Bilateral Paramedian Thalamic Infarcts

A 60-YEAR-OLD MAN with hypertension and dyslipidemia had a sudden onset of somnolence and gait ataxia. The neurological examination revealed skew deviation, bilateral dysmetria, and bilateral extensor plantar responses. Fluctuation in consciousness was noted for several weeks, but the patient gradually recovered. The neuroimaging studies demonstrated symmetric bilateral hyperintense thalamic lesions on T2-weighted images consistent with ischemic events (**Figure 1**). Basilar arteries and posterior cerebral arteries (PCAs) were fully patent on magnetic resonance angiography (not shown).

A 63-year-old man with thalassemia and no risk factors for stroke was admitted for somnolence, confusion, disorientation, and inappropriate social behavior. The neurological examination demonstrated anterograde memory impairment, left facial weakness, and a minimally affected left pyramidal tract. The T2- (**Figure 2**A) and diffusion-weighted images (Figure 2B) showed bilateral paramedian thalamic infarcts. Digital subtraction angiography (not shown) demonstrated fully patent basilar and posterior cerebral arteries.

COMMENT

The paramedian thalamic perforating arteries, or arteries of Percheron, usually arise from the first segment of each PCA. However, they may arise from a single common trunk off of 1 PCA.[1] The suggested mechanism of bilateral thalamic infarcts is occlusion of the single common trunk from 1 PCA that supplies the bilateral paramedian thalamic perforating arteries.[2] To our knowledge, there is only 1 case in the literature where the presence of a single common trunk from 1 PCA was proven radiologically.[3] The natural history of this condition is that patients tend to remain severely disabled. However, recovery has occasionally been reported,[4] and our first patient is one of the few examples.

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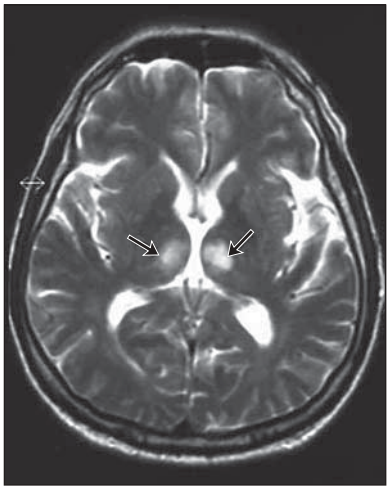

Figure 1. T2-weighted image showing the bilateral symmetric thalamic hyperintensities (arrows) of the first patient.

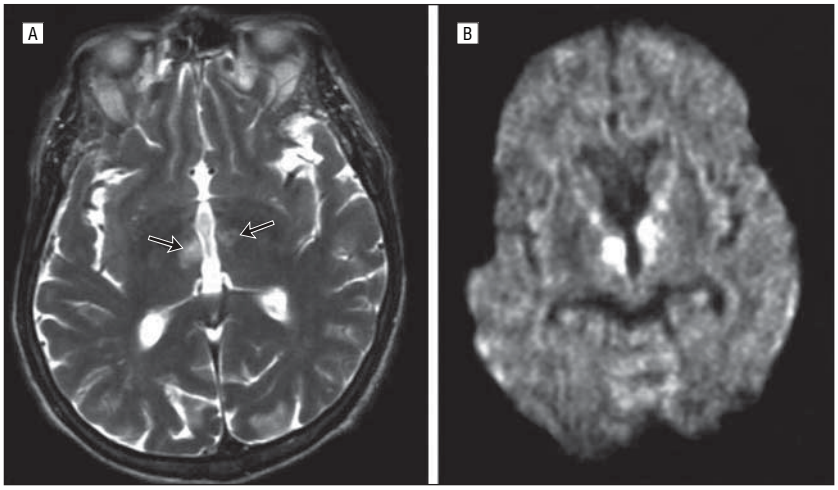

Figure 2. T2- (A) and diffusion-weighted (B) images from the second patient consistent with bilateral paramedian thalamic infarcts (A, arrows).