

Manuscript ID: 67059

Title: *Helicobacter pylori* eradication: exploring its impacts on the gastric mucosa
By Chun-Yan Weng, Jing-Li Xu, Kai-Jie Wang, Shao-Peng Sun, Bin Lu

Dear Professor Ma:

Thank you very much for your correspondence dated 4th June, 2021, regarding the review of our manuscript. We are pleased to hear that you are considering our manuscript for conditionally acceptance, following some essential revisions. We appreciate very much the comments and suggestions from the editor and reviewers, and have made changes in the revised manuscript accordingly. The following are our point-by-point responses to the editor's and reviewers' comments.

Responses to Editor's comments and suggestions:

EDITORIAL OFFICE'S COMMENTS

Authors must revise the manuscript according to the Editorial Office's comments and suggestions, which are listed below:

(1) Science editor: 1 Scientific quality: The review manuscript describes "Helicobacter pylori eradication: Exploring its impacts on the gastric mucosa". The topic is within the scope of the WJG. (1) Classification: Grade D, Grade C, Grade B, and Grade C; (2) Summary of the Peer-Review Report: (02522871): Despite the authors summarize the benefits associated with *H. pylori* eradication in a clear and coherent manner, I have some suggestions: In the discussion, the authors deal with the problem of *H. pylori* resistance to the common antibiotic therapy and cite the potential use of antimicrobial peptides as potential substitutes. Could the authors add more details about this and some information about the main novel treatments developed against *H. pylori*? The authors should extend the section introduction. (04913316): The manuscript is interesting, and well written and I recommend it be accepted for publication Minor changes Avoid terms such as elimination or depletion. Eradication is more appropriate. (05224115): I would like to make a few comments and suggestions. 1. The authors have touched on the endoscopic findings of the gastric mucosa in *H. pylori* infection. There are a few reported studies on the use of a novel endoscopic technique, endocytoscopy, in the assessment and evaluation of the gastric mucosa in *H. pylori*. I would recommend including these reports (One example: In vivo gastric mucosal histopathology using endocytoscopy. Sato H, et al. World J Gastroenterol) 2. Please have the manuscript rechecked by a native English speaker or a language-editing company, to make the English more consistent. For example, for Section 2.1, under the subsection "Changes of atrophy and intestinal metaplasia", the authors wrote "However, Kang

JM et al founded AG was improved in corpus but not in antrum at same time.[41]" Please change "founded" to "found". (04162659): Specific comments; 1. The manuscript should be reviewed and corrected for English language and grammar, especially due to the syntax errors throughout the manuscript. 2. *H. pylori* is not italicized at least in one place (second last line on page 6). 3. On page 9, please explain: "However, although community structure can also be partly restored upon. *H. pylori* elimination, whether the post-eradication and negative control groups still markedly differ remains highly controversial." 4. The section on gastric microbiota is not connected to the rest of the article. This section can be deleted as it does not add to the rest of the manuscript the way it is written. 5. The manuscript should include additional studies from different regions of the world. 6. The flow of the manuscript needs to be improved as in places it reads like information has been put in for various aspects without making proper connections.

Responses: We thank you and the reviewers for the positive assessment and constructive comments and suggestions. We have now revised the manuscript accordingly. The major changes in the text are marked in red. we will specifically answer the comments of peer reviewers in the next section.

(3) Format: There are 3 tables and 2 figures; (4) References: A total of 153 references are cited, including 55 references published in the last 3 years; (5) Self-cited references: There are 2 self-cited references;(6) References recommendations: The authors have cited proper references. 2.Language evaluation: Classification: Grade C, Grade B, Grade B, and Grade A. 3 Academic norms and rules: The authors provided the Non-Native Speakers of English Editing Certificate.

Responses: We have now provided the Non-Native Speakers of English Editing Certificate.

4 Supplementary comments: This study was financially supported by the National Natural Science Foundation of China (grant no. 722211A00352). The authors declare no conflict of interest. The topic has not previously been published in the WJG.

Responses: We have now revised the manuscript accordingly. The approved grant application form of this foundation has been now provided. We declare no conflict of interest.

5 Issues raised: (1) The "Author Contributions" section is not detailed. Please provide the author contributions; (2) The "Article Highlights" section is missing. Please add the "Article Highlights" section at the end of the main text. 6.Re-Review: Required 7 Recommendation: Conditional acceptance

Responses: We have now detailed the author contributions and added the "Article Highlights" section in the end of text (Line 428 to 431, Page 16)

(2) Company editor-in-chief: I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastroenterology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors.

Responses: We would like to thank you again for the positive assessment and constructive comments and suggestions. We have now revised the manuscript accordingly. The entire manuscript has been proofread and met the journal's guidelines. In the next section, we will answer the peer-reviewers' comments in detail.

Responses to Reviewers' comments and suggestions:

Responses to Reviewer #1

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors: The review entitled "Helicobacter pylori eradication: Exploring its impacts on the gastric mucosa" deals with endoscopic, histological and gastrointestinal microbiota changes related to *H. pylori* eradication. Despite the authors summarize the benefits associated with *H. pylori* eradication in a clear and coherent manner, I have some suggestions: In the discussion, the authors deal with the problem of *H. pylori* resistance to the common antibiotic therapy and cite the potential use of antimicrobial peptides as potential substitutes. Could the authors add more details about this and some information about the main novel treatments developed against *H. pylori*? The authors should extend the section introduction.

