Ischemic stroke following intracranial hemorrhage from moyamoya disease

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Sir,

We read with great interest the article entitled “Ischaemic stroke after acute intracranial hemorrhage in patients with moyamoya disease: six new cases and a short literature review” by Kim et al. [4]. The authors reported six cases of ischemic stroke after intracranial hemorrhage (ICH) from moyamoya disease (MMD), and reviewed the literature. Their review showed that the vast majority of patients (94%) had intraventricular hemorrhages (IVH) without subarachnoid hemorrhage, and revealed that most cerebral infarcts (CI) after ICH from MMD were multiple, large, and cortically involved. The authors suggested that thromboembolism or vasospasm might play a role in the pathogenesis of CI after ICH from MMD. We completely agree with the authors’ findings and wish to provide further comment.

We also believe that vasospasm is one of the contributing factors to CI after ICH from MMD. Preventive measures to reduce the risks of CI after ICH from MMD are important, because the optimal treatment strategy remains unclear. Su et al. [6] reported a case of CI after IVH from MMD, and suggested that early perfusion computed tomography (CT) scanning was a powerful tool for identifying patients at high risk of CI. Additionally, Ko et al. [5] reported that IVH volume was a prognostic factor for cerebral vasospasm. We suggest that perfusion CT scanning may be especially useful for predicting cerebral vasospasm in patients with massive IVH from MMD. There is no evidence for the optimal treatment for

IVH from MMD; however, dehydration and hypotension should be avoided to prevent CI, regardless of the mechanisms involved [2]. Some authors have reported a relationship between increased intracranial pressure and cerebral vasospasm [3], and surgical interventions, such as ventricular drainage and/or endoscopic removal of the hematoma, may thus be indicated if increased intracranial pressure is suspected. Nimodipine or nicardipine may also be effective for preventing or treating cerebral vasospasm after ICH from MMD [1]. Further investigations into the optimal methods of predicting, preventing, and treating CI after ICH from MMD are required.

Conflicts of interest None.

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