Reviewer’s report

Title: Transcutaneous Neuromodulation improved inflammation and sympathovagal ratio in Patients with Primary Biliary Cholangitis and Inadequate Response to Ursodeoxycholic Acid–A Pilot Study

Version: 1 Date: 01 Apr 2020

Reviewer's report:

The authors have greatly improved the manuscript and answered most of my questions.
1. See comments on pdf.
2. However figure 3 and 4 are still difficult to understand. The authors need to explain how to interpret these figures. The colour shows an increase or decrease. But what is changing in the control and pretreatment participants? This needs to be addressed by the authors in the manuscript. It should be explained in the figure legend.
3. In response to a question from reviewer 1, the authors have described the method of allocating treatment. The method of allocating patients to TN or sham TN is not random. The patients were alternately assigned to each treatment. Thus the researchers working with the data can tell what treatment was given and this can affect analysis. This allocation method cannot be called random. Please remove the statement that it is random and just leave the description of allocation. In future studies the authors should use a random method to mix up allocation. This should also be added to limitations.

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.

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.

Yes
I am able to assess the statistics

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

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

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If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

'I declare that I have no competing interests'. I do hold patents for transcutaneous electrical stimulation to treat constipation. but this is a different stimulation method and a different condition.

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