oral fluid increases in comparison with the control values in accordance with the severity of the pathological process in the periodontal tissues. The treatment of generalized periodontitis causes to a decrease in the MMP-8 in oral fluid.

Prospects for further research. The obtained values of the concentration of MMP-8 in the oral fluid, as well as their dynamics, proved that this marker is indicative of the course of the inflammatory-destructive process in periodontal tissues, and therefore the possibility of its application for the diagnosis and monitoring of the results of treatment of generalized periodontitis.

References:


Key words: generalized periodontitis, matrix metalloproteinase-8, oral fluid, diagnosis.

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RESULTS OF COMPLEX TREATMENT OF WAGOTONIA IN PATIENTS WITH CHRONIC COURSE OF GENERALIZED PERIODONTITIS

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Treatment of patients with generalized periodontitis depend on the peculiarities of the course and clinical picture. The presence of general somatic diseases has a significant effect on the clinical picture of generalized periodontitis. Without regarding these peculiarities, periodontal disease has an adverse course and resistance to treatment. The autonomic nervous system has an integrative role. Therefore, in the treatment of this type of disease it is necessary to take into account the state of the autonomic nervous system of patients.

Materials and Methods. Complex treatment of generalized periodontitis was performed in a group of 60 patients aged 25-45 years old with a chronic course of generalized periodontitis of the 1st and 2nd degree and prevalence of parasympathetic nervous system. 40 patients made up the main group. There was developed a scheme of medication therapy for their treatment. Evaluation of the state of their autonomic nervous system was carried out by determining the Kerdo index. The comparison group consisted of 20 patients with generalized periodontitis, who were treated by a complex treatment similar to the patients in the main subgroup of treatment, but without drug preparation.

Patients with the chronic course of generalized periodontitis and prevalence of parasympathetic autonomic nervous system were prescribed the following medications before each visit:
1. «Anaprilin» 0,01 g - 1 tablet 2 times a day;
2. Tincture of valerian - 0,25 drops 3 times a day.

During the three days after a dental intervention, they were given:
1. “Ibuprofen” 0.2 g - 2 tablets 3 times a day;
2. Tincture of valerian - 0,25 drops 3 times a day;
3. “Anaprilin” 0,01 g - 1 tablet 4 times a day.

All patients were provided with professional oral hygiene, complete elimination of all periodontal tissue irritants, complete removal of dental deposits with the treatment of surfaces of the teeth roots. Clinical examination of patients was carried out according to the traditional scheme.

Results. The course of treatment for patients with generalized periodontitis of the 1st degree of the main group was 6,05 visits and 9,18 visits for the comparison group. To achieve the stabilization of the pathological process in patients with generalized periodontitis of the 2nd degree it was necessary to make 8,46 visits for patients in the main group and 10,2 visits for patients in the comparison group. The complex treatment has led to a reduction of gums bleeding (PBI index). In patients of the main group it has decreased from 2.81 ± 0.19 to 0.71 ± 0.02 points and in patients of the comparison group - from 2.38 ± 0.22 to 0.89 ± 0.02 points. The state of the whole complex of periodontal tissues at the stages of treatment is indicated by changes in the periodontal index (PI). In general, the PI index in patients of the main group decreased by 68.3% from 2.49 ± 0.3 to 0.71 ± 0.07 points, and in the comparison group - by 67.78% from 2.52 ± 0.48 to 0.89 ± 0.07 points. After the course of treatment, the state of the oral cavity hygiene has improved: the hygiene index ONI-S in patients of the main group has decreased from 1,59 ± 0,09 to 0,79 ± 0,06. After the treatment of patients with generalized periodontitis with predominance of parasympathetic
autonomic nervous system using the proposed drug preparation, a significant improvement in the periodontal state was observed. The proposed treatment technique allows to eliminate the manifestations of inflammation and achieve the stabilization of the dystrophic and inflammatory process in the periodontium in shorter terms.

Perspectives for further research. Consequently, the analysis of the results of clinical and laboratory research methods after the conducted complex treatment showed a high therapeutic effectiveness of the proposed medicines in the influence on the periodontal, which will be the basis for the development of other schemes of complex treatment of patients with periodontal disease, depending on the state of the autonomic nervous system.

References:

Key words: generalized periodontitis, autonomic nervous system.

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APPLICATION POTENTIAL OF BIOMARKERS IN PERIODIC DENTAL SCREENING PROTOCOL FOR PATIENTS WORKING IN HARMFUL CONDITIONS

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The problem of dental diseases prevention is rather actual, since the results of numerous researches demonstrate that the incidence of the major dental diseases is really high. Due to this, essential preventive protocols have been elaborated which allows prevention of future nosological illnesses. The main criteria in the modern preventive stomatology are the ratio between time that is necessary for a dentist to prevent a disease, benefits of the measures undertaken according to the given prevention protocol, and risks of untimely prevention. All these factors can be minimized, and effective results of nosological disorders prevention can be obtained. The familiar protocols can be improved by introducing modern methods of work with biomarkers, i.e. molecules that are used as identifiers of different diseases, and of an organism’s pharmacological reaction to treatment. Only multidisciplinary view of a certain clinical situation allows predicting and elaborating the most real prognostic plan of full rehabilitation. However, owing to modern technologies of biomarkers application, a dentist can quickly and independently improve a patient’s dental health.[1,2,3] Numerous studies have confirmed that social-economical (financial state, nutrition, educational level, availability of medical service) and psychological (stressful situations, behavior, low motivation to follow dentist’s recommendations) factors proportionally influence patients’ dental health.[4] Both systematic and local preventive activity is becoming more and more significant in dental practice where the main aim is elimination of those factors that negatively influence a patient’s health, for the sake of prevention of a disease development which might result in more catastrophic consequences, in case of fully pathological course of a dental disease. Search for prognostically important indicators of disease course is determined by the wide spread of pathological processes. In this context, special attention is recently given to the study of composition of oral fluid that is one of the main biological fluids (cytochemical method). The aim of our research is identifying clinical and diagnostic pathogenic meaning of change in concentration of such biomarkers as lactoferrin, vitamin D and vitamin D-binding protein in oral cavity with various dental diseases, and demonstrating the necessity of introduction of biomarkers into periodic screening protocol.[4,5]

Materials and Methods. 100 patients were selected for the present study; they were examined in dental offices and dental clinics. The patients were divided into clinical group, comprising patients who work in harmful conditions, and observational group, made of patients with physiologically normal health indicators and absence of dental pathologies. Values of lactoferrin and cathelicidin in the oral cavity were estimated. Age band of both clinical and observational groups was 25-40 years of age. Oral fluid was collected from the patients in fasting state, early in the morning, by means of spitting into a sterile test-tube. The stock was centrifuged and stored at the temperature -30°C, and the amount of lactoferrin was estimated with the help of enzyme-linked immunosorbent assay. The presence of vitamin D-binding protein in the oral fluid was defined with precipitation assay.

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