



IMPROVING MODERN APPROACHES TO EARLY DIAGNOSIS AND TREATMENT OF CANDIDA-ASSOCIATED PERIODONTITIS AMONG PATIENTS.



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ABSTRACT

This article presents measures to improve oral hygiene and increase its preventive effectiveness and reduce the development of complications, taking into account the prevalence of dental diseases caused by candida, the complexity of diagnosis and treatment, and the prevalence of periodontal tissue diseases caused by this disease.

Keywords. Assimilation process, immunological markers, periodontal tissue diseases, immunohistochemical examination, etiopathogenetic view.

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**“BEMORLAR ORASIDA KANDIDA BILAN ASSOTSIATSIYALANGAN PARODONTITNI
ERTA TASHXISLASH HAMDA DAVOLASHGA QARATILGAN ZAMONAVIY
YONDASHUVLARNI TAKOMILLASHTIRISH”**

ANNOTATSIYA

Ushbu maqolada kandida ta'siri natijasida yuzaga keladigan stomatologik kasalliklar keng tarqalganligi, tashxislash va davolashda murakkabligi, ushbu kasallik natijasida yuzaga keladigan



parodont to'qimasi kasalliklarining tarqalish darajasiga qarab, og'iz bo'shlig'i gigiyenasini yaxshilash va profilaktik samaradorligini oshirish va asoratlar rivojlanishini kamaytirish chora-tadbirlari keltirilgan.

Kalit so'zlar. Assimilyatsiya jarayoni, immunologik markerlar, parodont to'qimasi kasalliklari, immuno-gisto-kimyoviy tekshiruv, etiopatogenetik qarash.

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**«СОВЕРШЕНСТВОВАНИЕ СОВРЕМЕННЫХ ПОДХОДОВ К РАННЕЙ
ДИАГНОСТИКЕ И ЛЕЧЕНИЮ КАНДИДОЗ-АССОЦИИРОВАННОГО
ПАРОДОНТИТА У ПАЦИЕНТОВ»**

АННОТАЦИЯ

В данной статье представлены мероприятия по улучшению гигиены полости рта, повышению ее профилактической эффективности и снижению развития осложнений с учетом распространенности стоматологических заболеваний, вызванных кандидозом, сложности диагностики и лечения, а также распространенности заболеваний тканей пародонта, обусловленных данным заболеванием.

Ключевые слова: Процесс ассимиляции, иммунологические маркеры, заболевания тканей пародонта, иммуногистохимическое исследование, этиопатогенетическая интерпретация.

There are more than 500 species of fungi that parasitize the body. Fungi are distinguished by their multifaceted effect on the organ. The prevalence of dental diseases resulting from the effects of Candida has a special place in the complexity of diagnosis and treatment. Scientific sources have noted that studies over the past five years have observed up to 10% of cases of oral diseases resulting from candida, and up to 12.3% of cases with different syndromes. At the same time, the predominance of Candida-induced, parodont tissue diseases, as well as the observation of 36.2% to 43.1%, testify to the prevalence of pathology. This situation is explained by the fact that the initial stages of diseases are accompanied by an absence of sufficient data on changes in both clinical and laboratory tests, as well as the absence of a single etiopathogenetic view among specialists. This indicates the need to improve the treatment and prevention methods of the problem [4,8].

The prevalence of mycotic infections of the oral mucosa reaches 40-88%. The issues of early effective diagnosis, pathogenesis, therapy, and prevention of this pathology remain largely unresolved and debatable, although numerous clinical and experimental studies have been devoted to their study. The authors studied the incidence of candida-associated periodontitis related to the age of patients. At the same time, the main share in the total number of patients falls on the age range from 34 years to 64 years and older. The high incidence of the adult population is explained by the higher frequency of background somatic pathology, frequent use of antibiotics and hormonal (steroid) drugs [3,5].

