Reviewer's report

Title: Genetic epidemiology of ischemic stroke: A bi-ethnic, population-based stroke surveillance study

Version: 2 Date: 25 July 2005

Reviewer: Steven J Kittner

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. It appears that patients with strokes prior to the study period were included in the analysis. Cases of recurrent stroke could demonstrate different relationships from incident/first ever cases and their inclusion hampers interpretation of the results and potential comparisons with other studies. It would be desirable to clarify this issue.

2. A substantial proportion (37%) of the family history interviews were conducted with proxies, primarily spouse or child of the case. Although prior work established the agreement between patient/proxy interviews for other historical elements, agreement for family history has not been examined. Proxy interviews are presumably a marker of stroke severity and could be correlated with stroke subtype and with completeness of family history. For this reason, proxy status could be a confounder. This could be examined empirically, for example, by determining the quantitative change in the odds ratio for the association between family history and each outcome, before and after adjustment for proxy status.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

1. There is a rather striking finding in Table 2 of increased family history of stroke among female stroke cases compared to men (p=0.0006) that is not commented upon in the results or discussion. However, the discussion is otherwise appropriate to the results with a full discussion of strengths and limitations.

2. The title is somewhat misleading since the main exposure of interest, “family history”, is not mentioned.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.