Fifty percent of all those with atopic dermatitis develop other allergic symptoms within their first year of life and probably as many as 85% of patients experience an onset below 5 years of age

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Atopic Dermatitis: Global Epidemiology and Risk Factors
by S. Nutten

Key insights
Atopic dermatitis often begins in early childhood and is the first step in the so-called ‘atopic march’. This concept summarizes the natural history of atopic manifestations, which typically begin with atopic dermatitis in early childhood followed by the development of other allergic disorders in later life. The onset of atopic dermatitis in childhood often foreshadows the later development of asthma and/or allergic rhinitis (hay fever).

Current knowledge
Atopic dermatitis has a complex etiology, whereby genetic and immune mechanisms act in concert with environmental factors to influence the manifestations of the disease. Genetic mutations in epidermal barrier proteins (such as filaggrin) have recently been shown to affect skin barrier function. The presence of food sensitization and allergies is also predictive of severe atopic dermatitis. The inter-country variations and urban-rural gradient in disease prevalence suggest that environmental factors act in concert with intrinsic genetic factors to drive disease progression.

Practical implications
Breastfeeding is a protective factor; for infants who cannot be breastfed, the use of clinically proven partially or extensively hydrolyzed whey formulas is preferable to cow’s milk formulas. Encouraging results have been obtained with the use of probiotics to modulate the gut flora, although the data are still in the exploratory phase and need further study. Finally, protecting the skin barrier is an important strategy for prevention, particularly in children who have mutations in the skin barrier genes and in those who show early signs of skin barrier impairment.

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