Reviewer’s report

Title: Electroacupuncture Analgesia Is Associated with Increased Serum Brain-Derived Neurotrophic Factor in Chronic Tension-Type Headache: A Randomized, Blind, Placebo-Controlled, Crossover Trial

Version: 3 Date: 23 September 2014

Reviewer: João Bosco Silva

Reviewer’s report:

Minor revisions: 1, 2, 3, 4, 5, 6, 7, 8, 12.

Major revisions: 9, 10, 11, 13, 14.

The work is novel and very interesting. I believe it posed new questions for better understand acupuncture. The conclusion is supported by the data which are well controlled.

The article is well written and some flaws are due to the lack of attention. Figures and Tables are OK but Figure 5 needs some attention.

It deserves to be published with a few amendments.

Title

1. It is almost impossible to perform a blind study on acupuncture. Options are to blind the evaluator and the statistician, for example. You did so, but you did not assess the awareness for allocation, so, you may not be sure the patients were blinded. Although you are not wrong by the circumstances of acupuncture research, I suggest the word “blind” should be removed from the title.

Introduction

Good, well described and referenced.

Methods

CONSORT was used. But and STRICTA? Some considerations below shows us it was not.

2. Line 129. 6000 habitants is the correct data?

3. Line 134. You have already stated this before. It sounds wordy.

4. Line 148. Isn’t 0.05?

Randomization

5. You stated the envelopes were ready to allocate patients. Have all of them the same chance to participate in the groups? It looks like the last patient was
already allocated.

6. Line 165. You say to avoid bias you used the same acupuncturist. Is not this another kind of bias? Or at least a weakening of the study.

7. Line 167. Was the acupuncturist a physician? If not, who is in line 170?

8. Line 171. You have already stated it. It is repetitious.

9. Line 185. The points are not very well described. Are they traditional acupuncture points? Are they trigger points? Motor points? State it better, as recommends STRICTA.

It could be also nice naming the ear points and that one in hand.

10. Line 187. All needles were electrically stimulated? Even those in ears?

11. Line 188. I would like to read better details about frequency. Alternate? Both at the same time? One and after other?

12. Line 262. What about the values between them?

Discussion

13. It should be better explained the relation (and also figure 5) between depression and BDNF. It sounds confuse to me (and I believe it could be to our readers).

14. You performed just electroacupuncture I know, but it is impossible to say if the effects are due to acupuncture, electroacupuncture or both. I think this must be stated as a limitation.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare I have no competing interests in relation the paper "Electroacupuncture Analgesia is associated with increased serum Brain-Derived Neurotrophic Factor in Chronic Tension-Type Headache: a Randomized, Blind, Placebo-Controlled, Crossover Trial." that I am reviewing.