

Relationship between vascular anatomy and silent cerebral ischemia after carotid artery stenting. Author's reply

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Carotid artery stenting (CAS) and carotid endarterectomy surgery are performed in the treatment of severe carotid artery stenosis [1]. Determining which treatment method will be more advantageous for which patient requires experience [2]. The most important periprocedural complication associated with CAS is cerebral embolism. Periprocedural embolism due to CAS has many causes that have been described so far and they include complex vascular anatomy, type III aortic arch, vascular tortuosity, prolonged CAS duration, stent type, inexperienced operator... to name a few [3, 4]. Many studies such as ours aim to reveal the causes of and solutions to cerebral embolism due to CAS.

In our study, we investigated the effect of carotid plaque morphology on ipsilateral periprocedural cerebral embolism due to CAS. However, many patients and lesion groups that could have cerebral embolism due to CAS were excluded (see Tables 1 and 2 [5]). We did not include many groups with a high risk of cerebral embolism due to CAS, which the authors mentioned. We aimed to reveal more precisely the plaque morphology and the risk of cerebral embolism due to CAS in our selected patient group. Therefore, we did not include the cases mentioned by the authors, such as ulcerated and thrombotic lesions, tortuous vascular anatomy, prolonged procedure time (procedure time >45 min), type III aortic arch, etc.

Our study differs from other studies in some respects. First of all, our study was conducted in a very special group (see Tables 1 and 2 [5]). In our patients, not only the distal embolism protection method but also the proximal embolism protection method was

used. All cases were multidisciplinary and were followed up by an invasive cardiologist and an interventional vascular neurologist. Resistance to antiaggregation drugs was studied in all patients before the CAS procedure.

In our study, the duration of fluoroscopy was not given because patients with long and complicated CAS procedures, such as those with a prolonged procedure time (>45 min), those who required repetitive balloon inflation, those with distal internal carotid artery spasm, and those with hemodynamic instability were not included in our study.

The fact that the serum biochemical or physiological indicator suggested by the authors was not used in our study is, admittedly, a shortcoming. Intravascular ultrasound or magnetic resonance imaging may have been more beneficial to evaluate carotid plaque morphology.

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