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Клиническая медицина

APPLICATION OF PROBIOTICS IN THE COMPLEX TREATMENT OF CHRONIC GENERALIZED CATARRHAL GINGIVITIS IN ADOLESCENTS.

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Ключевые слова: генерализованный катаральный гингивит, подростки, микробиоценоз, пробиотики.

Резюме: *Заболевания тканей пародонта, как в детском, так и в зрелом возрасте, занимают второе место и остаются актуальной проблемой детской стоматологии. Данная патология возникает в следствие действия целого ряда факторов. Важную роль играет общее состояние организма подростка, проживание в экологически неблагоприятных условиях, однако доминирующее место занимает микробиоциноз полости, изменения с появлением условно патогенной и патогенной микрофлоры вследствие недостаточной гигиены полости рта.*

Resume: *Diseases of periodontal tissues, both in children and in adulthood, occupy the second place and remain the actual problem of pediatric dentistry. This pathology occurs due to the action of a number of factors. An important role is played by the common state of organism of teenager, residence in ecologically unfavorable terms, however a dominant place occupies the microbiocenos cavities of mouth, changes with appearance conditionally of pathogenic and pathogenic microflora because of insufficient hygiene of cavity of mouth.*

Actuality. Epidemiological studies indicate a high level of dental morbidity, both among adults and among children. Diseases of periodontal tissues rank second after caries, various forms of periodontal tissue diseases among children's population of Ukraine ranges from 60-80%. Chronic catarrhal gingivitis is predominantly registered - 90-96.3% [5,8,10]. Often, in the early stages of the disease, it runs through unexpressed symptoms, which makes it difficult to timely diagnose and, in the future, without timely medical and prophylactic measures, forms a risk group for the development of destructive processes in the elderly. According to the WHO data, the main reason for the increase in the prevalence of periodontal diseases is the violation of hygienic oral care, the presence of chronic general somatic diseases, deterioration of the ecological situation, etc. [1,3].

The questions of development of effective schemes of complex treatment and preventive measures remains relevant, it is connected with failures in the treatment, the absence of persistent clinical effect, the presence of relapses that occur as a consequence of the unilateral approach to the treatment without considering the peculiarities of existing microorganisms, features of the local resistance and the General condition of the organism [4,6].

Nowadays, for the treatment of periodontal diseases, a significant arsenal of drugs of synthetic origin is used, which simultaneously with the expressed positive action can lead to side effects. In this regard, attention is drawn to the use in childhood of herbal medicinal products in combination with probiotics that are non-toxic, relatively safe, in order to compete

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with pathogenic microorganisms, antimicrobial action on pathogenic microflora, reduction of inflammatory events, increase of local immune protection. The main mechanisms of action of probiotics in the oral cavity are aimed at competition with cariesogenic and parodonogenic microorganisms, normalization of acid-alkaline balance of the oral cavity, antimicrobial action of substances relative to the pathogenic microflora, reduction of inflammatory events, and increased local immune defense [2,7,9].

Aim. The purpose of the study is to study the effectiveness of the prophylactic treatment-prophylactic complex in adolescents with generalized chronic catarrhal gingivitis.

Tasks: to work out and estimate клиническую эфективность of medical and preventive complex that includes combination of probiotics.

Objects and methods of research. To achieve the goal, changes in the periodontal tissues after 40-year-old adolescents with chronic generalized catarrhal gingivitis (HGKG) of moderate severity aged 12 to 18 years who at the time of the survey did not complain of violations of somatic health and not were on the dispensary account of adjacent specialists. Diagnosis of catarrhal gingivitis was carried out in accordance with the classification of periodontal diseases adopted at the XVIth Plenum of the All-Union Scientific Society of Dentistry (1983). Integrated therapy of HGKG was carried out in accordance with the protocols approved by the Order of the Ministry of Health of Ukraine No. 566 of 23.11.2004 "On Approval of the Protocols for the Provision of Medical Aid to Children for the Specialty Pediatric Therapeutic Dentistry". Adolescents were divided into three groups depending on the treatment scheme applied: the I group (16 people) received the treatment and prophylaxis complex developed by us, which included the use of a combined plant antimicrobial preparation Stomatophyte in the form of paddles with a 15% aqueous solution, applications on the gum mucosa and introduction into the interdental dentagel spots, and additionally prescribed a drug of probiotic origin "Biogaya ProDentius »1 mouthpiece for resorption for 30 days. For the purpose of general treatment inward, a probiotic YOGURT was prescribed; The II group (12 people) received a treatment and prophylaxis complex developed by us, which included the use of a combined herbal antimicrobial preparation Stomatophyte in the form of pads with a 15% aqueous solution, applications on the gum mucosa and introduction into the interdental dentagel gaps. For the purpose of general treatment internally appointed probiotic YOGURT; The III group (12 people) received traditional HGKG therapy, namely, irradiation of the gums, 0.05% of the solution of chlorhexidine bigliuconate, herbal teas (chamomile, calendula) herbal teas and application to the gum mucosa and introduction into the interdental spaces of the ointment of Mefenate.

