

To: World J Gastroenterology
From: David A Johnson MD MACG FASGE MACP

Re: Manuscript (NO.: 63458) to the World Journal of Gastroenterology.

The Role of Microbial Dysbiosis in the Pathogenesis of Esophageal Mucosal Disease: A Paradigm Shift from A(Acid) to B(Bacteria)?

Authors:

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Date: 4/1/2021

Response to comments:

Reviewer

This is a review article discussing the pathogenesis of esophageal diseases from the perspective of microbial dysbiosis, with an interesting title and good coverage. The title of the article is interesting and well-written. Please describe the layers of the esophageal mucosa in which the microorganisms are present, and whether different microorganisms are present at different sites. In Asia, esophageal squamous cell carcinoma is still more common than esophageal adenocarcinoma.

Please describe how dysbiosis may or may not be involved in the development of esophageal squamous cell carcinoma.

Answer:

Role of the microbiome in esophageal squamous cell carcinoma

Evaluation of microbiomes of patient's with ESCC demonstrates specific changes when compared to healthy controls, notably increased in proportion of *Actinomyces* spp. and *Atopobium* spp., and decrease in *Fusobacterium* spp., and *Porphyromonas* spp. Generally, there is also a decrease in bacterial diversity, and increase in interpersonal compositional variation, suggestive that the dysbiotic state is not stable. As with EAC, there is a close association with oral cavity disease/dysbiosis and ESCC.

Decrease diversity of oral flora is associated with ESCC, as aboral movement of microbes likely disrupts the normal esophageal microbial composition and contributes to dysbiosis.

1. The "Author Contributions" section is missing. Please provide the author contributions;

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(2) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor

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(3) PMID numbers are missing in the reference list.

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4. "Please describe how dysbiosis may or may not be involved in the development of esophageal squamous cell carcinoma. "

Done-We have added specific discussions on this point.

Respectfully,

David A Johnson MD MACG FASGE MACP