In our country, targeted and practical measures are being carried out to reform the health system and equalize it to World requirements, measures are being carried out to prevent diseases of the oral mucosa, develop effective methods of early diagnosis and complex treatment. In this regard "...improving the effectiveness, quality and popularity of medical care, as well as the formation of a system of medical standardization, the introduction of high-tech methods of diagnosis and treatment..." were set. These tasks are one of the relevant scientific directions for the implementation of the practice of improving the treatment and Prevention of periodont tissue diseases caused by Candida[7,9,12].

Dental diseases caused by Candida occupy a special place due to their prevalence, complexity of diagnosis and treatment. Studies conducted in scientific sources over the past five years have shown that oral diseases caused by Candida occur in up to 10% of cases, and in combination with



various syndromes, these diseases occur in up to 12.3%. At the same time, the prevalence of periodontal diseases caused by Candida, which range from 36.2% to 43.1%, indicates the high prevalence of the pathology. This situation is explained by the fact that the initial stages of the disease proceed without obvious symptoms, the lack of sufficient information about changes in both clinical and laboratory tests, and the lack of a single etiopathogenetic view among specialists. This indicates the need to improve methods of treatment and prevention of the problem[1,2].

Candidiasis is a fungal disease that mainly affects the mucous membranes and skin, and sometimes also internal organs. It can manifest itself in various forms, including the digestive, respiratory and genitourinary systems, as well as in the skin. In places where the immune system is significantly weakened, candidiasis sepsis (generalized candidiasis) can develop, which can lead to serious complications [2,9].

Common features of changes in periodontitis in intestinal dysbiosis are the progressive course of generalized periodontitis, the rapid formation of a periodontal pocket, pathological tooth mobility, a tendency to abscess formation, osteolysis of bone tissue with the formation of bone pockets, lacunae and its rapid resorption. If periodontal syndrome is detected, the patient requires a thorough examination by an endocrinologist, dentist, and other specialists [3,7].

The existing large arsenal of medicines and techniques does not lead to a decrease in the number of patients suffering from periodontal diseases. This may be due to many reasons: the duration of the chronic inflammatory process, the absence or insufficiency of diagnostic and therapeutic measures, etc. In this regard, a scientific search is underway for new methods and means that increase the effectiveness of therapeutic effects on the pathological focus of inflammation in the periodontium in patients with candidal lesions of the oral cavity[4,6].

The purpose of the study: to identify among patients periodontitis associated with candida in an etiopathogenetic-based state, to improve early diagnosis and modern approaches aimed at treatment.

As the object of the study, 150 patients with dental hard tissue diseases caused by energy drinks who applied to the admission Department of the Central ASIAN MEDICAL UNIVERSITY Ti clinic and 82 young people without energy drinks in the same young contingent were taken for the control group.

Prior to the start of treatment, all patients underwent oral sanitation, anesthesia, antiseptic treatment of periodontal pockets (PC) with the antiseptic "Furasol", removal of supragingival dental deposits, temporary splinting and selective grinding of teeth, removal of subgingival dental deposits and curettage of PC. All patients underwent antimicrobial therapy. After the elimination of the serous-purulent discharge from the PC, the patients were randomly divided into 2 groups. In patients in both groups, Traumel C was applied to the area of the affected PCs under a protective and fixing bandage for at least 2 hours.

Scientific and practical significance of the work. The practical significance of the work consists in the study and analysis of the degree and main risk factors of the spread of dental diseases in patients with periodontitis tissue diseases associated with Candida.

In patients belonging to this contingent, the specifics of the clinical signs of parodont tissue are identified and Prevention guidelines are developed, using an individual approach for each group.

The implementation of the research results in theoretical and applied medicine serves to increase the effectiveness of the Prevention of periodont tissue diseases caused by Candida.

