



Celiac disease and iron deficiency anemia

To the Editor,

I read with great interest the study by Ertekin et al. (1), in which they reported the highest prevalence (21.3%) of celiac disease (CD) in children with iron deficiency anemia (IDA) and recommended routine CD screening of children with IDA. Their study raises some important issues that should be clarified.

Firstly, it is not clear how the patients were recruited. If the patients were selected randomly rather than consecutively, selection bias would not be avoided.

Secondly, the authors cited a population-based study by Dalgic et al. (2) that reported the prevalence of biopsy-proven CD in Turkey was 1:212, and that together with those previously diagnosed as CD and those with high anti-endomysium and/or tissue transglutaminase titers but without biopsy findings, the prevalence was estimated to be 1:58. As such, the authors then concluded that the high prevalence of CD in Turkey might possibly explain why the prevalence of CD in children with IDA in their study was the highest reported. But, in order to avoid bias and be more accurate, the former prevalence of 1:212 should be taken into account, because the latter prevalence of 1:58 includes cases without confirmatory biopsy and those diagnosed as CD based on questionnaires only.

Furthermore, higher CD prevalence rates of CD were reported from United States, England, Finland, Italy, and Sweden, as compared to that in Turkey (3). But, they have not reported such high CD prevalence rate in children with IDA. Indeed, the prevalence of CD was not found over 15% even among children with refractory anemia (4). Moreover, a recent study from Turkey (5) reported that only 1 (2.3%) of 44 children with IDA had CD.

In conclusion, the high prevalence of CD in Turkey cannot be regarded as the reason of the high CD prevalence rate in children with IDA, as reported by Ertekin et al. (1). But, data on the prevalence of CD in the region in

which their study was performed could be more useful to make such conclusions on this issue.

Conflict of Interest: No conflict of interest was declared by the authors.

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Author's Reply

To the Editor,

We thank you for your interest in our work and your comments are appreciated. In our paper, in material and methods section, our lack of that we had not written the necessary information about patient selection. Patients were selected by outpatient general pediatric

clinic performed every other day for 2 days within the week. Therefore consecutively patient selection was not made.

In a population-based study by Dalgıç et al. (1), biopsy-proven CD prevalence was 1:212. In addition, in the same place where our study was made, in another study carried out previously, biopsy-proven CD prevalence was 1:158, even serological CD prevalence was 1:115 (2). That is, prevalence of CD was higher in Eastern of Turkey. These two studies included 6-17 years school-age children whereas our study included children between 2-17 years old. Therefore, population groups were slightly different. Moreover, Ataturk University in Erzurum is tertiary center in Eastern Anatolia. All of them may have contributed to high rates.

Ferrara et al (3) have not found over 15% of CD prevalence even among children with refractory anemia. But later studies showed that CD prevalence may higher in children with refractory IDA, as 44% (4,5). Winter et al (6) stated that CD diagnosis should be considered in every children with IDA, in particular those with recurrent IDA.

In conclusion, it may be differences in rates of both CD and IDA between regions. As your mentioned, CD prevalence was found high in the region in which our study was performed. Regional differences may affect prevalence of CD.

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