

**FEATURES OF THE SIGNIFICANCE OF THE CLINICAL COURSE OF CARIES IN
CHILDREN**

Mullacheri Kamalon Rohith Krishnan
Fergana Medical Institute of Public Health

Annotation: The most common dental disease is caries. This is the name given to the progressive destruction of hard tooth tissue under the influence of bacteria. Starting from the enamel and spreading deep into the dentin, this process can lead to purulent inflammation and damage to the pulp (neurovascular bundle), bone tissue and periosteum. All this often leads to tooth loss. To prevent and treat caries, you need to visit a dentist at least 2 times a year, which will allow you to eliminate dental damage in the early stages[1,3]. In children, caries often has an acute course, destruction proceeds faster than in adults.

Key words: Caries, dentin, infectious diseases, demineralization, lactobacilli, morphology.

INTRODUCTION

Caries is the most common human disease (over 93% of people). In childhood, it ranks first among chronic diseases and occurs 5-8 times more often than the second most common disease - bronchial asthma. According to various authors, from 80 to 90% of children with primary occlusion, about 80% of adolescents at the time of graduation have carious cavities, and 95-98% of adults have filled teeth[2,6,7,8]. Therefore, children should be brought for preventive examinations once every 3 months. Caries of primary teeth requires mandatory treatment to prevent periodontitis and damage to the rudiments of permanent teeth. Timely treatment also eliminates the source of chronic infection in the mouth, which helps against caries when changing teeth.

According to another study conducted in Australia, more than 40% of children aged 5-10 years had caries in their primary teeth. One quarter of children in the same age group have never been treated for dental caries[4,9,10]. On average, Australian children aged 5-10 years have 1.5 baby teeth affected by decay, and one in four children under the age of 10 years has untreated tooth decay.

Statistics show that in equatorial regions (Africa, Asia) caries is less common than in the polar regions (Scandinavia, North America). Developing countries also have higher rates of dental caries.

Currently, the occurrence of dental caries is associated with a local change in pH on the tooth surface under dental plaque due to the fermentation (glycolysis) of carbohydrates carried out by microorganisms and the formation of organic acids[11,12,13]. Cariogenic bacteria of the oral cavity include acid-forming streptococci (*Streptococcus mutans*, *Str. sanguis*, *Str. mitis*, *Str. salivarius*), which are characterized by anaerobic fermentation and some lactobacilli.

When considering the mechanisms of occurrence of dental caries, attention is drawn to the variety of different factors, the interaction of which determines the occurrence of a focus of demineralization: oral microorganisms, nutritional pattern (amount of carbohydrates), diet, quantity and quality of salivation (remineralizing potential of saliva, buffering properties, nonspecific and specific salivary protection factors), changes in the functional state of the body, the amount of fluoride entering the body, environmental influences, etc.[5,14,15,16].

However, the main factors for the occurrence of caries are the following: caries susceptibility of the tooth surface, cariogenic bacteria, fermentable carbohydrates and time.

The purpose of the study is to study the features of the clinical course of caries of primary teeth in children.

Material and methods: We examined 50 children aged 2 to 6 years, who applied for treatment to the Department of Advanced Training and Retraining of General Practitioners and took a course in pathophysiology. The condition of enamel and dentin, the localization and depth of carious lesions were determined by probing, the intensity of caries according to the index of teeth, the activity of carious lesions: compensated form (up to 4 teeth affected by caries), subcompensated form (from 5 to 8) and decompensated form (9 teeth and more).

Results: Based on the data obtained by clinical analysis, circular caries was identified in 12 children (22.6%) in the area of the frontal teeth of the upper jaw, localized in the cervical region and encircling its perimeter. In some teeth the crown part was missing due to its fracture. The planar form of caries was detected in 15 children (28.3%), that is, carious lesions in the front teeth were determined more on the surface than in depth, covering the vestibular and contact surfaces. The molars lacked enamel and part of the dentin along the chewing and cervical surfaces; in some teeth there were no walls of the carious cavity. Development of blooming caries, i.e. An acute course of carious lesions covering a large number of teeth was noted in 17 children (32.1%). At the same time, the enamel and dentin were light, soft, and easily removed with an excavator [17,18,19]. The value of the "kp" index of teeth averaged 14.8. The number of teeth affected by caries ranged from 9 to 20 teeth (decompensated form). The slow course of caries was determined in 9 children (17.0%), in which the dentin was dark, dry, dense, and was difficult to remove with an excavator. A compensated form of caries was detected in 7 children (13.2%), a subcompensated form in 25 (47.2%), and a decompensated form in 21 (39.6%).

CONCLUSIONS

In children, there are forms of caries that are characteristic only of primary teeth, requiring correct diagnosis and selection of general and local treatment. Taking into account the peculiarities of the occurrence and development of circular caries, it is necessary to develop a set of preventive measures taking into account the identified violations of the elemental status in young children, starting with proper dental care and ending with the organization of proper nutrition.

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. Зюзукова С.А., Давыдов Б.Н., Гаврилова О.А. «Динамика некоторых показателей гомеостаза полости рта у школьников//Труды IV Всероссийской конференции детских стоматологов». СПб, 2001.
2. 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.
3. IN Рахматjonовна. Qabziyat sabablari, tashxislash va davolash. научные исследования и общественные проблемы 1 (1), 205-207
4. Гинзбург М. М. Ожирение: влияние на развитие метаболического синдрома. Профилактика и лечение/ Гинзбург М. М., Н.И. Крюков – М. : Медпрактика, 2002.
5. ИР Исакова, Ж Юнусов, АГ Худоярова. Возможные пути коррекции секреторной функции поджелудочной железы с её протоковой системы. неделя науки-2017, 489-491
6. Isaqova, N.R. Influence of constipation on anthropometric indicators of children. Science and Innovation, Volume 1, Issue 8, pp. 888-892, 2022.
7. IN Рахматjonовна. The most pressing problem today is iodine deficiency. World Bulletin of Public Health 23, 97-100

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. ИН Рахматжоновна. Влияние запора на антропометрические показатели детей при заболеваниях толстого кишечника. Тиббиётда янги кун 2 (34), 85-87
11. Y.Nishonov., A.Abdulhakimov., N.Madrahimova. Scientific bases of methods for studying anthropometry of the eye bowl. Science and Innovation, Volume 1, Issue 8, pp. 1001-1006, 2022.
12. 7-18 ёшли болаларнинг кўз косаси антропометриясини ўрганиш. Ю.Н.Нишонов., А.Р.Абдулхакимов., Н.Р.Мадрахимова. Scientifiac impulse 1(5), 910-913, 2022.
13. Palvanova M.S. Morphological changes in the bone tissue of the child's body in the age aspect. World Bulletin of Public Health, 94-96, 2023
14. Р.Т.Юсупова, О.Е. Шаланкова Репродуктивное здоровье девочек-подростков, проживающих в условиях Ферганской долины. Университетская наука: взгляд в будущее, 612-614, 2020
15. Palvanova M.S., Akhmatov B.K. Chronic myeloid leukemia epidemiology in the Fergana region over decade from 2010 until 2020. Science and innovation, Volume1, issue 8, pp. 1020-1025
16. Madaminov S.M., Madaminov A.S. Efficiency of application of innovative biomechanical orthopedic instruments in the pathology of the bone joint system. World Bulletin of Public Health. Volume-23, 104-108, June 2023
17. Кипиани Г.Э. «Состояние местного иммунитета при кариесе зубов у детей»//М.: Медицина. Ж. Стоматология, 1989. №5.
18. Brown C.J., Chenery S.R., Smith B., Tomkins A., Roberts G.J., Sserunjogi L., Thompson M. A sampling and analytical methodology for dental trace element analysis.// Analyst. -2002.
19. Хамадеева А.М. и др. Программа массовой профилактики кариеса зубов и болезней пародонта у детского населения//Стоматология. 1988. - №1.