OPEN PEER REVIEW REPORT 1

Name of journal: Neural Regeneration Research
Manuscript NO: NRR-D-19-00703
Title: Total flavonoids of hawthorn leaves improve locomotor functional recovery by reducing neuronal apoptosis in rats with spinal cord injury
Reviewer's Name: Tomoharu Kuboyama
Reviewer's country: Japan
Date sent for review: 2019-11-29

COMMENTS TO AUTHORS

You found that TFHL improved motor function in SCI rats probably via neuroprotection.
Although effects of TFHL are significant, I have following comments and questions.

1. In abstract, please emphasize your motivation why you focused on TFHL, and mention meaning of SCI recovery effects of TFHL.
2. Do you want to repair rat SCI or human SCI? If human, could you cite references showing importance of neuroprotection in human SCI in Introduction?
3. Ref#21 did not mention Allen's method.
4. Please mention names of microscopes used in TEM and Nissl staining.
5. In figure 1, could you show time dependent changes of BBB scores? Was the BBB score improved 1 day after injury by TFHL administration?
6. In the result part of Figure 4, you mentioned that TFHL increased neurons. Were neurons really increased? If so, what is the origin of the increased neurons?
7. In discussion, you mentioned that "At present, TFHL has been widely used to treat a variety of diseases [29-30]". But Ref #29 and 30 did not mention human disease. Please cite appropriate references or revise the sentence.
8. Please discuss contents of TFHL and mechanisms of TFHL.
9. In conclusion, please mention meaning of SCI recovery effects of TFHL. What is the merit of TFHL?
10. Please draw scale bars and mention the number of samples in each figure.
11. Please mention levels of spinal cord you used in each figure.
12. In Figure 3, I cannot find myelin sheath in sham.
13. In Figure 5, photos are too dark. Please emphasize.