Spectrum Journal of Innovation, Reforms and Development
Volume 14, April, 2023 | ISSN (E): 2751-1731
Website: www.sjird.journalspark.org

MCAVIARFLORA OF THE ORAL CAVITY AND FEATURES OF INFLAMMATION OF THE RESPIRATORY TRACT IN PATIENTS WITH BRONCHIAL ASTHMA IN COMORBIDITY WITH RAPIDLY PROGRESSIVE PERIODONTITIS

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ABSTRACT
Evaluation of indicators of microbiological, clinical and respiratory status in the group of patients with rapidly progressing periodontitis in combination with bronchial asthma revealed that in patients the indicators of physical condition and ventilation capacity of the lungs were reduced, and the emotional state was tense compared to the group of healthy individuals.

Keywords: bronchial asthma, rapidly progressingperiodontitis, microbiological status, clinical status, tolerance to physical activity, emotional state, respiratory dysfunction.

Introduction

In recent years, bronchial asthma (BA) in combination with rapidly progressiveperiodontitis (STD) has been recognized as one of the most pressing medical problems among the population, with serious socio-medical and economic consequences, in severeradiance leading to radiation. Disability. Improving the effectiveness of early diagnosis, prevention and treatment of STD in AD is one of the pressing challenges facing health professionals today [1,3,12].

A number of studies are being conducted in the world aimed at studying the problems of dentistry, as combined lesions of the periodontium and internal organs. They occupy a prominent place, since this kind of pathology is characterized by a mutually aggravating course of diseases due to the presence of a close functional connection between the affected organs [2,5,11]. At the same time, in patients with AD, rapidly progressing periodontitis is a factor predetermining the unfavorable course of the disease and a sharp decrease in the quality of life (QOL) of patients. The mechanism of BPP in AD is still unclear and requires further study of the role of local immunity and in the progression of BPP [4,6,9]. In this regard, important tasks are to determine the pathogenetically related aspects of the imbalance of local microbiocenosis, endothelial dysfunction, with ventilation-perfusion disorders of the ventilation ability of the lungs (HSL), psycho-emotional factors of regulation, the development of BPP in AD, the assessment of quality of life, and the development of basic criteria for the prognosis of exacerbations of early diagnosis of BPP [7,10].

In addition, it is known that the influence of microbiotic, oxidative, endothelial and respiratory factors on the development of rapidly progressive periodontitis in AD are basic. It has been shown that all available factors can cause additional damage to the periodontal and respiratory system, as well as the effects of remodeling, reparative processes in the oral mucosa [2,8,11].

Materials and Methods

The contingent of those examined includes 32 patients with rapidly progressive periodontitis (STD) in combination with AD, of which: patients with periodontitis and AD of mild, moderate and severe stages. The comparison group consisted of 35 patients with rapidly progressing periodontitis who do not have somatic pathology, the control group was 25 practically healthy individuals.

After the initial examination, all patients with periodontitis and AD were divided into two groups: the 1st group consisted of 44 patients with periodontitis on the background of AD, who underwent only standard dental treatment and exacerbation therapy for AD, the 2nd group included 45 patients with periodontitis on the background of AD who received dental treatment, basic therapy for AD, resonance therapy resonance therapy (resonance therapy with highly spectral IR emitters locally, 2 times a day for 6 minutes) and tincture of propolis (NP) (tincture of propolis 25 ml OOO "RADIKS" Uzbekistan application for gums for 30 min x 2 times a day, 30 minutes after meals) against the background of basic therapy. A dynamic examination was carried out on the 10th day from the start of treatment (assessment of dental status), 1 month after the start of therapy (survey, clinical and laboratory, immunological examination).

The structure of basic therapy was as follows: antileukotrienes - 58% of patients, methylxanthines - 56% of patients, β-agonists - 41%, inhaled glucocorticosteroids - 41%, NP - 26%, resonance therapy with narrow-spectral IR emitters - 27%, ozone therapy - 24%, peparates for local anesthesia - 7%, also all patients took massage, respiratory gymnastics, psychotherapy.

General clinical examination of all patients before and after 10 days of complex therapy included the following: assessment of general clinical parameters for the point system; objective physical examinations, general analysis of blood, urine and sputum;

Clinical examination of all participants was carried out according to generally accepted methods, taking into account the recommendations of WHO (2016). An objective assessment of the state of periodontal tissues was carried out using the following indices: hygienic (OHI-S, Green J.C., Vermillion J.R., 1964), periodontal (PI, Russel A., 1956) and papillary-marginal-alveolar (PMA, Parma G., 1960, hygienic index Silness-Loe, bleeding index Muhlemann-Cowell).

