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Case Report

A rare case of subacute sclerosing panencephalitis masquerading as adrenoleukodystrophy

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Subacute sclerosing panencephalitis (SSPE) is chronic progressive encephalitis due to persistent measles virus infection.[1] The diagnosis is based on characteristic clinical manifestations, periodic complexes in the electroencephalography (EEG) and raised antibody measles antibodies in the plasma and cerebrospinal fluid (CSF).[2] We are reporting a case of SSPE mimicking adrenoleukodystrophy (ALD).

An 8-year-old boy presented with decreased scholastic performance for 6 months followed by myoclonic jerks. There was a history of measles infection at 14 months of age. On examination, myoclonic jerks were noted at regular intervals with pyramidal signs. Magnetic resonance imaging brain showed symmetrical T2-weighted images hyperintensities in the periventricular white matter of bilateral cerebral hemispheres with occipital lobe predilection. EEG showed generalised periodic slow waves suggestive of Radermecker complexes. CSF analysis revealed 85 mg/dL sugar, 55 mg/dL protein and acellular background. Serum and CSF measles immunoglobulin G antibody was positive in a high titre of more than 1:650.

The differential diagnosis for a combination of cognitive regression, myoclonic epilepsy and ataxia includes progressive myoclonic epilepsies (sialidosis, late-onset gangliosidosis and neuronal ceroid lipofuscinosis) and X-linked ALD. The radiological findings in SSPE include asymmetric hyperintensities in the white matter with posterior predilection which usually progresses to involve the corpus callosum and basal ganglia.[3,4] The neuroradiological findings of X-linked ALD are quite similar with symmetric involvement of white matter with posterior predominance and corpus callosal lesions. Although posterior predominant white matter lesions are known in SSPE, the symmetric nature of involvement may mislead the physician who may initiate a workup towards leukodystrophies which are expensive. The presence of myoclonic jerks and a history of measles prompted us to consider SSPE despite the neuroimaging feature. Arriving at the correct diagnosis is important as both SSPE and ALD have different management and prognosis.

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