

Comorbidity of migraine with ADHD in adults

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Abstract

BACKGROUND:

Migraine and Attention Deficit and Hyperactivity Disorder (ADHD) have been found to be associated in child and adolescent cohorts; however, the association has not been assessed in adults or otherwise healthy population.

Assessing the comorbidity between ADHD and migraine may clarify the etiopathology of both diseases. Thus, the objective is to assess whether migraine (with and without visual disturbances) and ADHD are comorbid disorders.

METHODS:

Participants from the Danish Blood Donor Study (N = 26,456, age 18-65, 46% female) were assessed for migraine and ADHD using the ASRS ver 1.1 clinically validated questionnaire and self-reported migraine in a cross-sectional study. Logistic regression was used to examine the comorbidity between migraine and ADHD, and their associated endophenotypes.

RESULTS:

Migraine was strongly associated with ADHD (OR = 1.8, 95% CI = 1.5-2.1), (238/6152 vs 690/19,376). There was a significant interaction between age and gender, with comorbidity increasing with age and female sex. Post-hoc analysis showed that migraine with visual disturbance was generally associated with a marginally higher risk of ADHD and this was independent of ADHD endophenotypes.

CONCLUSION:

Migraine and ADHD were demonstrated to be comorbid disorders; the association with ADHD was most prominent for participants with migraine with visual disturbances. Future studies will elucidate which genetic and environmental factors contribute to migraine-ADHD comorbidity.