

ANSWERING REVIEWERS



April 25, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 10107-review.doc).

Title: Oxytocin decreases colonic motility of cold water stressed rats via oxytocin receptor

Author: Xiao Yang, Tao-Fang Xi, Yu-Xian Li, Hai-Hong Wang, Ying Qin, Jie-Ping Zhang, Wen- Ting Cai, Meng-Ting Huang, Ji-Qiao Shen, Xi-Min Fan, Xuan-Zheng Shi, Dong-Ping Xie

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 10107

The manuscript has been improved according to the suggestions of reviewers:

- 1 Format has been updated in word format
- 2 The figures have been provided as word format which can be edited
- 3 Comments have been written according to the provided writing requirements
- 4 Revision has been made according to the suggestions of the reviewer

(1) Rewrite the manuscript, especially the result section

The results section in manuscript has been rewritten (See results section in manuscript from page 9 to page 11)

(2) Finding a professional English writer or English editing service provider will help?

The Jing-Yun Ma Expert Group for SCI Biomedical Editing and Publishing has edited the manuscript for us (Please see the editorial certificate).

- 5 References and typesetting were corrected

Thank you again for publishing our manuscript in the World Journal of Gastroenterology.

Sincerely yours,

A handwritten signature in blue ink that reads 'Dongping Xie'.

Dongping Xie, MD, PhD
Department of Physiology
Tongji University School of Medicine,
1239 Siping Road
Shanghai 200092, China
Fax: + 86-021-65987071
E-mail: xiedping@tongji.edu.cn

Suggestions of reviewer:

The estrogen effect could be central or local or both. To gain further insight, estrogen receptor distribution in the colon should be examined to see if it is co-localized with OT receptor. If estrogen receptor is expressed by the colon, then the colonic smooth muscle strip test should be performed to see if estrogen has a direct effect. Adding these data will make the manuscript a lot stronger to claim an estrogen dependent effect.

Response:

Thanks a lot for reviewer's great suggestions!

We observed the effect of estradiol (E_2) on colonic motility and found no significant response, which means E_2 has no direct effect on the colonic smooth muscle contraction (figure 1). We observed the expression of estrogen receptor in the colon. We found that estrogen receptor also located in myenteric nerve plexus of the colon in rat (figure 2). The result is consistent with what Kramer et al ^[1] found the gene of estrogen receptor expressed in the colon of rats. Our previous study has found that estradiol upregulated the expression of oxytocin receptor in the colon of rats ^[2]. We think that estrogen dependent effect is acceptable. We would like to further study the mechanisms involved in the future.

References

- [1] Kramer F, Johnson IT, Doleman JF, Lund EK. A comparison of the effects of soya isoflavonoids and fish oil on cell proliferation, apoptosis and the expression of oestrogen receptors alpha and beta in the mammary gland and colon of the rat. *Br J Nutr.* 2009;102:29-36.
- [2] Feng M, Qin J, Wang C, Ye Y, Wang S, Xie D, Wang PS, Liu C. Estradiol upregulates the expression of oxytocin receptor in colon in rats. *Am J Physiol Endocrinol Metab.* 2009;296:E1059-66.

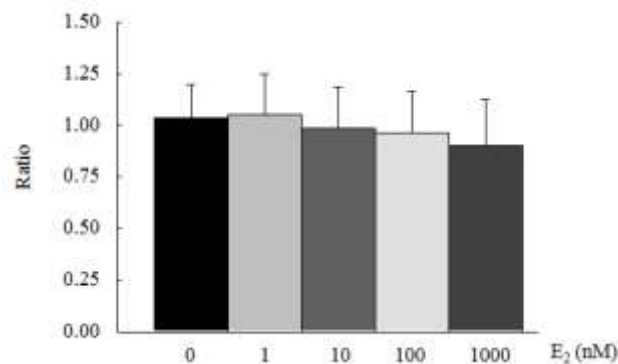


Figure 1 Effect of estradiol (E_2) on colonic motility

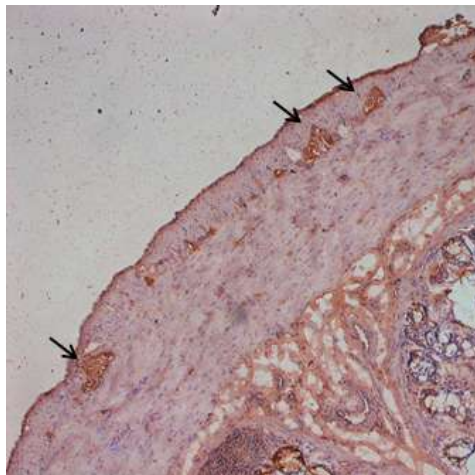


Figure 2 Estrogen receptor was expressed in the myenteric nerve plexus of the colon in rat