



SYMPTOMATIC CRITERIA FOR BRONCHIAL ASTHMA AND CHRONIC OBSTRUCTIVE PULMONARY DISEASE OVERLAP SYNDROME

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Article history:	Abstract:
Received: August 6 th 2023 Accepted: September 4 th 2023 Published: October 6 th 2023	Coexisting forms of these pathologies are often the result of the simultaneous manifestation of a number of risk components, with tobacco use, untreated AD, and recurrent respiratory infections considered to be the leading ones. In this aspect, the formation of each individual component depends on the patient's genome.

Keywords: Bronchial asthma crossing syndrome, chronic obstructive pulmonary disease

INTRODUCTION. The presence of a number of undesirable effects often complicates the diagnosis of the disease, with a number of avid smokers and elderly patients, which violates the proper management of patients and the principles of rational pharmacotherapy.

A number of patients present with symptoms of concurrent AD and COPD, which contributes to the severity of the disease and often worsens the underlying symptomatology. The simultaneous presence of asthma and COPD is reflected by severe exacerbations, worsening of general condition, degradation of EFV1, severe complications, decreased exercise tolerance, and reduced levels of leukocytic inflammation in the airway mucosa. Rational corticosteroid therapy connotes an increased need for β_2 -agonists compared with different manifestations of COPD .

As a result of the differences in the symptomatology of AD and COPD and the lack of standards, guidelines for differential diagnosis, there are differences in information about these pathologies, resulting in a significant, almost 4-fold, increase in the frequency of the combined manifestation of AD and COPD.

A protocol for the management of this group of patients was created in order to optimise the diagnosis, as well as to identify manifest criteria for the diagnosis of the combination of COPD and bronchial asthma.

The GINA committee and the later formed GOLD committee, as a result of a bilateral agreement, published a document entitled "Defining Persistent Disease with Coexisting AD, COPD and SPBAH". This document shows the demonstration features of these respiratory diseases and has indications of a correct management strategy. SPBAH, when correctly diagnosed, can distinguish this respiratory disease from AD and COPD.

Leading principles to the management of SPBAH in patients are ranked as follows .

- SPBAH reflects the manifestations of both COPD and bronchial asthma;

- there are a number of difficulties in the aspect of diagnosis in elderly people and in people with bad habits;

- A stepwise principle is necessary;

-Early detection of the disease and the principle of prevention and early rehabilitation in specialised institutions for all patients without exception;

- The specific aspect of the pathology influences the principles of early initiation of therapy, and the choice of drugs with regard to adverse reactions.

A stepwise approach in the diagnosis of SPBAH is given in the following:

1) Early diagnosis of patients with chronic respiratory diseases;

2) Correct differentiation of BA from COPD and SPBAH;

3) Availability of optimal facility to treat this group of patients depending on severity;

4) Instrumental verification of airway obstruction;

5) Management of patients according to existing protocols. The main thing in the diagnosis of the condition is the presence of similar signs of manifestation of 2 pathologies:

The presence of several features characteristic of bronchial asthma and COPD simultaneously increases the risk of SPBAH.

Various studies aimed at identifying the pathogenetic similarities of these pathologies allow for a more precise and optimal diagnostic procedure.

Similarity in the diagnosis of bronchial asthma and chronic lung disease is noted in about every 5-7 cases. A number of researchers believe that the presence of certain criteria does not provide grounds for unambiguous differentiation of bronchial asthma from other chronic respiratory pathologies, especially in the elderly. There is evidence to describe a number of



phenotypes of SPBAH manifestations based on various clinical manifestations of the disease and the results of genetic testing.

The formation of the pathology is often based on the principles of leukocytic lesions of the mucosa of the bronchial tree, which in turn leads to increased resistance to inhaled glucocorticoids. The use of beta2 agonists in inhaled form contributes to an increase in corticosteroid consumption, while the use of monotherapy may lead to uncontrolled bronchial asthma, especially in individuals with comorbid pathologies.

In the literature, SPBAH is considered as a separate nosological form, and impaired respiratory patency in COPD patients often leads to an incorrect diagnostic approach in patients with SPBAH. Half of COPD patients in conducted clinical cases have an increased level of dependence on inhaled bronchodilators.

Patients with COPD are at risk of acute impairment of bronchial patency over a period of time. These principles imply the importance of the correct method of diagnosis in SPBAH patients.

In this disease, probable plasma and sputum biomarkers are studied. Iwamoto et al studied 4 possible biomarkers of COPD (surfactant protein A, soluble form of glycation end-stage receptors, myeloperoxidase and neutrophil gelatinase). Professor Fu, showed the importance of analysing the major cytokines in patients, in the study there was an increase in the levels of these immunoglobulins. Interleukin 6 levels were elevated in patients with bronchial asthma, while there was a slight increase in interleukin 4 and in patients with chronic obstructive pulmonary disease. In a study of genes in COPD patients, different SPBAH genotypes were observed which is worth noting as important risk factors in this condition. Christiansen performed additional genetic screening in patients with AD and COPD.

In the GLUCOLD study group, patients with COPD showed a difference in Th2, which was directly related to elimination of major lymphocytic factors, increased tissue eosinophil levels, and a positive response to the use of bronchodilators. Gene expression has been observed to increase airway patency in patients on inhaled corticosteroids compared to the use of dummy for long periods of time. To date, there are no standards for the treatment and management of patients with these pathologies, which often requires additional research

CONCLUSIONS: In summary, the current management of patients with SPBAH is based on the

same principles used in the treatment of bronchial asthma. The main products for patients with AD are inhaled GCs in combination with long-acting b2-agonists.

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