Cell Mol Immunol. 2011 Mar;8(2):96-102. Epub 2011 Jan 31. Celiac disease: diagnostic criteria in progress. Volta U, Villanacci V. Source Department of Clinical Medicine, St Orsola-Malpighi University Hospital, Bologna, Italy. umberto.volta@aosp.bo.it

## Abstract

Until a few years ago, celiac disease (CD) was thought to be a rare food intolerance that was confined to childhood and characterized by severe malabsorption and flat intestinal mucosa. Currently, CD is regarded as an autoimmune disorder that is common in the general population (affecting 1 in 100 individuals), with possible onset at any age and with many possible presentations. The identification of CD is challenging because it can begin not only with diarrhea and weight loss but also with atypical gastrointestinal (constipation and recurrent abdominal pain) and extra-intestinal symptoms (anemia, raised transaminases, osteoporosis, recurrent miscarriages, aphthous stomatitis and associated autoimmune disorders), or it could be completely symptomless. Over the last 20 years, the diagnostic accuracy of serology for CD has progressively increased with the development of highly reliable tests, such as the detection of IgA tissue transglutaminase and antiendomysial and IgG antideamidated gliadin peptide antibodies. The routine use of antibody markers has allowed researchers to discover a very high number of 'borderline' cases, characterized by positive serology and mild intestinal lesions or normal small intestine architecture, which can be classified as potential CD. Therefore, it is evident that the 'old celiac disease' with flat mucosa is only a part of the spectrum of CD. It is possible that serology could identify CD in its early stages, before the appearance of severe intestinal damage. In cases with a positive serology but with mild or absent intestinal lesions, the detection of HLA-DQ2 and HLA-DQ8 can help reinforce or exclude the diagnosis of gluten sensitivity.