

COMPARATIVE EFFICACY OF THE USE OF BIOLOGICALLY ACTIVE SUPPLEMENT "ASTMA Z" IN THE TREATMENT OF BRONCHIAL ASTHMA OF VARIOUS SEVERITY

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Abstract. *Despite the development and implementation of modern effective methods of treatment and medicines, the economic burden of uncontrolled bronchial asthma on society is high. Uncontrolled bronchial asthma is associated with a decrease in the quality of life and the need for patients to contact the healthcare system.*

Keywords: *bronchial asthma, rational drug therapy, prevention, dietary supplement.*

Relevance

Insufficient asthma control is the cause of an increased risk of exacerbations, a decrease and impairment of the quality of life and ability to work, and an increase in the use of health care [4,5,5,6]. Asthma may remain uncontrolled in patients who are prescribed regular medication but who continue to experience exacerbations [6]. Understanding prognostic factors is of great importance [1,5]. Other risk factors include poor asthma control and poor compliance [3,5].

Among the factors contributing to poor control of bronchial asthma, incorrect inhalation technique is often detected [6,7,9]. The issue of the small airway has been neglected for many years, but interest in the topic has revived due to the development of measurement methods for assessing this area, as well as the ability to deliver drugs to the distal airway [3,9]. Control can be improved as a result of inhalation technique training, which leads to a significant increase in asthma control rates [8,9]. Providing patients with access to reliable sources of information, such as websites or guidelines, can increase the level of understanding of the disease and improve the control of bronchial asthma [10]. For effective training, the physician must also be competent in the use of the inhalation device [11]. Unfortunately,

Purpose of the study

The purpose of our study was the comparative effectiveness of the use of the biologically active additive "Astma Z" in the treatment of bronchial asthma of varying severity.

Materials and methods of research

The study included 54 patients aged 38 to 61 years with bronchial asthma. All patients had asthma of mixed form, moderate severity, partially controlled. Patients had a disease duration of 8 to 12 years. At the time of the study, they were hospitalized in the acute stage. The studied patients were divided into two groups, depending on the treatment (main and comparison group).

Exclusion criteria: intolerance to the natural component, severe uncontrolled asthma, exacerbation of concomitant chronic diseases. Before and after treatment, patients underwent spirometry with the determination of violations of the function of external respiration, standard laboratory tests (general blood count, general urinalysis, electrocardiogram, chest x-ray, examination by a gynecologist for women in order to determine the presence of contraindications to the appointment of physical methods), determination of the severity clinical symptoms on a visual analog scale (cough, severity of shortness of breath, number of asthma attacks, sputum separation), functional tests of Stange (duration of breath holding after maximum inspiration) and Genchi

(duration of breath holding after maximum expiration), assessment of daily variability of forced indicators of the function of external respiration. The main complaints were: asthma attacks from 4 to 10 times a day, expiratory dyspnea with little physical exertion and at rest, cough with sputum difficult to separate. Patients in the comparison group received medical treatment. In the main group, along with the standard therapy for the treatment of bronchial asthma, a dietary supplement consisting of broccoli extract and Astma Z sesame oil was prescribed.

The effectiveness of treatment was assessed according to the following criteria: the severity of clinical symptoms (cough, shortness of breath on a visual 10-point analog scale; the number of asthma attacks per day), spirometry indicators with the assessment of forced indicators (forced VC, forced expiratory volume in 1 second - FEV1). 1, MOS 28%, MOS 78%, MOS 61%), the results of functional respiratory tests of Stange, Genchi, daily variability of forced indicators of respiratory function.

All patients signed a voluntary informed consent to participate in the study. For statistical analysis were used: spreadsheet MS Excel and application software package "STATISTICA 8.0".

Results and its discussion

In order to optimize the prevention of bronchial asthma, we have prepared the drug "Asthma Z" from a mixture of broccoli juice and sesame oil. During the experiment, out of 80 patients, 65 patients received Asthma Z for 14 days. To assess antioxidant protection in the cells of the upper respiratory tract, nasal swabs obtained from the paranasal sinuses of patients were analyzed at the beginning and at the end of the study. It was found that the use of the drug "Asthma Z" in a volume of 100 grams in volunteers significantly increased the level of antioxidant protection. We evaluated the effectiveness of the drug "Asthma Z" depending on the severity of asthma (Table 1).

Table 1.

