LEVEL OF ORAL HYGIENE IN PATIENTS WITH DIFFERENT SMOKING EXPERIENCE

Asrorov Amir Khamzayevich[1], Akhrorova Malika Shavkatovna[2], Abdulloev Afzal Sarkhadovich[3], Shopulotova Zarina Abdumuminovna[4]
[1]Samarkand State Medical University, master degree
[2]Samarkand State Medical University, PhD assistant
[3]Samarkand State Medical University, PhD assistant
[4]Samarkand State Medical University, assistant

Abstract. According to WHO estimates, there are 1.3 billion people in the world who smoke. Purpose of the study was to determine the level of oral hygiene in patients with different smoking experience. The study involved 104 patients aged 18 to 44 years, male and female, with at least one year of smoking experience. All patients were divided into 3 groups depending on their smoking history. Based on the results of the survey, it was revealed that 69% of respondents had experience smoking steam cocktails, of these, 49% have a smoking history of less than 5 years, and 51% have been smoking for more than 5 years. The level of oral hygiene among tobacco smokers is unsatisfactory.

Keywords: Tobacco smoking (TS), smoking index (SI), steam cocktail (hookah), gingivitis index (GI), temporomandibular joint (TMJ), papillary-marginal-alveolar index (PMA), periodontal index (PI).

Relevance. According to WHO estimates, there are 1.3 billion people in the world who smoke. The number of people who smoke is projected to rise to 1.6 billion by 2025. Globally, 47% of men and 12% of women currently use tobacco, while in Europe alone, about 30% of adults smoke. Much of the growth of the tobacco epidemic in recent decades is due to an increase in the proportion of people who smoke in developing countries.

Today, tobacco smoking is widespread throughout the world. Tobacco smoking (TS) leads to huge irreparable losses for public health. According to statistical calculations, TS is the cause of more than 17% of deaths in Russia. It is also known that TS is associated with 43% of all deaths of men aged 35-69 years from malignant tumors and 89% from lung cancer.

Currently, there are no extensive scientific studies of dental health in people who use steam cocktails while smoking. There is also no scientifically proven opinion on how these patients should be received and treated.

There have been many studies done on how tobacco affects oral health, but there are no studies on how hookah smoking affects dental health.

Purpose of the study: To determine the level of oral hygiene in patients with different smoking experience.

Materials and methods of research. The clinical study was carried out on the basis of the Department of Maxillofacial Surgery of Samarkand State Medical University in accordance with the purpose of the study to solve the assigned problems. The study involved 104 patients aged 18 to 44 years, male and female, with at least one year of smoking experience. The comparison group included 49 patients aged 18 to 44 years, male and female, who do not use or have not previously

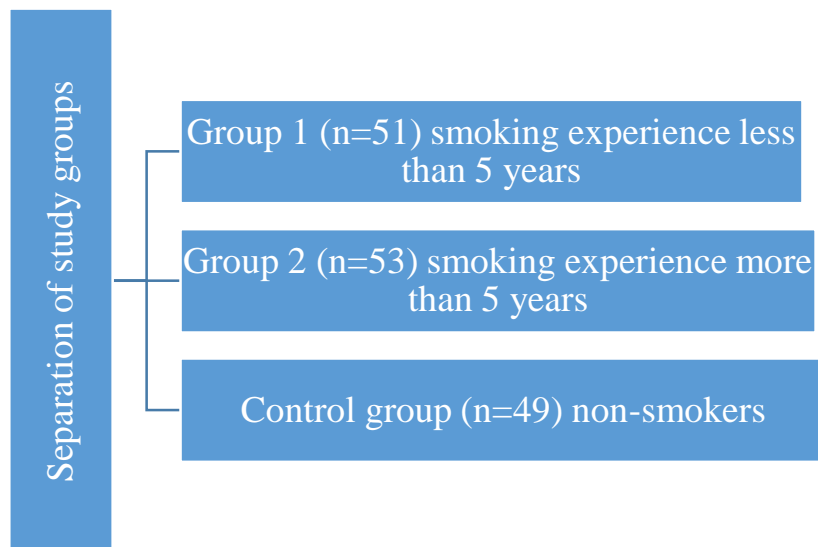used tobacco mixtures. All patients were divided into 3 groups depending on their smoking history (Figure 1).

