Reviewer’s report

Title: Increasing prevalence and high Incidence of celiac disease in elderly people: A population-based study

Version: 1 Date: 2 March 2009

Reviewer: joseph murray

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This is a very important observation of the new development celiac disease in older patients. It is of scientific and practical clinical importance.

Whilst there were new 5 elderly individuals identified with probable new onset celiac disease, this is a small number whilst this is statistically significant in terms of a change over prior. Could this change be due to variability in the testing between the two time periods? This could be addressed by examining and reporting the absolute values and arbitrary assay units between the two time points. For example, were the earlier samples close to the threshold considered abnormal for tissue transglutaminase antibody? Repeating testing on both the first and the subsequent sample at the same time for both tests to make sure this truly was not simply variation around a threshold. The second issue is whether there were any confounders occurring on the first time, such as the use of steroids, be it topical or other immune modifiers.

2. Another second issue relates to the very high incidence of celiac disease in this unique population. Is the population of Lahti particularly inbred or isolated? Is there an especially high prevalence of homozygocity for DQ2, for example?

3. How would these results from this very isolated population relate to other populations? Have the authors taken into account the possibilities that the patients may have originally been seronegative celiac disease who then became seropositive, but had celiac disease all along? Demonstration of the actual histology would be convincing to this reviewer. Also, it would be worthwhile to know what the prevalence of seronegative celiac disease or pre-celiac disease could be in these individuals.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.