

Type 1 Diabetes in Parents and Risk of Attention Deficit Hyperactivity Disorder in Offspring: A Population-Based Study in Sweden.

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Abstract

OBJECTIVE:

To explore whether a family history of type 1 diabetes (T1D) is associated with an increased incidence of attention deficit hyperactivity disorder (ADHD) in offspring.

RESEARCH DESIGN AND METHODS:

Individuals with T1D were identified from the nationwide Swedish National Hospital Discharge Register and Swedish Outpatient Register in Sweden and were linked to the Swedish Multi-Generation Register to identify their offspring. Cox regression was used to calculate the hazard ratio (HR) of ADHD in offspring of patients with T1D compared with the general population.

RESULTS:

A total of 15,615 individuals were born after their parents were diagnosed with T1D. After a set of confounding factors was controlled for, offspring of T1D patients had a significantly increased risk of ADHD with a HR of 1.29 (95%CI 1.15-1.42). Maternal T1D was associated with an enhanced risk of ADHD (HR 1.35 [95%CI 1.18-1.55]) compared with paternal T1D (HR 1.20 [95%CI 1.03-1.41]), but the difference was not statistically significant.

CONCLUSIONS:

In this retrospective cohort study, we found that a parental history of T1D was associated with a 29% increased risk of being diagnosed with ADHD. However, the underlying mechanisms need to be explored in future studies.