Author’s response to reviews

Title: Magnesium sulfate reduces the rocuronium dose needed for satisfactory double lumen tube placement conditions in patients with myasthenia gravis

Authors:

Shoujun Fei (feisj@hku-szh.org)
Hengfu Xia (xiahf@hku-szh.org)
Xiaowei Chen (chenxw@hku-szh.org)
Dazhi Pang (pangdz@hku-szh.org)
Xuebing Xu (xuxuebing@hotmail.com)

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Author’s response to reviews:

Overall Comments:

The English language needs to be clearer and more fluent throughout the manuscript. The language limits the potentially impact of this manuscript and its reception by reviewers. I ask that after responding and incorporating my comments / questions below, please improve the fluency of the language. Specifically focus on the abstract and the discussion, but ensure all sections are clear and grammatically correct.

I am very appreciated for reviewers’ patience on our manuscript with some language problems. I have revised our paper with the help of an English specialist.

Methods
Why were operational time > 4hr, and blood loss > 1L exclusion criteria?
operational time > 4hr, and blood loss > 1L

We excluded the cases with operational time > 4hr and/or blood loss > 1L because these are the two main risk factors for delay postoperative extubation.

Was any anticholinergic medication administered with neostigmine for reversal of NMBA?
Sorry we did not emphasize this important issue. After the end of operation, if the TOF% was less than 90% or the anaesthetist was not satisfied with the recovery of the respiratory function, neostigmine 0.05mg.kg-1 and calcium chloride 1g were given to the patient. There were 6 patients in the magnesium sulphate group and 7 patients in the control group respectively administered neostigmine
for reversal of NMBA. There was no difference on the rate of neostigmine medication. We had added this result into the revised manuscript (line 13 of the second paragraph in Results part) and presented in Table2.

Is the pilot data used for power calculations included in the manuscript data? Was it published elsewhere? Is your hospital a center for thymectomy surgery that performs many of these? Or is this a usual number of thymectomies for a hospital in HK?

The pilot data used for power calculations in this manuscript was not published previously. Our hospital is in Shenzhen, and is runned by the University of Hongkong. We have a myasthenia gravis research center in our hospital and therefore we see a lot of these patients from all over China.

Results
How many patients required NO rocuronium in either group prior to intubation attempt?
There were 2 patients did not require rocuronium for intubation in the magnesium sulphate group. We had put this data into the result of the revised manuscript. (Line 6 of the second paragraph in Results part)

For pain medication--fentanyl with induction, remifentanil as infusion, and then parecoxib were administered for a VATS? Was there any intraoperative rib blocks or any regional anesthesia or additional pain medication?
Beside fentanyl, remifentanil and parecoxib, the other important procedure for pain prevention is that the surgeon performed local anesthesia infiltration with 10 ml of 0.5% ropivacaine at the incision sites for chest ports before skin incision. (Line 2 of the 5th paragraph in Patients and methods part)

Please explain why p=0.095 is a significant decrease? “patients in magnesium sulfate group dropped from 95.7(10.5) to 77.2(29.2), which showed a significant decrease(p = 0.095).”
Thank you for pointing out such a big mistake. We had a deadly typo (missed a zero). The p value actually is 0.0095, not 0.095.

Discussion
Why do you think there was less change in vital signs with magnesium (pre/post induction)?
We had discussed this point in the revised manuscript (the 5th paragraph in Discussion part).

Please be a little less definite in explaining the mechanisms of action of magnesium in this specific setting unless bonafide studies have examined the mechanism in this specific setting.
We agree your opinion in explaining the mechanisms of action of magnesium in this specific setting, and we had changed our expression way of the conclusion.

Table 1
As this was an RCT you should not need to evaluate P values--but it is worth commenting in the discussion on perceived differences in the samples.
Thanks for your suggestion. We had revised Table 1 and the result part of the manuscript accordingly.

Table 2
Separate out primary and secondary outcomes visually.
Thanks for your suggestion. We had revised Table 2 accordingly.

Table 3
When exactly were the “pre-intubation” and “post-intubation” vital signs assessed? 
We had put the illustration of “pre-intubation” and “post-intubation” for the Table 3. Thank you!

Data Storage 
Can you elaborate on where and how the data will be stored / made available? 
Our data will be available at website of http://www.chictr.org.cn.