TO STUDY PERIODONTAL, HYGIENIC INDICES OF THE ORAL CAVITY, MINERAL COMPOSITION OF ORAL FLUID IN DENTAL PATIENTS WITH ISCHEMIC PATHOLOGY

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Abstract. In recent decades, the problem of the relationship between oral health and cardiovascular diseases has been considered very relevant. The influence of foci of chronic oral infection on the development of common diseases is recognized as significant in all countries of the world (WHO, 2003). Thus, according to the World Health Organization, based on dental examination of the population, periodontal diseases occur in 68-98%.

The incidence of periodontitis reaches 98.5% by the age of 40. The number of people suffering from cardiovascular diseases is also high all over the world. In developed countries, cardiovascular diseases remain the main cause of death. According to WHO, 14 million people die from CVD every year. According to the Cardiological Society, the mortality rate from ischemic heart disease in people aged 35 to 64 years in our country turned out to be the highest in Europe and amounted to more than 350 for men, and more than 100 per 100,000 people per year for the general population. Periodontal diseases are an important medical and social problem, characterized by constant growth and widespread prevalence in people not only the elderly, but also young people. An important feature of the functioning of organs and tissues of the oral cavity is the fact that all ongoing processes are carried out in the constant presence of various associations of microorganisms that are either the cause or participants in pathological processes in the body [1.3.5.7.9.11.13].

Keywords: exo- and endotoxins of periodontal pathogenic bacteria, coronary atherosclerosis, secondary myocardial damage, Parodont tissue.

The manifestation and progression of periodontitis symptoms depends on many circumstances, including the presence of somatic diseases, social, behavioral, systemic, genetic factors, the microbial composition of plaque and other indicators and risk factors. Among periodontal diseases, the first place is occupied by chronic generalized periodontitis. The leading role in the formation of the inflammatory process in the oral cavity belongs to the resistant obligate anaerobic and microaerophilic microflora. The factors that induce prolonged inflammation and destruction of periodontal tissues usually include exo- and endotoxins of periodontal pathogenic bacteria. An important circumstance affecting the severity of the course of chronic generalized periodontitis is the growth of general somatic pathology, in particular pathology of the cardiovascular system, the patient's history of atherosclerosis of coronary vessels and coronary heart disease.

Dental clinics for periodontitis, background somatic diseases were diagnosed in 23.6% of cases, 16.9% were diseases of the cardiovascular system. According to the observations of the association of the inflammatory process in periodontitis with pathology of internal organs was noted. Thus, according to the author, hypertension was observed in 26% of cases, coronary heart disease - in 10.6%. Since 1999, after the first publication of the work of R. Ross, the inflammatory

nature of coronary atherosclerosis is recognized by most scientists. Since that time, the idea of inflammation as the essence of the atherosclerotic process has been dominant in many studies [2.4.6.8.10.12.14.16.18.20].

Over the past two decades, there have been reports of a link between inflammation in periodontal tissues and cardiovascular pathology. A number of foreign authors see similarities in the pathogenetic mechanisms of periodontitis and diseases of the cardiovascular system in the ability of microorganisms and their endotoxins to cause immune-inflammatory reactions in the intima of blood vessels, hemodynamic disorders and metabolic tissue lesions.

Combined overload occurs against the background of complex heart defects. Myocardial heart failure occurs against the background of primary (myocarditis and dilated cardiomyopathy) or secondary myocardial damage (hypo - or hyperthyroidism, diffuse diseases of the connective tissue). The development of a heart defect is caused by genetic abnormalities that determine the structure of sarcomeric proteins, cell membranes and ion channels, leading to a deterioration in myocardial contractility. Ischemic changes in the heart muscle, the most common cause of heart defects in adults, are relatively rare in children. They can manifest themselves in congenital anomalies of the coronary bed, in patients who have undergone surgery near the coronary arteries (Ross surgery), in cases of left ventricular hypertrophy and coronary blood flow disorders (aortic stenosis).

Myocarditis is considered a viral autoimmune disease. In the first stage of the disease, the virus has a direct damaging effect on the myocardium, the second phase consists of an immune response that takes into account viral particles and cardiac epitopes. In some cases, the development of the disease and inflammation can last for a long time, which leads to the development of cardiomyopathy.

