulcers. Her weight was 32 kg (<3rd percentile) and her height was 126 cm

(<3rd percentile); her systemic examination was normal. Biomicroscopic examination of the right eye revealed posterior synechiae. Laboratory examinations demonstrated normal complete blood count: Hemoglobin (Hb) 12 g/dl, hematocrit 35%, white blood cells 9800/mm³ with a normal differential, and platelets 407,000/mm³. Erythrocyte sedimentation rate was 24 mm/h and C-reactive protein was 0.2 mg/dl (0-0.8). Liver and renal function tests and electrolytes were as follows: alanine aminotransferase 54 U/L, aspartate aminotransferase 26 U/L, blood urea nitrogen 14.5 mg/dl, serum creatinine 0.3 mg/dl, sodium 141 mEq/L, potassium 4.46 mEq/L, glucose 91 mg/dl, calcium 9.9 mg/dl, phosphorus 4.5 mg/dl, alkaline phosphatase 173 U/L, total protein 7.6 g/dl, and albumin 4.8 g/dl. Thyroid function tests, urine analysis and complement levels were normal, and antinuclear antibody, anti-dsDNA, and thyroid-specific autoantibodies were negative. Bone age was consistent with 11 years. Because of her short stature and growth failure, celiac antibodies were studied. As anti gliadin IgG and antiendomysium IgA antibodies were strongly positive, endoscopic small bowel biopsy was performed, and diagnosis of type 3b celiac disease was established. A gluten-free diet was started and steroid therapy for uveitis was continued. Juvenile idiopathic arthritis, Behçet's disease, sarcoidosis, and toxoplasmosis were excluded with clinical and laboratory findings. Increase in height and weight gain were established with gluten-free diet at the end of six months, and uveitis was completely treated. She has been followed for two years with negative antiendomysium IgA antibodies, and ophthalmologic examination showed no signs of uveitis.

Celiac disease association with other autoimmune diseases is very well known.

These autoimmune diseases and celiac disease have a complex relation that involves genetic and immunologic factors. As an example, type I diabetes and thyroid disease are the most commonly encountered diseases affecting 5% of celiac patients. This link is thought to be related with genetic background, especially in the HLA region of the chromosome⁴. In the case of dermatitis herpetiformis, HLA-DQ2 and DQ8 markers are shared with celiac disease, and affected patients often have the same intestinal pathology with celiac disease, although they do not have gastrointestinal symptoms⁵. Anti-transglutaminase antibodies are also observed in the papillary dermis of patients with dermatitis herpetiformis with celiac disease⁶. Neurologic disorders such as cerebellar ataxia and peripheral neuropathy, which are seen most commonly with celiac disease, have the same pathology, as deposits of anti-transglutaminase antibodies are also observed in the cerebellum and brainstem of the patient with celiac disease⁷. The nature of the connection between celiac disease and uveitis is unknown. However, we presume an immunologic relation between these entities, as uveitis is usually seen with autoimmune diseases such as juvenile idiopathic arthritis, ankylosing spondylitis and Behçet's disease, in which the pathogenesis is related to immunologic and genetic features.

Celiac disease and uveitis were reported in a few cases in the literature. Laghmari et al.³ reported 20 children with uveitis. One case in this report was associated with celiac disease, and the patient was treated with a gluten-free diet and corticosteroids. Another case was a three-year-old girl with Vogt-Koyanagi-Harada disease associated with type I diabetes mellitus and celiac disease. Good response was noted in the latter case with a gluten-free diet, systemic corticosteroids and immunosuppressive therapy⁸. Hyraille et al.⁹ reported another uveitis case with celiac disease cured with only gluten-free diet. Uveitis, alopecia and celiac disease association was also reported¹⁰.

Uveitis is rare in childhood, and the cases with celiac disease are very limited. Although certain relations between the pathogenesis of uveitis and celiac disease are not exactly understood, in our opinion, uveitis may be regarded as one

of the extraintestinal features of celiac disease. It may also be speculated that uveitis is an immunologic disease seen in association with celiac disease. As it is known that celiac cases with atypical symptoms are harder to diagnose, in the case of uveitis, celiac disease must be considered, especially if it is present among other symptoms regarding celiac disease. If the association of celiac disease and uveitis is diagnosed more commonly, studies may be held in the future to clarify the pathogenesis.

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