For the assessment, we used a score based on H.P.Kamilov and O.E.Bekzhanova. All patients of the 1st group received, along with standard therapy, the antimycotic drug "Flunol" at a dose of 50 mg 1 time for 14 days, and patients of the 2nd group, along with "Flunol", were prescribed "Funistatin" 6 drops 4 times a day for 10 days. On day 7, an injection of platelet autologous plasma (TAP) of 0.1-0.2 ml into the gingival papillae and 0.3-0.5 ml along the transitional fold was included in the complex therapy. The procedure was performed 5 times for each patient. Results and



discussions. In the complex treatment of moderate periodontitis in patients of group 2, it helped to stop the inflammatory-destructive process in periodontal tissues, while improving the hygienic condition of the oral cavity, increasing the clinical effectiveness of treatment by 23.66%; resistance of teeth to stress by 35.63%.

Candidiasis, candidiasis (Candida - the Latin name of the genus of yeast-like fungi and Greek mycos - fungus), thrush, thrush - a mycosis disease that occurs in humans and animals; mainly caused by yeast-like fungi (Candida). The skin, mucous membranes, and sometimes internal organs are affected. It is more common in children and the elderly. Since ancient times, a white tongue, called mold, has been known, which is observed in young children, especially infants and immunocompromised patients. Candida fungi are widespread in nature; in particular, they live on plants, fruits and vegetables, as well as in sugary fruits; they are always present on the skin and oral cavity of humans and animals, on the mucous membranes of the intestines, respiratory and reproductive tracts. Candida fungi enter the skin and mucous membranes of a newborn baby during the birth canal and live with it for life. In some cases, as a result of severe diseases that reduce the body's defenses (tuberculosis, blood diseases, dysentery, dysentery, etc.), as well as when a person is irregularly treated with antibiotics, the biological balance of microorganisms in the body is disturbed, and the disease develops. In such cases, as well as in people who have been ill for a long time, the mucous membrane of the oral cavity turns pale, easily movable white spots appear on the tongue, palate and gums, which hurt when eating [4].

If the patient has already undergone antimicrobial therapy and has been cured of candidiasis, vitamins, levorin and nystatin are prescribed to prevent possible complications. It is very important to take a responsible approach to the prevention of candidiasis in babies. Namely, it is necessary to boil pacifiers, pacifiers and baby dishes, do not take the bathroom with the child, do not put his toys in his mouth. It is always worth remembering that adults are carriers of candida, so during contact with them, a child can become infected very easily. The baby's menu should include foods that are rich in fermented milk bacteria, as they boost immunity [3].

A large number of healthy people are carriers of candida fungus. To date, scientists have studied about 150 varieties of the fungus, 20 of which can cause various diseases in the human body. In the oral cavity, fungi can be found on the tonsils, on the mucous membrane, in the channels of damaged teeth, and in carious cavities[1,4].

Fungi are usually activated in an alkaline environment, which occurs in the oral cavity due to eating foods rich in carbohydrates. Fungi usually enter the active stage of vital activity due to a decrease in immunity or the influence of any other risk factors on the body. The factors of candidiasis development primarily include the following:

- pregnancy, as it is accompanied by changes in metabolism, decreased immunity, and hormonal levels;

- long-term use of drugs that depress the immune system (cytostatics and corticosteroid medications);

- various concomitant diseases — tuberculosis, diabetes, HIV, adrenal gland diseases;

- a long course of antibiotics that disrupt the composition of the microflora;

- radiation therapy in the process of cancer treatment;

- minor injuries to the oral mucosa;

- oral contraceptives that create good conditions for the activation of the fungus;

- bad habits (alcohol abuse and smoking);

- wearing dentures.

Symptoms of oral candidiasis

Thrush usually occurs in acute and chronic forms. Both of these forms can arise separately or transform from one another. Usually, chronic candidiasis occurs due to the lack of adequate treatment



of the acute form of the disease for a long time. As for the signs of the disease, they directly depend on the stage of its development. [2,5].

