Reviewer's report

Title: Variation in the circle of Willis in a Sri Lankan Population

Version: 6 Date: 19 October 2009

Reviewer: Hisashi Tanaka

Reviewer's report:

The authors measured the size of brain vessels of Sri Lankan people and compared the results with previous similar measurements for other races.

Major compulsory revisions

I have concern about the comparison, because some of the previous autopsy studies might use threshold of “normal” vessel size which was different from that in the present study. The authors should remove the data from the previous studies using different threshold of “normal” vessel size.

In addition to it, I'm unsure that Pearson Brown ranked correlation is an appropriate statistical strategy. In order to perform Pearson Brown ranked correlation, I assume variations of the Circle of Willis to be ranked. However, it is difficult to determine which is highly ranked, for example, type 5 (unilareral hypoplastic PcoA and AcoA) or type6 (bilateral hypoplastic PcoAs) in Table1. Chi-square test, suggested by referee 2, is more appropriate.

Minor essential Revisions

page 7 line 11-12 right and left internal internal carotid arteries. Please remove one of the “internal”

Discretionary Revisions

Some people have multiple anterior communicating arteries. Each of the arteries may be less than 1mm in diameter, however, as a whole, they suffice as effective collateral. If the authors encountered such case, please describe how the case to be classified.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests.