

CARIES AFFECTIVENESS AND HYGIENE LEVEL IN CHILDREN

Roli

Fergana Medical Institute of Public Health

Annotation: Among various dental diseases, caries ranks first in prevalence. In many cases, caries occurs in early childhood; baby teeth are also affected by caries. Of course, regular oral care and removing plaque with a toothbrush helps remove metabolic products of microorganisms that increase the permeability of the enamel, leading to its demineralization. Regular brushing of teeth accelerates the process of physiological maturation of hard tissues, increasing their resistance[1,2,3]. However, only rational and proper dental care cannot solve the problem of preventing dental caries.

Key words: Caries, oral hygiene, gingivitis, infectious diseases, periodontitis, circular (or “bottle”) caries, dentistry.

INTRODUCTION.

The term caries literally means “rotting.” This term denoted an inflammatory disease of the bone marrow (osteomyelitis). Without serious etiological, morphological and clinical similarity of the processes, this term began to be called a disease of the hard tissues of the tooth, the external manifestation of which is the destruction of the enamel and dentin of the tooth[4].

Dental caries is one of the most common diseases among the population of various geographical zones and countries of the world, which can be explained by the extreme versatility of the problem, the complexity of its relationships with the influence of social and external factors that significantly change conditions and increase the intensity and prevalence of damage.

In recent years, scientific research and practical activities in the field of developing and creating conditions for influencing directly the pathogenetic mechanisms of the carious process have given new impetus to the development and improvement of the prevention of dental diseases[5,6]. Prevention of caries is most effective during the period of growth and development of temporary and permanent teeth. However, during the antenatal period and in the early period of child development, the problem of primary prevention is least studied.

Relevance of the problem. The problem of caries in its relevance occupies a dominant place in dentistry; The incidence of caries is one of the leading indicators of the general dental health of the population. Moreover, the prevalence of caries and its complications in young children continues to increase, which is increasingly attracting the attention of researchers[7,8]. Medium and high levels of intensity of dental caries require dentists to focus on improving preventive care for the population.

It is known that the occurrence of dental caries is promoted by risk factors, which include insufficient fluoride content in drinking water, adverse effects during antenatal development, such as pathologies of pregnancy, infectious diseases of a pregnant woman, factors acting after birth, for example, violations of feeding and nutrition of the child, dental plaque, decreased pH of oral fluid and much more [9,10]. One of the causes of dental caries is the

consumption of carbohydrates between meals and at night, as a result of which the teeth are exposed to prolonged exposure to acids formed under the influence of oral microflora.

In this regard, the incidence of dental caries in children, known as circular (or “bottle”) caries, is increasing [11].

Of particular concern is the occurrence of this pathology in children in the first years of life, since at this age not only the formation of the child’s dental system occurs, but also the formation of caries resistance of the enamel.

As a rule, the resulting carious process is characterized by a multiplicity of lesions and a destructive, rapidly progressing course. Caries that affects the entire neck of the tooth can lead to complications such as fracture of the tooth crown, the occurrence of pulpitis and periodontitis. The consequence of this is the risk of early loss of a group of teeth, which subsequently leads to the formation of dental anomalies[18].

In connection with the above, the problem of the development of caries and its complications is especially relevant in children of the first years of life and is of great medical and social importance.

However, at present, circular caries remains poorly studied, since the treatment of children aged 0 to 3 years is associated with the presence of specific difficulties due to the psycho-emotional characteristics of behavior at this age, as well as due to the anatomical and physiological features of the structure and insufficient mineralization of the hard tissues of temporary teeth. The enamel of erupted teeth goes through a stage of “maturation” with the participation of saliva (in particular, the mineral substances contained in saliva).

The usefulness of the structure of hard dental tissues in children 7-10 years of age is largely determined by mineralization processes and depends on the state of elemental metabolism.

Therefore, for the full formation of teeth and the prevention of the development of oral diseases, normal elemental status is extremely important, i.e., sufficient content in the child’s body of all essential (vital) elements - calcium, phosphorus, manganese, chromium, etc. It has been established that the elemental composition of the body can be judged with sufficient certainty by the content of individual macro- and microelements in biosubstrates - blood, urine, saliva, hair, etc.

Data have also been accumulated indicating that the content of chemical elements in hair reflects the elemental status of the body as a whole and that the results of hair analysis are an informative integral indicator of mineral metabolism (normally and in pathology) in the human body [5].

Thus, the etiology and pathogenesis of circular caries (especially in children of the first years of life) remain insufficiently studied. There is practically no information about the role of imbalance of macro- and microelements in the mechanism of development of dental caries. This determines the relevance of this topic and served as the basis for this study.

- Oral hygiene plays an important role in the prevention of diseases such as caries, gingivitis, and periodontitis[6]. Timely removal of plaque not only stops the carious process, but also leads to the cure of gingivitis. The nature of a person's diet has a great influence on the condition of teeth. Prevention of caries includes correction of eating habits. To do this, it is important to follow several recommendations:
- reduce the amount of sweets and flour products consumed;
- select the menu so that the balance of fats, proteins and carbohydrates corresponds to age and lifestyle;
- saturate the body with all the necessary vitamins and microelements, if necessary, take multivitamin complexes;
- introduce raw vegetables into your daily diet, which will allow you to naturally clean your teeth while eating;
- eat fish and seafood at least once every 3 days to get phosphorus and vitamin D;
- introduce fermented milk products into the menu, which saturate the body with calcium;
- give up high-calorie sweet snacks;
- chew food thoroughly;
- rinse your mouth after eating or use chewing gum to clean your teeth and normalize the acidity in your mouth[7].

