



Current Trends the Influence of the Term and Dynamics of Eruption of Permanent Teeth in School-Age Children on Dental Status

Afakova Ma'mura Shuxratovna ¹

¹ Bukhara State Medical Institute

Abstract: Teething is a physiological process defined as the movement of a tooth from its position in the bone during its development to its functional position in the oral cavity. This is a complex and dynamic process that involves changes in the tissues surrounding the tooth and in the tooth itself. The process of teething consists of three phases: pre-eruptive, pre-functional and functional.

The mechanism of teething is not fully understood. As a result of the analysis of physiological processes, it was found that an important role in the process of teething is played by the dental follicle, periodontal and the shell covering the periapical tissues, and the terminal root follicle. These structures interact with each other and control the process of teething [1.3.5.7.9].

One of the important factors influencing the development of a child is teething. From the moment of eruption of temporary teeth, the vital physiological process of eating is formed, the sucking reflex decreases, the swallowing mechanism develops, and the chewing function. These changes contribute to the growth of the jaws and a change in the proportions of the cerebral and facial skull. With the eruption of temporary teeth, the development of speech is activated - it becomes possible to implement correct articulation and sound formation and the formation of social adaptation and stimulation of the child's mental development. The physiological norm of temporary occlusion teething can be established on the basis of a number of criteria, such as certain timing, pairing and sequence of teething [2.4.6.8.10].

If the age of eruption of baby teeth in a child is significantly different from the average eruption dates accepted for this population, this is late or premature eruption. Later eruption is more often observed. It can be caused by premature birth, shorter body length and weight, insufficient nutrition, genetic disorders, systemic diseases and local factors. Premature teething of baby teeth may also be associated with smoking of the mother during pregnancy, low physical activity of the mother before pregnancy, the socio-economic status of the mother and some genetic disorders in the development of the child.

Turgut MD, Tekçiçek M, Canoglu H. (2006) consider violations of the development of a permanent tooth that has not erupted as a result of trauma to the milk tooth, since there is a close proximity between the root of the milk tooth and its permanent descendant. Damage to an uncut permanent tooth occurs by transferring traumatic forces to the rudiment of a permanent tooth. In this case, however, there is a violation of the development of the permanent central incisor of the upper jaw as a result of the direct impact of the intrusion of the milk central incisor of the upper jaw. The intrusive tooth was removed under general anesthesia. During the eruption of the permanent central incisor, local malformation of the crown was observed along with enamel hypoplasia, which was not previously classified as a developmental disorder. The damaged areas were repaired with a light-curing composite.

It was found that the average values of the fluorescence intensity of intact permanent teeth in children differed depending on the localization of the studied area and the age of the patient. The highest values of fluorescence were determined in children aged 8-9 years on the chewing surface of

the first permanent molars (7.56 and 9.92 rel. units, respectively), while in the mesial pits an average fluorescence value of 5.85 rel. units was recorded, indicating a higher degree of mineralization.

In the area of the equator of the teeth, the average values of fluorescence intensity were lower than in the cervical region. The data obtained indicate the immaturity of the hard tissues of the tooth in the cervical region and in the area of the pits compared to the equator in the first molars. As the age increased, the laser fluorescence indicators decreased, which indicates an increase in the degree of their mineralization. In children aged 10-11 years and 12-13 years in the area of the central and distal pits of the first permanent molars, fluorescence indicators decreased [11.13.15.17.19.21.23.25]. The highest values of fluorescence were determined in children aged 8-9 years and lower – at the age of 10-11 years on the chewing surface of the first permanent premolars, while no further decrease in the value of the indicator was recorded in children aged 12-13 years. This may be due to the later eruption of premolars in representatives of this age group. In the second premolars, there is a statistically significant ($p < 0.05$) decrease in the values of indicators in the area of the central fissure with increasing age. Determining the degree of mineralization of the hard tissues of the tooth after eruption helps the dentist to implement a differentiated approach in providing dental care to the children's population.

