

ALLERGIC BRONCHOPULMONARY ASPERGILLOSIS: XXI CENTURY. A MODERN VIEW ON THE PROBLEM

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Abstract

Aspergillus organisms are widely ubiquitous in the environment and can cause a great number of pathological syndromes mainly in immunocompromised patients. However, aspergillosis lesion may occur not only in patients with immunodeficiency. Allergic bronchopulmonary aspergillosis is a noninvasive form of *Aspergillus* lung disease, occurring in nonimmunocompromised patients and manifesting with poorly controlled severe asthma. The pathogenesis of this disease is not understood completely. But there are a lot of investigations those can shed the light on some mechanisms of disease development. The diagnosis is based on results of different tests such as aspergillus skin-test, total and specific serum IgE levels, specific serum IgG levels, high-resolution computed tomography, investigation of sputum culture etc. Based on typical symptoms and data of laboratory and instrumental methods, diagnostic criteria were formulated. Purposes of treatment includes asthma control, prevention and treatment of exacerbations, prevention of bronchiectasis development. The basic principles of treatment are immunosuppression and eradication of the pathogen from the organism. Oral and inhaled corticosteroids, antifungal drugs and anti-IgE monoclonal antibodies are used. But there are not official recommendations about dosage, drug regimen and duration of treatment. Therefore, treatment options described in different works are based on individual experience of patient management. The development of molecular allergology opens new perspectives for diagnosis and treatment of this disease. New antigenic components of *A. fumigatus* are released and new vaccine for antigen-specific immunotherapy are developed. But efficiency and expediency of this diagnostic and treatment method need to be investigated.

Keywords: allergic bronchopulmonary aspergillosis, aspergillosis, asthma, molecular allergology.

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