Author's response to reviews

Title: Changes in lymphocyte subsets in patients with Gullain-Barre syndrome treated with immunoglobulin

Authors:

Hui Q Hou (hhq0407@126.com)
Jun Miao (miaojun1@126.com)
Xue D Feng (2837529300@qq.com)
Mei Han (apple91102@163.com)
Xiu J Song (songxiujuan@126.com)
Li Guo (houhuiking2006@163.com)

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Author's response to reviews: see over
Author's covering letter for initial submission

Title: Changes in lymphocyte subsets in patients with Guillain-Barre syndrome treated with immunoglobulin

Authors:

Version: 1 Date: 9 July 2014

Comments: see over
Dear Nhell,

Thank you very much for your letter dated June 10th enclosing the reviewer’s comments for our manuscript entitled “Changes in lymphocyte subsets in patients with Guillain-Barre syndrome treated with immunoglobulin”. We would like to submit a revised manuscript here, and we have improved the authors’ department (Department of Neurology, the Second Hospital of Hebei Medical University, Key laboratory of Hebei Neurology). The following is my reply to your reviewers concerning the comments and suggestions about the manuscript.

We wish to take this opportunity to thank your consideration of our paper for publication in your journal, BMC Neurology.

Yours sincerely,

Guo Li, Ph.D.

Department of Neurology, the Second Hospital of Hebei Medical University,

Key laboratory of Hebei Neurology,

Shi jia zhuang, Hebei, 050000, China.

To reviewer #1

Dear Prof. Ricardo,
Thank you for your kind comments for our manuscript (1543205314106857) to BMC Neurology. We appreciate your valuable comments and suggestions to improve it. We wish to reply as follows: We have corrected the errors (Gullain and must say Guillain). We hope that the changes having been made to the manuscript meet to your satisfaction.

To reviewer #2

Dear Prof. I.N.,

Thank you for your message dated May 27, 2014 concerning our manuscript entitled “Changes in lymphocyte subsets in patients with Guillain-Barre syndrome treated with immunoglobulin” (1543205314106857). The comments have been most helpful in revision of our manuscript. We dealt fully with the criticisms in the revised manuscript, which is now re-submitted. In the following I specify changes made in the manuscript, replying point-by-point to the comments.

Point1:

In the peripheral blood, CD4+CD45RA+ T cells can convert into CD4+CD45RO+ T cells following stimulation by antigen. Studies have shown that during the development of T cells in the thymus, a shift from CD45RO to CD45RA occurs, which marks the completion of negative

Point2:

In our research, after therapy with IVIG, CD4+CD45RA+ T cells increased, while CD8+ T, CD4+CD45RO+ T, and CD19+ B cells significantly declined in the AIDP group. We suppose that CD4+CD45RA+ T cells can suppress the immune responses directly or by another way. Perhaps, it can play a role in the feedback regulation of CD8 cells. We got this result in our study, and samples from clinical patients are unable to be recollected. The exactly mechanism needs to be studied in the future. Thanks for understanding.

Point3:

When it comes to treating a few healthy controls with IVIG and seeing what happens with their subsets, and investigating subsets of GBS patients who are not treated, we are sorry for that. In clinical work, this control is difficult to implement.

Point4:

It is difficult to collect samples from patients to investigate the subsets after recovery. In our next experiments, we will further improve the design to shine some light on this similar problem. Thanks for your understanding.
Point 5:

We have implied scatter plot of the most important experiments in the manuscript (Fig. 5), and we have improved the method of detection of lymphocyte subsets in the manuscript.

We hope that the changes having been made to the manuscript meet to your satisfaction.