

## Letter to the Editor

# Histopathological classifications of celiac disease: an update

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Celiac disease (CD), also known as gluten-induced enteropathy or celiac sprue, is a chronic autoimmune disease that affects the small intestine and is caused by hypersensitivity to gluten. It is prevalent in about 1% of the population and has been increasing in recent years [1]. The clinical presentation of CD varies from chronic diarrhea, steatorrhea, and abdominal distension in infants to atypical or latent CD presenting with growth retardation, infertility, peripheral neuropathies, and dental enamel defects in adults. CD is diagnosed using clinical, serological, and histopathological criteria, with histological examination of small bowel mucosal biopsies being essential [2]. The histopathological features of celiac disease (CD) include total or subtotal villous atrophy, crypt hyperplasia, alteration of surface epithelium, densification of inflammatory infiltrate of chorion, and intraepithelial lymphocytosis. The classification of histopathological lesions of CD is challenging for pathologists due to the various classifications proposed over the decades [3]. The Marsh-Oberhuber classification was proposed in 2005, consisting of five types of lesions and a cut-off of 30 for intraepithelial lymphocytosis, but the reproducibility of the subtypes is problematic. The Marsh-Oberhuber classification is currently the most widely used classification system and has been found to be useful in identifying subgroups of patients with different prognoses. The classification system evaluates four parameters: the degree of villous atrophy, the degree of crypt hyperplasia, the presence of increased intraepithelial lymphocytes, and the presence of epithelial regenerative changes. The updated classification of CD has provided more clarity in diagnosis and treatment of the disease, leading to better outcomes for patients [4]. In 2007, Corazza and Villanacci proposed a simpler three-grade classification for CD that includes intraepithelial lymphocytosis greater than 25/100 epithelial cells in all grades, but the positive diagnosis of CD is made in case of grades B1 or B2 [5].

Ensari's classification is similar but replaces the term "grade" with "type" and lists the categories as 1, 2, and 3 [6]. Although the classifications have evolved and improved over time, some authors argue that the term "type" is more appropriate than "grade" as mucosal lesions do not necessarily reflect the severity of the disease. Pathologists play a critical role in ensuring accurate analysis of small bowel biopsy specimens and applying a simple and precise classification system for CD diagnosis. There have been many classifications proposed for celiac disease since the 1970s, but the Marsh-Oberhuber classification is the most widely used. Future classifications may respond to molecular advances in understanding the pathophysiology of CD and better adapt to the needs of clinicians.

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## Conflict of Interest Disclosures

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