Treatment patterns in atopic dermatitis

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Thesis title: Occurrence and treatment patterns in children with atopic dermatitis and subsequent comorbidity in form of severe acne - a nationwide prescription registry study

Atopic dermatitis (AD), a chronic inflammatory skin disorder, remains a significant concern among the pediatric population. Yet limited research exists on large-scale studies regarding the occurrence and treatment patterns, and no prior studies have encompassed the entire Norwegian pediatric population.

We employed an algorithm utilizing medical diagnoses and disease-specific medication data, spanning the years 2009 to 2020. The study encompassed nationwide incidence rates, prevalence, and risk predictors. Furthermore, treatment patterns emerged as a focal point and their impact on patient outcomes. Additionally, the study explored the association between severe acne vulgaris and AD and the tolerability of isotretinoin, shedding light on the comorbidities and the clinical implications for young adults with AD.

We found that the number of children with AD under the age of 6 increased by nearly 17% and by 42% during the first year of life (2009 to 2014). Around one-fourth of Norwegian children born in 2014, received treatment for AD before age 6. Boys experienced an earlier

onset of the disease than girls. Treatment initiation predominantly occurred in winter or spring. Male sex and early onset of AD were associated with a long-term treatment course and treatment with potent topical corticosteroids, and skin infections. The majority of pediatric patients in Norway were treated with mild topical corticosteroids for a limited period. Systemic treatments were sparingly used. Treatment of severe acne with isotretinoin was associated with AD at the population level in individuals over 17 years of age.

The notable rise in children receiving treatment for AD highlights its importance as a public health concern. Further investigation is warranted to thoroughly characterize the disease and its associated comorbidities, with the goal of developing customized therapeutic approaches. Simultaneously, research into preventive strategies is essential to mitigate the risk of AD in the pediatric population.