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“REMINERALIZING PREVENTION OF DENTAL HARD TISSUES DISEASES IN CHILDREN WITH CLEFT LIP AND PALATE” .

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Abstract: *Protecting the health of the working-age population in the world is one of the most important tasks of medical personnel. At present, “... in the context of the economic distribution of regional resources, the diversity and specificity of technological processes, the raw materials used, equipment, mechanization of automation conditions, as well as the placement of production enterprises on the sites that differ from each other in terms of the types of products received, taking into account the sanitary protection zones of production enterprises that are objects that affect the health of the environment and workers, taking into account the sanitary protection zones of production enterprises that have objects that affect the environment. environment and health, it is necessary to develop and hygienically justify the requirements for the organization of production areas ... ".*

Key words: *Dental caries, risk factors, preventive measures, ecology.*

“РЕМИНЕРАЛИЗИРУЮЩАЯ ПРОФИЛАКТИКА ЗАБОЛЕВАНИЙ ТВЁРДЫХ ТКАНЕЙ ЗУБОВ У ДЕТЕЙ С РАСЩЕЛИНОЙ ВЕРХНЕЙ ГУБЫ И НЁБА” .

Аннотация: *Охрана здоровья трудоспособного населения в мире является одной из важнейших задач медицинского персонала. В настоящее время «...в условиях экономического распределения региональных ресурсов, разнообразия и специфики технологических процессов, используемого сырья, оборудования, механизации условий автоматизации, а также размещения на местах производственных предприятий, отличающихся друг от друга по видам получаемой продукции, с учетом зон санитарной охраны производственных предприятий, являющихся объектами, влияющими на здоровье окружающей среды и рабочих, с учетом зон санитарной охраны производственных предприятий, имеющих объекты, влияющие на окружающую среду и здоровье, необходимо разработать и гигиенически обосновать требования к организации производственных зон...».*

Ключевые слова: *Кариес зубов, факторы риска, лечебно-профилактические мероприятия, экология.*

«YUQORI LAB VA TANGLAY KEMTIGI BOR BOLALARDA TISH QATTIQ TO'QIMALARI KASALLIKLARINI REMINERALIZATSIYALASH PROFILAKTIKASI».

Annotatsiya: *Dunyoda mehnatga layoqatli aholi salomatligini muhofaza qilish tibbiyot xodimlarining eng muhim vazifalaridan biridir. Hozirda“... hududiy resurslarni iqtisodiy taqsimlash sharoitida texnologik jarayonlarning xilma-xilligi va o‘ziga xosligi, foydalaniladigan xomashyo, asbob-uskunalar, avtomatlashtirish sharoitlarini mexanizatsiyalash, shuningdek, ishlab chiqarish korxonalarini ishlab chiqarish korxonalarini ishlab chiqarish korxonalarini ishlab chiqarishdan farq qiluvchi uchastkalarda joylashtirish. atrof-muhit va ishchilarning sog'lig'iga ta'sir etuvchi ob'ektlar bo'lgan ishlab chiqarish korxonalarining sanitariya muhofazasi zonalarini hisobga olgan holda, olingan mahsulotlar turlari bo'yicha bir-biriga ta'sir ko'rsatadigan ob'ektlarga ega bo'lgan sanoat korxonalarining sanitariya muhofazasi zonalarini hisobga olgan holda. atrof-muhit va sog'liqni saqlash, sanoat zonalarini tashkil etishga qo'yiladigan talablarni ishlab chiqish va gigienik jihatdan asoslash zarur ... ".*

Kalit so'zlar: *Tish kariesi, xavf omillari, profilaktika choralari, ekologiya.*

A considerable number of studies, both domestic and foreign, have been devoted to the issues of the influence of adverse factors of the working environment on the organs of the oral cavity of workers [1], which revealed some aspects of the pathogenesis of occupational lesions of the oral cavity and developed appropriate therapeutic and preventive measures. However, little attention is paid to such a problem as non-carious lesions, in particular enamel hypoplasia, which is directly related to the health of children and their psycho-emotional status.

The assessment of the incidence of children with dental caries in areas with different levels of chemical pollution, as well as the development of chemical environmental pollution and dental diseases, is based on clinical and functional indicators of the correlation, as well as on the impact of the harmful effects of pesticides and industrial waste on ante- and postnatal development. teeth of rats in the experiment. Of particular importance is the development of evidence-based, dental, therapeutic and preventive recommendations to reduce the incidence and prevent complications of diseases of hard dental tissues in children.

It is known that the process of enamel formation proceeds in three stages: the stage of enamel secretion and primary mineralization, the stage of enamel maturation, and the stage of final enamel mineralization [4]. The first two stages take place in the prenatal period, the third - in the postnatal period. The impact of a negative factor can lead to a violation of any stage of mineralization, which, in turn, leads to a violation of the development of the tooth structure [5].

