Reviewer’s report

Title: The attenuation of neurological injury from the use of simvastatin after spinal cord ischemia-reperfusion injury in rats

Version: 0 Date: 16 Oct 2017

Reviewer: Cheng Ni

Reviewer's report:

1. As the authors indicated that trauma or injury is unpredictable, post-treatment studies provide greater clinical implications than the pre-treatment study since. This study designed to evaluate the preventive effect of simvastatin after IR injury on neurologic damage (Simvastatin has been proved to be valuable in prevention of neurologic damage prior to IR injury), the results have their clinical significance, and could be accepted after necessary revision.  
2. A blank control group without ischemia-reperfusion should be added to provide baseline levels of MDS and motor neuron numbers in SD rats.  
3. As 10 mg/kg simvastatin group is the only group that has significant difference compared with IR group, groups with larger doses (such as 20 or 50 mg/kg) could be necessary to reveal the optimal doses.  
4. The study should provide possible mechanism related to simvastatin treatment. It has mentioned anti-inflammatory and antioxidant effects, thus, supplementary experiments including ROS and inflammatory cytokine tests could be acceptable.

Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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