

SPREAD OF NON-CARIOUS DISEASES IN THE FERGANA VALLEY

Usmonov Baxtiyorjon Arobidin o'g'li

ASMI, Head of department of therapeutical dentistry

Tulanboev Muslimbek Mannobjon og'li

Resident of department of therapeutical dentistry.

<https://doi.org/10.5281/zenodo.14715914>

Abstract. The article examines the features of the spread of non-carious lesions of hard dental tissues depending on the sex and age of patients, identifies the most common types of lesions, and proposes primary prevention measures.

Key words: non-carious lesions of hard dental tissues, pathological abrasion, wedge-shaped defects, gender characteristics.

Аннотация. В статье рассмотрены особенности распространения некариозных поражений твердых тканей зубов в зависимости от пола и возраста пациентов, выделены наиболее распространенные типы поражений, предложены мероприятия первичной профилактики заболеваемости.

Ключевые слова: некариозные поражения твердых тканей зубов, патологическая стираемость, клиновидные дефекты, гендерные особенности.

Izoh. Maqolada bemorlarning jinsi va yoshiga qarab qattiq tish to'qimalarining karioz bo'lmagan lezyonlarining tarqalish xususiyatlari ko'rib chiqiladi, eng ko'p uchraydigan lezyon turlari aniqlanadi va birlamchi profilaktika choralari taklif etiladi.

Kalit so'zlar: qattiq tish to'qimalarining karioz bo'lmagan shikastlanishlari, patologik ishqalanish, xanjar shaklidagi nuqsonlar, jins xususiyatlari.

Diseases of hard dental tissues are widespread among the population of Russia and other countries of the world. Non-carious lesions of hard dental tissues are a large group of dental pathologies, including many nosological forms, similar to each other in the picture of manifestation and genesis [1, 3, 4, 7, 8].

Average prevalence rates of non-carious lesions range from 11% to 22% in individuals not employed in professionally hazardous industries. At the same time, increased enamel abrasion in the structure of diseases varies from 9.3% to 19.0%. Erosion - 0.8-3.6%. Wedge-shaped defects - 2.5-6.0%, various forms of hypoplasia - 1.8-5%. Fluorosis affects from 31.0% to 91.0% of the population in various endemic, unfavorable areas [1, 2, 5, 6]. It is important to take into account the fact that a number of areas of the Fergana Valley (FD) are endemic in terms of fluorine content in natural sources. Thus, the amount of fluorine in drinking water in the city of Kuva averages 3.8 g / l, in the Yazyavan district this figure approaches 4.9 g / l, which indicates a high level of free fluorine saturation [2].

Objective of the work. To determine the prevalence of non-carious lesions of hard dental tissues among the adult population of the Fergana region.

Research methodology. When drawing up the research program, classical and modern methods of social and hygienic research were used, followed by statistical processing and analysis of the obtained data.

In accordance with the objectives, the object of the study was consumers of dental services in Fergana, observed in a dental clinic in the period from 2022 to 2023. Reporting documentation, including 266 outpatient patient records, was subject to dynamic analysis.

The following methods were used in the study: statistical, information and analytical, comparative analysis. During the study, the data obtained in the study were grouped, relative indicators and their errors were calculated, t, Kruskal-Wallis and χ^2 criteria, a comparative assessment and determination of the reliability of the difference in indicators. The processing of the obtained material was carried out using the MSOffice software package.

A comparative analysis of the distribution frequency of the assessed indicators was carried out using the Statistica 6.0 statistical software package. The study was conducted in two stages. First, all patients were divided into age and gender groups to determine the frequency of visits to a general dentist and assess the level of dental health among the adult population of the Federal District as a whole. Then, at the second stage, patients with diagnoses related to the group of diseases of non-carious lesions of hard dental tissues were identified from the total number of patients, and a comparative analysis was performed to identify the most common nosological forms in this region.

Results of the study and their discussion. As the study showed, there were approximately equal numbers of men and women in the group of patients (47.61% and 54.47%, respectively). In general, the patients were predominantly aged 29–50 years, (37.95 ± 2.18)%.

At the second stage of the study, when assessing the prevalence of "non-carious lesions of hard dental tissues", a group of 97 people was identified, which amounted to (20.58 ± 1.90)% of the general population. In this group, men significantly predominated (62.90% and 38.14%, respectively) ($p < 0.01$), which may be due to a more active lifestyle in men, a lower level of attention to their health and appearance in general, which is based on gender characteristics and the presence of bad habits (alcoholism, smoking). In the structure of "non-carious lesions of hard dental tissues" in patients, pathological abrasion (41.30 ± 4.72) % and wedge-shaped defects (24.88 ± 4.33)% (Fig.) prevailed, which correlates with the age of patients, since only the adult population was examined, and accordingly, the level of dental lesions occurring during the period of follicular tissue genesis was relatively low. Nevertheless, the incidence of fluorosis among the adult population of FD was (8.89 ± 2.77) %.