In the clinical study, the following were analyzed: periodontal symptoms of varying intensity - pain, inflammation of the periodontal tissue, bleeding, (Cr), purulent discharge from the dentition-gingival - periodontal pockets and changes in their structure (IS), bad breath (ZR), redness of the periodontal tissue (Pokr), pathological mobility of the teeth and their displacement. Test with 6 minutes of walking (6 MWD); testing the quality of life according to the modified Seattle questionnaire; assessment of the periodontal tissue functions of

external respiration (FVD) by methods of spirography, pneumotachography with registration of the flow-volume loop and computer calculation of indicators for assessing the vital capacity of the lungs (FVC), the volume of forced exhalation in 1 second (FEV_1) and the Tiffno index (FEV_1 / FVC) "Medicor" (Hungary). To study the reversibility of obstructive ventilation disorders in the initial study, an inhalation pharmacological test with β-agonists was used; the study of peripheral blood flow was carried out on the ultrasound apparatus "Toshiba SSH 60A" (Japan), endothelium-dependent vasodilation (EZVD) was evaluated using dopplerography of the brachial artery; blood oxygen saturation (SaO2) was assessed by pulse oximetry using the OXY apparatus (Germany); the psycho-emotional status of patients was determined by psychological testing using the Spielberger-Hanin scale. A sufficient amount of research provided the possibility of representative analysis of the material from various positions. Statistical processing of the results of the study was carried out using modern computer systems such as IBM using a package of standard programs

Results of the Study

determined the cellular factors of local protection of the oral cavity: epithelial cells and leukocytes that are found in saliva and gingival fluid. 95-97% of the cells of them are neutrophils, 1-2% are lymphocytes and 2-3% are monocytes. It was found that an increase in the number of epithelial cells is a marker of the destruction of the dentition and increased microbial contamination of cells. At the same time, the number of polymorphonuclear leukocytes correlates with the number of epithelial cells, neutrophils and lymphocytes, r=0.30, respectively; r = 0.36 and r = 0.31 ($p<0.05$), that is, parallel to the severity of the inflammatory process in the periodontal tissue. A characteristic feature for microbial lesions of periodontal tissue is cellular infiltration, represented by plasma cells, lymphocytes, eosinophils and neutrophils. This is indirectly interpreted about the activity and severity of inflammation by the predominance of certain cellular elements. Thus, it was analyzed that out of 10 to 5 cases, a high degree of activity of the inflammatory process, where neutrophil granulocytes of the gum mucosa underwent degranulation. These degranulations of neutrophil granulocytes of the mucous membrane of periodontal tissue are noted in patients with asthma in combination with BPP, long-term receiving inhalation drugs in the cGCS + iGCS mode, which is a sign of a sharp decrease in the antimicrobial function of the gingival fluid mucosa. Due to the chronic process, a sharp decrease in the antimicrobial function of neutrophilic granulocytes and pronounced leukocyte and lymphocytic infiltration mainly in the PC zones were noted.

The analysis of the data obtained coincides with the opinion of the researchers that polymorphonuclear leukocytes play a protective role due to the bactericidal function, which is reduced in BPP. They also give impetus to the release of multiple tissue-destructive agents: free radicals and proteases, activate platelets, which, interacting with the vascular endothelium and underlying tissues, cause their destruction, and platelet conglomerates can block microvessels.

CONCLUSION

Based on the results obtained during the research, the following conclusions were formulated. 1. It was found that an increase in the number of epithelial cells is a marker of the destruction of the gingival junction and an increase in microbial cell contamination. At the same time, the number of polymorphonuclear leukocytes correlates with the number of epithelial cells, neutrophy and lymphocytes, parallel to the severity of the inflammatory process in the periodontal tissue. If in 41% of patients with AD + BPP a severe, and in 9% an aggressive form of rapidly progressive periodontitis is detected, then in patients with beh AD the indicators are statistically much less and are respectively 8% and 1%. It was also revealed that in patients with varying severity of periodontal lesions compared to periodontitis of a mild form of intact periodontium exceeds by 15.5%. 2. Cellular factors of local protection of the oral cavity make up epithelial cells and leukocytes, which are found in saliva and gingival fluid, from them. 95-97% of cells are neutrophils, 1-2% are lymphocytes and 2-3% are monocytes.

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