Dental caries is the most common chronic disease among children. A special place in the structure of this pathology is occupied by caries of milk teeth. Despite the improvement in the quality and expansion of the volume of preventive and therapeutic measures, the level of intensity and severity of early childhood caries in our country and in the Bukhara region in particular remains at a very high level [1]. One of the

reasons for the high prevalence of this disease lies in the features of the histological structure and condition of the hard tissues of milk teeth in different age periods of the child, which is not taken into account when carrying out therapeutic and preventive measures. Early childhood caries is a complex multifactorial disease. [2]. In 2003, at the sixth congress of the European Association of Pediatric Dentistry, the etiological causes of enamel hypomineralization were divided into five groups [2,3]: exposure to environmental pollutants; the impact of pre-, peri- and neonatal problems; the influence of the content of fluoride ions in water and food; the impact of childhood diseases; the effect of drugs on the child's body.

There are more than a hundred reasons that contribute to the development of a carious process in milk teeth. Of these, the most important are socio-demographic, biological, dietary, hygienic and breastfeeding-related factors. At the same time, the consolidation or weakening of their action in a number of circumstances will determine the occurrence and further development of early childhood caries [6,7].

Thus, the study allows for a comprehensive assessment of the main risk factors for the development of dental caries with its various types. The data obtained make it possible to improve the quality of its conservative treatment and prevention in school-age children. [7].

In order to develop the medical sphere of the country, adapt the medical system to the requirements of world standards, reduce various dental diseases resulting from pesticide poisoning among children, Decree of the President of the Republic of Uzbekistan dated December 7, 2018 No. UP-5590 “On comprehensive measures to radically improve the healthcare system Republic of Uzbekistan” was noted “...increasing the efficiency, quality and universality of medical care in the country, as well as creating a system of medical standardization, introducing high-tech diagnostic and treatment methods, supporting a healthy lifestyle and preventing diseases by creating effective models of patronage services and medical examinations.”

Despite the use of various methods for the prevention and treatment of dental caries, the prevalence of this disease in our country is increasing every year.

Thus, various toxic and chemical substances, in particular, pesticides, mineral fertilizers and other industrial wastes (sulfur dioxide, nitrogen dioxide, aromatic hydrocarbons) pollute environmental objects and through the body of pregnant and lactating mothers, along with changes in the general condition of the body, have an adverse effect on the dentoalveolar system of children, expressed in an increase in dental caries.

In connection with the above, we have set the goal of the work.

The aim of the work was to study the prevalence of caries diseases in the stain stage and superficial dental caries in children and, on this basis, to conduct secondary prevention with the “Dental gel +” gel.

Materials and research methods.

A total of 296 children were examined, of which 22 children aged 13-15 years, 78 children aged 7-12 years of Karaulbazar district, Gijduvan district 41 children aged 13-15 years, 55 children aged 7-12 years, Bukhara district village Madaniyat aged 13-15 years 29 children, aged 7-12 years 71 children. Caries in the stain stage and superficial caries of permanent teeth were found in 144 (48.6%) children. Of these, at the age of 13-15 years, 37 people (25.6%), and at the age of 7-12 years, 107 people (71.8%). It should be noted that patients whose parents did not live in the three districts of the Bukhara region before the birth of the child were not included in the study.

Differences between boys and girls in percentage terms in the incidence of 144 children with caries of permanent teeth in the Karaulbazar district: 22.9% girls and 21.5% boys aged, Gijduvan district 15.2% girls and 19.4% boys, in the Bukhara district of the village Madaniyat 11.8% girls and 9.02% boys. Differences between boys and girls in percentage terms in the incidence of caries of permanent teeth in the first group of Karaulbazar district: out of 64 children - 43.7% girls and 29.7% boys, in Gijduvan district out of 50 children - 34.0% girls and 28% boys , in the Bukhara district of the village of Madaniyat, out of 30 children, 50% are girls and 40% are boys aged 7-12 years. In the second group, there were insignificant, except for the boys of the Gijduvan region, 14.1 girls and 12.5% boys in the Karaulbazar region, 10.0% girls and 28% boys in the Gijduvan region, 3% girls and 7% boys in the Bukhara region of the Madaniyat village. aged 13-15 years.

Questionnaire interviews showed that the past illnesses, the level of hygienic knowledge of oral care and diet in children in the studied rural areas were in Karaulbazar district out of 100 children surveyed 49% follow the diet, in Gijduvan out of 96 children 62%, in Bukhara district 80% out of 100 children in Madaniyat settlement. Pay attention to hygienic oral care in the Karaulbazar district 31%, in the Gijduvan district 46%, in the Bukhara district in the village of Madaniyat 65%.

It was found that due to poor hygiene care and non-compliance with the diet in the Karaulbazar district, children significantly more often complain of discoloration in their teeth compared to the control information - white spots 46.8% ± 4.98 children, yellow 16.8% ±3.67 and brown spots in the teeth of 26.4% ±4.39 children. In the Gijduvan region, children complain of discoloration in their teeth - white spots in the teeth of 35% ± 4.91 children, yellow spots in the teeth of 17.5% ± 3.9 children and brown spots in the teeth of 15.6% ± 3.71 of children, in the Bukhara district of the Madaniyat village complain of discoloration in the teeth - white spots in the teeth of 15.2% ± 3.57 children, yellow spots in the teeth of 9.1% ± 2.86 children and brown spots in the teeth of 6.1 %± 2.37 children.

