

Aspartame Has No Effect on Seizures or Epileptiform Discharges in Epileptic Children

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The effects of aspartame (l-aspartyl- l-phenylalanine methyl ester; APM) on the neurological status of children with well-documented seizures were examined in a randomized, double-blind, placebo-controlled, crossover study. We report on 10 children (5 boys, 5 girls, ages 5-13 yr) who were tested for 2 weeks each on APM and placebo (single morning dose, 34 mg/kg). Seven children had generalized convulsions with 4 also having absence episodes. One child had absence seizures and 2 had complex partial seizures only. On each arm of the study, children were admitted to the hospital for a standard 21-lead electroencephalogram (EEG), continuous 24-hour cassette EEG, and determination of biochemical variables in plasma and urine. Subjects completed the Subjects Treatment Emergent Symptoms Scale (STESS) and parents the Conners Behavior Rating Scale. There were no significant differences between APM and placebo in the standard EEG or 24-hour EEG. No differences were noted for the STESS or the Conners ratings, and no differences were noted for any of the biochemical measures (except for expected increases in phenylalanine and tyrosine after APM). Our findings indicate that, in this group of vulnerable children, APM does not provoke seizures.

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