

Among 100 children with chronic recurrent headaches treated in neurology practice, 15% had a history of epileptic seizures. EEG showed epileptiform discharges in 18%. Headaches were diagnosed as migraine in 42% and tension headaches in 18%. A trial of antiepileptic medication controlled headaches in 77% of 30 children with migraine, but a positive response was unrelated to an abnormal EEG. Beneficial response rates were 61% and 88% in 13 with abnormal and 17 with normal EEGs, respectively. Migraine patients with normal or abnormal EEGs were benefited. An abnormal EEG and response to AED are insufficient criteria for a diagnosis of epileptic headache [6].

References.

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MUSCLE DISORDERS

CEREBRAL ABNORMALITIES IN DUCHENNE MD

Investigators from Leiden University, the Netherlands, used quantitative MR imaging to study brain microstructure in 30 patients with Duchenne muscular dystrophy (DMD) and 22 age-matched controls (age 8-18 years). DMD patients had smaller total brain volume, lower white matter fractional anisotropy, and higher white matter mean and radial diffusivity than healthy controls. DMD patients also performed worse on neuropsychological examination. Subgroup analyses showed that isoform expression DMD_Dp140 subjects contributed most to the gray matter volume differences and performed worse on information processing. Dp 140 dystrophin isoform has an important role in cerebral development. (Doorenweerd N, Straathof CS, Dumas EM, et al. Reduced cerebral gray matter and altered white matter in boys with Duchenne muscular dystrophy. *Ann Neurol* 2014 Jul 10).

COMMENTARY. In addition to cardiomyopathy, DMD patients should be tested for central nervous system disorders. These include cognitive impairments (1 SD below normal) involving verbal short-term memory, visuospatial long-term memory, and verbal fluency, and higher incidence of autism, ADHD, ODD, and learning disorders [1].

References.

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