Introduction: Venous brain circulation disorders

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Brain ischemia by arterial occlusion has been a focus of attention for decades, and cerebral venous disorders have been an underestimated condition of potentially good outcome if diagnosed and treated promptly. Recently, there has been considerable interest in cerebral injury following cerebral venous circulation disorders because diagnosis has improved as our understanding of the diseases and modern imaging technologies have advanced.

The representative cerebral venous disease is cerebral vein and dural sinus thrombosis. Cerebral vein and dural sinus thrombosis is increasingly recognized as a much more common neurological disorder than previously believed. The International Study on Cerebral Vein and Dural Sinus Thrombosis cohort reported that diagnostic delay was associated with an increased risk of poor outcome in patients with isolated intracranial hypertension. First-line treatment remains systemic anticoagulation, but new endovascular techniques and technology allow more aggressive thrombolysis and thrombectomy in the setting of acute thrombosis in the selected patients in whom the disorder is unresponsive to adequate anticoagulation.

This issue of Neurosurgical Focus covers many aspects related to venous brain circulation and disorders in the field of neurosurgery: anatomy of the diploic venous system, cerebral venous sinus thrombosis (pathophysiology, natural history, and appropriate and new treatment), vein of Galen malformation, vascular malformation, radiosurgery of parasagittal meningioma, trigeminal neuralgia by venous compression, sinus pericranii, and so on. Theses articles provide timely and considerable information regarding venous brain circulation and disorders. We will learn the historical therapies, the current concept of the disorder, and the current and emerging technologies used to treat disorders of the venous circulation. It is hoped that the present issue highlights clinical features and many of the recent developments in this area and also serves to stimulate further studies.

References


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