Author's response to reviews

Title: Hemispheric differences in the surgical outcomes of patients with traumatic acute subdural hematoma

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Author's response to reviews: see over
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Prof. Susanne Brummelte/JNRBM Editorial Team

Re: MS: 1607826457119788 R1

Dear Prof. Brummelte:

We revised our manuscript entitled “Hemispheric differences in the surgical outcomes of patients with traumatic acute subdural hematoma” (MS: 1607826457119788 R1), following suggestions and comments from reviewers. Response to each suggestion/comment is addressed below.

Reviewer I

Q1. Discuss in detail some autonomic variability and differences among hemispheres by incorporating some references:
A1. We incorporated the references suggested (the third paper could not be obtained, and we used the other three) into Discussion section (P11L6-8). A total number of the references increased from 19 to 24.
Q2. Was the lower hospital stay related with the early mortality in left SDH when compared with right SDH? Please clarify the hospital stay in all the survivors between right and left SDH.
A2. In survivors, there was no significant hemispheric difference in the mean hospital stay. The data are summarized in Table 6, and was also described in the main text (P9L15-17).
Q3. Give some theories on impact of contusion on ANS using above literature evidence.
Q4. How many of the contusion and non-contusion patients had involvement of insula and give a breakout numbers between the right and left group.
A3. 4. Our speculation is that temporal lobe compression by severe ASDH result in temporary insular injury or dysfunction. However, there is insufficient data to prove it in this study. The number of patients with direct insular injury was small (3 in left ASDH and 4 in right ASDH), which makes statistical comparison difficult. We provided detailed account in the text (P10L21-23) and in Table 4.

Reviewer 2

Q1. The authors did not compare hematoma volume and location between the two groups, which may have influenced the different mortality rates seen in the two groups. Further it was not defined if intracerebral hematoma was also treated with an evacuation of the lesion, which may also influence patients outcome
A1. We appreciate the comment, and did perform measurement of the hematoma volume. There was no significant left-right difference in the mean hematoma volume (Table 4). The frequency of hematoma removal (=internal decompression) was also similar between the two groups (Table 4). Furthermore, we conducted multivariate regression analysis to evaluate whether factors other than hemispheric laterality was responsible for the difference in the outcomes (Table 6).
Q2. Apart from 90 day mortality, hospital stay and brain swelling refractory to treatment other outcome parameters would enhance informative value of surgical outcome following treatment for traumatic ASDH.
A2. After the comment, assessment of ADL 90 days after surgery was added for surviving patients. Although left-sided ASDH patients seemed to fare better, the difference was not significant (Table 6).

We are doing our best to meet the high standard of the Journal of Negative Results in BioMedicine, and we believe that our manuscript has been improved after revision. However, we will be happy to revise the manuscript (if necessary). Thank you so much for your time and effort to edit/review our manuscript.

Sincerely,

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