

ESPS Peer-review Report

Name of Journal: World Journal of Gastrointestinal Pathophysiology

ESPS Manuscript NO: 9260

Title: Gastric expression of NADPH-oxidase, inducible nitric oxide synthase and myeloperoxidase in relation to nitrotyrosine in Helicobacter pylori-infected humans

Reviewer code: 02441485

Science editor: Huan-Huan Zhai

Date sent for review: 2014-01-30 17:12

Date reviewed: 2014-03-11 20:21

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input checked="" type="checkbox"/> Major revision

COMMENTS TO AUTHORS

In this study the Authors demonstrated, in human gastric mucosa of H.pylori positive patients, an increase of some enzymes belonging to oxidative stress pathway, while the amount of nitrotyrosine rich proteins did not differ from H.pylori negative tissues. These findings could confirm the hypothesis that H. pylori is able to avoid oxidative stress damages due to acute host response, also in humans. The manuscript should be improved for English language, since there are several inaccuracies and errors. The main criticisms concern M & M and Results sections: 1) Why did you perform gastric biopsy in patients who do not seem to need it? In fact, in paragraph Study groups (page 4, from line 25) you report only 7 patients with symptoms. 2) Results obtained with anti-MPO and anti-nitrotyrosine are a bit 'questionable as poorly suited for quantification of protein expression. Indeed they identify more than one band, at different molecular weights. The ideal choice would be to use an ELISA assay. 3) Furthermore, there is a large gap in the WB method, is not minimally mentioned the use of an antibody for the detection of housekeeping proteins (such as b-actin or GAPDH) essential for the normalization of the amount of protein for each lane. 4) For each studied protein, it is necessary to show a representative picture of WB analysis in the Results. In the remaining paper minor revisions are needed. The Abstract is well written and complete, there are only a few minor criticisms: 1) In the first line of Background paragraph, please report the name of the bacterium in full: "Helicobacter pylori" instead of "H. pylori". 2) In Results paragraph, please report the number of individuals who were found to be H. pylori positive. 3) Always in the results, I suggest to emphasize the fact that the differences are significant. Background 1) Page 4, lines 3-7. "A

recent study suggests the H.pylori HP0013 protein to be an enzymatic NO detoxifying system for the in vivo microbial protection Several pathways have been described to inhibit the iNOS by suppressing the activation of NADPH oxidase and Jak2/Stat3 in” These two sentences are not so clear. Please rephrase. Results 1) It is preferable to fully write “MPO” when used as paragraph title (page 7, line 3). 2) Page 7, lines 10-12. The following sentences “The expression of NADPH-oxidase was analysed by detecting the NADPH-oxidase subunit p47-phox expression. During activation of NADPH-oxidase, p47-phox migrate to the plasma membrane where it associates with other subunits to form the active complex.” are best suited for M & M section or at most for Discussion. Discussion 1) It seems to me improper to write "production of nitrotyrosine," Perhaps it is better to refer to “proteins containing nitrotyrosine”. 2) Page 10, lines 5-8. “The present study does not provide data on if H. pylori also inhibit the oxy-radical forming enzymes. However it is shown that H. pylori Catalase and arginase are other examples of antioxidant proteins”. This paragraph is not clear in this context.

ESPS Peer-review Report
Name of Journal: World Journal of Gastrointestinal Pathophysiology

ESPS Manuscript NO: 9260

Title: Gastric expression of NADPH-oxidase, inducible nitric oxide synthase and myeloperoxidase in relation to nitrotyrosine in Helicobacter pylori-infected humans

Reviewer code: 02444931

Science editor: Huan-Huan Zhai

Date sent for review: 2014-01-30 17:12

Date reviewed: 2014-03-17 09:31

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input checked="" type="checkbox"/> Major revision

COMMENTS TO AUTHORS

1. Authors should show the results of Western blots. 2. The results is too simple.author should add some logic analysis. 3. Some grammar errors should be corrected. Such as neutrofile and macrophages should be placed by neutrophils and macrophages. *in vivo* in background section should be *in vivo* (italic).

ESPS Peer-review Report
Name of Journal: World Journal of Gastrointestinal Pathophysiology

ESPS Manuscript NO: 9260

Title: Gastric expression of NADPH-oxidase, inducible nitric oxide synthase and myeloperoxidase in relation to nitrotyrosine in Helicobacter pylori-infected humans

Reviewer code: 02444986

Science editor: Huan-Huan Zhai

Date sent for review: 2014-01-30 17:12

Date reviewed: 2014-03-18 18:30

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

? The number of case and controls are too few for statistical analysis. The controls must be sex and aged matched. but H. pylori group is younger and female dominant. ? Grafics should be scatterplot instead of box-plot. ? Grammar of some sentences should be corrected i.e "abstract conclusion: Expression of iNOS, MPO and NADPH-oxidase was up-regulated in the antrum of the H. pylori infected group. Regarding nitrotyrosine formation, Western blot did not show any significant change compared to controls." "introduction: Untill few years ago little was known about how the H. pylori could avoid being eliminated by the acute host defence and establish a chronic infection in the human gastric mucosa. It is found that H. pylori interferes with reactive oxygen species (ROS) such as superoxide anion (O₂⁻) that plays an important role in the elimination of invading microorganisms."