Separation of study groups

Group 1 (n=51) smoking experience less than 5 years

Group 2 (n=53) smoking experience more than 5 years

Control group (n=49) non-smokers

Figure 1. Study design

We took the secretion of the salivary glands from all subjects using a salivary collector (Sarstedt D-51588 Numbrecht). In order to assess your smoking status, you need to fill out three questionnaires. These questionnaires contain data on smoking a steam cocktail, namely a hookah. And it is these data that help to assess the smoking index, the degree of nicotine addiction, the type of smoking behavior, as well as the degree of motivation to quit smoking. In order to estimate the smoking index (SI), the formula is used:

SI = number of cigarettes smoked per day × 12.

Smoking a hookah for 1.5 minutes was equivalent to one cigarette.

That is, SI of a steam cocktail (hookah) = time during which a steam cocktail was smoked per day × 12.

The assessment of dental status began with a survey and clinical examination of patients who use a steam cocktail while smoking. The assessment was also carried out using a questionnaire. As a result of the survey, the patient's complaints, as well as smoking history, were found out. All information on the survey was entered into the questionnaires from the words of the patients.

After the survey, the external examination began. First, the configuration of the face, skin color, and the presence of pathological formations on it were assessed. Then the regional lymph nodes were palpated: mandibular, mental, occipital, cervical. The degree of mouth opening was assessed, and then the temporomandibular joint (TMJ) was examined: symmetry, smoothness of movements, deviation of the lower jaw.

After the external examination, we moved on to examining the oral cavity. The vestibule of the oral cavity was examined: the mucosa, the ducts of the salivary glands, the frenulum of the lips, the depth of the vestibule and occlusion. Then we moved on to examining the tongue.

When examining the oral mucosa, the papillary-marginal-alveolar index (PMA) was performed. The criteria for this index are as follows:

"0" – no inflammation

"1" – inflammation of the gingival papilla (P)

"2" – inflammation of the gingival papilla and gingival margin (M)

"3" – inflammation of the marginal and alveolar gums (A).

For the purpose of calculation, we used the formula:

Gingivitis index (GI) = sum of indicators in points 3 x number of teeth × 100%,

where 3 is the highest score of gum inflammation.

The PMA index is assessed as follows: less than 30% – mild severity of gingivitis; 31-60% – moderate severity; 61% and above – severe severity [63].

The periodontal index (PI) was used to assess the prevalence and intensity of periodontal disease. An examination of the dentition was carried out for each tooth using a dental probe and a mirror. The examination results were included in the dental formula. The intensity of dental caries was determined by the CFR index, where C is the number of carious teeth, F is the number of filled teeth, R is the number of removed teeth. The sum of all these values shows the intensity of the carious process.

Statistical processing of the obtained data was carried out using the IBMSPSS program, version 21.0. Descriptive statistics of the research results are presented for qualitative values in the form of percentages and their standard errors, for absolute values - in the form of arithmetic means (M) and standard deviations (σ). Median (Me) and quartiles (Q25, Q75) were used in descriptive statistics in cases where there was no normal distribution of characteristics.

When confirming the normal distribution of variable values in the study groups, the statistical significance of the differences was checked using the Student t-test for independent samples. The reliability level was at least 95%.

Research results and discussion. When analyzing the degree of dependence in groups 1 and 2, we obtained the following results: In both groups, a decrease in the degree of dependence was noted throughout the study. In the first group from high dependence to moderate dependence. In the 2nd group from average to weak dependence. Moreover, an interesting fact is that the longer the experience of using steam cocktails, the weaker the patients' assessment of addiction.

The smoking index had higher values in the first group, in contrast to the second group ($p<0.05$). This fact suggests that with increasing smoking experience, the smoking process itself moves from the category of "pleasant pastime" to the category of "satisfying the need for nicotine." As a result of the preventive program, we saw a statistically significant ($p<0.05$) decrease in the smoking index. Moreover, in the first group it was 46.9% and in the second 48.2%.

The type of smoking behavior in both the first and second groups remained at the same level throughout the study. The only difference is that in the first group this type corresponded more to "playing with a cigarette", and in the second group it corresponded to "relaxation".

The degree of motivation to quit smoking after the preventive work we carried out increased in both the first and second groups. Moreover, in the second group (in persons with a long history of smoking), the positive dynamics of this parameter is higher ($p<0.05$). In the first group the dynamics was 7.7%, and in the second group 38.4%. We associate this fact with the fact that with an increase in the "experience" of smoking, the negative manifestations of smoking may appear to a greater extent. And smokers often think about quitting their bad habit, but they lack the "catalyst" to make such a decision. Therefore, the preventive work we carry out can precisely be the "trigger" factor that allows you to quit smoking.

