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GENERAL CHARACTERISTICS OF PATIENTS WITH BRONCHIAL ASTHMA AND COMPLEX PROCEDURES OF DENTAL EXAMINATION

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ABSTRACT

Bronchial asthma is a serious problem in all countries of the world, including the Republic of Uzbekistan, which is also associated with a clear increase in the frequency of occurrence, the number of complications, exacerbation of the disease [1,6,7].

Studies in recent years have shown that about 2 million people in Uzbekistan suffer from bronchial asthma, of which about 1 million have severe forms of the disease. The prevalence rates for patients with bronchial asthma among the population are 30% mild , 50% moderate, and 20% severe bronchial asthma patients [5].

Bronchial asthma causes disability and major economic damage in the population. High rates of bronchial asthma have been reported in Uzbekistan. In 2019-2022, its prevalence in the Fergana region was studied, accounting for 7.2% [1].

Bronchial asthma has a single immune-inflammatory form that also affects the organs of the oral mucosa and the respiratory tract. In patients with bronchial asthma, the oral cavity has a significant effect on the decrease in the protective properties of the mucous membrane, which creates unfavorable conditions for the hard tissues of the tooth and periodont tissue, increases the effect of microflora and other pathogenic factors. There is information about the presence of disorders in the immune system in patients with bronchial asthma who are prone to the occurrence of inflammatory periodontal diseases [2,4,9].

Both an attack of bronchial obstruction and a relatively calm period of the disease require the appointment of medications, in particular glucocorticosteroids. At the same time, along with a positive effect, these drugs lead to a decrease in the natural protective barrier of the oral mucosa and dysfunction of immune defense systems. This can significantly complicate adequate therapy of the disease, contributing to the development or progression of local and general inflammatory diseases [11,12].

With the beginning of the use of glucocorticosteroids, the results of preventive and maintenance therapy of bronchial asthma have improved significantly, but currently the effect of these drugs on the condition of the oral mucosa is little studied. Studies have not been carried out in patients with bronchial asthma, taking into account the condition of the oral cavity, the clinical and pathogenetic variant, duration and methods of this disease [4].

Key words: bronchial asthma, patient, oral cavity, biochemical study, studied parameters.

INTRODUCTION

Purpose of the study

Evaluation of the development of complex methods for studying the state of oral tissues and treating their diseases in patients with bronchial asthma.

Object of study: 155 patients aged 20 to 45 years.

The practical results of the research are as follows:

The results of the researches are a theoretical basis for the development of modern dental approaches to the treatment and prevention of basic dental diseases, dental caries and periodontal diseases in children with bronchial asthma. The assessment of comprehensive treatment and prevention of dental caries, periodontal soft tissue diseases is given and the expediency of using dental treatment-prophylactic measures developed against the background of treatment of the main disease in patients with bronchial asthma is based. Clinical, clinical-functional and cytological methods have confirmed the high efficiency of using an electric toothbrush in the care of the oral cavity in patients with bronchial asthma. The complex developed for the treatment and prevention of the main dental diseases allows to increase the level of dental health in patients and the efficiency of dental care in patients with bronchial asthma.

Reliability of research results.

The reliability of the research results was determined by the use of modern and tested theoretical and practical methods and approaches, a sufficient selection of patients, the reliability of the obtained results was confirmed using complementary and interrelated studies. The comparison of the reliability of the obtained results with other results obtained by foreign and domestic authors confirms that our results are reliable and valid, and the conclusions have been confirmed by competent bodies.

The effect of bronchial asthma on changes in oral organs and tissues in 155 patients with bronchial asthma aged 20-45 years was studied, who were on treatment in the pulmonology department of the Fergana regional Multidisciplinary Medical Center and were on a “D” account at the residence address in Fergana city and district polyclinics.

The comparison group included 25 patients with chronic recurrent aphthous stomatitis who did not suffer from bronchial asthma. The age levels of patients are compiled according to the WHO classification (Table 1). The age group of 20 to 24 years was made up of 23 patients (14.9%), the age group of 25-29 was made up of 26 patients (16.8%), 29 patients were 30-34 years (18.7%), 37 patients were 35-39 years (23.8%) and 40 patients were in the 40-45 years (25.4%) range.