Dental caries is a violation of the dynamic balance between the processes of remineralization and demineralization in the oral cavity, which closes the metabolic phenomena occurring at all levels and their regulation systems. It is known that the frequency of carious lesions of molars in the first years after their eruption increases due to an increase in fissure caries, therefore, the issue of studying the possibility of regulating the process of enamel maturation of fissure and permanent teeth in children with the help of fluoride-containing toothpastes is relevant. The study involved children from 5 to 12 years old (300 people), who were divided into two age groups: 5-7 years - 150 people and 9-12 years - 150 people. The age groups were selected in such a way as to trace the effect of fluoride-containing pastes on the maturation of tooth enamel and on the condition of hard tooth tissues. The favorable effect of fluoride-containing toothpaste "Blend-a-honey" on the process of enamel maturation and on the condition of hard tissues of permanent teeth was determined [12.14.16.18.20.22.24.26].

Thus, the effect of F in enhancing enamel remineralization is well known from several in vitro and in situ studies, given the best knowledge about dental caries, any "remineralizing therapy" should follow two fundamental principles: Dental biofilm, a necessary factor causing caries, should be controlled by brushing teeth. Fluoride should be used either to stop existing lesions or to slow the progression of new ones. The authors also emphasize that salivary calcium and phosphorus are the source of minerals for the restoration of demineralized enamel, since saliva is oversaturated with dental minerals, which contributes to the deposition of minerals. Thus, the normal endogenous concentrations of Ca and P i found in saliva are high enough to cause remineralization, but the latter can be significantly enhanced by exogenous F delivered by various oral delivery routes.

Conclusion. The analysis of the literature sources shows that an important stage in the formation of the dental status of a child is the process of enamel maturation, during which the "peak" of the incidence of caries occurs. The effectiveness of caries prevention is closely related to the problem of the formation of a full-fledged enamel. Prevention of early forms of caries during the eruption of permanent molars stabilizes the foci of caries and reduces its intensity.

USED LITERATURE

1. Эронов Ё.К., Жумаева Ш.Б. Болаларда ўткир герпетик стоматитларни даволашга замонавий ёндошув // *Tibbiyotda yangi kun* – Бухоро, 4 (24) 2018 й. 123-125 б (14.00.00; №22).
2. Эронов Ё.К., Жумаева Ш.Б. Кичик ёшдаги болалар ва ўсмирларда гингивитни даволашнинг замонавий усуллари // *Journal of Biomedicine and Practice*. 2019 № 3 61-65 б (14.00.00; № 24)

