Reviewer’s report

Title: Helicobacter pylori infection associated with an increased risk of colorectal adenomatous polyps in the Chinese population

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Reviewer: Christos Zavos

Reviewer's report:

This is an interesting study investigating the association of H. pylori infection with colorectal adenomas. The authors compared the prevalence of H. pylori infection in 180 patients with polyps vs. 1195 participants without colorectal polyps, and found a positive correlation.

Comments

1. The language is full or typos and grammatical mistakes. The authors are strongly advised to seek help from a native English speaker.

2. The authors should add more details in their Discussion on the potential pathophysiological mechanisms by which H. pylori may be involved in colorectal adenoma and ultimately cancer development. As already reported previously, H. pylori has an impact on colorectal oncogenesis by: causing a possible chronic inflammatory mucosal damage, comparable to upper gastrointestinal tract (UGT); stimulating cancer stem cells (CSCs) or recruiting bone marrow-derived stem cells (BMDSCs), similar to UGT H. pylori-associated chronic inflammation, atrophic gastritis, hyperplasia, metaplasia, dysplasia and BMDSCs recruitment that may facilitate tumor formation and progression in animal models and humans; and affecting metabolic syndrome parameters, oncogenes and immune surveillance processes, that may be involved in the sequence: colon epithelium transformation to colon adenoma-dysplasia-colorectal cancer development/progression (See for example, Kountouras J, et al. Gut Liver 2017;11:733-734; Kountouras J, et al. Saudi Med J 2015;36:1249; Kountouras J, et al. Scand J Gastroenterol 2014;49:381-2; Kountouras J, et al. Am J Gastroenterol 2013;108:625-6).

3. The authors could reinforce their findings by comparing them to a similar study which also found an association between H. pylori and colorectal polyps/cancer (Kapetanakis N, et al. Immunogastroenterology 2013;2:47-56.). This study included 50 colorectal cancer (CRC) patients, 25 patients with colorectal adenomas (CRA) and 10 controls, and showed a significantly higher presence of H. pylori infection in the CRA (68%) and CRC (84%) groups compared with controls (30%).
4. The Figure is not high-quality, and the Figure legend does not explain the various pathophysiological mechanisms, which are also not explained in the Discussion. I would recommend that the mechanisms are mentioned in the Discussion and more shortly in the Figure legend.

5. The references are not checked for consistency.

**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.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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