Reviewer's report

Title: The Association Between Celiac Disease and Eosinophilic Esophagitis in Children and Adults

Version: 1 Date: 24 February 2013

Reviewer: Carlo Catassi

Reviewer's report:

This is an epidemiological study investigating the association between eosinophylic esophagitis (EoE) and celiac disease (CD) in a large Canadian population sample. The incidence of EoE ranged from 2.1 to 10.7 cases per 100,000 population. The incidence of CD ranged from 10.4 to 15.7 cases per 100,000 population. The concomitant diagnosis of both EoE and CD was made in three patients, all of whom were pediatric males. The SIR for EoE in the CD cohort was 48.4 with a SIR for CD within the paediatric EoE cohort of 75.05.

This is a simple epidemiological work that is clearly presented. The sample size is large, however the relevant disease association (EoE + CD) was present only in three cases, a finding that weakens the conclusions. Furthermore I don’t think this study really demonstrates that CD is significantly associated with EoE, since the prevalence of CD in patients with EoE was 3/421, i.e. the same (around 1%) expected in the general population. These contradictory findings are likely to be explained by a possible detection bias, in that a patient undergoing EGDS because of suspected EoE is more likely to end up with a diagnosis of CD than a subject who is not performing the EGDS.

Minor comments:

Page 2 line 12: The SIR of EoE in the CD cohort…("in the" is missing)

Pages 3-4: the introduction is too long, particularly concerning the description of EoE. There is no need to describe clinical and pathophysiological details here, since the study did not address these issues. Likewise the number of references on EoE should be cutted accordingly;

Page 4 line 7: change “effect” with “affect”

Page 6 line 3: the diagnostic criteria for celiac disease (CD) should be stated more clearly, e.g. patients with a Marsh 3a-c biopsy, Marsh 3a-c biopsy or Marsh 1 plus typical serological CD pattern (e.g. anti-tTG higher than 10x normal values, etc)

Page 8 line 13: delete “in”

Level of interest: An article of limited interest

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests