Reviewer's report

Title: Additional corpus biopsy enhances the detection of Helicobacter pylori infection in a backdrop of atrophic gastritis

Version: 1 Date: 24 July 2012

Reviewer: Michael Vieth

Reviewer's report:

Major Compulsory Revisions

I completely agree that the current recommendations concerning the location of gastric biopsy sampling are not perfect to detect atrophy, intestinal metaplasia and even the morphological proof of Helicobacter colonisation depend a lot on the site of the biopsy due to the patchy nature of changes within the stomach.

In the literature there is a continuous mix of autoimmune gastritis and gastritis with atrophy. I would like to suggest to change terminology in the present manuscript from "atrophic gastritis" (which can be mixed up with autoimmune gastritis or features of autoimmune gastritis) into "gastritis with atrophy" throughout the manuscript.

The discrepant cases where Helicobacter was not detected morphologically: I would like to recommend in these cases to mention the degree of inflammation (at least the activity of the gastritis) which can be an indirect sign of Helicobacter gastritis even if the bacteria can't be detected morphologically and relate this to other positive tests. This can be added to table 1.

In contrary to the authors' statement that there are no recommendations for the location of taking a biopsy (personally I think that they are not optimal but they do exist!): the Sydney System (ref 18) has an enormous background of statistical analysis to ensure that with a minimum of biopsies from defined areas the correct histological diagnosis can be made. Also, an incisura biopsy was once suggested within the Sydney System. Please mention the exact number of biopsies and exact proposed location of the biopsy site of the Sydney System. It is not "one biopsy from antrum and corpus"! I would like to suggest to change this / add this information throughout the manuscript.

I would also like to suggest to emphasize that grading of antrum atrophy is most difficult for pathologists since kappa values are very low. Please mention also, that you graded the atrophy like proposed in the Sydney System (please, with reference 18).

Minor Essential Revisions

instead of backdrop may be background is a better term?
ref 7... there is a new Masstricht IV/Florence report available from 2011

Table 4: "ca" in front of "Degree" ?

**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'