Background CD is an immune-mediated systemic disease elicited by gluten and related prolamines, it affects genetically susceptible individuals and it is characterized by the presence of gluten-dependent clinical manifestations, CD-specific antibodies, HLA-DQ2 or HLA-DQ8 haplotypes and enteropathy. According to the guidelines published by ESPGHAN in 2012, it is possible to diagnose celiac disease without intestinal biopsy, in symptomatic children and adolescents with very high levels of transglutaminases type-2 antibodies and positive HLA DQ2/DQ8.

Aims The aim of our study is to analyse two groups of patients: one in which diagnosis was based on the new ESPGHAN criteria, and another based on the 1991 Revised Criteria. Both are tested for average age of diagnosis, sex, presenting symptoms and comorbidities. The objective is to find relevant differences between the two groups.

Patients and methods Our study involves 25 patients having the CD onset from February 2013 to February 2019 with the following features: presence of anti-TTG IgA antibodies with a titer higher than at least 10 times the threshold value, presence of EMA IgA serology, compatible genetic profile (HLA-DQ2 and/or DQ8), clinical features. Patient recruitment was performed using data collected at our Pediatric Gastroenterology Center. The values obtained were compared with those of 25 children (control group) with CD diagnosis performed through the 1991 Revised Criteria.

Results In group 1 a prevalence of comorbidities such as IDDM and thyroiditis equal to 48% was found (12 patients out of 25, of which 8 males and 4 females). Out of these, 7 patients have IDDM exclusively, 4 IDDM and thyroiditis together, 1 patient with thyroiditis only.

In group 2 there was a prevalence of comorbidities such as IDMM and thyroiditis equal to 20% (5 patients out of 25, of which 2 males and 3 females). Out of these: 4 patients present exclusively IDDM, 1 IDDM and thyroiditis.

A statistically significant difference emerged between the two groups of patients when we analyzed the incidence of autoimmunity comorbidities. The P value of $\chi^2$ test was indeed <0.05. The IDDM and Thyroiditis variables taken individually are not significant.

Conclusion An increased prevalence of overall comorbidities (IDDM and thyroiditis) in the first group shows that the new diagnostic criteria could expose patients to a greater diagnostic delay responsible for the onset of such comorbidities. Further studies should be carried out on more numerous samples to highlight possible statistically significant differences between the two groups.