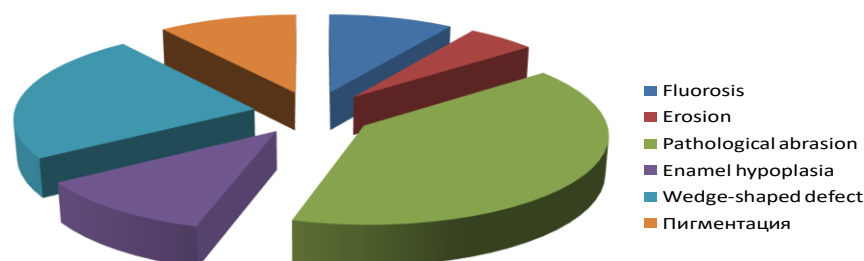


Fig. Structure of non-carious lesions of hard dental tissues



When assessing the reliability of the difference in indicators using the Student's t-test (with Bonferroni correction), a reliable predominance of pathological abrasion over wedge-shaped defects ($p < 0.05$) and other types of non-carious lesions ($p < 0.01$) was noted. Similar results were obtained using the Kruskal-Wallis test for comparing several groups ($p < 0.05$) and the χ^2 criterion ($p < 0.01$), including in the context of the relationship between the prevalence of various types of non-carious lesions and age. The highest frequency of non-carious lesions of hard dental tissues was observed at the age of 39-60 years ($55.72 \pm 5.02\%$), the lowest - at the age of 18-20 years, ($6.16 \pm 2.30\%$) ($p < 0.01$). In individuals aged 21-29, 30-39, and 60 years and older, the prevalence of non-carious lesions did not differ significantly, ranging from ($09.39 \pm 3.10\%$) to ($16.50 \pm 3.58\%$).

Conclusions. As the study showed, the prevalence of non-carious lesions of dental tissues was ($20.17 \pm 1.84\%$), which is 1/4 of all therapeutic pathologies. Therefore, when providing dental care to the population, it is necessary to take this layer of diseases into account, as well as pay great attention to prevention. In addition, it is necessary to pay attention to regional characteristics, in particular the microelement composition of water and soil.

Only comprehensive dental educational work will help to activate auditory and visual motivation, improve hygiene skills and theoretical knowledge about the level of dental health. In order to optimize and rationally use motivational methods of oral hygiene, first of all, it is necessary to create a theoretical foundation, strive to develop cognitive activity in the population, arouse interest and desire to receive information, as well as instill manual skills, maintain and improve hygiene knowledge and abilities. For comprehensive educational work, it is necessary to resort to the help of the media (advertisement of new hygiene products, reminders on how to brush your teeth correctly, when to change your toothbrush, how often you need to go to the dentist).

Literature:

1. Borisova E.G., Lepekhina L.I., Kumirova O.A. et al. Non-carious lesions of dental tissues // International Journal of Applied and Fundamental Research. - 2014. - No. 3. - P. 149-150.
2. Dmitrieva K.M. Endemic diseases of dental dystonia // Amur Research Journal. - 2014. - No. 4. - P. 50.
3. Dmitrienko S.V., Chizhikova T.S., Solomatina E.S. et al. Optimization of methods of medical examination of students with pathology of hard dental tissues and periodontal diseases // Bulletin of the Volgograd State Medical University. - 2012. - No. 1. - P. 73-75.
4. Kovalenko I.P. Efficiency of treatment of hyperesthesia of hard dental tissues by the remineralization method // Modern dentistry. - 2013. - No. 2. - P. 85-88.
5. Lutskaya I.K., Marchenko E.I., Chukhrai I.G. Aesthetic filling of non-carious defects of hard dental tissues // Modern dentistry. - 2012. - No. 1. - P. 29-31.
6. Okushko V.R., Ryabtseva I.M. Dental fluorosis - a marker of intoxication hypoplasia // Modern dentistry. - 2016. - No. 1. - P. 40-43.
7. Oskolsky G.I., Ushinsky I.D., Zagorodnyaya E.B. et al. Dental status of the population of the Far Eastern region // Endodontics Today. - 2012. - No. 3. - P. 10-14.

8. Chizhikova T.S., Dmitrienko S.V., Solomatina E.S. and others. Characteristics of dispensary groups of students with major dental diseases // Bulletin of the Volgograd State Medical University. - 2012. - No. 3. - P. 64-66.

