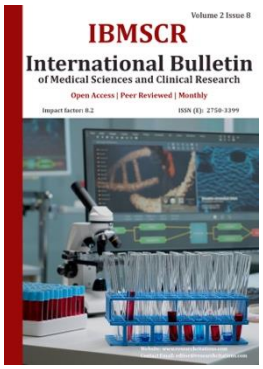

TREATMENT AND PREVENTION MEASURES FOR NICOTINE PALATINE LEUKOPLAKIA CAUSED BY TOBACCO EXPOSURE IN MILITARY PERSONNEL.

Sharipova Gulnihol Idievna
sharipova.gulnihol@bsmi.uz
https://orcid.org/0009-0009-0825-0534
Komilova Zamira Abdurashidovna
Bukhara State Medical Institute named after Abu Ali ibn Sino, Uzbekistan
abdurashidovnazamira192@gmail.com
https://orcid.org/0009-0009-9401-9581
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Abstract. Nicotine stomatitis is a protective reaction of the oral mucosa to the long-term toxic effects of tobacco smoke when smoking or chewing. This type of stomatitis manifests itself in the oral cavity in the form of single or multiple foci of excessive keratinization of the epithelium (whitish films) against the background of chronic inflamed mucosa.

Key words: Tobacco, oral cavity, smoking, gingivitis, toothpastes.

When a dentist insists on stopping such a bad habit as smoking, it is connected not only with plaque on the teeth (from gray to brown-black color) and with an unpleasant smell from the mouth. Unfortunately, all medical restoration works in smoking patients quickly lose their freshness, shine and acquire a dull, gray appearance. But a more serious problem is the occurrence of nicotine stomatitis (smoker's leukoplakia) in smokers. Pathological abrasion of teeth is one of the most pressing dental problems of our time[2,5].

Nicotine stomatitis is a protective reaction of the oral mucosa to the long-term toxic effects of tobacco smoke when smoking or chewing. This type of stomatitis manifests itself in the oral cavity in the form of single or multiple foci of excessive keratinization of the epithelium (whitish films) against the background of chronic inflamed mucosa[7].

As a rule, patients with nicotine stomatitis do not present any complaints. Sometimes they may notice a slight cosmetic effect in the form of white stripes or circles on the mucous membrane of the cheeks and tongue, roughness and dryness of the mucous membrane of the oral cavity, decreased taste sensitivity. Less common are complaints of burning of the mucous membrane when eating spicy or hot food[3].

When examining the oral cavity, the dentist discovers whitish films of various shapes that are not removed by scraping with an instrument. The favorite place for the films to be localized are areas of the mucous membrane that are constantly irritated by smoke, namely: the hard palate, the anterior part of the soft palate, the corners of the mouth, and the back of the tongue.

Often, lesions can be seen as white stripes on the mucous membrane of the cheeks along the line of the teeth. These stripes rise slightly above the level of the mucous membrane and are most often intermittent due to constant biting of the raised areas. The patient does not feel pain, biting the mucous membrane of the cheeks over time becomes just a habit and is observed in most patients. Against the background of white films, soft reddish tubercles with pinpoint openings of the excretory ducts of the salivary glands are often visible[3,7].

Diagnosis of nicotine stomatitis is not difficult for a specialist, but the success of treatment largely depends on the patient. If smoking is eliminated as the main cause of the

disease, then changes in the oral cavity are easily reversible with treatment. If a long-term irritant is not eliminated, the disease can transform into a malignant form. Tobacco smoke contains nicotine, tar deposits in large quantities, hydrocyanic acid, hydrogen sulfide, ammonium, carbon monoxide, phenols. Nicotine itself does not have a significant effect on the mucous membrane of the oral cavity and respiratory tract when smoking, but the purine formed during its destruction is a very dangerous substance that has a pronounced carcinogenic effect. Nicotine stomatitis is an optional precancer and occurs in 13% of patients with various dental diseases[9].

In the treatment of nicotine stomatitis, only the elimination of the bad habit - smoking, proper treatment, sanitation of the oral cavity in general, regular preventive examinations by a dentist give a good result. What is osteopathy in dentistry - read more in the blog of our dentistry [3].

Smokers are 22 times more likely to develop lung cancer (9) during their lifetime than non-smokers. Tobacco smoking is the leading cause of lung cancer, which annually causes more than two thirds of deaths from this disease in the world and claims the lives of about 1.2 million people. There is also a risk of developing lung cancer for non-smokers who are exposed to second-hand smoke at home or at work[2,5].

One in five tobacco smokers develops chronic obstructive pulmonary disease during their lifetime, especially for people who start smoking in childhood or adolescence, as tobacco smoke significantly slows down the growth and development of the lungs. Smokers develop COPD 3-4 times more often than non-smokers. Smoking leads to inflammatory damage and destruction of the walls of the pulmonary vesicles — alveoli and impairs the ability of the lung to inhale oxygen and exhale carbon dioxide. It also causes the accumulation of purulent mucus, resulting in a painful cough and painful, labored breathing. The risk of COPD is also at risk for adults who were exposed to second-hand tobacco smoke in childhood and for this reason often had lower respiratory tract infections[8].

