Letter by Riba-Llena et al Regarding Article, “Not Listened or Not Reported Rather Than Silent Stroke”

To the Editor:

We read with great interest the article by Saini et al1 about the presence of incidental brain infarcts on diffusion-weighted imaging in a dementia research study and how these infarcts were not truly asymptomatic or silent but related to the lack of awareness of stroke-like symptoms in the elderly and their families.

We are conducting an observational prospective study in 1093 hypertensive participants 50 to 70 years of age to determine the prevalence of silent or magnetic resonance imaging (MRI)–defined brain infarcts and cognitive impairment. Patients are excluded when they have a previous diagnosis of stroke or whenever they report previous stroke-like symptoms assessed by the Stroke Symptom Questionnaire.2 Also, demented patients determined by a clinical interview and a screening test (Dementia Rating Scale-2) are excluded. All participants undergo a brain MRI for which brain infarcts are defined as lesions ≥3 mm in their widest dimension, with signal characteristics of cerebrospinal fluid in all pulse sequences (T1, T2, and fluid attenuated inversion recovery) thought to be of vascular origin.3

Participants with MRI-defined brain infarcts have been later interviewed by 2 neurologists who, in 8 cases, agreed with the presence of acute clinical manifestations attributable to a stroke in the past, which were only referred by the participants after being informed of the brain MRI results. Overall, our participants with “not listened rather than silent” brain infarcts were younger than those from Saini et al (mean age, 63.7 years), 75% were men, and all of them had ≥1 vascular risk factors (100% hypertension, 75% hyperlipidemia, 50% diabetes mellitus, and 37.5% current smokers) or history of previous vascular disease, such as coronary artery disease (25%) or atrial fibrillation (12.5%). In addition, none of were cognitively impaired.

Regarding brain lesions, 7 participants had an ischemic infarct and 1 had a hemorrhagic infarct. Five participants had multiple ischemic infarcts, which tended to involve the posterior circulation. Localizations were mainly supratentorial, 1 was infratentorial, and 1 affected both regions. There were no preferences for subcortical, deep gray matter, or cortical region involvement of the brain. Two infarcts were territorial, and the rest were lacunar.

Focusing on clinical data, 6 reported acute onset of symptoms and 3 had persistent focal neurological signs consistent with the brain lesion. The duration of symptoms ranged from minutes to months. Two participants had sudden gait ataxia for several hours, which were not deemed to be significant; 1 presented speech disturbances for several minutes, which were dismissed by himself and spouse; 1 had transient headache, amnesia, and blood pressure measurement of 250/150 mm Hg, although never sought for medical attention, and displays at present immediate memory and verbal fluency impairment; I had acute-onset numbness of his right arm lasting minutes; and another had a sharp onset but long-lasting disorientation with incoherent and repetitive speech, attributed to an acute kidney infection. The oldest one had lost vision since a previous admission for an acute myocardial infarction and had a right unnoticed hemianopia. The last one had a central facial palsy, which had been unnoticed.

In agreement with the report from Saini et al,1 even after asking for general stroke symptoms, there are still a small but significant number of patients with MRI-defined brain infarcts, which are “not listened” or “not reported” rather than silent. In our case, this could be because of the lack of recognition of stroke symptoms even in cognitively intact patients, particularly when they are mild or atypical unlike the anosognosia or lethargy of the patients from the article by Saini et al. As a limitation, our brain MRI design is different, and because we do not use diffusion-weighted imaging, the temporary link between clinical manifestations and brain lesions cannot be established for sure. Sensitizing general population regarding recognition of stroke-like symptoms is crucial to improve treatment and prevention of acute stroke and to reduce the risk of a new stroke or subsequent dementia.

Disclosures

None.

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