These data indicate the highest frequency of caries in the stain stage and superficial caries of teeth in the Karaulbazar district.

Results. As is known, at present there is a large arsenal of means and methods for the treatment and prevention of intoxication of the body with pesticides and other chemicals [4]. However, an analysis of recent literature data has shown [4] that the

most promising in terms of greater pathogenetic effect on the body when exposed to organochlorine and phosphorus pesticides is the use of ascorbic acid, and in case of intoxication with sulfur dioxide and nitrogen, calcium glycerophosphate in combination with ascorbic acid.

Based on these considerations and based on the data of our own field and experimental studies, we have developed a new therapeutic and prophylactic drug "Dental gel +".

The expediency of including in the composition of the new therapeutic and prophylactic drug “Dental gel+” developed by us is determined by the following components included in its composition [5]:

- The use of ascorbic acid and calcium glycerophosphate is due to the fact that they activate redox processes in the body, have a positive effect on metabolic processes and morphological and functional indicators in tissues, on metabolically important links of carbon, protein, lipid and, most importantly, energy metabolism, due to which it helps to accelerate the excretion of harmful chemicals from the body [5]. Calcium glycerophosphate is a regulator of calcium-phosphorus metabolism, has a tonic, tonic effect, stimulates metabolic processes in the body.

- Sodium fluoride and sodium monofluorophosphate in the composition of the gel are natural fluorine compounds, fluorides. They have a powerful antibacterial and regenerating effect. The active substance sodium fluoride reduces the ability of bacteria to convert sugar into acid, which destroys enamel. Promote remineralization (restoration of the mineral composition) of tooth enamel, keeping calcium directly on its surface and creating a calcium "depot"; reduce the number of bacteria in the oral cavity, that is, prevent the appearance and development of caries due to the fact that the pH of the oral cavity becomes less acidic; reduce the rate the formation of soft plaque, while maintaining the smoothness of the enamel and fresh breath.

- Carbomer is a gel-like substance that covers the teeth with a protective film, prevents the deposition of soft plaque and prevents the formation of tartar, due to the acidic reaction of the composition. The clinical effectiveness of rinsing the oral cavity with “Dental gel +” is due to the formation of a protective film on the teeth and gum mucosa and thus preventing the harmful effects of acid plaque and toxic drugs in the mouth from the environment.

In this regard, it was undertaken to study the effectiveness of the use of calcium glycerophosphate and ascorbic acid in the complex treatment of dental caries in children of Karaulbazar, Gijduvan districts and Bukhara district of Madaniyat settlement.

The methodology for these activities was as follows.

Teeth application. After brushing the teeth with paste, the teeth are covered for 3-5 minutes with tampons moistened with a 10% calcium gluconate solution, then for 5-6 minutes with rollers moistened with the Dental gel + preparation. For one course, 3-6 procedures were performed every other day 3-4 times a year.

Observations were carried out on two groups of patients with superficial dental caries in children aged 7-15 years. Both groups of children received complex treatment including local and general measures. General treatment was prescribed depending on the general condition of the body of sick children after consultation with pediatricians.

The effectiveness of the treatment of patients was assessed by the change in subjective sensations, clinical symptoms, data of the hygienic index (the state of hygienic care for the oral cavity), acid solubility of tooth enamel.

Thus, the use of the proposed treatment-and-prophylactic complex led to a significant decrease in the hygienic index of the oral cavity in children aged 7-12 and 13-15 years old living in the Karaulbazar district by 19%, children living in the Gijduvan district by 20% and children 7-12 and 13- 15 years old living in the village of Madaniyat, Bukhara region by 21%, and there was a significant increase in acid resistance of enamel in children 7-12 years old in Karaulbazar region by 12%, in children 13-15 years old by 14%, in children 7-12 years old in Gijduvan region by 18 %, in children aged 13-15 by 21% and in children aged 7-12 living in the village of Madaniyat, Bukhara district, by 22%.

Thus, the results of the studies carried out testify to the significant effectiveness of topical application of the drug "Dental gel +" in the complex treatment of caries in the stage of spots and superficial caries in comparison with generally accepted traditional methods of treatment. Allergic reactions and side effects of these drugs did not cause.

Conclusions.

1. Local application of a therapeutic and prophylactic drug led to a decrease in the hygienic index in the examined children. 2. There was an increase in the acid resistance of enamel in children.

2. The use of a therapeutic and prophylactic drug in the complex treatment of dental caries in the stain stage and superficial caries has been an effective method of treatment that can be widely used in dentistry.

3. Summing up the data on the features of the prevention and treatment of dental diseases in children, we can conclude that for the prevention and treatment of lesions of hard dental tissues in children under the influence of adverse environmental factors on the body, the complex of therapeutic and prophylactic effects recommended by us (general and local), as the most environmentally friendly and harmless therapeutic and prophylactic agents.

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