All teenagers had professional oral hygiene with the selection of personal oral hygiene products, as well as training and motivation for individual oral hygiene.

Clinical examination of adolescents was carried out according to the generally accepted method with the use of subjective (complaints, anamnesis of life, medical history) and objective (main: review, palpation, sensing, percussion and additional: index evaluation of oral hygiene and the state of periodontal tissues) methods and filling out medical records. The received

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data of each patient was entered into an outpatient card of a dental patient and the map of our examination, which was developed by us.

An index estimate was used to determine the initial state of periodontal tissues and the result of treatment in the prevailing groups. In order to evaluate the oral hygiene status, all patients were given a Green Hermeneutical Index (Oral Hygiene Index-Simlified, Green-Vermillion, 1964) Index of Hygiene in the oral cavity of Green-Vermillion. To evaluate the inflammatory process in the gums and to record the dynamics of the process, the PMA index (papillary-marginal-alveolar index, modified by C. Parma, 1960) was used. Papillary Bleeding Index for Papillary Bleeding Index for Saxer, Muhlemann (1975), which is a sensitive indicator of gum inflammation, was used to establish the diagnosis and prognosis of the treatment of periodontal tissue diseases.

Monitoring was conducted before and after treatment.

The received digital material was subjected to statistical analysis using Student's T-criterion.

The research is carried out in accordance with the principles of the Helsinki Declaration. The protocol of the research was approved by the Local Ethics Committee (LEC) of all institutions indicated in the work. In accordance with the requirements of bioethics "On conducting laboratory research of biological material", written consent was received from parents (guardians) of each child and adolescent for the study of biomaterials.

Research results and their discussion. Mostly, teenagers complained of periodic bleeding gums, a sense of discomfort, less unpleasant smells from their mouths. According to the results of the clinical examination, it was found that the state of hygiene in the surveyed responded to satisfactory level, respectively, the index of hygiene of the oral cavity of Green-Vermillion 1.42 ± 0.01 points. The index of the PMA was 31.7 ± 1.1%, which corresponded to the average severity of HGKG. The index of bleeding was 1.34 ± 0.01 points.

All of the adolescents in the follow-up group after the treatment managed to eliminate complaints and achieve a positive therapeutic effect. Prior to the onset of HGKG in adolescents, periodontal indices were approximately the same, after the course of treatment, improvement in periodontal indices was found in all study groups, however, in adolescents of the 1st group, the indices' evaluation changes were more pronounced positive. After treatment, adolescents in all three groups significantly decreased the indicators of hygiene index, also the index of RMA and IR showed a decrease in the intensity of inflammation, however, the best results were in adolescents And groups. So, Teens And group index of hygiene of green-Vermillion was equal to 0.22±0.01 GPA, which corresponded to good condition and was 1.4 times less than adolescents in group II and 1.6 times than in adolescents group III, respectively. The index PMA decreased to 2.7±0,22%, which was 1.3 times and 1.7 times less than the figure in adolescents II and III group respectively. A similar pattern was observed with the index of bleeding. Adolescents in group i the index of bleeding was reduced to 0,13±0,01, which was 1.2 times and 1.4 times less than the figure in adolescents II and III group respectively.

The results of the examination of adolescents and group I who applied the proposed comprehensive treatment of HGKG of moderate severity with the additional appointment of

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the drug of probiotic origin "BioGaida ProDentius" traced a more pronounced positive dynamics of the indexes, reduces or eliminates the inflammatory process in the periodontal disease, allows achieving a stable remission compared with the adolescent groups of comparison .

Conclusions. The obtained results allow us to conclude about the high clinical efficacy of the proposed complex with the additional appointment of the drug of probiotic origin "BioGaida ProDenti", which contributes to the continuation of positive therapeutic dynamics and stable changes in periodontal tissues at an earlier date, which is confirmed by positive changes in the indexes.

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