Infant eczema, infant sleeping problems, and mental health at 10 years of age: the prospective birth cohort study LISAplus.

Abstract:

Cross-sectional studies suggest an association between eczema and mental health problems, possibly modified by sleeping problems, but prospective evidence is missing. We aimed to prospectively investigate the relationship between infant eczema (within first 2 years of age), infant sleeping problems (within first 2 years of age), and the risk of mental health problems at 10 years of age. Between 1997 and 1999, a population-based birth cohort was recruited in Munich, Leipzig, Wesel, and Bad Honnef, Germany, and followed until 10 years of age. Physician-diagnosed eczema, parent-reported sleeping problems, and known environmental risk factors for atopy were regularly assessed until 10 years of age. Mental health was measured using the Strengths and Difficulties Questionnaire (parent version) at 10 years of age. We applied logistic regression modeling adjusting for environmental and lifestyle factors, allergic comorbidity, and family history of eczema. From the original cohort of 3097 neonates, 1658 (54%) were followed until age 10, while 1578 (51%) were eligible for analysis. In the fully adjusted model, children with infant eczema were at increased risk of hyperactivity/inattention at 10 years of age [odds ratio (OR) 1.78; 95% confidence interval (95% CI) 1.02-3.09]. Infant eczema with
concurrent sleeping problems predicted emotional problems [OR 2.63; 95% confidence interval (95% CI) 1.20-5.76] and conduct problems (OR 3.03; 95% CI 1.01-9.12) at 10 years of age. Infant eczema with concurrent sleeping problems appears to be a risk factor for the development of mental health problems.