Thus, when analyzing personal data, we see confirmation of the effectiveness of our activities.

When analyzing the CFR data in each of the groups, we note stable values. But when comparing the groups, it is clear that this parameter had minimal values in the control group; in the first group, this parameter (p<0.05) had large values (by 30.2%). The second group was superior (p<0.05) to the control group by 46.8%.

The PMA index in the control group was stable throughout the study and amounted to 21.06±2.27. Before the start of the study, this parameter had significantly higher values in both the first (52.8%) and second (56.5%) groups (p<0.05). Subsequently, there was a tendency towards a decrease in this parameter by the end of the year, but the value of this index could not approach the value in the control group (p<0.05).

The PI index in the control group also had stable values at all stages of the study. In groups 1 and 2, this parameter at the beginning of the study had large values (p<0.05). Subsequently, there was a tendency for this parameter to decrease by the end of the study in both the first (60.7%) and second (75.5%) groups (p<0.05).

Moreover, this parameter in group 2 at all control points had statistically significant (p<0.05) prevailing values. The Turesky index in the control group at all control points was 1.80±0.19. In the first group, before the study, this parameter prevailed by 31.0% over the index of the control group (p<0.05). Subsequently, this parameter decreased to 1.98±0.57. In the second group, this index prevailed by 47.8% over the control group before the study (p<0.05). And by the end of the study it also reached a value of 1.98±0.46.

Thus, based on a clinical study, we can assume the effectiveness of our activities.

Conclusions. Based on the results of the survey, it was revealed that 69% of respondents had experience smoking steam cocktails. Of these, 49% have a smoking history of less than 5 years, and 51% have been smoking for more than 5 years.

The level of oral hygiene among tobacco smokers is unsatisfactory. In patients with less than 5 years of smoking experience, the average OHI-S scores were –2.61±1.04 (p<0.05), in patients with more than 5 years of smoking experience, OHI-S – 3.45±1.34 (p<0.05).

The CFR index in the control group was 6.82±0.24 (p<0.05). In group 1, the CFR index was greater by 30.2% (p<0.05), and in group 2 by 46.8% (p<0.05), compared to the control group. The Turesky index in the control group was 1.80±0.19 (p<0.05). In group 1, the Turesky index was higher by 31% (p<0.05), and in group 2 by 47.8% (p<0.05), compared to the control group.

REFERENCES

1. Alimdjanovich R. J., Abdullaev A. S. PASTKI ALVEOLYAR NERV YALLIG'LANISHINI DAVOLASHDA NUKLEO CMF FORTE NING O'RNI //Евразийский журнал медицинских и естественных наук. – 2022. – Т. 2. – №. 5. – С. 82-92.
2. Alimdzhanovich R. J., Sarkhadovich A. A. Prospects for the treatment of neuritis in fracture of the lower jaw //ACADEMICIA: An International Multidisciplinary Research Journal. – 2022. – Т. 12. – №. 4. – С. 712-717.
3. Abdullaev A., Turopov F., Narzikulov D. POSTTRAUMATIC NEURITIS OF THE INFERIOR ALVEOLAR NERVE //Бюллетень студентов нового Узбекистана. – 2023. – Т. 1. – №. 6 Part 2. – С. 67-70.

4. Amirzoda T. S., Asliddinovich S. S. НЕДЕРЖАНИЕ МОЧИ И НЕУДЕРЖАНИЕ МОЧИ: КАЧЕСТВО ЖИЗНИ ПАЦИЕНТОВ //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 5.

5. Fayzullaev U. R., Sarkhadovich A. A. A METHOD FOR INCREASING THE EFFECTIVENESS OF CHON-DROPROTECTIVE THERAPY IN PATIENTS WITH TMJ ARTHRITIS-ARTHROSIS ACCOMPANYING CERVICAL OSTEOCHONDROSIS //Asian journal of pharmaceutical and biological research. – 2022. – Т. 11. – №. 2.

6. Khudoyarova D. R., Shopulotova Z. A., Solieva Z. M. PREVENTION OF COMPLICATIONS IN PREGNANT WOMEN WITH CHRONIC PYELONEPHRITIS //Бюллетень студентов нового Узбекистана. – 2023. – Т. 1. – №. 5. – С. 25-29.

