

## IMPROVING THE METHODS OF DIAGNOSIS AND TREATMENT OF LOCAL DEMINERALIZATION OF TEETH IN CHILDREN

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Dental caries is a multifactorial infectious disease that can develop at any age - in early childhood, in adolescence and in adults, throughout life, leading to enamel demineralization with the formation of a carious cavity. According to the WHO, caries remains a significant problem in most of the developed world, affecting 60 to 90% of children and the vast majority of adults. The main method of detecting caries is a thorough visual examination using a dental probe and mirror. Additional methods include vital staining, radiography, electroodontodiagnostics (EOD), etc. In children in permanent teeth, carious defects are often formed against the background of focal demineralization of teeth. The traditional treatment of caries involves the complete removal of enamel with signs of demineralization. This approach to treatment led to a significant loss of hard tissues and weakening of the supporting structures of the teeth.

In a comparative study, the advantages and disadvantages of the studied methods were established and it was revealed that the most effective is an integrated approach to the clinical situation and a combination of several diagnostic methods, additional use of instrumental diagnostic methods to clarify the diagnosis.

The problem of caries and its prevention is a significant problem in all countries of the world, due to the tendency to increase the severity and frequency of the disease.

Numerous studies devoted to the study of the etiology, diagnosis, prevention and treatment of caries in children objectify the relevance of this problem.

Dental caries in children is a serious public health problem due to the high prevalence of the disease and the low effectiveness of therapeutic and preventive measures.

Diagnosis and prevention of the development of the carious process are still considered important and not fully understood problems in modern dentistry.

It has been proven that caries is a multi-stage process, a combination of risk factors and time is necessary for the formation of a cavity. Dentists cannot always diagnose the onset of a carious process and the risk of caries in the enamel of children's teeth.

Diagnosis of the early stage of caries is one of the most difficult issues in pediatric dentistry. It is difficult to diagnose the early stage of enamel caries with a single visual examination - focal demineralization of tooth enamel in the form of

white or pigmented lesions on the approximate and contact surfaces of hard dental tissues.

It is very important that at an early stage of the formation of a carious cavity, it is possible to stop the progression of the disease process, as well as reverse its development.

All methods of diagnosing caries can be divided into basic and additional. The main methods for diagnosing caries include: a survey (anamnesis of the disease, anamnesis of life), visual examination: palpation, probing, percussion. There are also additional methods, such as vital staining, selective separation of teeth, radiography, electro-odontometry diagnostics, ultrasound, etc.

The following diagnostic methods can be used to detect and evaluate carious lesions. Careful visual inspection; vital staining of teeth using macromolecular dyes; digital radiography; computed tomography (TAST); laser fluorescence method using the diagnostic device DIAGNOdent (KaVo, Germany); quantitative light fluorescence method (QIF method); method of electrometric diagnosis of caries (ECM); ultrasound detection of caries.

The method of vital staining is used for the differential diagnosis of caries and non-carious lesions. This method is based on the penetration of the dye into demineralized enamel at the initial stage of the pathological process, when enamel permeability increases due to an increase in the number of pores, thereby the dye is absorbed, and the lesion is stained in the color of the dye. This method is very convenient, visual and economical, but also has its drawbacks, the inability to assess the depth of the lesion, the difficulty in diagnosing caries in hard-to-reach surfaces.

Imaging remains one of the main ways to diagnose caries to this day, but more and more experts recognize that basic methods are not enough to detect early carious lesions, especially in hard-to-reach places.

Diagnosis of carious disease is a complex process consisting of three main stages. Detection of a carious lesion and its assessment (determination of the stage of development of the activity of the process), as well as the diagnosis itself. Using early methods of diagnosing caries in children, the initial lesions of caries can be stopped and even possible to achieve the elimination of the disease with its reverse development. For diagnosing dental caries in children, there is no ideal caries detection method with adequate sensitivity and specificity for all tooth surfaces.

The most effective is a combination of several diagnostic methods. The introduction of new methods of diagnosing caries into clinical practice will prevent further development of the carious process in the early stages, as well as facilitate treatment using non-invasive techniques without preparation, while preserving the natural tissues of the tooth. It should be noted the strengthening of the effect of remineralizing therapy in the complex application of them with an antiseptic 0.01% chlorhexidine in all periods of observation.

## References

1. Исаходжаева, Хабиба, С. Маликов, and Д. Акрамова. "Изучение гестационного возраста и массы тела новорожденного на сроки прорезывание молочных зубов." in Library 22.1 (2022): 263-267.

2. Даминова, Ш., С. Маткулиева, С. Назирова, и Н. Раззакова. «Нарушения биологии полости рта у детей с гепатитом С». in Library, т. 21, вып. 2, июнь 2021 г., сс. 47-48, <https://inlibrary.uz/index.php/archive/article/view/14501>

3. Хасанова, Л., and М. Юнусходжаева. "Опыт применения препарата биоплант для лечения пародонтита." Stomatologiya 1.2 (71) (2018): 22-24.

4. Исаходжаева, Х., et al. "ВЛИЯНИЕ ГЕСТАЦИОННОГО ВОЗРАСТА И МАССЫ ТЕЛА НОВОРОЖДЕННОГО НА ПРОРЕЗЫВАНИЕ ЗУБОВ." Stomatologiya 1.1 (82) (2021): 40-42.

5. Даминова, Ш., & Маткулиева, С. (2020). Изучение чувствительности микробов к некоторым лекарственным препаратам в условиях in vitro!. in Library, 20(3), 89-87. извлечено от <https://inlibrary.uz/index.php/archive/article/view/14503>

## ОЦЕНКА ГИГИЕНЫ ПОЛОСТИ РТА У ДЕТЕЙ ШКОЛЬНОГО ВОЗРАСТА

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Несмотря на развитие детской стоматологии и профилактики стоматологических заболеваний, кариес зубов остается распространенной патологией у детей школьного возраста. Распространенность кариеса к 11 годам в разных регионах составляет от 30 до 80%.

Одним из этиологических факторов развития поражения твердых тканей зубов является несоблюдение гигиены полости рта. Рациональная гигиена является везущим звеном в профилактике заболеваний полости рта. Доказано, что мягкий зубной налет и зубная бляшка, изобилующие микроорганизмами, препятствуют поступлению в эмаль необходимых макро- и микроэлементов из ротовой жидкости, нарушают равновесие между слюной и эмалью, замедляя, таким образом, восстановление и созревание эмали зуба. Однако практика показала, что процесс деминерализации эмали не всегда заканчивается образованием кариозной полости. Достаточно организовать рациональную гигиену полости рта, чтобы приостановить развитие процесса.

Цель исследования: оценить уровень гигиены полости рта у детей 11-15 лет.

Материал и методы: проведено стоматологическое обследование 78 детей в возрасте от 11 до 15 лет, обратившихся в Поликлинику детской стоматологии ТГСИ. Обследование включало: внешний осмотр, осмотр