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CELIAC CASES PRESENTING WITH ENDOCRINE COMPLAINTS

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INTRODUCTION

Celiac disease is a chronic enteropathy resulting from an autoimmune response to dietary gluten in genetically susceptible individuals. Celiac Disease can affect mainly small intestine but also many other systems because of autoimmune mechanism. This may lead to delayed diagnosis (1). Celiac disease is divided into 5 groups: typical, atypical, silent, latent, and potential. While the symptomatic cases of the disease that the frequency of which is increasing day by day constitute the tip of the iceberg, the asymptomatic and latent forms cover a much larger area (Figure 1). This article draws attention to celiac cases presenting with purely endocrinological findings.

MATERIALS AND METHODS

Our study includes 10 cases who applied to the pediatric endocrinology outpatient clinic with various complaints.The cases in which a detailed history was taken and anthropometric evaluation and physical examination were performed are summarized in Table 1.

Table 1	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Case 9	Case10
Yaş	13Y9A	7Y8A	11Y10A	8Y5A	11Y7A	11Y2A	16Y6A	16Y5A	12Y	8Y10A
Cinsiyet	Girl	Girl	Boy	Girl	Boy	Girl	Girl	Girl	Girl	Girl
Şikayet	Short stature	Breast enlargement	Overweight	Tsh yüksekliği	Short stature	Tsh yüksekliğİ	Kilo kaybı	Tip 1 diyabet	Tsh yüksekliği	Erken ergenlik
Fm	P5	T2	P5	T1	P1	P5	P5	P5	T3	T1
Vkip	0.7P	82.89	99.8	38.21	8.08	4.46	-2.5	79.95	1	50.8
Boysds	-1.81	2.74	3.17	1.85	-2.09	1.48	0,81	0,74	-1.45	+1.88
Doku Tg Ig A	Negatif	Pozitif	Pozitif	Pozitif	Pozitif	Pozitif	Pozitif	Pozitif	Negatif	Pozitif
Doku Tg Ig G	Negatif	Negatif	Pozitif	Negatif		Negatif			Negatif	
Anti Gliadin IgA	Negatif									

Anti Gliadin IgG	Negatif									
Anti Endomisyum IgA	Pozitif	Pozitif	Pozitif	Pozitif				Negatif	Pozitif	Pozitif
Anti Endomisyum IgG	Negatif	Negatif	Pozitif	Negatif				Negatif	Negatif	Negatif
Biyopsi	İzlem	İzlem	Pozitif	Negatif	İzlem	İzlem	Pozitif	İzlem	Negatif	İzlem
Tanı	Çölyak ve nütrisyonel boy kısalığı	Çölyak ve puberte prekoz	Çölyak ve obezite	Çölyak Ve hashimato tiroiditi	Çölyak ve total büyüme hormon eksikliği	Çölyak ve hipotiroidi	Çölyak ve anoreksia nervosa	Çölyak ve tip 1 diyabet	Çölyak ve hipotiroidi	Çölyak ve puberte prekoz

The endocrinological diseases that coexist with celiac disease are summarized in Table 2.The gender distribution of the cases was determined as eight girls and two boys.Tests were performed on two patients who presented with breast enlargement, and a diagnosis of pubertal precosis was made.Pathological short stature was detected in two patients who presented with short stature.Obesity was diagnosed in a patient who applied for the reason of being overweight.Hashimoto's thyroiditis was detected in one of the three patients who presented with Tsh elevation.A patient who was admitted with the diagnosis of anorexia nervosa was referred to the pediatric gastroenterology department after positive celiac antibodies were detected. In the biopsy, the patient was diagnosed with celiac disease. Celiac tissue transglutaminase lg A was positive in a patient with type 1 diabetes. Tissue translutaminase Ig A was studied in all patients by the ELISA method. In negative cases, anti-endomysium Ig A antibody was opened by IFA method. Ig A was studied simultaneously with celiac antibodies in order to prevent false negatives due to possible Ig A deficiency in patients. We recommend simultaneous study of lg A with celiac antibody.

Table 2

Çölyak ve Endokrin Bulgular

- Yeme Bozukluğu
- Boy Kısalığı
- Obezite
- Hipotiroidi
- Tip 1 Diyabet
- Puberte Prekoz

DİSCUSSİON

Celiac disease is an autoimmune disease that can result in mucosal damage in the small intestine as a result of ingestion of gliadin protein found in grains such as wheat and barley (2). Although celiac disease usually presents with classical findings such as diarrhea and abdominal distension in childhood, it may also present with different findings such as isolated short stature, treatment-resistant iron deficiency anemia, alopecia, and depression, especially in older children (1,2). Celiac disease accompanies various autoimmune diseases and genetic syndromes. Although the most common disease is type 1 diabetes mellitus, diseases such as Hashimoto's thyroiditis, cystic fibrosis, IgA nephropathy may accompany celiac disease. Celiac disease is also seen in patients with Down syndrome. Although

the association of obesity and celiac disease is more prominent in adults, it is also seen in pediatric patients (1)

Celiac disease can occur at any age from early childhood to old age. It has two peaks; the first peak occurs after gluten intake within the first two years of life, and the second peak occurs within the second or third decade of life. Diagnosing celiac disease is difficult because symptoms vary from patient to patient. The prevalence of celiac disease has considerably increased over the past 30 years, which can be attributed to both the widespread use of very sensitive and specific tests as well as doctors' increasing knowledge and awareness of the condition. First- and second-degree relatives of celiac patients, Down syndrome, type 1 diabetes mellitus (DM), selective immunoglobulin (Ig)A deficiency, autoimmune thyroiditis, Turner syndrome, and Williams syndrome all carry an increased chance of getting the condition. The rise in prevalence of celiac disease was also influenced by screening tests for the condition in risk populations like those with type 1 diabetes, autoimmune thyroid conditions, and first-degree relatives of celiac patients.

Children typically get symptoms 4 to 24 months after consuming gluten-containing foods. There might be a lag or latent interval between ingesting gluten and the appearance of symptoms. In celiac disease, GIS and extra-intestinal symptoms are frequent[38]. Chronic diarrhea, recurring stomach discomfort, nausea, vomiting, and abdominal distension are the main GIS symptoms of celiac disease. Infants typically have distinct symptoms than older kids do. Younger children frequently exhibit diarrhea, anorexia, stomach distension, and abdominal pain. Failure to thrive, irritability, and severe malnutrition might be observed in cases with delayed diagnosis. Up to 60% of children with celiac disease have extra-intestinal symptoms. The most typical characteristic in children is short stature. In children with undiagnosed or untreated celiac disease, hypogonadism in females and delayed puberty in males are common findings. 10% to 20% of celiac disease patients experience delayed puberty.

Patients with celiac disease are three to ten times more likely than the general population to develop another autoimmune condition. Type 1 diabetes is the most frequent comorbid condition because it shares genetic risk factors and pathogenic pathways with celiac disease. There is strong evidence linking autoimmune thyroid disorders with celiac disease. Additionally, selective IgA deficiency patients have a higher prevalence of celiac disease than the overall population.

CONCLUSION

As a result, it should be kept in mind that celiac disease may present with atypical findings in all kinds of health problems that cannot be named in the child and adolescent group (1).

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