Table 1.

Age levels of patients examined.

Age	Research methods			
	Main		Compare	
	Number of patients	%	Number of patients	%
20-24 years old	23	14,9	3	12,0
25-29 years old	26	16,8	4	16,0
30-34 years old	29	18,7	5	20,0
35-39 years old	37	23,8	7	28,0
40-45 years old	40	25,8	6	24,0
Total	155	100	25	100

The average age of patients is 30±40 years. From the cited data (Table 2), there were 155 patients between the ages of 20-45 in patients with bronchial asthma (86.1%). The comparison group matched the core group by age.

In the patients examined, generally accepted clinical-laboratory studies were carried out in dentistry and pulmonology.

The study evaluated clinical-Anamnesis, labarator and instrumental indications during the primary examination.

Table 2

Distribution of patients by age and form of the underlying disease

Age	Non-hormone dependent		Hormone-dependent		Jami		Compare	
	Number of patients	Number of patients	Bemor soni	%	Number of patients	Number of patients	Number of patients	Number of patients
20-24 years old	11	7,0	12	7,9	23	14,9	3	12,0
25-29 years old	16	10,4	10	6,4	26	16,8	4	16,0
30-34 years old	21	13,5	8	5,2	29	18,7	5	20,0
35-39 years old	27	17,4	10	6,4	37	23,8	7	28,0
40-45 years old	19	12,3	21	13,5	40	25,8	6	24,0
Total	94	60,6	61	39,4	155	100	25	100

Comprehensive dental research in patients with bronchial asthma:

identification of patient complaints, collection of Anamnesis, visual examination and examination of the condition of the organs of the oral cavity – KPU, GI, RMA, ERTKB Index assessment, cytological methods of research, professional and individual hygiene of the oral cavity. Patients were examined in the dental room using a standard set of dental equipment. During the examination of patients, the generally accepted sequence was observed: external examination, study of the functions of the jaw-facial area, examination of the mucous membrane of the lips and oral cavity, study of the condition of the periodont tissue, assessment of the location of teeth, tooth rows and occlusions, assessment of oral hygiene, study of the condition of the solid tissues of the teeth, oral fluid.

Clinical-laboratory research methods in patients with bronchial asthma.

In addition to the main clinical-laboratory research methods, the prevalence, intensity and acceleration of caries were studied in 155 patients with bronchial asthma. It was found that patients, as well as the state of hygiene in the oral cavity, as well as patients ' knowledge of the method of proper hygiene in the oral cavity. The large preparatory work carried out and the corresponding organizational activities provided the opportunity to accurately conduct dental examinations in the minimum periods. Data from public dental examinations were included in the “individual dental examination card for patients with bronchial asthma”. Examination of the oral cavity organs in patients was carried out according to generally accepted clinical methods. In the oral cavity of patients, the position of the existing teeth was studied from right to left, starting with the upper jaw, then from left to right in the lower jaw.

The following condition of the teeth was noticed: absence of caries, intact teeth, caries and its complications.

In patients with bronchial asthma, damage to the teeth with caries was diagnosed in the presence of a carious cavity of the filled and acquired teeth – KPU/kp. Caries was diagnosed on the basis of the identified clinical symptoms of carious cavity development, taking into account the depth of damage to the hard tissues of the teeth. The following main indicators of caries damage were envisaged in the dental examination of children: increase in intensity and intensity – according to who nomenclature. Intensity refers to the degree of injury of teeth with caries, expressed in the form of the average number of damaged teeth in one person (index KPU/kp) (caries – K.k; plugged-P.p; taken (O) or to be taken – O.o;) in constant biting, the KPUz (teeth) index was calculated. For all groups of patients examined, a method of assessing its indicators on the organizational elements of the KPU/kp was used based on the reviews conducted on the KPU/kp. The study

of the organizational elements of the KPU/kp index provides accurate and informative information about the actual condition of the teeth and the level of Organization of dental care. The increase in the intensity of caries was assessed by the intensity of the formation of new lesions with caries on the teeth of a person examined within a certain observed period (within 1 year). This figure was calculated in absolute quantities and included in the”individual dental examination card for patients with bronchial asthma". Since the characteristic of the intensity of caries is fully determined not only on the basis of the number of carious teeth, but also on the basis of the number of surfaces affected by caries, we studied the KPUp (surfaces) index in dynamics in all examiners. An increase in the intensity of caries on this indicator was determined every year.

