Asymptomatic Moyamoya Disease

To the Editor:

We read with great interest the article by Kuroda et al concerning asymptomatic moyamoya disease (MMD) in multicenter survey. The authors describe clinic-radiological findings in 40 patients. We also reported asymptomatic MMD adults on brain check-up (BC)-based population in Japan. A total of 11 402 healthy subjects (7570 men and 3832 women) offered BC between January 1997 and November 2003. Mean age (SD) of subjects was 53.2 (11.1) years, 53.2 (10.9) in men and 53.2 (11.5) in women. Probable (unilateral) MMD was diagnosed in 8 subjects (4 men and 4 women). There were no subjects with definite (bilateral) MMD. Mean age (SD) of our cases was 54.0 (12.0) years, 54.8 (12.8) in men and 53.3 (13.9) in women. Detection of asymptomatic MMD on BC was 0.07% in all, 0.05% in men and 0.10% in women. The sex ratio of female to male was 3.3. Estimates of MMD were calculated as 50.7 per 100 000 persons, 28.9 in men and 94.3 in women. Our data are higher than the prevalence (3.16 per 100 000 persons) in previous nationwide hospital survey. This fact suggests that asymptomatic MMD is thought to be not uncommon in Japanese population. Our 5 cases had a family history of definite MMD, and 7 cases had a family history of hemorrhagic stroke. MRI revealed silent lacunae in 1 case (70-years-old woman). Seven patients had no ischemic lesions. On brain single-photon emission CT using $^{123}$I-IMP, cerebral perfusion was decreased in 5 cases. During follow-up of 2 to 3 years, 2 cases (25%) developed transient ischemic attacks. Silent infarction is seen in 12 (30%) patients of Kuroda et al. The first question is whether cerebral infarction is correlated with age or angiographic stages of patients. We would like to know the clinico-radiological course in 5 patients who were diagnosed unexpectedly on BC. Do baseline data differ between BC and other patients? Only 3 of 40 (7.5%) cases have unilateral MMD in the study of Kuroda et al, whereas all our cases had unilateral MMD. Thus, the possibility is postulated that MMD cases diagnosed on BC are early stage as compared with hospital cases. The authors mention that their study is performed in 12 representative hospitals of MMD. Thus, natural course of MMD may not be a similar way between asymptomatic patients from BC and their special hospital-based population. A follow-up study of asymptomatic cases with unilateral MMD could contribute to precise risk of stroke events and silent infarction.

Disclosures

None.

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