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EXOGENOUS DRUG PREVENTION OF DENTAL CARIES IN PRIMARY SCHOOL CHILDREN WITH HIGH CARIES ACTIVITY

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Summary : to determine the effectiveness of the remineralizing prevention of dental caries in children (6-7 years) with different degree of caries activity. **Materials and methods:** for the determination of the role of the remineralizing therapy of early forms of caries was examined 146 school children of the primary classes in the town Uzhhorod, including 63 (46.9%) were boys and 83 (53.1%) were girls, whom was conducted the remineralizing hard tooth tissue therapy by using Biflyuorid-12 (VOCO, Germany) and was defined efficiency after 12 months. **Research results and its discussions:** the article represents clinical study of high efficiency remineralizing preventive treatment of dental hard tissues in children of 6-7 years old/ After 12 months, in all examined children prevailed satisfactory level of hygiene, namely 52.5% in boys and 49.7% in girls; good hygiene was 37.7% in boys and 45.4% in girls. The increase of caries intensity was in the main group P = 4,8-13,3 = -8.5; and in the children of the control group of the same age was P = 14,5-13,1 = 1,4. That is, in children of the clinical group after 12 months the reduction of caries intensity was 8.5 in the age group 6-7 (7-8) years.

Key words : children, prevention, caries, the effectiveness of the remineralizing prevention.

Introduction: The high occurrence of caries in permanent teeth of children in Ukraine [1, 2, 3] shows the problem of prevention as a major problem in pediatric dentistry. Given the fact that the teeth after eruption are the most susceptible to caries [2, 8] is the particular relevance for the searching of new approaches for the creation of programs to prevent dental caries of permanent teeth, especially at the stage of immature enamel [6, 7].

Caries process on the teeth in the first years after their eruption often develops in fissure and natural hollows on the chewing surfaces of permanent teeth [6, 7], because it is explained by the low mineralization of the specified surface in this period and the complexity of architectonics of occlusal surfaces, creating unfavorable conditions for their cleaning and contributes to the fissure caries [4, 5].

Whereas the eruption of the first permanent molars and the state of unfinished mineralization coincides with the period of high impact of stress from the adaptation of the child to school that reduce non-specific resistance of the body, the conduction of the preventive measures during this period greatly reduce the likelihood of carious affections in the future.

The objective of the research: to determine the effectiveness of the remineralizing prevention of dental caries in

children (6-7 years) with different degree of caries activity.

Materials and methods: for the determination of the role of the remineralizing therapy of early forms of caries was examined 146 school children of the primary classes in the town Uzhhorod, including 63 (46.9%) were boys and 83 (53.1%) were girls.

Remineralizing therapy of the hard tissues of the teeth was conducted by using Biflyuoryd-12 (VOCO, Germany) and aimed in double varnish coating of Biflyuoryd-12, VOCO of all teeth with an interval of 6 months after the thorough cleaning of toothpaste Clint (VOCO, Germany). The pressurization of tooth fissures was made by fissure sealants of light curing according to the screenings. Control of pressurization was carried out during the year.

Treatment of caries and complicated caries was carried out according to the standards of dental care for children.

The restoration of the lost hard tooth tissues was carried out by glass ionomeric and composite materials, according to the indications for their usage, the advantage was given to compomeric materials in temporary teeth (Twinky Star, VOCO, Germany) and composite nano filling materials Polofil Supra (VOCO, Germany) for the chewing group of teeth and Amarys (VOCO, Germany) for the front group of teeth.

The control group consisted of 90 children of analogical age, whom did not carry out remineralizing therapy and pressurization of shapes.

Results and its discussions. The results of occurrence and intensity of caries in the examined children of the clinical group. The occurrence of caries in the main group was– 95,3±3,2, in the control group was– 94,1±3,7.

At primary examination prevailed bad level of hygiene (57,4% in boys and 45,9% in girls); in 27,2% of boys and in 22,2% of girls the level of hygiene was very bad. For the improving the level of hygiene were applied group learning methods (narration, dialogue, repeating movements), individual training (instructor with 5 children), theatrical performances for group involving favourite cartoon characters. The control of adherence to the skills of individual hygiene was carried out four times, the first two on the models, the third and the fourth - in the dental office individually with visualization of plaque by using the method of color «Finder Plaque» (Curaprox, Switzerland), which clearly indicates the shortcomings of hygiene care of the oral cavity and the ways of their elimination.

After 12 months was conducted the examinations again and was defined the increase of caries intensity and the index of caries reduction. Children of primary school age, 6- 7 years (7-8 years) increase of caries intensity composed in the main groups, P = 4,8-13,3 = -8.5; and the children of the control group of analogical age P = 14,5-13,1 = 1,4. That is, the children of clinical group after 12 months, the reduction of caries intensity was 8.5 in the age group 6-7 (7-8) years.

After 12 month, in all examined children prevailed satisfactory level of hygiene, namely in 52.5% in boys and 49.7% in girls; good hygiene was 37.7% in boys and 45.4% in girls. A small percentage of poor hygiene was diagnosed in boys – 9.8% and 4.9% in girls. This can be explained by the absence of participation of parents in teaching children to improve their hygiene, which plays a significant role.

Conclusions. The problem of high prevalence of caries of deciduous teeth evidences about caries genetic situation in the oral cavity of children during the eruption of the first permanent molars that is complicated by the reaction of the microorganism to the change of living conditions and the start of the first grade of primary school is a form of stress requires specific planned remineralizing prevention. The usage of the proposed prevention schemes based on adaptation factor of children before school age will prevent the development of caries in permanent molars of the 1st and the 2nd degree of activity.

The aim of the study was focused topographo-anatomical justification of raising and mobilization of angiosomal temporal grafts, improving of preparing methods of surface and deep temporal fascias, minimizing the possibility of traumatization of fronto-temporal branch of the facial nerve.

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