7. Rakhimovna K. D., Abdumuminovna S. Z. Traumatization of the genital organs. – 2022.

8. Sarkhadovich A. A. A. NEURITIS OF THE LOWER ALVEOLAR NERVE AND ITS TREATMENT //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 5. – С. 51-55.

9. Shopulotova Z. COMPARATIVE ANALYSIS OF CLINICAL CASES OF EXACERBATION OF CHRONIC PYELONEPHRITIS IN PREGNANT WOMEN //International Bulletin of Medical Sciences and Clinical Research. – 2023. – Т. 3. – №. 8. – С. 22-25.

10. Shopulotova Z. A., Zubaydilloeva Z. K., Khudoyarova D. R. COMORBID EVENTS IN PREGNANT WOMEN WITH PYELONEPHRITIS AND PREVENTION OF THESE CONDITIONS //Бюллетень педагогов нового Узбекистана. – 2023. – Т. 1. – №. 9. – С. 35-38.

11. Shopulotova Z. A., Zubaydilloeva Z. K. THE VALUE OF ULTRASOUND DIAGNOSTICS IN PREGNANT WOMEN WITH CHRONIC PYELONEPHRITIS //Бюллетень студентов нового Узбекистана. – 2023. – Т. 1. – №. 9. – С. 19-22.

12. Shopulotova Z. A., Zubaydilloeva Z. K. PERINATAL CARDIOLOGY: PREGNANCY AND CONGENITAL HEART DEFECTS //Евразийский журнал академических исследований. – 2023. – Т. 3. – №. 9. – С. 55-59.

13. Shopulotova Z. A. et al. PHENOMENA OF COMORBIDITY IN PREGNANT WOMEN WITH PYELONEPHRITIS.

14. Shamatov I., Shopulotova Z. ADVANNAGES OF PALATE LASER THERAPY IN COMPLEX TREATMENT OF LARINGITIS //International Bulletin of Medical Sciences and Clinical Research. – 2023. – Т. 3. – №. 9. – С. 104-107.

15. Shamatov I. Y. et al. COMPREHENSIVE AUDIOLOGICAL STUDIES SENSORY NEURAL HEARING LOSS OF NOISE GENESIS //American Journal Of Social Sciences And Humanity Research. – 2023. – Т. 3. – №. 10. – С. 128-132.

16. Shamatov I. Y., Shayqulov H. S. H., Shopulotova Z. A. O'RTA QULOQNING ZAMBURUG'LI ZARARLANISHLARI //Евразийский журнал медицинских и естественных наук. – 2022. – Т. 2. – №. 6. – С. 425-427.

17. Shopulotov S., Isroilov O. GIPERAKTIV QOVUQ SINDROMINI DAVOLASH BO'YICHA YANGI IMKONIYATLAR //Бюллетень студентов нового Узбекистана. – 2023. – Т. 1. – №. 6 Part 2. – С. 106-109.

18. Shopulotov S. et al. GIPERAKTIV QOVUQ SINDROMINI TASHXISLASHDA ZAMONAVIY YONDASHUVLAR //Молодые ученые. – 2023. – Т. 1. – №. 9. – С. 38-42.

19. Shopulotov S. et al. SIYDIK TUTOLMASLIK MUAMMOSI //Центральноазиатский журнал образования и инноваций. – 2023. – Т. 1. – №. 6 Part 6. – С. 44-48.

20. Yakubovich S. I., Abdumuminovna S. Z., Batiobekovna A. N. Analysis of the Effectiveness and Errors of Medical Care //Eurasian Journal of Research, Development and Innovation. – 2023. – Т. 20. – С. 1-4.

21. Yakubovich S. I. et al. Morphofunctional Changes of the Adrenals at Chronic Exposure to Magnesium Chlorate //Central Asian Journal of Medical and Natural Science. – 2022. – Т. 3. – №. 6. – С. 178-185.

22. Рустамов М. И. и др. Методы лечения эпителиального копчикового хода //European Research. – 2018. – С. 136-140.

23. Shernazarov Farrukh ORGANIZATION OF DIGITALIZED MEDICINE AND HEALTH ACADEMY AND ITS SIGNIFICANCE IN MEDICINE // SAI. 2023. №Special Issue 8. URL: https://cyberleninka.ru/article/n/organization-of-digitalized-medicine-and-health-academy-and-its-significance-in-medicine (дата обращения: 20.11.2023).