Teaching Neuro*Image*

Atypical territorial infarction in moyamoya disease

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A 71-year-old woman presented with sudden akinetic mutism. MRI showed an infarction on the anterior portion of the brain. Angiographic studies demonstrated occlusion of both internal carotid arteries at the supraclinoid portion and extensive collaterals (figure), which were suggestive of moyamoya disease.[1] Although symptom onset at age 71 is unusual in moyamoya disease, underlying diseases that may be associated with moyamoya-like vasculopathies (moyamoya syndrome) were not found despite the extensive work-ups. An infarction involved only the anterior part of the anterior and middle cerebral artery territories,[2] which indicated that distorted vascular territories in moyamoya disease caused an atypical territorial infarction.

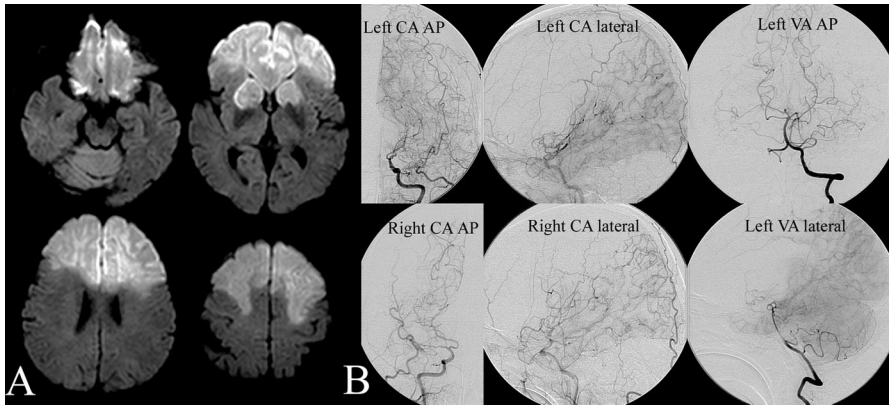

Figure. (A) Diffusion-weighted axial MRI shows an acute infarction involving the bilateral frontal lobes and anterior portions of the basal ganglia. (B) Carotid (CA) and vertebral (VA) angiograms demonstrate occlusion of both internal carotid arteries and well developed bilateral leptomeningeal and basal collaterals from the posterior cerebral and external carotid arteries.

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