Reviewer’s report

Title: Nerve Growth Factor and Tropomyosin Receptor Kinase A are Increased in the Gastric Mucosa of Patients With Functional Dyspepsia

Version: 0 Date: 21 Jun 2019

Reviewer: Cristina Giaroni

Reviewer's report:

This study describes the expression of NGF and its high affinity receptor, TrkA, in the gastric mucosa of patients affected by functional dyspepsia, and the possible correlation with enhanced NGF-TrkA pathway with some of the symptoms associated with the disease. The study has merit. However some points should be addressed before publication:

Background:

Line 30: EGCs are major cellular components of myenteric and submucosal ganglia within the ENS. This information is missing;

Methods:

-Line 5: a second biopsy was used to perform immunocytochemistry….

-Line 7: Another

-For immunohistochemistry, immunofluorescence and western blotting procedures there are no indications on the controls specificity assays;

-Which program was used to measure the NGF, GFAP and TrkA staining density?;

-There are no specifications on the method used to express western blotting;

-Since, in the mucosa of FD patients, NGF and TrkA may be expressed by different populations of inflammatory cells double staining with appropriate markers (i.e. eosinophils and mast cell) should be performed, to better characterize the possible mucosal sources for the neurotrophin;

Statistical analysis: please specify the relevant data sets for each applied statistical test

Results:

-data indicating the severity of symptom scores to the patients are missing;
-Lines 13, 29: (Figure 1B). (Line 13) NGF staining density and (line 28) TrkA staining density: would better describe the immunohistochemistry approach;

Discussion:

-There is no discussion on how the upregulation of NGF-TrkA pathway in the FD patient mucosa may affect afferent sensory neurons for the stomach modulating visceral hypersensitivity;

Minor: the English form should be revised by a Mother Language speaking colleague

Abstract

Line 8: .. and motility disorders…;

Line 15: .. in gastric mucosa of patients with FD;

Line 21: remove square brackets after PDS;

Line 23: The expression of NGF, TrkA and GFAP was examined;

Line 40: Changes in the expression of NGF, TrkA and GFAP positively..

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

No

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

No

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:

Needs some language corrections before being published

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