

OPTIMIZATION OF PREVENTIVE MEASURES FOR CHILDREN AT HIGH RISK OF CARIES

Malenyants Gevorg Vladimirovich

first-year student of the Faculty of Dentistry

of Samarkand State Medical University

Abstract: The content of the article is that the topic of optimization of preventive measures for children with a high risk of caries is fully described. According to preliminary diagnostic results, approximately 20% of children in all age groups we examined had decompensated caries.

Key words: caries, fluorometry, diagnostics, fissure, laser-fluorescent, statistics.

The results and clinical effectiveness of laser fluorometry to determine the form of caries in permanent teeth in children when studying the condition of hard tissues in the area of 352 molar fissures (89 teeth in 6-year-old children, 188 teeth in 7-year-old children, 75 teeth in 8year-old children). initial and final diagnostic results corresponded to 196 cases (61, 103 and 32 teeth, respectively). The results of initial assessment of the state of the hard tissues of 156 teeth (32, 81 and 43 teeth, respectively) were false-negative. In the study, we used two different methods for the diagnosis of caries in the fissures of permanent teeth: visual-tactile (A, initial) and laser fluorometry (B, final, "gold standard") and evaluated the operational characteristics of these methods in children aged 6-8 years (internal validity period) (Table 2). Differences between visual-tactile and laser-luminescent assessment of the state of hard tissues in the area of

eruption of first permanent molars in children aged 6-8 years were statistically significant. According to our study, 100% specificity shows that a patient without carious lesions is incorrectly classified as having carious lesions by the visual-tactile method of viewing the state of hard tissues. Low sensitivity shows that the visual-tactile method did not detect the disease in almost 90% of patients, but they were present.

Consequently, when using this method, carious lesions are detected at the last stage, and the form of caries shifts to a more severe one. The presence of hidden caries foci in the fissures of the molars detected using a diagnodent-pen (KaVo) was confirmed by a pneumokinetic drug. According to the results of the initial diagnosis, 35.0% of 6-year-old children had a compensated form of caries, but after the final diagnosis with the Diagnodent-pen, about a fifth of those examined (22.5%) remained in the group. In visual-tactile examination, one fifth of 6-year-old children (22.5%) entered the group with decompensated caries, accurate diagnosis 2.5% 2.5% 35.0% 22.5% 40.0% 27.5% 22.5% 47.5% 0.0% 5.0% 10.0% 15.0% 20.0% 25.0% 30.0% 35.0% 40.0% 45.0% 50.0% predvaritelnyy diagnoz okonchatelnyy diagnos doli detey s zdorovye kompensirovannye sootvetstvuyushchimi stepenyami activities kariesa subkompensirovannye dekompensirovannye as a result of almost half of the children (47.5%) formed the decompensated caries group . According to the results of initial diagnosis, approximately one third (37.5%) of 7-year-old children had a compensated form of caries; after laser luminescence analysis, the diagnosis was confirmed in only one fifth of children (22.5%).



20.0% of 7-year-old children had a decompensated form of caries, as the final diagnosis using Diagnodent-pen (KaVo) accounted for almost half of the children in this group (45.0%). According to the initial diagnostic results, more than a quarter of 8-year-old children (28.9%) were assigned to the group with a compensated form of caries; after diagnosis, this group corresponds to one fifth of children (18.4%). 18.4% had decompensated caries and 18.4% were healthy.

After the last diagnosis, almost half of the children (47.4%) had a decompensated form of caries, only 5.3% remained healthy (Fig. 21). Thus, according to the preliminary diagnostic results, approximately 20% of the children of all age groups we examined had decompensated forms of caries. After the final diagnosis using the laser fluometry method, almost half of the children were assigned to the group with decompensated caries. The clinical effectiveness of the dental caries prevention program in permanent teeth in children. Clinical effectiveness of a dental caries prevention program The effectiveness of a comprehensive program for the prevention of caries in permanent teeth was evaluated by changes in the level of oral hygiene in children, new lesions the number of first permanent teeth that have appeared and also the safety of hermetic coatings. The results of the table show a decrease in the prevalence and intensity of temporary dental caries. After one year of follow-up in 6-year-old children, caries prevalence did not change, but the intensity decreased by 7.5%. Two years later, caries prevalence in the same patients decreased by 3.6% and intensity by 11.0%. After one year of observation in 7-year-old children, caries prevalence did not change and the intensity decreased by 8.3%. After two years, the prevalence of caries in these patients decreased by 0.35%, but the intensity decreased by 12.0%. After one year of follow-up in 51 8-year-old children, the prevalence of necrotic teeth remained at the initial level, the intensity decreased by 12.0%.

