

## ESPS Peer-review Report

**Name of Journal:** World Journal of Gastroenterology

**ESPS Manuscript NO:** 3416

**Title:** Electroacupuncture improves gut barrier dysfunction against prolonged hemorrhagic shock in rats

**Reviewer code:** 02497108

**Science editor:** Wen, Ling-Ling

**Date sent for review:** 2013-04-29 18:00

**Date reviewed:** 2013-05-13 17:16

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

The study is somewhat interesting. Additional information is required to strengthen the readability of the manuscript. Comments: 1. The study is performed to evaluate ST36 has any beneficial effects on hemorrhagic shock-induced intestinal barrier dysfunction. However, the information related to ST36 and intestinal barrier is not enough. Please provide additional information and cited references. 2. ST36 in rat model- How to make sure the correct acupoint and proper depth? 3. The experimental design and timing may be not clear. The authors is suggested to provide a scheme for whole experiment. 4. Please provide information of ?-BGT. 5. Page 3-“the vagus nerve can prevent cytokine release and tissue injury via an efferent neural signaling pathway termed the cholinergic anti-inflammatory pathway.” Please provide additional information related to electroacupuncture and pathway mentioned above. 6. Methodology- Sham operation is lacking in vagotomy group. In addition, there is no vehicle in therapeutic drug group. 7. Page 9- Please provide the possibilities of decreased TNF-a and IL-6 levels. 8. Please address the limitation of the study. 9. Page 19- lines 8-10: “These results were in ...IL-10 secretion” are suggested to deleted. In addition, please provide the meaning of “DAO activity”. 10. Please correct some typos- For example: Page 3: We have demonstrated that EA at ST36 had a significant positive therapeutic effect on hemorrhagic shock [2] in rats with delayed fluid resuscitation of hemorrhagic shock, however, its mechanism remains unknown. Page 5: (a) EAN group: Rats were performed EA at non-channel acupoints

## ESPS Peer-review Report

**Name of Journal:** World Journal of Gastroenterology

**ESPS Manuscript NO:** 3416

**Title:** Electroacupuncture improves gut barrier dysfunction against prolonged hemorrhagic shock in rats

**Reviewer code:** 02495050

**Science editor:** Wen, Ling-Ling

**Date sent for review:** 2013-04-29 18:00

**Date reviewed:** 2013-05-21 21:54

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

HS causes multiple organ failure, and many studies tried to alleviate MOF in HS with various methods. However, nothing could be extended to clinical uses. In that sense, EA ST36 could be one simple methods, and it is very interesting its mechanism could be through vagus nerve. Below are my comments. 1. First of all, English proofing is mandatory. Many grammatical errors are found, and this leads to poor understanding of your precious findings. 2. Introduction should be more organized. 3. In methods, it seems to be that volume controlled HS combined with pressure controlled HS was used. If right, please make it more clear. 4. In methods, is there sham group? 5. In results, the last sentence in 3.3. section should go to discussion, or could be deleted if you think it is repetitive. 6. EA group showed better hemodynamic results compared to other groups. Did you check NO or iNOS? 7. How about showing the K-M curve with log rank test? 8. In discussion, please spell out DAO. 9. In discussion, the following sentences seem to be irrelevant with this study; Moxibustion, one therapy of Traditional Chinese medicine has been reported to successfully repair tight junctions and enhance colonic epithelial barrier function in rats

## ESPS Peer-review Report

**Name of Journal:** World Journal of Gastroenterology

**ESPS Manuscript NO:** 3416

**Title:** Electroacupuncture improves gut barrier dysfunction against prolonged hemorrhagic shock in rats

**Reviewer code:** 00036765

**Science editor:** Wen, Ling-Ling

**Date sent for review:** 2013-04-29 18:00

**Date reviewed:** 2013-06-03 17:22

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input checked="" type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input checked="" type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

The article by Ming-Hua Du et al. describes the protective effect of electroacupuncture in intestinal barrier dysfunction in an elegant animal model of hemorrhagic shock. The study is well designed and results seem to be very congruent among the different aspects of systemic inflammation and intestinal barrier function investigated. Major comments. 1. The authors conclude that the vagal nerve plays an important role in mediating this protective anti-inflammatory effect. Such effect has been described extensively in the literature. The question that remains unanswered by the authors is what the exact mechanism is that results in such activation of the vagal nerve through acupuncture. Release of certain hormones, such as CCK, has been suggested to play a role in the anti-inflammatory effect of vagal activation, but was apparently not investigated further in this study. The authors should provide more mechanistic insight into what happens between electrical stimulation of the ST36 point and the reinforcement of barrier function through vagal stimulation. The vagus has no receptive field in the tibial region, therefore, it is difficult for me to imagine such protective response without the release of either systemic mediators (CCK, for instance), or the involvement of neural circuits (involving the nucleus of the vagus nerve or the nucleus of the solitary tract, for instance). I suggest that the authors comment on this in the discussion. 2. The authors suggest that acupuncture could be an important tool in the emergency setting due to lack of resources of early fluid resuscitation. I assume however, although I am not familiar with the EA procedures itself, that EA also requires certain equipment, such as an EA apparatus, which may also not be available in an emergency setting. I can hardly imagine that such apparatus is present, in for instance war setting, as the authors suggest. In case of a hypovolaemic shock, cardiopulmonary resuscitation is necessary to

maintain circulation until the patient is transferred to a setting in which fluid resuscitation is available. Personally, I do not see a role for EA currently in the emergency situation. I would therefore suggest that the authors amend the discussion, as such statements divert the attention from the main message of the study. Minor comments 1. Please give a brief description of the ST36 points and the EA procedure. Not all readers are familiar with these. 2. Please very briefly describe the vagotomy performed. What was the time interval between vagotomy, EA and hemorrhagic shock? 3. Similarly, please indicate the time interval between BGT treatment, EA and hemorrhagic shock. A schematic scheme of the treatments may be helpful. 4. I would suggest shortening the abstract to approximately 300 words or as otherwise instructed by the editorial guidelines. 5. Please spell out DAO in the discussion section. 6. English language editing is necessary.