Author's response to reviews

Title: Effect of Electroacupuncture Stimulation at Zusanli Acupoint (ST36) on Gastric Motility: Possible through PKC and MAPK Signal Transduction Pathways

Authors:

Qi Yang (yide3877@163.com)
Yan-Dong Xie (346385709@qq.com)
Bo Huang (326026382@qq.com)
Chao Zhang (zzwwcc2001@yahoo.com.cn)
Hui-Yan Li (lihuiyan1016@163.com)
Rong Zhang (19473094@qq.com)
Ming Qin (qmm427@yahoo.com.cn)
Yu-Xin Huang (969211665@qq.com)
Jing-Jie Wang (jingjie@fmmu.edu.cn)

Version: 2 Date: 12 February 2014

Author's response to reviews: see over
Dear editor,

We are pleased to answer the questions of the reviewers’ and the manuscript (MS: 1935814324106763) has also been extensively revised according to the comments and the journal style. This paper was proofread by a native English professional with science background. We are appreciating for each editor’s hard work on our manuscript.

Reviewer: José M Nascimento

Reviewer's report:

The manuscript is original in scope and has not been considered elsewhere. The introductory material consists of sentence that carries the reader into the topic. There is a logical arrangement of later parts and there is a large body of research in the reference notes. To my understanding, the general subject of the review is quite interesting.

However, I think that the manuscript has points that should be observed.

1. Analysis of western blot showed up regulation of CaD and CaP protein expression, but it is necessary to show the results of the densitometric analysis of these bands in which the protein levels were normalized for #- actin.

Answer: We showed the results of the densitometric analysis of these bands in which the protein levels were normalized for β- actin in Fig 1.

2. In some occasions add transitions so that it flows from one section to the next.

Answer: This paper was proofread by a native English professional with science background and rewrite in some sections.

Reviewer: Jiande Chen

Reviewer's report:

Major Compulsory Revisions

1. Fourth paragraph: Electrogastrography should be applied before and after the
stimulation, whereas the authors applied the electrogastrography only after the stimulation. Is the baseline of average peak amplitude and frequency comparable between the three groups?

**Answer:** We agree with the reviewer’s advise. But the animals were randomly allocated into three groups, so, in our opinion, this randomization processing make it comparable among these groups of gastric electrical activity. In this way, we applied the electrogastrography only after the stimulation just as Murakami et al did in their article:


2. Fifth paragraph: The authors should provide more details on how rats were selected for real-time polymerase chain reaction (PCR) analysis (What kind results of electrogastrography on the control group, non-acupoint group and EA group would be selected?)

**Answer:** Rats were selected for real-time polymerase chain reaction (PCR) analysis as we modified in the manuscript:

For control group and non-acupoint group, one rat was randomly selected respectively. For EA group, we first divided it into EA promoting group and EA inhibiting group according to the results of the electrogastrography. And then, there rats were randomly selected from both groups.

3. First paragraph: How did the author judge the types of gastric motor patterns?

**Answer:** We judge the types of gastric motor patterns according the average peak: rats with positive average peak were judged to promoting pattern, while rats with negative average peak were judged to promoting pattern, just as we described in the manuscript.

4. Fourth paragraph, Line 241: “increased” should be replaced by “decreased”?
Stimulation with EA decreased CaD and CaP protein expression in ST36 promoting group according to Figure 1A, B.

Answer: Yes, we are sorry for the mistake and changed it in the manuscript.

- Minor Essential Revisions

1. Third paragraph: EA stimulation at ST36 had dual effects on gastric motility; were these effects facilitative or inhibitory. The results were interesting. The authors should discuss this issue more and discuss possible mechanisms. Why EA stimulation with same parameter had different effects?

Answer: We agree with the reviewer’s comments and we discussed this issue more and possible mechanisms in the discussion part.

2. Fourth paragraph, line 304: delete word ”pathological”

Answer: Sorry for the mistake, we have deleted word ”pathological” in the manuscript.

Editorial comments

Please amend your ethic statement so that this is clearly declared.

Answer: We amend our ethic statement in the manuscript.

Prof. Jingjie Wang
Department of Gastroenterology, Tangdu Hospital, Fourth Military Medical University, Xi’an 710038, Shaanxi Province, China,
E-mail: jingjie@fmmu.edu.cn,
Tel: +86-29-84777721,
Fax: +86-29-84777721