After two years of follow-up, the prevalence decreased by 10.0% and the intensity by almost 24.0%. Thus, with a statistically insignificant decrease in the prevalence of temporary dental caries, the intensity decreased significantly, and the older the child, the higher the change in intensity. In our opinion, the decrease in the values of prevalence and intensity of caries of milk teeth was caused by their physiological changes. The prevalence and intensity of caries in permanent teeth at the age of 6-8 depends mainly on the condition of the hard tissues of the first permanent teeth. Because these parameters differed significantly, fissure sealing performance in each study group was evaluated based on sealant retention and contact parameters.

After one-year and two-year follow-up, the number of new carious cavities in the first permanent molar was analyzed, the results are presented in Table 5. In group I, in which classic SIS was used as a filling material with pretreatment of hard tissues with ozone, no new lesions were detected after one year of follow-up, and the lowest number of new carious lesions was found after two years (1.15 ± 0.01) All sealed of teeth%)) ... At the same time, a liquid composite with a sealing system of the 6th generation was used as a filling both with ozonation of hard tissues and without ozonation, the maximum new in groups carious lesions were noted. After two years in group III, $12.5 \pm 0.09\%$, in group IV - $10.0 \pm 0.08\%$ of teeth are affected by caries. Analysis of the safety of hermetic coatings of first permanent molars (IR, ICKG) To



evaluate the safety of hermetic coatings in the area of fissures of first permanent molars, the index of retention of the filler was determined, which describes the condition of all hermetic coatings in the patient's mouth. The data show that after 1 and 2 years of follow-up, the maximum preservation of the filling material was recorded in the first group of the study, where the classic glass ionomer Ketac Molar Easy mix (3M ESPE) cement was used before sealing the fissures with hard tissue ozonation 53 used for..

Ketac Molar Easy mix (3M ESPE) in the second group used classic glass ionomer cement, but without ozonation, complete safety of the filler after one year of follow-up ³/₄ of all coatings, after two - only 30 years Silicone sealant% was completely preserved. Filtek Supreme XT (3M ESPE) liquid composite for sealing, Adper Easy One (3M ESPE) 6a self-dissolving sealant and ozonation of hard tissues before sealing the fissure in the third group, full safety of the coating in 1 year It was found in 15.4 percent. And after two years, only 7.7 percent. In the fourth group, which applied composite and self-hardening sealants without prior ozonation, after one year, complete safety of the sealant was found in 1/3 of sealed teeth; after two years, only one-fifth of the sealant was completely preserved in the coatings of the first permanent teeth. After a year in the first group, the complete loss of the hermetic coating was not detected; after two years, approximately 4% of the molars in this group had completely lost the filling material. In the second group, after one year, the complete loss of the filling material was 5% of all sealed teeth; after two years this indicator has not changed. In the fourth group, after one year, the complete loss of the filler was observed in 13% of the molars, and in the third group, 40%, after two years, almost half of the coatings in the fourth group were observed, in the third group, more than the molars, the filler was lost. it stopped.

List of used literature:

1. Akaeva, E.V. Communicative influence on dental admission of children (Text) / E.V. Akayeva, N.V. Golochalova, K.V. Khromenkova // Clinical dentistry. - 2012. - No. 2. - P. 56-58.

2. Alimsky, A.V. Assessment of the dynamics of dental diseases in terms of volume and quality of rehabilitation work among the pediatric population of Karaganda (Text) / A.V. Alimsky, A. Ya. Dolgoarshinnyx // Pediatric dentistry and prevention. - 2009. - No. 1. - P. 70-72.

3. Analysis of reasons for dental treatment in children under general anesthesia (Text) / K.A. Gorbachev (and others) // Innovations in Dentistry: Proceedings of the 6th Congress of Belarusian Dentists, Minsk, October 25-26. 2012 / Belarus. honey flour; editorial board: A.V. Glinnik (and others). - Minsk: BSMU publishing house, 2012. - P. 70-72.

4. Bezvushko, E.V. Prevention of caries of the first late teeth in children according to the individual plan (Text) / E.V. Bezvushko // Stomatology news. - 2009. - No. 2 (59). - S. 67-71.

5. Berlov, A.V. Managing the child's behavior at the appointment of a dentist (Text) / A.V. Berlov // Pediatric dentistry and prevention. - 2010. - No. 4. - P. 67-69.

6. Abdurakhmanov A.I. Materials and technology and orthopedic dentistry. Grif UMO po



meditsinskomu obrazovaniyu; Medicine - M., 2008. - 237 c.

