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Low Apgar scores and risk of childhood attention deficit hyperactivity disorder.

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Source

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Abstract

OBJECTIVE:

To examine whether low Apgar scores at 5 minutes are associated with increased risks of attention deficit hyperactivity disorder (ADHD).

STUDY DESIGN:

We conducted a nationwide population-based cohort study of all 980 902 singletons born in Denmark from 1988 to 2001. All children were monitored from 3 years of age until a first International Classification of Diseases diagnosis of hyperkinetic disorder, a first medication for ADHD, migration, death, or the end of 2006, whichever came first. We used Cox regression models to examine the association between Apgar scores at 5 minutes and ADHD.

RESULTS:

Apgar scores were inversely associated with risk of ADHD (hazard ratio 0.92; 95% CI: 0.88-0.96, P trend < .001). Compared with children with Apgar scores of 9 or 10 at 5 minutes, the risk for ADHD was 75% higher in children with Apgar scores of 1 to 4 (hazard ratio 1.75; 95% CI: 1.15 to 2.11) and 63% higher for those with Apgar scores of 5 to 6 (95% CI: 1.25 to 2.11).

CONCLUSIONS:

A low Apgar score was associated with an increased risk of ADHD in childhood. Low Apgar scores and ADHD may share common causes or a low Apgar score reflects at least one causal pathway leading to ADHD.