

## **HYPERTENSIVE ENCEPHALOPATHY MIMIC STROKE : A CASE REPORT**

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**BACKGROUND/AIMS** : Hypertensive encephalopathy (HE) is an acute brain organic syndrome occurring as a result of failure of the cerebral vascular autoregulation. The symptoms of HE include lethargy, confusion, headaches, visual disturbance and seizures, which are usually non-focal and imply diffuse cerebral dysfunction. The case of HE with focal neurological deficits is rare. Here, we report a case of HE with initial hemiplegia, which mimic stroke. The mechanism of the focal neurological deficits in HE will be discussed in this essay.

### **CASE REPORT** :

A 57-year-old female was admitted due to severe biparietal headache, dizziness, agitation, blurred vision and slurred speech. Her blood pressure was 250/133 mmHg initially. On the second day, she fell into the state of right hemiplegia and global aphasia. A stroke was highly suspected. Cranial T2-weighted and FLAIR MRI revealed diffused hypersignal lesions over periventricular subcortical area but not a large infarct over the left hemisphere. Cerebral angiography revealed stenosis of about 50% in left distal internal carotid artery (ICA). Her blood pressure returned to 160/82 mmHg after treatment. The hemiplegia and global aphasia resolved almost completely 2 weeks later.

### **DISCUSSION/ CONCLUSIONS** :

HE occurs when blood pressure exceeds the autoregulatory capacity. The loss of pressure dependent constriction and cerebral vascular autoregulation lead to the secondary vasodilation, hyperperfusion and disruption of the blood-brain barrier. Our patient underwent stenosis of about 50% in left distal ICA in which hypoperfusion must be developed during the breakthrough of autoregulation. We speculate that the stenosis of ICA might be a promotive factor to worsen the disruption of the blood brain barrier, which, furthermore, caused the focal neurological deficits.

**Key words** : Hypertensive encephalopathy, Stroke, Cerebral vascular autoregulation