Infantile basal ganglia stroke after mild head trauma

A 13-month-old boy presented to our hospital with a history of right hemiparesis and right facial paresis for 2 days. These symptoms occurred several hours after a fall from a bed to the ground. An MRI of the brain showed an ischemic lesion and cerebral ultrasound examinations demonstrated bilaterally hyperechogenic lenticulostriate arteries (figure).

Infantile basal ganglia stroke after mild head trauma is a rare condition in childhood. Lenticulostriate artery mineralization, lenticulostriate vasculopathy, is implicated as the pathologic substrate in this type of stroke. Rigid mineralized arteries increase the vulnerability of the vessels to shear injury during mild head trauma.

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Figure Brain MRI and cerebral ultrasound examination

MRIs showed a left posterior putamen ischemic lesion extending to the internal capsule (A). A cerebral ultrasound examination identified lenticulostriate vasculopathies, which are not shown by MRIs. Bilateral multiple lenticulostriate vasculopathies were observed in coronal (B, C), and left (D) and right (E) parasagittal views (arrows).

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