Diastolic heart rate concept was developed after monitoring patients with heart rate symptoms despite normal left ventricular contraction. Because left ventricular systolic function is not impaired, it has been proposed that pathological changes develop in violation of diastolic filling and relaxation. Diastolic dysfunction occurs in patients with hypertrophic or restrictive cardiomyopathy, constructive pericarditis, as well as after hemodynamic correction of a complex heart failure disease with increased pulmonary vascular resistance.

Currently, more than 90 types of heart defects and many combinations of them have been described. The formation of heart diseases includes the interatrial and interventricular septum, heart valves, aortic and pulmonary trunk, pulmonary veins, cavacal vein and coronary vessels. The isolated misdevelopment of one element or their combination gives a huge number of options for defects. The most common birth defects are the "Big Five" congenital heart defects, which include ventricular curtain defect, aortic coarctation, transposition of large arteries, open arteriosis canal, and Fallot tetralogy. Sharykina A.According to S (2012) this may include a fused group of stenosis and atresia of the pulmonary artery. Together, they account for 65.2% of all congenital heart defects [13.15.17.19.21.22.23].

Timely, early diagnosis of heart defects, adequate intensive care, supplemented by surgery, will prevent inevitable death in most children, and 35% - can radically correct existing hemodynamic disorders.

Purpose of the study. To study periodontal, hygienic indices of the oral cavity, mineral composition of oral fluid in dental patients with ischemic pathology.

In order to carry out cytological studies in patients with a heart defect, 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 the cells of the late stage of differentiation are identified.

The use of a cell differentiation index to assess the cytograms of scars when the mucous membrane of the gums (mshq) is damaged has shown the viability and convenience of this indicator for practical observation in the dynamics of the disease. 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 functional changes in which the exudate accumulated when the milk ego was transudate or parodontitis.

The study of the condition of the organs of the oral cavity in patients with heart defects has identified a number of clinical-pathological changes and a number of marked complex pathological processes. Thus, with the development of complications of caries at an early and aggressive age, with the development of caries at very short intervals, high damage to the teeth with caries, almost symptom-free development of pulpitis and periodontitis, several carious cavities are marked on the chewing surface of permanent teeth. Pathological changes in the Parodont tissue will be more pronounced and diffuse during the period when the underlying disease is exacerbated [18.20.21.22.23].

A low and very low level of hygiene of the oral cavity has been identified, with patients finding that the lack of knowledge of oral care guidelines deepens the situation. In the physico-biochemical state of oral fluid in patients with a heart defect, pathological changes aggravate the pathological changes prescribed in the organs of the oral cavity at the same time as the effect of a sufficiently wide complex of other expressed shifts in the oral cavity of patients, general somatic disease. Clinical-pathological shifts expressed in the oral cavity in turn deepen the course of the underlying heart defect disease by forming a closed circle of interrelated effects in the course of these diseases.

Conclusion. Due to the fact that, depending on the severity of the underlying disease, patients are obliged to be in stationary treatment for a long time, at least 2 times a year, the duration of treatment can stretch from 1 to 2 months. Therefore, it is necessary to organize the conduct of dental treatment and preventive measures in the conditions of inpatient treatment for this category of patients. In this case, together with specialists, cardiologists should draw up an individual dental treatment-prophylactic complex, which is carried out against the background of the treatment of the underlying disease for patients with heart defects.

REFERENCES

 Khabibova N.N. Characteristic features of free-radical processes and antioxidant protection in the oral cavity during chronic recurrent aphthous stomatitis// European Science Review. -2018. - P. 191-193.

