Reviewer’s report

Title: Helicobacter pylori vacA, cagA and iceA genotypes in dyspeptic patients from the southwestern region of Saudi Arabia: Distribution and association with clinical outcomes and histopathological changes

Version: 1 Date: 09 Oct 2018

Reviewer: Amin Talebi Bezmin Abadi

Reviewer's report:

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Dear Editor in BMC Gastroenterology

My pleasure to see your invitation addressing this cross sectional paper,

I have some suggestions/critics and modifications to improve this paper which I found it interesting for publication in BMC journal.

1- The title is too long and descriptive. I would prefer to see more informative one. Generally, it is not acceptable to say everything in the title for a cross sectional paper.

2- In background section of abstract: the actual aims stated by the authors are in a line, why they divided these same goals into two different ones? Please correct it.

3- The result section for abstract should be reduced in word count. I see some unnecessary parts in it, so please delete them all.

4- The word H. pylori in many of sentences are not italic, please address this correction all over the manuscript.

5- Basically, if the authors want to talk about the virulence genes, the y should have think about many of proposed virulence genes for HP. For example, dupA, babA and homB are the minimum candidates which deserve more investigation by the researchers before they
can conclude about virulence determinants of HP. So I would see the rationale for such selection by the authors or performing this survey as I mentioned in revised manuscript afterwards.

6- The page 3- line 65, add the word "bacterial" before the carcinogen.

7- The page 3, line 73, whole line needs a reference, and without the reference this section should be removed. Mainly from the region authors work. For example, these references are suggestive:

a-High correlation of babA 2-positive strains of Helicobacter pylori with the presence of gastric cancer

b-Prevalence of Helicobacter pylori vacA, cagA, cagE, iceA, babA2, and oipA genotypes in patients with upper gastrointestinal diseases

c-High frequency of vacA s1m2 genotypes among Helicobacter pylori isolates from patients with gastroduodenal disorders in Kermanshah, Iran

d-Clinical relevance of the cagA, tnpA and tnpB genes in Helicobacter pylori

8- Whole page-4 needs rewrite in English!

9- All genes should be italic, it is large number of genes which wrote not-italic through the paper.

10- Of how many biopsies, the authors could take 128 positive biopsy specimens which have all positive for HP? This should be clarified in the M&M. This is very important since I think this paper designed as cross sectional study but something are lacking in my opinion. However, the other criteria for a cross-sectional study is not met and I think that they selected manually those 128 samples! This is a major query should be replied in detailed by the authors before final decision.

11- Page7 is a bit elongated text, please reduce it.

12- PAGE 4 Line 108-109, should be deleted! Since it is obvious statement and not necessary for a scientific paper
13- Page4, what was the identity of the positive control applied in the study?

14- I think that the paper can be considered as short communication rather a original paper. However, it can be an original paper only after making new experiments such as determining the new virulence factors as I suggested in above.

15- The first sentence is discussion should be removed since it is not true! If they insist on their claim, we need to see new references confirming their idea and statics.

16- Page 10-line 232, this sentence is not clear to me! I know what they meant but I need to read it once and get the meaning rapidly not think 20 minutes!

17- The literature review made by the authors to excuse the result in discussion part is not enough. I like this study but the authors should have informed that we need better search to publish this paper in BMC-Gastro!!!!!

Finally, I would see the revision if possible.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

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