It is known that smoking causes asthma exacerbation in adults, limiting their functional abilities, contributing to disability and increasing the risk of developing severe asthma requiring urgent medical attention. School-age children with smoking parents are exposed to the harmful effects of second-hand tobacco smoke and are at risk of developing and complicating asthma due to inflammatory lesions of the airways supplying the lungs.

All forms of tobacco are harmful, and there is no safe level of tobacco exposure. Cigarette smoking is the most common method of tobacco use worldwide. Other tobacco products include bidi, kretek, cigars, cigarillos, various smokeless tobacco products, roll-up tobacco, pipe and hookah tobacco, as well as more modern tobacco products[3,9].

A significant part of oral diseases is caused by the use of tobacco products (both smoking and smokeless). Both forms of tobacco use are known to cause oral cancer (5). In many countries, only a small percentage of oral cancer patients live longer than five years after diagnosis. Recovery from oral cancer is often accompanied by significant facial deformity and loss of the ability to speak, swallow, or chew.

Tobacco use also increases the risk of periodontitis, a chronic inflammatory disease that affects the gums and destroys the tissues of the jaw, leading to tooth loss. Smoking tobacco and using smokeless tobacco products disrupt the chemical balance in the oral cavity, activating plaque formation and causing yellowing of teeth, as well as bad breath[3,4].

The use of smokeless tobacco products and tobacco smoking increase the risk of malignant tumors of the head and neck, including cancers of the lip, throat (pharynx and larynx) and esophagus. After surgical removal of the tumor from the larynx, a tracheostomy (7) may be required — dissection of the tissues of the neck and trachea to form a lumen allowing the patient to breathe. Radiation therapy and chemotherapy for throat cancer have extremely severe and adverse effects on the body, including loss of taste sensations, decreased salivation and an increase in the volume of mucus in the oral cavity, as a result of which eating becomes painful and sometimes impossible[5].

Tobacco use is known to cause more than 10 other types of cancer. With each puff, toxic and carcinogenic substances enter the body from a cigarette. According to available data, at least 70 of the large number of chemicals contained in tobacco smoke cause cancer. Smokers have a much higher risk of developing acute myeloid leukemia; cancer of the nasal cavity and paranasal sinuses (8a); cancer of the colon and rectum (8b), kidney (8c), liver, pancreas (8d), stomach (8e) or ovaries; as well as cancer of the lower urinary tract (including the bladder, ureter, and renal pelvis).

Recent studies have demonstrated a link between tobacco smoking and an increased risk of breast cancer (8f), especially in heavy smokers and women who start smoking before their first pregnancy. It is also known that smoking increases the risk of cervical cancer in women infected with the human papillomavirus. The risk of these cancers usually increases with increasing intensity and duration of smoking due to the accumulated effects of toxic and carcinogenic substances. Smokeless tobacco contains 28 carcinogenic substances that cause cancer of the oral cavity, esophagus and pancreas[3,4].

References:

1.Almas K., Maroof F., Mcallister C, Freeman R. Smoking behaviour and knowledge in high school students in Riyadh and Belfast. II Odontostomat. Trop. - 2002. - Vol. 25. - № 98. - P. 40 - 44.

2.Bendick C, Scheifele C, Reichart P.A. Oral manifestations in 101 Cambodi-ans wit HIV and AIDS. II J. Oral. Pathol. Med. - 2002. - Vol. 31. - № 1. - P. 1 -4.

3.Casiglia J., Woo S.B. A comprehensive review of oral cancer. II Gen. Dent. -2001. - Vol. 49. - № 1. - P. 72 - 82.

4.Faddy M.J., Gullinan M.P., Palmer J.E. et al. Ante-dependence modeling in a longitudinal study of periodontal disease: The effect of age, gender, and smok-ing status. II J. Periodontol. - 2000. - Vol. 71. - № 3. - P. 454 - 459.

5.Sharipova Gulnihol Idiyevna. DISCUSSION OF RESULTS OF PERSONAL STUDIES IN THE USE OFMIL THERAPY IN THE TREATMENT OF TRAUMA TO THE ORAL MUCOSA// European Journal of Molecular medicinevolume 2, No.2, March 2022 Published by ejournals PVT LTDDOI prefix: 10.52325Issued Bimonthly Requirements for the authors.

6.Sharipova Gulnihol Idiyevna. THE EFFECTIVENESS OF THE USE OF MAGNETIC-INFRARED-LASER THERAPY IN TRAUMATIC INJURIES OF ORAL TISSUES IN PRESCHOOL CHILDREN//Academic leadership. ISSN 1533-7812 Vol:21Issue 1

7.Данилевский Н.Ф., Леонтьев В.К., Несин А.Ф., Рахний Ж.И. Заболевания слизистой оболочки полости рта. - М.: Издательство ОАО "Стоматоло¬гия", 2001.-272 с.

8.Кулик И.В., Миргородская Л.В. ВИЧ-инфекция. Проявления в полости рта. Журнал: Институт стоматологии. - 2001. - № 2. - С. 36 - 40.
9.Курение как фактор заболеваний пародонта, кариеса и потери зубов. // Стоматологическое обозрение. - 2003. - № 2. - С. 3 - 4..