

Cognitive dysfunction in epileptic children in correlation to seizure type, frequency and EEG changes

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The New Egyptian Journal of Medicine.

2001 v24 n4

This work was conducted on 46 epileptic children with EEG recording to study the problem of intellectual impairment in epileptic children.

The intellectual functions [verbal IQ (VIQ), performance IQ (PIQ) and general IQ (GIQ)] were assessed using Wechsler intelligence scale for children revised (WISC-R). The results showed a statistical significant difference between patients and controls as regard intellectual functions with higher IQ scores of the control group.

There was an insignificant difference between patients with different seizure type, however children with generalized tonic clonic seizures had lower IQ scores than those with absence or complex partial seizures. It was concluded that epileptic seizure itself had a detrimental effect on intellectual functions rather than other risk factors, thus intractable epilepsy strongly deteriorated intellectual functions.

Partial versus generalized seizures and normal interictal EEG were good predictor of normal intellectual functions in epileptic children.