Responses: We thank the reviewer for the positive assessment and constructive comments and suggestions. Following the reviewer's suggestions, we have added more details about antimicrobial peptides and some information about the main novel treatments developed against *H. pylori*. In order to make the logic of the article more fluent, we finally decided to add this part in discussion (Line 383 to 408, Page 14 to 15). Thanks again.

Responses to Reviewer #2

Reviewer #2:

Scientific Quality: Grade D (Fair)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision

Specific Comments to Authors: The authors review the impact of eradication of *Helicobacter pylori* on gastric mucosa. This is an important topic and the authors have compiled a number of studies to reference.

Specific comments; 1. The manuscript should be reviewed and corrected for English language and grammar, especially due to the syntax errors throughout the manuscript.

Responses: Following the reviewer's suggestions, we have now rechecked the manuscript by a language-editing company (**MedE Editing Group: <http://meditorexpert.com>**) in the revised manuscript.

2. *H. pylori* is not italicized at least in one place (second last line on page 6).

Responses: Following the reviewer's suggestions, we have now corrected this fault.

3. On page 9, please explain: "However, although community structure can also be partly restored upon *H. pylori* elimination, whether the post-eradication and negative control groups still markedly differ remains highly controversial."

Responses: We are sorry about this obscure expression. What we're trying to say is that the ability of gastric microbiome's community structure to be restored to a healthy level is age related. Specifically, the restoration ability in children is stronger than that in adults. The detailed revision has been presented on line 241 to 251, Page 9 to 10.

4. The section on gastric microbiota is not connected to the rest of the article. This section can be deleted as it does not add to the rest of the manuscript the way it is written.

Responses: We thank the reviewer's constructive suggestions. But we believe that gastric microbes are related to the changes of gastric mucosa. The infection of *H. Pylori* leads to multiple gastrointestinal disorders and other diseases. After the eradication of *H. Pylori*, the relative abundance Proteobacteria (including *H. Pylori*) will be changed, while these changes are closely related to the changes of gastric mucosa. So, we do not think that the microbial part is an unconnected section in this article.

5. The manuscript should include additional studies from different regions of the world.

Responses: We thank the reviewer's constructive suggestions. We have tried our best to collect articles related to the theme and content of this review from the Japan, Italy, China, South Korea and other countries. However, due to the limitation of time and conditions, we cannot collect all related studies. We will continue to pay close attention to the progress of these studies and timely organize them into materials for reference.

6. The flow of the manuscript needs to be improved as in places it reads like information has been put in for various aspects without making proper connections.

Responses: We thank the reviewer for the constructive comments and suggestions. We have now revised some parts of the article to make it more logical.

Responses to Reviewer #3

Reviewer #3:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: This a review paper discussing *Helicobacter pylori* infection, focusing on exploring its impacts on the gastric mucosa. The authors have emphasized the importance of *H. pylori* infection, most especially as it is related to the gastric mucosa and the development of multiple gastric mucosa and extragastric diseases. I would like to commend the authors for the good-formatting of the manuscript, making it easier to read and follow through.

Responses: We thank the reviewer for the positive assessment.

I would like to make a few comments and suggestions. 1. The authors have touched on the endoscopic findings of the gastric mucosa in *H. pylori* infection. There are a few reported studies on the use of a novel endoscopic technique, endocytoscopy, in the assessment and evaluation of the gastric mucosa in *H. pylori*. I would recommend including these reports (One example: In vivo gastric mucosal histopathology using endocytoscopy. Sato H, et al. World J Gastroenterol)

Responses: Following the reviewer's suggestions, we have now added the manuscript with detail about novel endoscopic technique to assessment and evaluation of the gastric mucosa with *H. pylori* in the revised manuscript, including magnifying endoscopy, endocytoscopy, magnifying narrow-band imaging, I-Scan, endomicroscopy and LCI (Line 356 to 370, Page13 to 14).

2. Please have the manuscript rechecked by a native English speaker or a language-editing company, to make the English more consistent. For example, for Section 2.1, under the

subsection "Changes of atrophy and intestinal metaplasia", the authors wrote "However, Kang JM et al founded AG was improved in corpus but not in antrum at same time.[41]" Please change "founded" to "found".

Responses: Following the reviewer's suggestions, we have corrected this fault. At the same time, we have now rechecked the manuscript by a language-editing company (MedE Editing Group: <http://meditorexpert.com>) in the revised manuscript.

Responses to Reviewer #4

Reviewer #4:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: This is an interesting review exploring the changes of gastric mucosa (both at the macroscopic and microspopic level) following *H. pylori* eradication. The manuscript is interesting, and well written and I recommend it be accepted for publication Minor changes Avoid terms such as elimination or depletion. Eradication is more appropriate

Responses: We thank the reviewer for the positive assessment and constructive comments and suggestions. We have now revised the manuscript accordingly. Following the reviewer's suggestions, we have now replaced the terms such as elimination or depletion with the word eradication in the revised manuscript.

Once again we appreciate very much the constructive comments and suggestions from the editor and reviewers, which have helped tremendously in the preparation of the revised manuscript. These comments have helped to improve the manuscript significantly. We hope the above responses and the changes made to the manuscript will meet your and the reviewers' expectations. We are looking forward to publishing this manuscript in *WJG*.

Thank you again for your time and efforts devoted to the review and editing of our manuscript.

Sincerely,

Bin Lu, PhD
Professor