

P-264 - INTRA-FAMILIAL STUDY OF PREGNANCY COMPLICATIONS IN ATTENTION DEFICIT HYPERACTIVITY DISORDER

Introduction: Epidemiological studies show that the variance in ADHD phenotype has a strong genotypic (75 to 80 %) and environmental (10 to 25%) contribution. The environmental contribution is mainly due to non-shared environmental factors rather than shared environmental factors.

Objectives: Case/control epidemiological studies are unable to distinguish between shared and non-shared environmental factors. Our intra-familial design reduces the number of confounding factors, thus giving a more reliable picture of the environmental and genotypic contributions to the phenotype.

Aims: To compare incidence of Pregnancy, Labor, Delivery and Neonatal Complication (PLDNC) between children with ADHD and their unaffected siblings matched for age and gender.

Methods: Children with ADHD were recruited at the Douglas Mental Health University Institute. The Kinney Medical and Gynecological Questionnaire and the McNeil-Sjöstrom Scale were used to assess incidence of PLDNC. The study had one hundred and sixteen sibling pairs (n=116) and a Mixed-Model Analysis of Variance (MMANOVA) was carried out.

Results: Rank of birth and gender were significantly different between the two groups and these were taken as covariates. There was a significant difference in PLDNC between the two groups ($F=4.49$, $df=1$, $p=.03$). However, there was no significant interaction between the different stages of PLDNC and presence of ADHD.

Conclusions: PLDNC appear to be among the non-shared environmental factors implicated in ADHD. Children with ADHD have a higher prevalence of overall complications during pregnancy as compared to their non-affected siblings, and the period surrounding pregnancy might be of particular relevance to the aetiology of ADHD.