Abstract

OBJECTIVES:
ADHD is one of the most significant diagnostic units in child and adolescent psychiatry. The occurrence in children is 5-6% and 50-80% continued to adult age. The presence of individual genes (polymorphism) on particular symptoms and processes in ADHD are not known. It is estimated that ADHD symptoms are up to 80% to genetic. The higher density of resultant DAT 1 protein was observed in ADHD patients in comparison with controls. The question was if DAT 1 10/10 predicted bad prognoses in long term therapy.

METHODS:
We compared 30 ADHD DAT 1 10/10 adolescents treated for 5-6 years. Patients with 30 control adolescents. They were the same age of probands and controls. All these subjects were examined by child psychiatry scales (Conners, Achenbach…). Biological changes were tested by MRI specific CNS volumetry.

RESULTS:
We didn’t confirm bad prognoses in long term therapy with methylphenidate or atomoxetine in ADHD children DAT 1 10/10 in long term therapy. In MRI specific CNS volumetry were not identify any differences in controls and ADHD probands. Gray matter thickness was significantly higher in prefrontal and occipital areas in patients compared to control in prefrontal and occipital areas with cluster-wise p-value<0.05. By this method were not identify any cerebrum damage in long term therapy by methylphenidate and atomoxetine.