In order to carry out cytological studies in patients with bronchial asthma, traces were taken from the mucous membrane of the gums in the area of the frontal and chewing teeth (6 traces from each pupil). To do this, a dry degreased sterile object bottle is placed several times in the studied part. If it is difficult to put on the damaged part, a chancellery Switch can be used. The eraser is cut into long thin sticks (working area 3x3 mm) sterilized, dried, placed on the part under study, and then the object is transferred to the bottle. Each object bottle produces 5-10 traces. The drug is left on methyl alcohol for 15-20 minutes, taken under a microscope using an X400 lens, as well as an X100 immersion lens. In traces of healthy mucous membranes, only cells of the late stage of differentiation are detected. The use of a cell differentiation index to assess the cytograms of traces in case of damage to the mucous membrane of the gums (MShQ) has shown the viability and convenience of this indicator for practical observation in the dynamics of the disease. In the case of trace preparations, it is also possible to come to certain conclusions about the character of microflora. The cytological picture obtained from the study of milk tracks in the absence of pathological changes in the soft tissues of the parodont was characterized by multiple funsional changes in which the exudate accumulated when the milk ego was transudate or parodontitis.

Laboratory research methods in patients with bronchial asthma

During the study, we conducted a sample of material for laboratory examination studies on an empty stomach in the morning. The examination involves the study of the state of local factors for the nospecific protection of the oral cavity and the protection of the immune system (humoral), as well as the composition of macro - and microelements in various environments-saliva, plasma, erythrocytes.

1. A "rn-121" RN meter was used to determine the RN value of oral fluid.

2. Determination of lysozyme activity in oral fluid, Shubika V.M., Levina M.Determination by Ya method.

3. The total protein content in the oral fluid was determined by a colorimetric method in Lowry et al, based on the fact that proteins form complexes intensively stained with copper in the presence of the folina-Chiakal'teu phenolic reagent.

4. Determination of the amount of immunoglobulins in oral fluid and blood serum using the IFA method. The analysis is based on the use of a paired monoclonal antitela (MKAT) directed to different antigenic regions of IgG, IgM, IgA or IgE molecules. In each pair, one of the MKATS serves to sensitize the surface of the plates and ensures that the solid phase of IgG, IgM, IgA or IgE from the analyzed samples is bound. A second MKAT labeled with peroxidase interacts with other antigenic determinant of solid-phase bound IgG, IgM, IgA molecules.

5. Determination of circulating immune complexes Kosiskaya L.S., Popova O.Ya. modified by. The most common methods for isolating immune complexes of different molecular weights are those that use polyethylene glycol. To determine whether it has been shown to selectively precipitate immune complexes, minimizing the deposition of free proteins.

6. The Antigen was detected by serological methods (RPGA and RTPGA). Methods are based on the fact that the periodontal antigen slows the interaction of the test antigen with antibodies in a passive hemagglutination loss reaction.

7. During the study, it was carried out in saliva, plasma, erythrocytes. The composition of chemical elements (Na, K, Mg, Sa, Zn, Si) was determined using atom-absorption spectrophotometrii. The saliva sample was carried out in the morning, on an empty stomach, before brushing teeth, eating and taking medications. A blood sample for the study was carried out in relative resting conditions. The tube is washed with heparin. The blood was centrophied for 20 minutes. After the plasma was extracted with a pipette connected to a water flow sucker, the layer of leukocytes and platelets was removed, leukocytes and platelets should be virtually absent in the isolated erythrocyte suspension.

In conclusion, it was studied that patients with bronchial asthma are associated with diseases of the oral mucosa with bronchial asthma, and the etiopathogenesis of bronchial asthma in relation to age in the whole organism at the origin of diseases of the oral mucosa was studied. The use of treatment with the new complex "stomasphera + propolis nastoyka" allows both to achieve stagnation of oral tissue resorption in the body and to improve, achieving long remission of the disease in 83.3% of patients.

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