Reviewer’s report

Title: A large nationwide population-based case-control study of the association between intussusception and later celiac disease

Version: 1 Date: 21 February 2013

Reviewer: Kalle Kurppa

Reviewer’s report:

A study by Ludvigsson et al. investigated the possible association of intussusception and celiac disease. The text is clear and well-written. There are some (mainly minor) issues that should be clarified.

Minor Essential Revisions

1. Introduction, paragraph 2, line 3. I recommend that world “small-bowel mucosal” or “intestinal” is added before “inflammation”.

2. Methods, Celiac disease, line 9. The authors should clarify what means “positive for CD serology”? Positive to EmA, TG2-ab or antigliadin antibodies? The latter are well-known of their poor specificity

3. Methods, Post-hoc analysis, last two lines. I wonder if it really was necessary to perform post-hoc power calculation, as the usefulness of such retrospective analysis is controversial

4. Results, Subanalyses, paragraph 2. I do not particularly like this paragraph; there were really no statistical differences. In my opinion the paragraph should be reformulated or omitted. Also, it is possible that the “especially high” OR before 1990 is more likely caused by surveillance bias.

5. Discussion, paragraph 2, last four lines. I believe that the authors may read the full article of Reilly et al. (online first version) from the journals’ website.

6. Discussion, last paragraph. Maybe it should be addressed that the modern rotavirus vaccine is not associated with an increased risk of intussusception.

7. Table 1. Since the number of the subjects is shown, it should expressed with “n” (= Age 0-19, n (%))

8. Additional File 1. In my opinion this table is unnecessary and could be omitted.

Level of interest: An article whose findings are important to those with closely related research interests

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