Reviewer’s report

Title: Expression of cannabinoid 1 and, 2 receptors and effects of cannabinoid 1 and, 2 receptor agonists on detrusor overactivity associated with bladder outlet obstruction in rats

Version: 0 Date: 12 Oct 2017

Reviewer: Hann-Chorng Kuo

Reviewer's report:

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This manuscript reports the CB1 and CB2 receptors in the BOO SD rat models with detrusor overactivity. Both CB1 and CB2 receptors were found to increase in density in the BOO bladders compared with the sham operated controls. The authors instilled CB1 and CB2 receptor agonists into the BOO rat bladder and found the detrusor contraction frequency and contraction pressure were significantly decreased in the CB1 agonist treated bladders but not in CB2 agonist treated bladders. The authors concluded that CB1 and CB2 receptors play a role in the pathophysiology of BOO associated DO in rats.

1) This is an interesting study and the methodology is appropriate.

2) Did the authors perform CMG before instillation of CB1 and CB2 agonist into the BOO bladders? What were the data?

3) The effect of CB1 and CB2 agonists on the inhibitory effect of BOO associated detrusor contractility is significant. However, the IHC and western blotting all showed the density of CB2 was not significantly higher than the controls. Authors might try to explain the possible cause for this discrepancy.

4) In conclusion, please report the most important findings of this study and clinical implications. Please delete hypothetical statement without evidence obtained from this study.

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.

Yes

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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None
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