

EARLY METHODS OF PREVENTION OF CARIES IN CHILDREN'S TEETH

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ABSTRACT

This article explains the necessity of early prevention of dental caries in children. the most effective methods of prevention of dental caries are beginning hygiene care and respect for the recommendations dentist since the first teeth. it is shown that the use of conservative therapy is very effective in the treatment of early forms of dental caries.

Keywords: prevention of caries, macula cariosa, conservative treatment

INTRODUCTION

Treatment of dental caries and its complications is a complex psychological and practical task for both the child and his parents, as well as for dentists. Therefore, it is most important and expedient to identify carious lesions in the early stages, in the treatment of which non-surgical methods are used (interceptive treatment). Early diagnosis of the enamel demineralization process allows the use of methods that promote remineralization. Therapy should be comprehensive and include both general and local interventions.

METHODOLOGY

According to recent studies, there is a tendency to an increase in the prevalence and intensity of dental caries in children [1]. It is alarming that the incidence of caries in young children (from 1 to 3 years) has significantly (2.5-3 times) increased. The prevalence of caries by 4 years in different regions ranges from 20 to 80%. [12].

According to a number of authors, this is largely due to an increase in the frequency of pregnancy pathology, a genetic predisposition to the incidence of caries, a deterioration in the environmental situation, which results in a decrease in the overall resistance of the child's body [2, 3]. The forced transfer of the infant from natural feeding to artificial feeding, which entails overstrain of adaptation and immunity mechanisms, and is a serious problem for his immature physiological systems, has an extremely negative effect on the state of the child's dentition. A change in the nature of feeding leads to a more rapid increase in mass-growth

indicators and as a result - to the redistribution of calcium in the body not in favor of the teeth [2, 3].

The acceleration of the physical development of children leads to the early eruption of both temporary and permanent teeth. The enamel of the teeth "does not have time" to be fully saturated with macro- and microelements, and after eruption, teeth that are at the stage of structural and functional immaturity are highly susceptible to the aggressive effects of cariogenic factors [3, 4]. Due to the fact that the susceptibility of enamel to the effects of acids during the period of incomplete mineralization is the greatest, in the first 2-3 years after eruption there is a high prevalence of focal demineralization, the likelihood of which increases with insufficient hygienic care of the oral cavity and consumption of large amounts of carbohydrates [4, 5].

Since the initial stage of dental caries is reversible, there is no doubt the importance of its timely prevention and treatment [5]. The negative influence of these factors is aggravated by the extremely low level of oral hygiene among a large part of the population of our republic, especially in childhood.

The period of physiological maturation (mineralization) of the enamel can take from 2 to 5 years, and throughout the entire period of mineral maturation (especially during the first year after eruption), the child's teeth need careful and effective care.

With caries of early childhood, temporary teeth are affected almost immediately after their eruption. The first carious lesions are usually found on the vestibular surface of the maxillary incisors in the cervical region in the form of chalky areas (focal demineralization). These lesions very quickly (in 2-3 months) acquire a light yellow color, then carious defects appear in this place. The carious process is characterized by the rapidity of the course, spreading in width (planar caries), multiple lesions of the teeth in the order of their eruption (except for the incisors of the lower jaw). A rare defeat of the lower incisors in this pathology is explained by the better self-cleaning capabilities (due to the position of the tongue) and abundant saliva washing [5, 6].

The accumulation of soft bacterial plaque on the surface of the teeth interferes with the process of physiological maturation of the enamel of deciduous teeth.

In a study conducted with the participation of 35 children aged 1 to 3 years, we carried out the treatment of caries in the stage

chalky spots using the gel "R.o.c.S. MedicalMinerals ". Clinical examination of the oral cavity was carried out according to the standard scheme with filling in an individual card. The intensity of demineralization in case of caries was assessed by

staining chalky spots with a 2% solution of methylene blue using a 10-point Axamit scale.

To assess the hygienic state of the oral cavity, an index was used to assess plaque in young children [6]. In addition, the presence or absence of catarrhal gingivitis was determined visually.

According to the indications, they were assigned the following complex of conservative therapeutic and prophylactic measures:

1. Improving the hygienic state of the oral cavity.
2. Normalization of the nature and diet (elimination of the carbohydrate factor).
3. Local remineralizing therapy using R.o.c.S. gel. MedicalMinerals (at home).
4. Dispensary observation.

Educating parents of young patients on the principles of oral hygiene and how to use the highly adhesive gel “R.o.c.S. MedicalMinerals ”took place in a dental office; the application of the gel was carried out at home. After the evening daily hygiene, the little patients were applied to their teeth with another brush, rubbed in and left overnight; at the end of the procedure, it was recommended to spit out the remains of the gel without rinsing the oral cavity. For hygienic care during the treatment period, a fluoride-free children's toothpaste “RocSbaby, linden scent” was recommended. On control examinations every month throughout the year, the areas of foci of demineralization of the enamel of deciduous teeth were assessed.

RESULTS AND DISCUSSIONS

During a clinical examination of the oral cavity of patients a month after the prescribed complex of conservative therapeutic and prophylactic measures, we noted the absence of an increase in new carious cavities and foci of demineralization; on the existing chalky spots, the brilliance was restored, and a positive symptom of the probe sliding was observed.

Before the study, chalky spots, when stained with a 2% solution of methylene blue, turned dark blue (from 6 to 9 points), after a month of preventive measures, chalky spots remained, but no staining occurred (0 points). Among other positive changes, it should be noted disappearance of signs of catarrhal gingivitis and satisfactory hygiene oral cavity in all patients.

As a result of the treatment, restoration of the structure of the enamel of deciduous teeth in all examined children was noted. Thus, the use of the remineralizing gel “R.o.c.S. MedicalMinerals ”for the treatment of decay in the chalky stage of deciduous teeth is an effective and safe method. As a result of the use

of the gel, enamel is saturated with calcium, which contributes to the remineralization of teeth and an increase in their resistance to the action of cariogenic factors. In addition, strict adherence to oral hygiene is the key to successful treatment of caries in the chalky spot stage. The study showed a high level of effectiveness of the proposed method and was highly appreciated by the parents of our patients.

Raising parents' awareness of new methods of treatment and prevention of dental caries in babies can help to increase the level of timely diagnosis of dental diseases in young children.

CONCLUSION

Prevention of dental caries in children is the key to dental health for a lifetime. Competent use of special children's oral hygiene products will help form a child's motivation to brush their teeth from the first years of life. Combination of remineralizing and antimicrobial action in R.o.c.S. MedicalMinerals "reduces the number of visits to the dental office in our proposed treatment scheme, which greatly facilitates its implementation in young children.

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