Teaching *NeuroImages*: Central variant of posterior reversible encephalopathy syndrome

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A 55-year-old man with chronic hypertension presented with acute headache and dizziness. Physical examination showed severe hypertension (210/140 mm Hg) without any neurologic sign. Brain MRI showed diffuse brain edema over the brainstem, bilateral thalami, and cerebellar hemispheres with multiple microbleeds at bilateral basal ganglia (figure 1). His symptoms improved dramatically after antihypertensive therapy. Brain MRI 1 month later showed resolution of the edema (figure 2). “Central variant” of posterior reversible encephalopathy syndrome predominantly involving the brainstem and basal ganglia and relatively sparing the parieto-occipital lobe is rare.¹ Paucity of brainstem signs and symptoms despite extensive neuroimaging abnormalities supports the diagnosis.²

AUTHOR CONTRIBUTIONS

Dr. David Chen studied the case, collected the information, and compiled the manuscript. Dr. Ying-Chi Tseng drafted and revised the manuscript for intellectual content. Dr. Yen-Lin Huang drafted and revised the manuscript for intellectual content. Dr. Yen-Lin Huang drafted and revised the manuscript for intellectual content. Dr. Chi-Jen Chen reviewed the manuscript.

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DISCLOSURE

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Figure 1 Brain MRI 1 day after symptom onset

(A) T2-weighted axial images show diffuse hyperintensities over the brainstem, bilateral thalami, and cerebellar hemispheres. (B) Susceptibility-weighted images show multiple microbleeds at bilateral basal ganglia (arrows), suggestive of the underlying chronic hypertensive status.

Figure 2 Brain MRI 1 month later

Brain MRI shows resolution of cerebral edema in the brainstem, cerebellum, and bilateral thalami.

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