MR imaging of hypothalamic hamartoma in a patient with gelastic seizures

ABSTRACT

Hypothalamic hamartomas (HHs) are non-neoplastic malformations that occur in the region of the hypothalamus. HH is the leading cause of gelastic seizures in children and adolescents, where laughing is characteristically manifested. However, these patients can also experience different forms of complex or generalized tonic-clonic seizures that can obscure the diagnosis of HHs. We present a case of a 10 year-old boy that experienced several seizure types, but was subsequently diagnosed with HH after MR imaging was performed. This case highlights the complementary role of MR imaging in ascertaining seizure etiololgy when the clinical history and EEG findings are non-specific. The importance of early diagnosis with MR imaging is further underscored by the fact that patients diagnosed with HH usually develop drug resistance towards antiepileptic drugs, mandating neurosurgical assessment and intervention.