3. Эронов Ё.К., Мирсалихова Ф.Л. Тиш кариесини профилактикаси ва даволашни церебрал фалажли бемор болаларда олиб бориш // *Tibbiyotda yangi kun.* - Бухоро. 2019 й. №3(27). 181-183 б (14.00.00; №22).
4. Эронов Ё.К. Мия фалажи билан касалланган болаларда тиш кариесининг комплекс даволаш усуллари// *Tibbiyotda yangi kun.* - Бухоро. № 4 (32) 2020 й. 710-715 б (14.00.00; №22).
5. Эронов Ё.К. Мия фалажи билан касалланган болаларда тиш кариеси профилактикаси // *Биология ва тиббиёт муаммолари.* - Самарқанд, 2020. - №6. - 145-150 б (14.00.00; №19).
6. Эронов Ё.К., Ражабов А.А. Мия фалажи билан касалланган болаларда кариес касаллигининг тарқалиш кўрсаткичларини баҳолаш // *Tibbiyotda yangi kun.* - Бухоро. №2 (30) 2020. 634-635 б (14.00.00; №22).
7. Эронов Ё.К. Мия фалажи билан касалланган болаларда Лошли юшенко красногорский усулида сўлак таркибий хосаларини тахлилий аниқлаш// *Tibbiyotda yangi kun.* - Бухоро. №2 (30) 2020. 272-274 б (14.00.00; №22).
8. Eronov Yo. K. Mirsalihova F.L., Rajabov A.A. Prevention and treatment of caries in children with cerebral palsy. *ACADEMICIA: An International Multidisciplinary Research Journal* Vol. 9 Issue 12, December. 2019.–P. 68-70 (Impact factor- 7.13)
9. Eronov Yo. K., Rajabov A.A. Assessment of the evaluation of oral hygiene in children with cerebral palsy // *Asian Journal of Multidimensional Research (AJMR)* Vol. 9 Issue 2 February 2020. – P.189-191 (Impact factor- 6.88).
10. Eronov Yo. K., Rajabov A.A. Analytical indicator of saliva in children with cerebral palsy. *ACADEMICIA: An International Multidisciplinary Research Journal* Vol. 10 Issue5 2020. – P. 1823-1825 (Impact factor- 7.13)
11. Eronov Yo. K. Disease incidence and statistical indicators in children with cerebral palsy // *International engineering journal for research development.* Vol. 5 Issue 4.2020. - P 31-32
12. Eronov Yo. K. Implementation of comprehensive prevention of dental caries in children with cerebral palsy // *International Journal of Human Computing Studies* Vol 2 № 6 2020. JHCS - P 22-24
13. Eronov Yo.K. Indications for oral hygiene in stch children with cerebral palsy // *International Journal of teguated Education* Vol 3, Issue VI, June, 2020.-P. 26-27
14. Eronov Yo.K., Kamalova M.Q. Evaluation of caries prevalence in children with cerebral palsy // *ACADEMICIA: An International Multidisciplinary Research* Vol 10. Issue 2. Jebruary 2020.-P. 85-87. (Impact factor- 7.13)
15. Эронов Ё.К., Мирсалихова Ф.Л. Церебрал фалажли болаларда тиш кариесини профилактикаси // *Актуальные проблемы стоматологии.* 29-30 март 2019г. г. Бухара, 37-38 б.
16. Эронов Ё.К., Ражабов А.А. Instruction for oral hygiene in sick children with cerebral palsy // “Янгиланаётган Ўзбекистон ёшлари ва инновацион фаолият” мавзусида халқаро конференция. - Бухоро. 2020 йил 2 сентябрь III қисм. – P. 548
17. Эронов Ё.К. Assessment of caries intensity the use of remodent medicine in caries disease in children with brain palasy // «Актуальные вопросы фармакологии от разработки лекарств до их рационального применения». - Бухара. 28-29 мая 2020г. – P. 102
18. Эронов Ё.К., Иноятов А.Ж. Мия фалажи билан касалланган болаларда кариес интенсивлигини тарқалиш даражасини баҳолаш // II Международная конференция студентов медиков и молодых учёных 27 мая 2020г. - Бухара. 204 б.
19. Eronov Yo. K. Evaluation of stomatological investigations in children diagnosed with cerebral palsy. “Актуальные вызовы современной науки” Украина выпуск 4(48) Часть-1.-P. 45

20. Eronov E.K. Criteria for evaluation of oral hygiene behavior in children with cerebral palsy // "Актуальные вызовы современной науки" Украина выпуск 4(48) Часть-1.- P.45
21. Eronov Yo. K. Oral hygiene in sick children with cerebral palsy // "Actual problems of children's dentistry" India 22 may 2020.-P.19-20
22. Eronov Yo. K. Caries and statistical indicators in children with cerebral palsy. "Actual problems of children's dentistry" // "Actual problems of children's dentistry" India 22 may 2020. - P. 26-27
23. Эронов Ё.К., Мирсалихова Ф.Л. Тиш кариеси комплекс профилактикаси ва даволашни церебрал фалажли болаларда олиб бориш ЭХМ дастури . № DGU. 08773.5.06.2020 йил.
24. Эронов Ё.К., Мирсалихова Ф.Л. Мия фалажи билан касалланган болаларда тиш кариесини комплекс даволаш усуллари // Услубий тавсиянома. Бухоро.2020 йил. -17 б.
25. Эронов Ё.К., Мирсалихова Ф.Л. Мия фалажи билан касалланган болаларда тиш кариесини профилактик алгоритми // Услубий тавсиянома. Бухоро.2020 йил. -19 б.
26. Eronov, Y. K., & Mirsalikhova, F. L. (2021). Indications for the comprehensive prevention and treatment of dental caries in children with cerebral palsy. *Annals of the Romanian Society for Cell Biology*, 25(1), 5705-5713. Retrieved from www.scopus.com