

MODERN VIEWS ON THE MECHANISM OF DEVELOPMENT OF THE ATOPIC MARSH

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Abstract. The development of atopic dermatitis (AD) in childhood and subsequent food allergy, allergic rhinitis and asthma in later childhood correspond to the modern concept of atopic march. Recent studies support the idea of a cause-and-effect connection between AD and later-onset atopic disorders. These studies suggest that skin barrier dysfunction is a source of the allergic sensitization to antigens. It is believed that the development of atopic march is influenced by many genetic factors (for example filagrin mutations, polymorphism of genes encoding TSLP, IL-33, and their receptors) and environmental factors (for example toxins, antigens of animal and microbial origin, pollutants). It induces systemic immunity of the Th2 type, which creates a predisposition in patients to food allergy, allergic rhinitis and contributes to respiratory tract hyperreactivity. Given that AD often begins in early childhood and is a chronic condition, and other diseases develop in older age, it can be concluded that there is an optimal therapeutic window when exposure to the skin barrier can prevent further development of other atopic disorders. It also enables for the search of ways of therapy with the purpose to stop the progression of atopy, for example, stopping development AD (use of emollients) or warning possibility of development of atopic march, blocking cytokines (r TSLP, Il-33), or using specific immunotherapy (while investigational only with the allergens of house dust mite), or other possible ways. In this review, we highlight the recent researches that describe the factors that contribute to the development of atopic disorders, and new ideas about understanding the pathogenesis of atopic march.

Key words: atopic dermatitis, atopic march, atopic diseases, skin barrier, allergic sensitization, antigen, filagrin.

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