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### RISK FACTORS FOR PREVALENCE SYMPTOMS OF ECZEMA IN POLISH CHILDREN ACCORDING TO ECAP STUDY

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The aim of this paper was to identify familial and environmental factors that are associated with increased AD risk in children.

**Material and methods:** Epidemiology of Allergic Diseases in Poland study (ECAP) was randomized, multicentre, cohort study, based on personal national identification number, performed in 2006-2008. The completed questionnaires were collected from 9231 children. According to ISAAC protocol 6-7 year-old (n=4510) and 13-14 year-old children (n=4721) participated in ECAP study. The questionnaire based on ISAAC was used. Statistical significance was defined as  $p < 0.005$ .

**Results:** Of the total 9231 children AD symptoms were observed in 3908 (42.3%) (45.8%; n=2066 and 39.0%; n=1842). There was an increase risk of eczema among tobacco smokers (35.0%) vs no smokers (32.4%) (OR=1.11, 95%CI: 1.02-1.21). The eczema prevalence in household with visible moulds was 44.7% and without moulds 35.5% (OR=1.47; 95%CI: 1.38-1.57). Multivariate logistic regression analysis showed that more frequent AD symptoms correlated with older mother (OR=1.20; 95%CI: 0.96-1.49). Strong associations were found between the number of cars and lorries went near patient's home and more eczema presence (respectively: OR=1.64, 95%CI: 1.22-1.75; OR=1.16, 95%CI: 1.06-1.26). High socioeconomic status and high prevalence of AD were strong correlated (OR=1.37; 95%CI: 1.26-1.48). There was a significant association between spending more than 1 hour per day watching TV and less prevalence of eczema (OR=0.83; 95%CI: 0.74-0.92).

**Conclusions:** Significant risk factors for incident AD were: tobacco smoking, household with visible moulds, older mother, traffic-related air pollution and high socioeconomic status. Long TV watching were associated with decreased risk of AD.

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### PARENT-INITIATED ORAL PREDNISOLONE FOR EPISODES OF ACUTE ASTHMA IN CHILDREN AGED 5-13 YEARS

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**Background:** There is high-level evidence that oral corticosteroids are effective in the treatment of acute asthma in school-aged children when administered following physician review. However, existing data regarding the effectiveness of parent-initiated oral corticosteroids for acute asthma in children is both disappointing and inadequate. We therefore aimed to assess the efficacy of a short course of parent-initiated oral prednisolone for acute asthma in school-aged children.

**Methods:** We used a population-based sampling strategy to recruit children aged 5-12 years who had suffered four or more episodes of acute asthma in the preceding year. Episodes of acute asthma (rather than participants) were randomised to be treated with a 3-5 day course of parent-initiated prednisolone (1mg/kg) or placebo. The primary outcomes were a 7-day daytime symptom score and health resource utilization (HRU).

**Results:** 230 children were enrolled in the study. Over a 3 year period 131 participants contributed 155 episodes of acute asthma randomised to parent-initiated treatment with prednisolone and 153 episodes treated with placebo. The mean daytime symptom score was on average 15% (95% CI 2% to 26%,  $p=0.022$ ) lower among episodes treated with prednisolone. Concordantly, 48 (31%) of episodes treated with prednisolone resulted in HRU compared with 69 (45%) of episodes treated with placebo (odds ratio = 0.54, 95% CI 0.34 to 0.86,  $p=0.010$ ).

**Conclusions:** We found that a short course of oral prednisolone initiated by parents when their child suffers an episode of acute asthma resulted in a modest reduction in asthma symptoms and HRU.