

## COMMENTS AND RESPONSES

### Prospective Study of Type 1 and Type 2 Diabetes and Risk of Stroke Subtypes: the Nurses' Health Study

Response to Janghorbani et al.

**W**e read the article by Janghorbani et al. (1) and have some observations for the authors. First, why did the authors classify stroke subtypes by Perth criteria (2), when TOAST (Trial of Org 10172 in Acute Stroke Treatment) classification (3) would have been, in our opinion, more suitable? Indeed, this classification, evaluating pathophysiological, instrumental, and anatomical findings following an algorithmic procedure, offers a better diagnostic categorization of ischemic stroke.

Second, the authors report that lacunar infarction and large-artery occlusive infarction had similar associations with diabetes, but recently Megherbi et al. (4) showed how diabetic patients, compared with those without diabetes, were more likely to have lacunar cerebral infarctions. Moreover, our group in two previous works showed in 159 subjects with acute ischemic classified (according to TOAST classification) that diabetes was more frequent among patients with lacunar sub-

types (5), and comparing 102 diabetic subjects with acute ischemic stroke with 204 nondiabetic subjects with ischemic stroke, we confirmed this association (6).

Third, in the study by Janghorbani et al., the authors evaluated, in the Nurses' Health Study, 2,719 cases in women, so is it possible that the reported finding of no difference in incidence of atherosclerotic and lacunar stroke could be a sex-related finding? Furthermore, the authors evaluated only first nonfatal strokes, only 1,899 (69.8%) cases were confirmed by medical record review, and 820 (30.2%) were classified as probable, with 332 corroborated by letter and 488 by telephone.

Therefore, it is plausible that the study by Janghorbani et al., owing to the classification of stroke subtypes used and the modality of cerebrovascular event registration, could have underestimated lacunar subtype incidence in this diabetic population.

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