Author's response to reviews

Title: Microvessel Changes after Post-ischemic Benign and Malignant Hyperemia: Experimental Study in Rats

Authors:

Haitao Lu (haitaolu1975@gmail.com)
Jungong Zhao (lhtliminghua@gmail.com)
Minghua Li (liminghuapro@gmail.com)
Yingsheng Cheng (chengyingsheng@yahoo.cn)
Yongdong Li (yongdongli@yahoo.cn)
Xiaofang You (youxiaofang@yahoo.cn)
Yuwu Zhao (doctorneurol@yahoo.cn)

Version: 3 Date: 24 February 2010

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

Ms: 1572415702259995

Title: Microvessel Changes after Post-ischemic Benign and Malignant Hyperemia: Experimental Study in Rats

Thank you very much for considering the revision of our manuscript. We have re-changed the format of manuscript according to your advice and made a point-by-point response to the reviewer’s comments below.

We appreciate your hard work and hope that our paper has a chance to be published in BMC NEUROLOGY. If you confront any further confusion about the manuscript, please contact me by e-mail: lhtliminghua@gmail.com.

Sincerely

Jungong Zhao MD. and Yuwu Zhao MD.

The Sixth Affiliated People’s Hospital; Medical school of Shanghai Jiao Tong University

E-Mail: lhtliminghua@gmail.com or doctorneurol@yahoo.cn

Tel.: +86-21-64844183

Fax: +86-21-64844183
Major Compulsory Revisions

On page 13 it is still postulated that longer times of ischemia as well as fibrinolysis are associated with malignant hyperemia. The authors explain, that longer times of ischemia is not more than 3 hours. However even at this time point there is no hyperemia (see group 2).

Response: This result may be explained by ‘no-reflow’ phenomenon incerebral ischemia. (Tissue Factor Contributes to Microvascular Defects After Focal Cerebral Ischemia. Winston S. Thomas et al. Stroke 1993;24:847-854; Polymorphonuclear Leukocytes Occlude Capillaries Following Middle Cerebral Artery Occlusion and Reperfusion in Baboons. Gregory J et al. Stroke 1991 ; 22:1276-1283). In group 2, saline may not help for reperfusion of microvascular bed while urokinase may do in group 3. However, futher study will be required to characterize this result.

Minor essential revisions:

Unfortunately fibrinolysis did not show any effect on the MRI-lesion size. it would be reasonabel to give a short explanation.

Response: In group 2 and 3 ,MRI-lesion size did not show difference , even group 2 size was more than group 3. We think that this phenomenon may be relation to time window and malignant hyperemia.