The purpose of the study is to study the prevalence and intensity of dental caries among children aged 7-9 years of secondary school.

Research methods – Dental and hygienic examination was carried out in secondary school No. 38 in Fergana. A total of 114 children aged 7-9 years were examined, of which 59 were boys, 55 were girls. The prevalence of dental pathology was assessed as a percentage, the caries intensity index was assessed by the index KPU+kp (mixed bite), the hygienic condition of the oral cavity was assessed by the Green, Vermillion hygiene index.

Results of the study and their discussion: The study proved that up to 95% of children have dental caries. When examining children aged 7-9 years, a high prevalence of caries was revealed - 92.4%; caries occurred mainly due to temporary teeth. The prevalence of caries in permanent teeth individually was 51.3%. The intensity of caries according to the index KPU+KP in all examined children was 6.3.

The examination showed that the intensity of caries in persons with a mixed dentition, when the mouth already has permanent teeth and milk teeth are still preserved, in the structure of the KP index, the "k" component was 4.2, the "p" component was 1.6, i.e. Each child had 4.2 teeth subject to therapeutic manipulation (therapeutic and surgical treatment). In the structure of the KPU component "K" was equal to 0.6, component "P" - 0.2, component "U" - 0. Analysis of the hygienic state of the oral cavity in the examined children as a whole was 1.2, which characterizes the state of oral hygiene as satisfactory.

When analyzing the prevalence of various levels of hygiene, a good level was found in 9.2%, satisfactory in 63.1%, unsatisfactory in 24.8%, and poor in 2.9%.

CONCLUSIONS

The high prevalence and intensity of dental caries in children dictates the need for full sanitation of the oral cavity, primary prevention of caries of the first permanent molars, carrying out sanitary educational work and training in oral hygiene.

REFERENCES

1. Антонов А.Р., Ефремов А.В., Микроэлементы в жизни человека.// Природные минералы на службе здоровья человека. Новосибирск: Экор, 1999.- С.28-39.
2. Елизарова В.М. «Изменение фракций гемато-саливарного барьера при множественном кариесе зубов у детей»./Труды IV Всероссийской конференции детских стоматологов. СПб, 2001, -С.90-92.
3. Елизарова В.М. Соматология детского возраста. М. Медицина.- 2003. С.158-168.
4. Жуматов У.Ж. Состояние элементного состава слюны у детей как показатель неблагоприятного влияния загрязнения окружающей среды на здоровье//Теория и практика стоматологии. Сборник научных трудов Ташкентского гос. мед. института. - Ташкент, 1990. С.53-57.
5. Иванов Е.Н., Петрова А.М., Патонина Г.Я., Кривонос Н.К., Дубровская А.Т. «Стоматологический статус сегодня и пять лет назад»./Труды IV Всероссийской конференции детских стоматологов «Стоматология и здоровье ребенка» СПб, 2001. — С.27-29.
6. Метаболический синдром у женщин / Беляков Н. А., Сеидова Г. Б., Чубриева С. Ю. [и др.] – СПб. : Издательский дом СПб.МАПО, 2005.
7. Калмыков З. А. Ожирение: профилактика и лечение / Калмыков З. А. – К. : Мед. кн., 2009.
8. Isakova N.R. The effect of constipation due to diseases of the colon on the anthropometric parameters of children. Asian journal of multidimensional research, Volume:10, Issue 5, pp. 666-669
9. IN Raxmatjonovna. Effects of colonic diseases on children's health. World bulletin of public health 23, 101-103, 2023
10. Рахматжоновна И. Н. Влияние запора на антропометрические показатели детей при заболеваниях толстого кишечника //Тиббиётда янги кун. – Т. 2. – №. 34. – С. 85-87.
11. Бирюков А.А. Коррекция липопероксидации у больных с ишемической болезнью сердца на фоне ожирения и хронической патологии печени // Укр. мед. альманах.— 2007.— Т. 10, № 3.
12. IN Raxmatjonovna. Qabziyat sabablari, tashxislash va davolash. научные исследования и общественные проблемы 1 (1), 205-207
13. Гинзбург М. М. Ожирение: влияние на развитие метаболического синдрома. Профилактика и лечение/ Гинзбург М. М., Н.И. Крюков – М. : Медпрактика, 2002.
14. IN Raxmatjonovna. The most pressing problem today is iodine deficiency. World Bulletin of Public Health 23, 97-100
15. IN Raxmatjonovna. Anthropometric indicators of children. Scientific Impulse 1 (5), 883-887
16. N Isaqova. Qabziyatining bolalar antropometrik kўrsatkichlariga ta'siri. Science and innovation 1 (D8), 888-892
17. N Isaqova. Bolalarning antropometrik ko'rsatkichlarini turli omillarga bog'liqligi. Science and innovation 1 (D8), 1000-1003
18. Гаврилов М. А., Мальцева И. В. Возрастное ожирение у женщин: корреляции физиологических параметров с весом // Науковий журнал МЦЗ України | № 1 (1), 2012.