

Title:

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Increased incidence of eosinophilic esophagitis among the child population of Zaragoza. An emerging disease

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Dear Editor,

Eosinophilic esophagitis (EoE) is an immune-mediated chronic inflammatory disease characterized by esophageal dysfunction and eosinophilic infiltration (1,2). In the past few years, an exponential increase in the incidence and prevalence of this condition has been documented worldwide (3), among both the adult and child population, in association with increased diagnostic suspicion and a likely actual rise in the incidence rate.

To corroborate this hypothesis in our setting, a longitudinal, retrospective, multicenter observational study was carried out with patients aged 0 to 14 years who received a histological diagnosis of EoE from 2008 to 2022 at public hospitals in the province of Zaragoza. The annual incidence rates and mean incidence rate for the study period

were calculated using the data for the reference population available at the Instituto Aragonés de Estadística (Aragonese Statistics Institute) (4). A total of 104 patients with a histological diagnosis of EoE were obtained after excluding those failing to meet the inclusion criteria. A remarkable increase in incidence rate was seen from 2014 onwards (Fig. 1).

The mean incidence rate was 5.1 cases per 100,000 inhabitants < 15 years old/year (0.75-11.2). In the first five-year period (2008-2012), the rate was 1.2 cases per 100,000 inhabitants/year; in the second five-year period (2013-2017), the rate was six cases per 100,000 inhabitants/year; and in the third five-year period (2018-2022), the rate was 8.1 cases per 100,000 inhabitants/year. A progressive increase in incidence rate was confirmed for the condition, which reached statistical significance between the first and both the second and third five-year periods (OR 5.68 [95 % CI: 2.55-12.67, $p < 0.05$]; OR 7.74 [95 % CI: 3.52-16.99, $p < 0.05$], respectively). However, this significant association was not seen between the second and the third five-year time periods (OR 1.39 [95 % CI: 0.91-2.04]).

These results reflect our hypothesis regarding an increase in EoE incidence over the past few years, among the child population of the public health system in the province of Zaragoza during the period 2008-2022. Similarly, a five-fold higher risk of having the condition may be seen during the second five-year period, and a seven-fold higher risk during the third five-year period, as compared to the first one.

Several hypotheses have been suggested to explain this exponential increase in cases, including a higher number of endoscopies and improved understanding of the disease over the past few years, but further research in this field is needed.

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Fig. 1. EoE incidence rate per 100,000 inhabitants younger than 15 years of age from 2008 to 2022 in the public health system of the Zaragoza province.

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