

Clinical, neuro-physiological, magnetic resonance image and blood bioelements in children with ADUD

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Aim of the work: To test the hypothesis that children with ADIAD may have abnormality in any of the bioelements with or without electricity changes in the brain, as well as changes in the morphology of specific areas of the brain.

Design of the study: Case control and cross sectional study.

Method: The study included 45 children recruited from The Pediatric Neurology Clinic of E]-Hussein University Hospital, diagnosed as having ADHD according to DSM-W criteria. They were aged from 312 years. They were subjected to Semi structured psychiatric interview to diagnose ADHD, WISC scale to test intelligence, laboratory tests (serum iron, magnesium, calcium and zinc) and EEG.

Results: regarding the MR1 studies, MR1 brain and specially for morphology of basal ganglia and corpus callosum was done and revealed a statistically ' significant difference for basal ganglia dysfunction in the children with ADHD due to size difference between right and left caudate nuclei. The study revealed that 71.1% of the study group was males and 28.9% were females (male to female ratio was 11). As regard consanguinity, 1st degree consanguinity was found in 8 cases (17.8%), 2nd degree consanguinity was found in 11 cases (24.5%), while negative consanguinity was found in 26 cases (57.7%)

Conclusion: The diagnosis of ADHD is currently based on clinical findings. ADIAD is more in boys than girls (3:1), it is important to detect the bioelement deficiency in ADIAD for better management.