Perinatal risk factors for infantile autism.
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BACKGROUND: Etiologic hypotheses in infantile autism suggest a strong genetic component, as well as possible environmental risks linked to early fetal development. We evaluated the association of maternal, pregnancy, delivery, and infant characteristics and risk of infantile autism. METHODS: We conducted a case-control study nested within a population-based cohort (all Swedish children born in 1974-1993). We used prospectively recorded data from the Swedish Birth Register, which were individually linked to the Swedish Inpatient Register. Cases were 408 children (321 boys and 87 girls) discharged with a main diagnosis of infantile autism from any hospital in Sweden before 10 years of age in the period 1987-1994, plus 2,040 matched controls. Conditional logistic regression was used to calculate odds ratios (ORs) and 95% confidence intervals (CIs). RESULTS: The risk of autism was associated with daily smoking in early pregnancy (OR = 1.4; CI = 1.1-1.8), maternal birth outside Europe and North America (OR = 3.0; CI = 1.7-5.2), cesarean delivery (OR = 1.6; CI = 1.1-2.3), being small for gestational age (SGA; OR = 2.1; CI = 1.1-3.9), a 5-minute Apgar score below 7 (OR = 3.2, CI = 1.2-8.2), and congenital malformations (OR = 1.8, CI = 1.1-3.1). No association was found between autism and head circumference, maternal diabetes, being a twin, or season of birth. CONCLUSIONS: Our findings suggest that intrauterine and neonatal factors related to deviant intrauterine growth or fetal distress are important in the pathogenesis of autism.

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