Response to Letter Regarding Article, “Preexisting Heart Disease Underlies Newly Diagnosed Atrial Fibrillation After Acute Ischemic Stroke”

We appreciate the interest of Doğanay et al1 in our article2 in which we examined the presence of preexisting heart disease in patients with newly detected atrial fibrillation (AF) after stroke. They refer to dysregulation of the autonomic nervous system after stroke and propose that epicardial fat thickness (EFT) may be a pathological marker.

Echocardiographic EFT reflects visceral adiposity. Associations with coronary heart disease, coronary artery calcification, metabolic syndrome, diabetes mellitus, and left ventricular morphology have been reported.3 Epicardial adipose tissue may affect the myocardium via locally acting hormones, cytokines, and vasoactive substances.4 Interestingly, it has been associated with the presence of AF in that patients with AF appear to have more peri-cardial fat than patients in sinus rhythm independent of traditional risk factors.5,6 However, the detailed pathophysiology is not fully understood,3 and normal reference values for EFT have not been established yet.

Our results suggested that preexisting heart disease represents the main cause of newly diagnosed AF after stroke,2 but we did not measure EFT. Multiple factors are associated with new post-stroke AF. Further work is needed to establish whether EFT could serve as another marker for covert paroxysmal AF or autonomic dysregulation in this setting.

Disclosures

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