Brain Calcification Associated with Pseudohyopoparathyroidism

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A 23-year-old, previously healthy woman presented with a first-onset generalized tonic-clonic seizure. Neurological examination was unremarkable. Computed tomography of the brain showed extensive symmetric calcifications in the corticomedullary junctions, basal ganglia, thalami, and cerebellar hemispheres (Fig. 1). Serum laboratory studies revealed levels of calcium 5.7 mg/dL (8.6-10.2 mg/dL), phosphorus 4.4 mg/dL (3.5-4.5 mg/dL), and parathyroid hormone 151 pg/mL (10-65 pg/mL) consistent with pseudohyopoparathyroidism. Her clinical features of a round face, short stature, and short fourth and fifth metacarpals suggested pseudohyopoparathyroidism type Ia, Albright’s hereditary osteodystrophy.1 Pseudohyopoparathyroidism is one of medical conditions which can be accompanied by brain calcifications, especially strio-pallido-dentate calcinosis.2

REFERENCES


Figure 1. Brain CT demonstrates extensive symmetric calcifications in corticomedullary junctions (A), basal ganglia and thalami (B), and cerebellar hemispheres (C). Calcifications of the brain are also seen in a cranial radiograph (D). Arrows indicate calcifications.