At the initial stage of the disease, fungi enter the cells and begin to actively multiply in them, releasing enzymes that strongly irritate the mucous membrane. Due to this process, patients experience swelling, redness and a feeling of dry mouth, increased sensitivity and soreness. As a result of the active reproduction of fungi, pseudomycelia is formed — a colony of white microorganisms accumulates on the surface of the mucous membrane. In addition to microorganisms, pseudomycelia also include fibrin, keratin, dead epithelial cells, and food residues[2,4].

Initially, plaque is very small grains that accumulate on the surface of the cheeks. However, over time, the amount of plaque begins to increase rapidly, it spreads to the gums, tongue, teeth, and tonsils. This plaque is easily eliminated, but in its place a red surface with ulcers forms, the cause of which is the destructive effect of fungi on the mucous membrane[3].

The sooner the disease progresses, the sooner the patient develops symptoms of candidiasis such as itching and burning, which only worsen during eating and swallowing saliva. If fungi have infected the pharyngeal mucosa, the patient may complain of difficulty swallowing. The proliferation of fungi, as well as their release of toxins, inevitably leads to an increase in temperature. Some patients may also develop a white plaque at the corners of their mouth[3].

To make a diagnosis, the doctor uses the data obtained during the examination of the patient, collection of complaints, laboratory tests and instrumental studies. During the examination, the dentist identifies the most characteristic signs of the disease. The doctor may also need to consult a pediatrician, a general practitioner, an infectious disease specialist, an endocrinologist, an allergist, and an immunologist[2,3].

The dentist prescribes the following laboratory tests: scraping and seeding for candidiasis, which helps not only to confirm the diagnosis, but also to determine the patient's sensitivity to various drugs. Candidiasis is confirmed if the candida fungus was detected in the tests during an overview microscopy of stained smears that were taken from areas affected by the fungus.

The symptoms of candidiasis of the oral mucosa are similar to those of many diseases. Therefore, the doctor needs to differentiate candidiasis from allergic and chronic aphthous stomatitis, lichen planus, desquamative glossitis, actinic cheilitis, streptococcal congestion, herpes simplex, lip eczema[1,5].

Treatment of oral candidiasis in adults can be local and general. General treatment focuses on taking medications that have an effect on the entire body. Taking antifungal drugs allows in this case to destroy candida fungi throughout the body.

Polyene antibiotics (levorin and nystatin) are considered effective antifungal drugs, which are recommended to be taken within two weeks. A few days after the start of taking these pills, the patient's well-being returns to normal, the erosions heal and the white plaque disappears. Imidazoles — econazole, clotrimazole, miconazole - have also shown their effectiveness in the treatment of candidiasis. The duration of their administration and dosage are prescribed depending on the severity of the disease and the age of the patient [3,4].

Since candidiasis of the oral cavity often occurs against the background of suppressed immunity, drugs for restoring the protective functions of the body occupy a special place in the treatment of the disease. Vitamins B, C, PP are usually prescribed for this purpose. To restore iron metabolism, which is significantly disrupted due to the disease, it is advisable for the patient to take Ferroplex or Conferon. Despite the effectiveness of general treatment, it can also have a negative effect on the human body, as it has side effects[2,4].

The use of Traumel C gel with the antimycotic drug Flunol and Funistatinom with the inclusion of TAP increases the effectiveness of traditional therapy to normalize clinical parameters by 35.89%. At the same time, the overall effectiveness of 74 treatment increased by 42.61% and the duration of treatment was reduced by 5.15 days. The average duration of treatment with standard



therapy was 13.62 ± 0.51 days; when antimycotic therapy was included, 12.03 ± 0.42 days; and with complex therapy, 9.95 ± 0.44 days; the remission period was 3.52 ± 0.12 , 4.62 ± 0.21 , and 7.01 ± 0.33 months, respectively.

Conclusions. The developed comprehensive treatment method in patients with candida-associated periodontitis makes it possible to optimize treatment, shorten its duration and prolong remission. The results of the conducted studies expand the understanding of the features of the treatment of this disease.

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