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## THE ROLE OF FUNGAL SENSITIZATION IN THE PATHOGENESIS OF ASTHMA AND ALLERGIC DISEASES

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### Abstract

The prevalence of fungal sensitization is 3–10% in the general population of Europe. However, its role is not determined definitely: whether micromycetes are one of the etiological sensitization factors, or it only aggravates the course of asthma and allergic diseases, or reflects the state of cross-sensitization in patients, as a casual association. Fungal allergy can manifest as the form of asthma, rhinitis, conjunctivitis, urticaria, atopic dermatitis. It is well-documented studies on the importance of *Alternaria*, *Cladosporium*, *Penicillium*, *Aspergillus*, and *Malassezia* fungi in the development or deterioration of allergic diseases. Micromycetes *Curvularia*, *Bipolaris*, *Drechslera*, *Exserohilum* and others are also involved in the development of allergic diseases. 111 fungal allergens are presented in the international nomenclature of allergens. It has been found out that severe persistent asthma in adults is often associated with fungal sensitization. The powerful factors affect the spectrum of fungal allergy. There are climate, indoor humidity, especially for children. The presence of cross-reacting allergen causes additional difficulties in the determination of fungal sensitization. It based on the presence of common B-cell antigenic determinants in homologous proteins. The main difficulties of the study of fungal allergy are related to the problems of standardization of methods, preparations and reagents, which can lead to different research results.

**Key words:** fungal sensitization, bronchial asthma, allergic diseases, fungal allergens, fungal allergy diagnostics.

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