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TO STUDY THE ASPECTS OF THE INFLUENCE OF SMOKING ON THE CONDITION OF ORGANS AND TISSUES OF THE ORAL CAVITY

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ABOUT ARTICLE

Key words: Smoking, young people, dental caries,	8 8
inflammatory periodontal diseases, diseases of	prevalence and intensity of major dental diseases
the oral mucosa.	against the background of impaired
	immunological reactivity of organs and tissues of
Received: 13.02.2024	the oral cavity include climatogeographic and
Accepted: 18.02.2024	social living conditions, the general condition of
Published: 23.02.2024	the body and one of the most common etiological
	causes threatening both the general health and the
	oral cavity of the population, - tobacco includes
	changes in regulatory indicators of immune status
	caused by smoking Tobacco smoking is an
	incalculable burden for health authorities and
	governments in many countries as a socio-
	economic problem associated with early mortality
	from smoking-related diseases, disability and
	economic losses due to absence from the
	workplace.

INTRODUCTION

That is why one of the most important directions of modern scientific and practical medicine in the development of health protection of various population groups around the world is a comprehensive and detailed study of the mechanisms of pathogenic influence of exogenous and endogenous factors, especially smoking, on the functional state of body organs and organs, as well as on human health in general, It is necessary to develop the necessary diagnostic criteria and optimal methods of prevention and treatment of diseases caused by its effects. Although in recent years some facts have become known about the components of tobacco smoke and the mechanisms of its harmful effects on the body, this harmful and harmful habit, nevertheless, remains an authority in the field of health even in developed countries, where, according to statistics, more than half of all adult healthy men and women smoke. the

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most urgent and unresolved problems for health authorities. The growing number of smokers in developed countries, including among young people and adolescents, deserves special attention. In most cases, there is a close relationship between the intensity and duration of smoking and the occurrence and development of pathological changes in various organs and systems of the human body, with an increase in the prevalence of diseases of the cardiovascular and genitourinary systems, respiratory and digestive organs, malignant neoplasms, including the oral cavity, and against this background, a decrease in physical activity and performance for a long time reduced working capacity, disability and overall mortality. Along with the importance of the medical and social aspects of smoking, another evidence of the increased risk associated with this problem is the increase in the incidence of non-smokers who are in close proximity to respondents with this harmful habit and constantly inhale air contaminated with tobacco smoke components. In other words, the so-called "secondhand smoke" contributes to the development of diseases characteristic of tobacco smokers. The main effect on the human body, including on the oral cavity, is that the toxic components of tobacco smoke enter directly through the mucous membranes, which are characterized by high permeability, and then the products of tobacco smoke undergo a number of chemical changes and indirectly enter the bloodstream, reaching the target organs. With regard to the occurrence and development of certain dental diseases associated with smoking, it is important to emphasize the violation of the functional state of the oral mucosa, small salivary glands and, of course, certain changes in mixed saliva and its buffering ability. At the same time, conducting comprehensive clinical and morphological studies is of great importance for a detailed study of some etiological mechanisms of the harmful effects of tobacco smoking on the main components of the immunological reactivity of organs and tissues of the oral cavity, as well as for the diagnosis of dental diseases most often caused by the side toxic effects of tobacco smoke, both clinically and experimentally are of great importance for practical medicine and dentistry in terms of timely detection of early symptoms of the disease.

The purpose of the study: A comprehensive clinical study of the features of the course of certain dental diseases in students who smoke.

Objectives and methods In the course of the study, a comprehensive survey was conducted of 380 students aged 16 to 27 years who enrolled in the third and fifth courses of the Samarkand Medical University. Of these, 180 were smokers and 200 were students without a smoking habit. The subjects were selected by random sampling based on a list of students compiled for each group. A comprehensive dental examination was carried out in accordance with WHO recommendations (1995) using special dental instruments and assessing the condition of soft and hard tissues of the oral cavity,

