Reviewer's report

Title: The Baboon (Papio anubis) Extracranial Carotid Artery: An Anatomical Guide for Endovascular Experimentation

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Reviewer: Dr Morgan Campbell

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Accept without revision

1. The conclusions are supported by the data and the study findings are explained to allow for reproduction of results.

2. Given that this is an anatomic study the conclusions are straightforward. The vascular anatomy was found to be relatively constant in vessel length and lumen diameter thus serving as a useful model for investigating interventional therapies. Lumen diameter in the primate common carotid vessels is however several millimeters smaller than the human extra cranial internal carotid artery which is typically in the range of 4-6 millimeters in diameter. Some variability was noted in the angle of proximal vessel origins in the primate model, however, considerable variability can be found in humans as well.

3. As noted in the study, lumen diameters varied somewhat when compared to MRI likely reflecting differences in perfusion pressure and vascular resistance in the living animal. Although less feasible to perform, a more interesting comparison would have used lumen diameters as measured by contrast angiography rather than contrast MRI which is more subject to flow artifact limitations which could affect lumen diameter and angle of origin. Traditional contrast angiography is also what the treating interventionalist would use for making vascular measurements during a procedure.

Competing interests:

None declared.