

Eczema in Children and Adolescents

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Marit Saunes, dermatologist at St Olavs Hospital and research fellow at the Norwegian University of Science and Technology (NTNU), Trondheim, Norway, defended her PhD thesis on 4 May 2012 at Nevrosenteret Øst, Trondheim. The thesis is entitled “Eczema in children and adolescents – epidemiology, course and impact. The Prevention of Allergy among Children in Trondheim (PACT) study. Young-HUNT 1”. The principal supervisors were Roar Johnsen, Turid Lingaas Holmen and Torbjørn Øien. The thesis committee and opponents were Birgitta Meding, Karolinska Institutet, Stockholm, Magritt Brustad, University of Tromsø, and Svein Kolmannskog, NTNU. Jon Magnussen was acting dean at the dissertation.

Eczema is one of the most prevalent diseases among children and adolescents in the western world. The thesis is based on data from two comprehensive population-based cohorts: the Prevention of Allergy among Children in Trondheim (PACT) study and the Young-HUNT 1 survey (HUNT: Nord-Trøndelag Health Study).

Clinical data from a random subsample of 390 children 2 years of age were used to investigate the prevalence and severity of eczema in Trondheim, Norway. The prevalence of eczema was relatively high, at 16.5%. Disease severity according to both SCORing Atopic Dermatitis (SCORAD) and Nottingham Eczema Severity Score (NESS) was, however, predominantly mild or moderate (1).

When studying family eczema history in children with eczema, a maternal line of inheritance is often reported. In a prospective design using data from the PACT study, we studied family eczema history reported at 6 weeks and at 1 year and the association with eczema in index children reported at 2 years of age. Both maternal and paternal history of eczema was associated with eczema at 2 years in the index children. Having siblings with eczema strengthened these associations only when exposure was reported at 1 year. This indicates recall bias in information gathering and has important implications for the comparability of studies measuring the effect of older sibling disease on index children's risk of eczema (2).

Children who were reported as ever having had eczema at 2 years of age also had an increased risk of current asthma at 6 years of age. Children who were reported as ever having had eczema at age 6 years also had an increased risk of current asthma at 6 years of age. These findings support the hypothesis of an “atopic march” in a general population in whom most cases of eczema are mild/moderate (3).

The Young-HUNT 1 survey includes adolescents aged 13–19 years. In this age-group, the prevalence of eczema was twice as high among girls as among boys. Adolescents also reported



Fig. 1. Marit Saunes (3rd from left) defended her PhD thesis in Trondheim, Norway on May 4, 2012. The opponents were (from left) Birgitta Meding, Magritt Brustad and Svein Kolmannskog.

a high prevalence of several other chronic complaints, such as headache, neck/shoulder pain and symptoms of mental distress. Eczema was associated with mental distress among both girls and boys, but the association was stronger for boys (4).

Despite the fact that most cases of eczema in a general population were mild or moderate, the consequences might be development of other allergy-related diseases, such as asthma and rhinitis. In addition, boys with eczema had more symptoms related to mental distress compared with girls with eczema.

References

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