Response to Letter Regarding Article, “Residual High-Grade Stenosis After Recanalization of Extracranial Carotid Occlusion in Acute Ischemic Stroke”

We appreciate the interest of Zhou et al 1 in our recently published article. They refer to an important issue about the acute treatment of an extracranial occlusion of the internal carotid artery (ICA) in patients with acute ischemic stroke. Our study was aimed at identifying a high-grade extracranial ICA stenosis after the acute phase in patients in whom an occluded extracranial ICA was found within the first hours after symptom onset. Because these patients are at risk for recurrent stroke, our results should be interpreted in the context of secondary prevention rather than in the context of acute treatment of ischemic stroke.

We agree with the authors that more evidence is needed on the optimal treatment strategy for an extracranial ICA occlusion in patients with acute ischemic stroke who are eligible for endovascular treatment. On the basis of our study results, we share the experience of Zhou et al that stenting of the extracranial ICA is frequently performed simultaneously with endovascular treatment. In our study, 11 of 86 patients with an extracranial ICA occlusion underwent endovascular treatment. In 3 of these patients, endovascular treatment did not succeed. In the remaining 8 patients, stenting of the extracranial ICA was performed in combination with treatment with the proximal intracranial occlusion. In only 1 patient, a high-grade stenosis of the extracranial ICA remained after stenting. In the Multicenter Randomized Clinical Trial of Endovascular Treatment for Acute Ischemic Stroke in the Netherlands (MR CLEAN) study, 70 of 266 (26%) patients in the control group and 75 of 213 (32%) patients in the intervention group had an occlusion of the extracranial ICA, 30 of whom underwent stenting during the revascularization procedure.2 The patients with an extracranial ICA occlusion showed a trend in favor of endovascular treatment in the acute stage (adjusted odds ratio, 1.43; 95% confidence interval 0.78–2.64).2 Until now, no details about residual high-grade extracranial ICA stenosis after endovascular treatment and subsequent functional outcome have been published by the MR CLEAN investigators.

With regard to a potentially residual high-grade stenosis remaining after endovascular treatment, we emphasize the difference between acute treatment and secondary prevention. In case of acute intra-arterial treatment, a residual high-grade ICA stenosis is identified immediately and action can be taken on this finding directly. In patients with a residual high-grade ICA stenosis, which is identified after the acute stage, subsequent carotid surgery or stenting should be considered.

Disclosures

None.

Merel J.A. Luitse, MD
L. Jaap Kappelle, MD
Department of Neurology, UMC Utrecht Stroke Center, Brain Center Rudolf Magnus
University Medical Center Utrecht
Utrecht, The Netherlands

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Merel J.A. Luitse and L. Jaap Kappelle

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