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including periodontal diseases, as indicators. The condition of hard tissues was determined by the CPI index, oral hygiene by the OHI-S hygiene index (Green J.C., Vermillion J.K., 1964) and the Fedorov-Volodkina index; the PMA index, modified by Parma 1960 (ShourI., Massler M., 1947) was used to determine the degree of gingival inflammation. The patients were divided into two groups - the control group (15 people) and the main group (17 people), the clinical examination and index measurement were repeated before and after the start and end of the main treatment. In the main group, unlike the control group, for one and six months, in addition to traditional disinfection measures, the mouthwash "Anti-tobacco Lomashka Sage" was used. The prevalence of smoking among students was determined using an unlabeled questionnaire. Each subject was given a special questionnaire consisting of 11 questions, on the basis of which it was possible to study the presence or absence of the studied bad habit, the students' idea of the harmful effects of smoking on the body as a whole and the state of organs and tissues of the alveolar system. Statistical processing of the obtained results was carried out using the method of variation statistics. The methods of descriptive statistics included the estimation of the arithmetic mean (M) of the signs of a continuous distribution, the average error of the average (m) and the frequency of occurrence of signs of discrete quantities. The Student's t-test and the nonparametric Wilcoxon-Mann-Whitney U-test were used to evaluate group differences in the values of continuous distribution features. Statistical group differences were considered significant at p<0.05). Thus, in the course of the conducted studies, it was revealed that many indicators characterizing the state of organs and tissues of the oral cavity differed between the main and control groups of students, however, similar dynamics were observed during the study. It was found that the intensity of caries differs in third and fifth year students. Comparing the data of smoking and non-smoking students also revealed significant and significant differences in indicators. In the control group of students of both courses, significantly fewer cases of gingival pockets were detected. Clinical observations have shown a decrease in the number of subjects with healthy or intact periodontal ligaments in senior students of both groups. On the other hand, fifth-year students with a history of smoking had significantly more cases with a more severe degree of periodontal tissue damage than third-year students. Analysis of the obtained statistical data on the condition of the soft tissues of the oral cavity showed that, despite good oral hygiene according to the OHI-S hygiene index before treatment, in some cases periodontal tissue inflammation occurred, and such inflammation of periodontal tissues was often diagnosed as a bad cigarette smoking habit during medical examination. In most cases, this was the case. The data obtained on the condition of the marginal gum corresponded to a weakly expressed inflammatory process. Thus, tobacco smoking is widespread among students and undoubtedly has a negative impact on the condition of the oral cavity and the body as a whole, significantly increasing the prevalence and

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intensity of major dental diseases. In smoking students, signs of pathological changes in periodontal soft tissues are more common than in their peers, which once again indicates the dependence of the condition of the parotid tissues on smoking. Against the background of intensive tobacco consumption, the data of the registered indicators indicate that the hygienic condition of the oral cavity in the examined third and fourth year students was unsatisfactory in both groups; the hygiene indicator OHI-S characterizes the level of oral hygiene before the start of the basic course of treatment as poor or unsatisfactory, which is confirmed by the periodontal indicator RMA. This was also evidenced by the growth of the RMA disease index. To study the effectiveness of the proposed method of improving the dental status of tobacco smokers by random sampling, two groups were formed: standard treatment regimens and the proposed treatment method. The combined treatment of pathological changes in periodontal tissues resulting from intensive tobacco consumption, in particular mild catarrhal gingivitis and periodontitis in the second group of students, in which the effective therapeutic and prophylactic drug Anti-tobacco mouthwash Anti-tobacco Chamomile Sage was used, led to a significant improvement in the condition of periodontitis and periodontal gingivitis compared with the first group, in which only conventional antiseptics were used. The results of the combined treatment of mild catarrhal gingivitis and periodontitis in the second group of students, in which only conventional disinfectants were used, revealed a relatively pronounced clinical improvement in oral hygiene and the condition of periodontal tissues compared with the first group, in which only disinfectants were used. The above was confirmed by the obtained hygiene data and indicators of the periodontal condition. Thus, at the initial stage after the end of basic treatment, the PMA index in group 2 was significantly lower than before the start of treatment, but also significantly different from the data recorded in the control group:

After a month of treatment, it amounted to $8.0 \pm 0.33\%$ in group 1 and $5.8 \pm 0.20\%$ in group 2 (Table 2). In the more distant period of the study, six months after the completion of therapeutic and preventive measures, higher values of the PMA index were observed in both observation groups, but more pronounced dynamics in the growth of the indicator It was evident in the group of students who were prescribed conventional conventional treatment. When conducting traditional treatment with the use of generally accepted antiseptics, tobacco smoking students showed less pronounced positive dynamics in the values of the studied dental indicators, the decrease in the PMA index to the standard value was definite and was observed most often in the main group. In other words, the use of tobacco smoking in the combined treatment of gingivitis and periodontitis of mild severity with the help of our proposed dental gel leads to a significant improvement in indicators characterizing the state of oral hygiene and periodontal soft tissues (PMA, OHIS), compared with the group that was prescribed conventional oral antiseptics for therapeutic purposes. A very positive effect has been obtained.

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Therefore, in order to improve the dental health of students, first of all, it is necessary to motivate them to quit smoking. In addition, especially from a preventive point of view, it is necessary to develop an algorithm for the dental treatment of smokers based on annual preventive examinations and regular oral hygiene, monitoring the condition of hard and soft tissues of the oral cavity in the dynamics of smoking and, based on this, the definition and application of effective therapeutic and preventive measures in this particular case. That would be important.

CONCLUSIONS

Exposure to smoking among students seems to be one of the most significant risk factors for the development of dental caries and periodontal tissue diseases. Prospects for further research It is planned to develop effective therapeutic and preventive measures that will lead to a decrease in the level of dental diseases developing against the background of smoking, and to implement them in a timely manner.

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