Factors associated with concomitant asymptomatic intracranial artery stenosis in patients with atherothrombotic brain infarction attributable to intracranial artery stenotic lesion

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Background and Purpose: The purpose of this study was to identify factors associated with concomitant asymptomatic intracranial artery stenotic lesion (ICAS) in patients with atherothorombotic brain infarction (ATBI) attributable to ICAS. Methods: Subjects of this study were 54 patients (37 men; mean age, 71.0±12.9 years) with symptomatic ICAS who were admitted to our department within 7 days of the onset of ATBI between April 2013 and August 2017. Significant ICAS was defined by the presence of ≥50% stenosis or occlusion of intracranial arteries, as detected by MR angiography. Results: Twenty-six patients (48.1%) had concomitant asymptomatic ICAS. Patients with asymptomatic ICAS was significantly older (74.9±2.4 vs 67.3±2.4 years, p=0.029) and more likely to have a history of ischemic heart disease (IHD) (23.1% vs 3.6%, p=0.033), compared to those without. The prevalence of current smoking habit was significantly lower in patients with asymptomatic ICAS than in those without (11.5% vs 35.7%, p=0.038). Multiple logistic regression analysis showed that advanced age (Odd ratio [OR], 1.83; 95% confidence interval [CI], 1.04-3.53; p=0.034, for every 10 years) and a history of IHD (OR, 11.5; 95%CI, 1.42-265.5; p=0.020) were associated with concomitant asymptomatic ICAS. Conclusion: Our results suggested that patients with ATBI attributable to ICAS who had concomitant asymptomatic ICAS were older and prone to have a history of IHD.