



Individual screening strategy for pediatric celiac disease

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To the Editor,

I read with a great interest the article published by Wessels et al., describing the prevalence and distribution of the diagnosis of celiac disease (CD) in first-degree relatives (FDRs) of pediatric index cases. Importantly, they found an overall 15% prevalence of CD in FDRs; moreover, the frequency of CD diagnosis resulted to be significantly greater in children (especially younger than 10 years) than in adults [1]. Respectively, these observations reveal the not negligible occurrence of CD in FDRs (higher than expected, according to previous evidences from the medical literature) [2] and underline the importance of looking for CD in pediatric FDRs. Indeed, childhood-onset CD impacts on several aspects related to the individual growth and development, and the potential long-term complications have more chance to manifest in the course of their life [3].

In addition to these aspects, this study might provide also interesting cues for the debate about the different approaches to screen CD, both in high-risk subjects and in the general population. Recently, we published a meta-analysis about the HLA-DQ genetics in children with CD: we found that at least one copy of the allele HLA-DQB1*02:01 (coding the β chain of DQ2 heterodimer) could be present in around 90% of the genotyped CD children [4]. Moreover, through a retrospective analysis of CD children in an Italian pediatric hospital ($N=143$, unpublished data), we had a similar finding, as more than 90% of CD children were carriers of HLA-DQB1*02:01 in homozygosis or heterozygosis. Therefore, in my opinion, it

would be interesting to show and analyze the frequency of CD between HLA-DQB1*02:01 carriers and not, in the cohort of patients described by Wessels et al., in addition to the analysis related to DQ2 heterodimer homozygosity only.

Indeed, further evidence supporting the specific predominance of HLA-DQB1*02:01, might provide some useful insights into the research of the most cost-effective strategy to screen CD in the pediatric population.

Authors' contributions Dimitri Poddighe conceived and wrote this contribution.

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