Efficiency of the drug "Asthma Z" according to the severity of asthma

Floor	Intermittent asthma	Mild persistent asthma	Persistent moderate asthma	Severe persistent asthma
Men	eighteen	15	five	Five
Women	15	3	3	1
Total	33 (48.8%)	18(26.2%)	8(13.8%)	6(11.2%)

Compared with severe and moderately severe persistent forms of bronchial asthma, 75% positive efficacy of Asthma Z was achieved directly in intermittent and easily persistent forms of bronchial asthma.

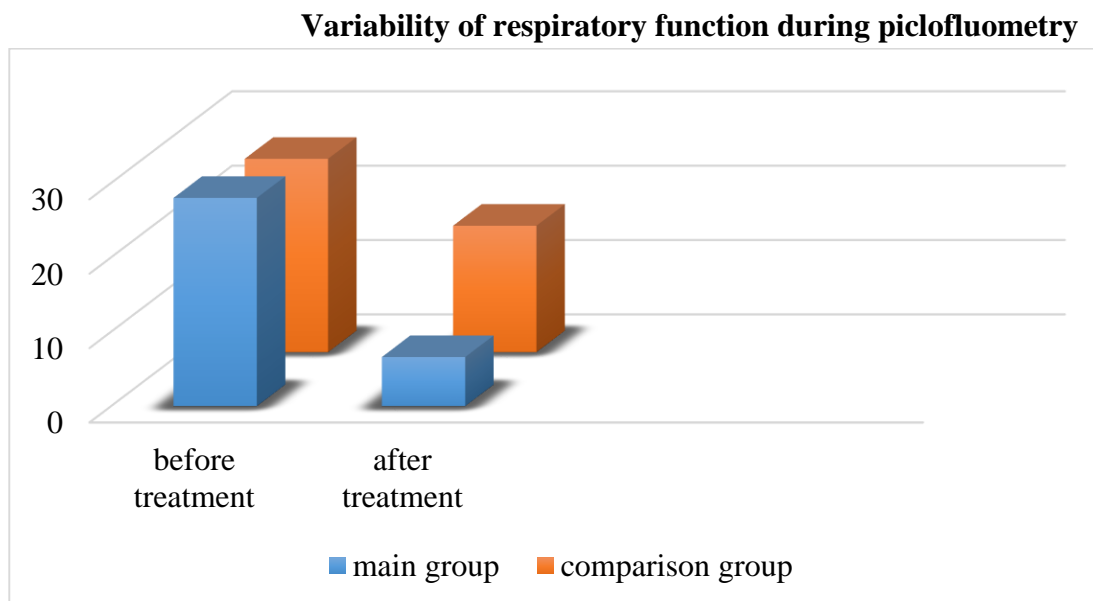
The methodology for optimizing the prevention of bronchial asthma and improving the principles of managing patients with asthma based on the results of this study is recommended for widespread use in primary healthcare practice. Expected effects from its use:

- 1) reduction of nocturnal asthma attacks;
- 2) decrease in the contingent of patients with BA;
- 3) ensuring drug safety up to 90% per year.

The conducted studies managed to determine some features of the management of patients with bronchial asthma. Data have been obtained on the shortcomings in the management of this category of patients, which is fraught with rapid progression of BA to severe persistent severity, a decrease in the quality of life of patients, and, accordingly, an increase in the cost of direct and indirect costs for the treatment of this complication. For the first time, a study was conducted on the study of the incidence and prevention of bronchial asthma in the Bukhara region. The results

obtained allow, firstly, to optimize the treatment process and, secondly, to predict the rate of progression of BA.

Fig.1.



Dynamics of indicators of variability of forced respiratory function indicators ($p < 0.01$)

During the test of Stange and Genchi, there is an improvement in performance, which reflects an increase in the body's resistance to hypoxia and oxygen supply to the body. In the main group before treatment, the result of the Stange test was 25.3 s, after treatment 48.8 s ($p < 0.01$), in the comparison group before treatment 26.1 s, after treatment 37.3 s ($p < 0, 01$). When performing the Genchi test in the main group, the time to complete the test was 12.4 s before treatment, and 30.2 after treatment ($p < 0.01$). In the comparison group before treatment 11.7 s, after treatment 21.2 s ($p < 0.01$).

Findings

Analyzing the results of the study, we can conclude that the use of the treatment complex, in combination with the natural drug "Astma Z", that the use of the complex is effective in patients with bronchial asthma in combination with rational drug therapy. They can be recommended for prescription in bronchial asthma.

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