Reviewer’s report

Title: Association Between Basilar Artery Configuration and Vessel Wall Features: A Prospective High-resolution Magnetic Resonance Imaging Study

Version: 0 Date: 23 Jul 2019

Reviewer: Ronald Benveniste

Reviewer's report:

The authors present a descriptive series of patients with posterior circulation stroke or TIA, and documented basilar artery stenosis. Findings on DSA and high resolution MRI of the basilar artery were carefully documented. The authors report statistically significant associations between morphology of the posterior circulation and specific MR findings of the vascular wall, in this patient population. Specifically, intraplaque hemorrhage was more likely in patients with incomplete proximal posterior circulation (i.e. absent VA) and plaque enhancement was more likely in patients with incomplete distal posterior circulation. The authors present a well organized discussion that suggests mechanisms by which morphology of the posterior circulation could affect development of these vascular lesions.

This study is scientifically interesting and could help guide future studies of risk stratification or even therapeutics in patients with symptomatic BA stenosis. I recommend two minor revisions.

First, the paper is well written in general but there are many minor errors in English syntax and grammar; review of the manuscript by an expert in writing in English would be helpful.

Second, the authors report in the abstract and body of the paper that there was a statistically significant correlation between incomplete proximal circulation and plaque enhancement (p=0.04); the p value in Table 3 is 0.07, and this discrepancy should be resolved.

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:

Needs some language corrections before being published

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