

## Scalloping and Mosaic Pattern of the Duodenum

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### 1. Case Report

A 65-year-old female patient was admitted to the gastroentero-hepatology outpatient clinic due to diarrhea, exhaustion and weight loss of about 6 kg complaints in the last year. Her medical history revealed that she had no chronic disease other than hypertension, and she did not use any medication other than ramipril, an antihypertensive drug that she used continuously. Iron deficiency anemia was detected in the patient. No pathological findings were found in the microbiological evaluation of feces. Gastroscopy and colonoscopy were performed on the patient who was over 50 years old. Colonoscopic evaluation was determined to be normal. In the gastroscopy, a mosaic pattern was observed in the second and third part of the duodenal mucosa (Figure 1 and Figure 2). The pathological examination of the duodenal biopsies revealed total villus atrophy and was identified as Marsh IIIc (Figure 3 and Figure 4). Tissue transglutaminase IgA and anti-endomysium IgA antibodies were positive in serological evaluation. The patient, who was evaluated as a celiac disease, had no diarrhea and improved iron deficiency anemia at the sixth-month control after gluten-free diet and iron replacement.

Although gluten disease can be seen at any age, it is mostly known as the disease of young adults and nowadays, we see that gluten disease tends to occur in elderly ages [1,2]. Patients with gluten disease may have no symptoms or they can present with typical gastrointestinal symptoms and/or non-gastrointestinal abnormalities [3]. Diagnosis of celiac disease is based on serological and histopathological findings of duodenum in clinically suspected

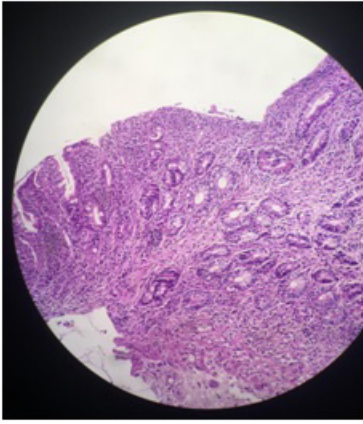
patients [3,4]. Scalloping, fissures, mosaic appearance, and decreased folds are mostly seen endoscopic findings in patients with celiac disease [3,4]. Celiac disease also should be kept in mind as in our case in iron deficiency anemia in elderly patients.



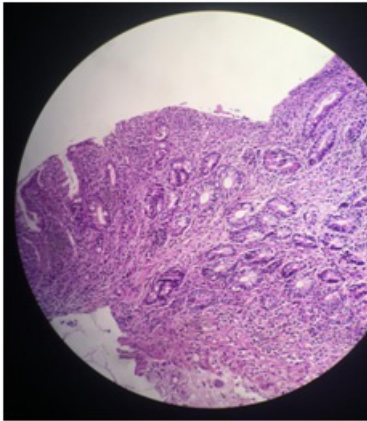
Figure 1: Endoscopic appearance of duodenal mucosa



Figure 2: Endoscopic appearance of duodenal mucosa



**Figure 3:** Duodenal biopsies total villus atrophy



**Figure 4:** Duodenal biopsies total villus atrophy

## References

1. Husby S, Murray JA, Katzka DA. AGA Clinical Practice Update on Diagnosis and Monitoring of Celiac Disease—Changing Utility of Serology and Histologic Measures: Expert Review. *Gastroenterology*. 2019; 156(4): 885-889.
2. Rubio-Tapia A, Hill ID, Kelly CP, Calderwood AH, Murray JA. ACG clinical guidelines: diagnosis and management of celiac disease. *Am J Gastroenterol*. 2013; 108(5): 656-76.
3. Volta U, De Giorgio R. New understanding of gluten sensitivity. *Nat Rev Gastroenterol & Hepatol*. 2012; 9: 295-299.
4. Lebwohl B, Rubio-Tapia A, Guandalini S, Newland C, Assiri A. Diagnosis of Celiac Disease. *Gastrointest Endosc Clin N Am*. 2012; 22(4): 661-677.