Atopic dermatitis in infancy

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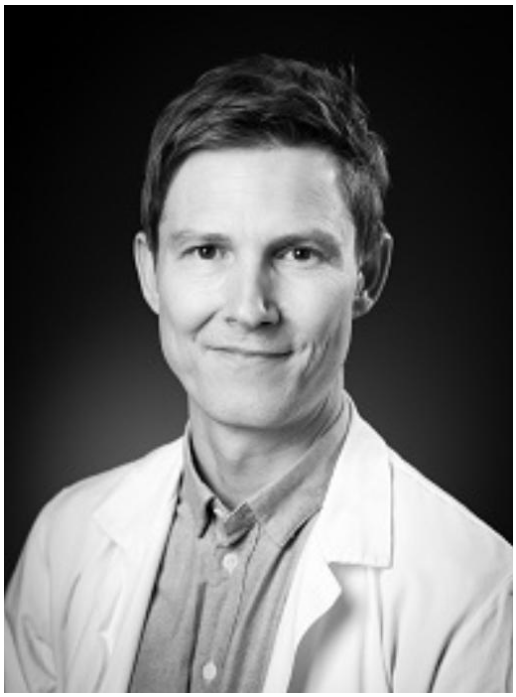

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Atopic dermatitis (AD) is characterized by a chronic relapsing and itchy rash. The first symptoms often occur during infancy, but may be unspecific, making a diagnosis difficult for both dermatologists, pediatricians and general practitioners. Data on potential sex-specific variations concerning risk factors and clinical presentation in early life, are limited.

The aims of this thesis were to identify early risk factors for AD, prevalence and persistence of AD during infancy, and the validity for well-established AD criteria used in infants. We also aimed to identify potential sex-specific variations on the risk, prevalence and clinical presentation of AD during infancy.

The study cohort consisted of infants in the Preventing Atopic dermatitis and Allergies (PreventADALL) study. Pregnant women at 18 weeks of gestation (n = 2697) were recruited from Norway and Sweden between December 2014 and October 2016. Their babies (n = 2397) were enrolled at birth. Clinical data was collected from follow-ups at 3, 6 and 12 months of age, including use of validated diagnostic criteria for AD, i.e. UK Working Party

(UKWP) and Hanifin & Rajka (H&R) criteriae. Data were also collected from electronic questionnaires at enrolment and at 30 weeks of pregnancy.

Atopic dermatitis in parents increased the risk of AD in offspring, mostly in infants with the same sex as the affected parent. This may be relevant for risk assessments and future genetic studies. Also, birth by elective caesarean section increased the risk of AD, supporting the benefit of vaginal birth over caesarean section. More boys than girls had AD during infancy, and the clinical distribution of eczema differed by sex, indicating possible differential disease mechanisms for AD. The UKWP and H&R criteria had several limitations, documenting the difficulties in diagnosing AD during infancy. Applying both sets of criteria and at multiple timepoints may useful in clinical research, but not so in most clinical settings.

Papers:

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3. Endre KMA, Landrø L, LeBlanc M, et al. Diagnosing atopic dermatitis in infancy using established diagnostic criteria: a cohort study. Br J Dermatol. 2021 Jan 28. doi: 10.1111/bjd.19831.
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