- 2. Khabibova N.N. Changes in biochemical and immunological indicators mixed saliva of patients with chronic recurrent aphthous stomatitis// European journal of pharmaceutical and medical research. –2018. (5) 11. P. 143-145.
- 3. Хабибова Н.Н. Клинико-биохимические особенности течения псевдоаллергических вариантов хронического рецидивирующего афтозного стоматита// Проблемы биологии и медицины. 2018. № 4 (104). С. 220-222.
- Хабибова Н.Н., Саидов А.А., Саидова М.Р. Сурункали рецидивирловчи афтозли стоматитда липидларни перекис оксидланишини ўзига хос хусусиятлари ва оғиз бўшлиғи антиоксидант ҳимоясининг ҳолати// Тиббиётда янги кун. – 2018. - № 3 (23). – Б. 61-63.
- Хабибова Н.Н., Вахидова М.А. Оценка защитной системы слизистой оболочки ротовой полости при хроническом рецидивирующем афтозном стоматите// Вестник ТМА. – 2019. -№ 3. – С. 131-133.
- 6. Хабибова Н.Н., Хабилов Н.Л. Роль адгезивных молекул в развитие афтозного стоматита// Stomatologiya. Ташкент. -2019. № 3. С. 32-36.
- 7. Khabibova N.N. Clinical characteristics of patients with recurrent aphthous stomatitis// Annals of international medical and dental research. 2019. Vol. 5. Issue 5. P. 64-66.
- 8. Хабибова Н.Н., Хабилов Н.Л. Оценка сосудисто-тканевых расстройств и регионарного кровотока при хроническим рецидивирующим афтозном стоматите// Новый день в медицине. 2019. 3 (27). С. 262-266.
- Muratova Saodat Kadirovna, Musirmanov Abdusalim Toshtemirov Humoyun TO IMPROVE TREATMENT OF CHRONIC GENERALIZED PERIODONTITIS // CENTRAL ASIAN JOURNAL OF EDUCATION AND INNOVATION/ 2023- P. 187-194.
- 10. Muratova S.K. Norqulova S.N. Teshaeva R.O. STATISTICAL ANALYSIS OF THE METHOD OF DELAYED FILLING IN CHRONIC APICAL PERIODONTITIS// CENTRAL ASIAN JOURNAL OF EDUCATION AND INNOVATION. Volume 2, Issue 11, Part 3 November 2023.- P 148-151
- 11. Muratova S.K. Teshayeva R.O. Teshayev Sh. O. SURUNKALI ILDIZ UCHI PERIODONTITDA KECHIKTIRIB PLOMBALASH USULINING STATISTIK TAHLILI// EURASIAN JOURNAL OF TECHNOLOGY AND INNOVATION/ 2023.-P. 186-189.
- 12. Muratova Saodat Kadirovna, Shukurova Nodira Tillayevna *A Literary Review of Statistical Indicators in the Diagnosis of Oral Tuberculosis*// Eurasian Medical Research Periodical. 2023.-P.30-33
- 13. Muratova Saodat Kadirovna, Shukurova Nodira Tillayevna *Assessment of the Dental Condition of Patients with Impaired Cerebral Circulation*// Eurasian Medical Research Periodical. 2023.- P.38-41.
- 14. Muratova Saodat Kadirovna, Naimov S, Toshtemirov I *Endodontic Treatment of Chronic Apical Periodontitis with The Drug Hydroxy calcium by Delayed Filling*// Eurasian Medical Research Periodical. 2023.- P 34-37.
- 15. Muratova Saodat Kadirovna *Modern Ideas About the Pathogenesis of Generalized Periodontitis*// Eurasian Medical Research Periodical. 2023.- P.42-45.
- 16. Muratova Saodat Kadirovna, Yukimurodov N, Absalamov D. *Results of Complex Treatment of Chronic Disseminated Periodontitis in Patients Who Have Undergone Covid-19*// Eurasian Medical Research Periodical. 2023.- P.27-29.

- 17. Khabibova, N. N. (2019). Characteristic Features of Biochemical Indicators of Mixed Saliva in Patients with Chronic Recurrent Aphthous Stomatitis. *Journal of Advances in Medicine and Medical Research*, 1-7.
- 18. Khabibova, N. N. (2019). Clinical characteristics of patients with recurrent aphthous stomatitis. *Annals of international medical and dental research*, *5*(5), 64-66.
- 19. Khabibova, N. N. (2021). Examination of patients with different forms RFL MMOC Sobirov Sh. S.
- 20. Nasullaevna, H. N. (2018). Characteristic features of free-radical processes and antioxidant protection in the oral cavity during chronic recurrent aphthous stomatitis. *European science review*, (9-10-2).
- 21. Qurbonova, N., Khabibova, N., & Ikhtiyarova, G. A. (2020). Hygienic condition of the oral cavity and the level of hygienic knowledge of silk motor workers. *European Journal of Molecular & Clinical Medicine*, 7(3), 3027-3033.
- 22. Khabibova, N. N., & Khadjimetov, A. A. (2019). Some occurrence aspects of chronic recurrent aphthous stomatitis of the oral cavity. *Global Journal of Medical, Physical and Health Education*, 7(3), 284-286.
- 23. Хабибова, Н. Н., Вахидова, М. А., & Жабборова, Ф. У. (2016). Эффективность комплексной терапии генерализованного пародонтита у больных с ожирением. *Наука молодых–Eruditio Juvenium*, (2).