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Unilateral Hemispheric Encephalitis

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Abstract

A 10 year old boy presented with history of mild fever and upper respiratory symptoms followed by recurrent seizures and loss of consciousness on the next day. Normal blood counts and abnormal hepatic transaminases were noted. MRI of the brain, done on the fourth day of illness, showed extensive involvement of the cortex in the right hemisphere. Lumbar CSF was normal. The EEG showed bilateral slowing with frontal sharp wave discharges and marked attenuation over the entire right hemisphere. The patient succumbed to the illness on the ninth day. A similar pattern of acute unilateral hemispheric cortical involvement is described in the hemiconvulsion-hemiplegia-epilepsy (HHE) syndrome, which is typically described to occur in children below 4 years of age. This case of fulminant acute unilateral encaphilitic illness could represent the acute phase of HHE syndrome.

Key Words: encephalitis, MRI, status epilepticus, hemiconvulsion-hemiplegia-epilepsy

A 10 year old boy presented with history of mild fever and upper respiratory symptoms followed by recurrent seizures and loss of consciousness on the next day. Normal blood counts and abnormal hepatic transaminases were noted. MRI of the brain, done on the fourth day of illness, showed extensive involvement of the cortex in the right hemisphere (**Figure 1**). Lumbar CSF was normal. The EEG showed bilateral slowing with frontal sharp wave discharges and marked attenuation over the entire right hemisphere (**Figure 2**). The patient succumbed to the illness on the ninth day. A similar pattern of acute unilateral hemispheric cortical involvement is described in the hemiconvulsion-hemiplegia-epilepsy (HHE) syndrome, which is typically described to occur in children below 4 years of age [1]. This case of fulminant acute unilateral encaphilitic illness could represent the acute phase of HHE syndrome.

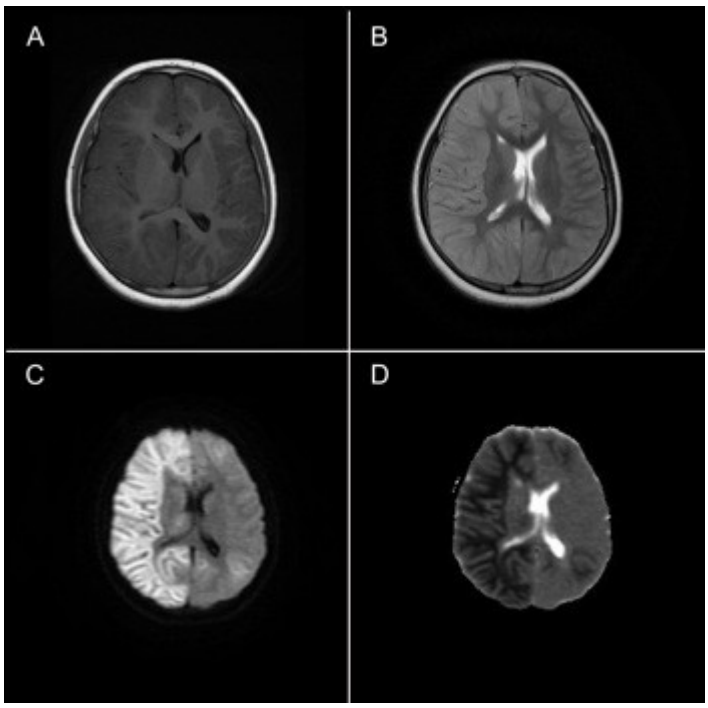

Figure 1: MRI of the brain showing extensive gyral edema in the right hemisphere on T1 (A) with hyperintensity of the cortex on T2 (B) and restricted diffusion (C & D). A few scattered areas of restricted diffusion are also noted on the left side.

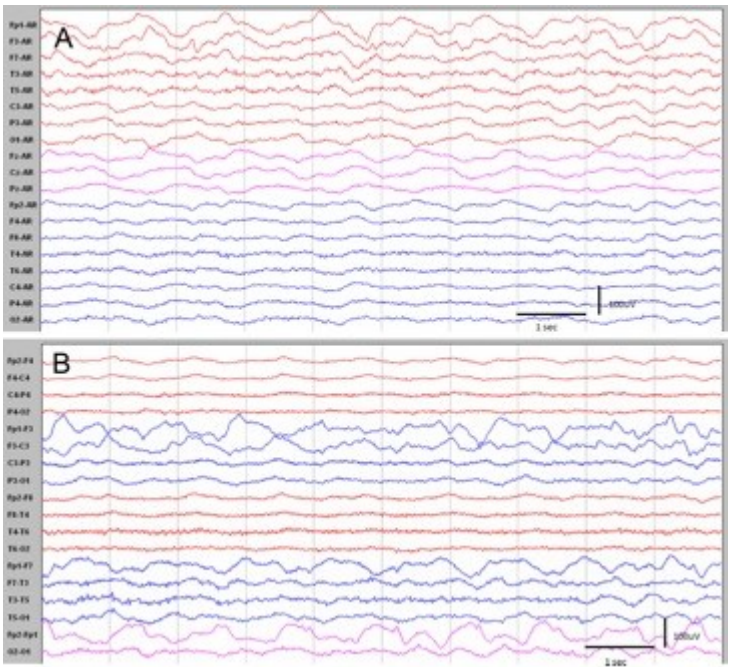

Figure 2: EEG with referential (A) and bipolar (B) montages showing bilateral slowing with frontal sharp wave discharges and marked attenuation over the entire right hemisphere.

References

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