Reviewer's report

Title: Association of brain-derived neurotrophic factor levels and depressive symptoms in young adults with acne vulgaris

Version: 1  Date: 30 Jan 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

No - there are minor issues

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

No - there are minor issues

Statistics - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are minor issues
OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Probably - with minor revisions

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: The study is an interesting human study. In general, the methods used in this project are appropriate, and most of data the authors got from the experiment can support the conclusions. The manuscript is written clearly and illustrated well. There are still some questions that need to be addressed.

1. The BDNF serum level in healthy controls should be 14.55(13.00-16.21) ng/ml, but the authors put the incorrect number in the abstract.

2. The authors should add one more group of depression patients without acne vulgaris and then compare the BDNF level of these patients with depression patients with acne vulgaris. Since a lower BDNF serum level is a common finding in a depression-like patient, the lower BDNF level the authors found in acne vulgaris patients with depression might be associated with depression only, instead of with acne vulgaris.

3. In the subjects' profiles, Table s2, the percentage of subjects who had no jobs was higher, and the percentage of subjects who had high family annual incomes was lower in the group of the acne vulgaris patients with depression. Their socioeconomic status rather than acne vulgaris might be associated with the depression, which leads to lower BDNF level; therefore, more controls or conditions should be considered before the authors jump to a conclusion.

4. Please also consider the medicines the acne vulgaris patients were using and whether these medicines could affect the readout of the measurements.

5. No figure legends were found in the article.

REQUESTED REVISIONS:

Please see my comments above.

Note: This reviewer report can be downloaded - see attached pdf file.
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.

No

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:

Acceptable

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