7. Abdurakhmanov A.I. Orthopedic dentistry. Material and technology; GEOTAR-Media - M., 2016. - 709 c.

8. http://www.studentlibrary.ru/book/ISBN9785970438022.html .- Mode dostupa: : http://www.studentlibrary.ru

9. Dentistry. International classification of diseases. Clinical characteristics of the nozological form. [Electronic resource] M. Ya. Alimova, L. N. Maksimovskaya,

10. Therapeutic dentistry. Kariyesologiya i zabolevaniya tverdyx tk aney zubov. Endodontics [Electronic resource]: ucheb. posobiye / Yu. M. Maksimovsky, A. V. Mitronin; pod obshchey ed. Yu. M. Maksimovsky. - M. : GEOTAR-Media, 2016. http://www. studentlibrary.ru/book/ISBN9785970435892.html.

11. Yusupov Sh.A, Shamsiev A.M, Atakulov Zh.O, Jalolov D.A. Assessment of the intensity of endogenous intoxication syndrome in children with widespread appendiceal peritonitis // Journal "Medical Almanac" - 2019. No. 5-6(61). – pp. 57-61.

12. Shamsiev A.M., Yusupov Sh.A., Sharipov R.Kh. The influence of ozone therapy on indicators of lipid peroxidation in children with common forms of appendiceal peritonitis // Journal "Annals of Surgery" - 2001. - T. 5. - P. 77.

13. Yusupov Sh.A, Shamsiev Zh.A, Suvankulov U.T, Daycare E.S. Surgical tactics for obstructive calculous pyelonephritis in children Journal "Saratov Medical Scientific Journal" - 2007. - T. 3, No. 2. – pp. 79-80.

14. Yusupov Sh.A, Mardyeva G.M., Bakhritdinov B.R. Features of radiological semiotics for pneumonia in young children // Journal "Current nutrition of pediatrics, obstetrics and gynecology" – 2017. No. 2. – pp. 21-24.

15.Shamsiev A.M., Yusupov Sh.A., Yuldashev B.A., Mukhamadieva L.A. The state of the immune status in children with chronic bronchitis // Journal "Pediatric Bulletin of the Southern Urals" - 2017. No. 1. – pp. 84-89.

16. Shamsiev A.M., Yusupov Sh.A., Makhmudov Z.M. Surgical treatment of children with acute hematogenous osteomyelitis of the bones forming the hip joint // Journal "Russian Bulletin of Pediatric Surgery, Anesthesiology and Reanimatology" - 2014. - Vol. 4, No. 3. – P.86-89.

17. Yusupov Sh.A, Kurbaniyazov Z.B, Zainiev A.F. Thyroid nodules. state of the problem (literature review) // Source "Bulletin of Scientific Research" – 2018. No. 1. – pp. 10-15.

18. Nugmanovna, M. A. (2024). Ethical Problems Of New Reproductive Technologies. *Miasto Przyszłości*, 9-12.

http://www.internationaljournal.co.in/index.php/jasass



19. Shamsiev A.M., Saidov M.S., Aipov R.R., Atakulov D.O., Yusupov Sh.A. Surgical correction of fecal incontinence with fistulas in the reproductive system in girls // Journal "Russian Bulletin of Pediatric Surgery, Anesthesiology and Reanimatology" - 2014. - T. 4, No. 2. – P.25-29.

20. Shamsiddinova, M., & Maxmudova, A. (2024). TIBBIYOTDA DEONTOLOGIYA VA BIOETIKANING DOLZARB MUAMMOLARI. *TAMADDUN NURI JURNALI*, *8*(59), 93-97.

21. Shamsiev A.M., Saidov M.S., Atakulov D.O., Yusupov Sh.A., Shamsiev Z.A., Suvankulov U.T. Surgical treatment of anorectal defects in children. Journal "Bulletin of Surgery named after II Grekov" - 2011. - T. 170, No. 2. – pp. 40-43.

22. O'tayev, S. T., & Mahmudova, A. N. (2023). O'zbekiston Respublikasining sog'liqni saqlash tizimida hozirgi kunda neyroxirurgiya yutuqlari. *Science and Education*, 4(2), 190-194

23. Nugmanovna, M. A. (2022). Bioethics as a form of protection of individuality and personalized medicine. *Thematics Journal of Social Sciences*, 8(4).

24. Nugmanovna, M. A., & Gennadievna, A. O. (2022). PRINCIPLES OF FORMATION OF ENVIRONMENTALLY SIGNIFICANT VALUES AMONG MEDICAL UNIVERSITY STUDENTS. *Thematics Journal of Social Sciences*, 8(3).

25. Nugmanovna, M. A., & Kamariddinovna, K. M. (2022). What A Doctor Should Know To Work Safely And Effectively: International Norms And Rules. *Thematics Journal of Social Sciences*, 8(3)

26. Nugmanovna, M. A., & Kamariddinovna, K. A. (2021, January). Modern biotechnical problems of medicine and their solutions. In *Archive of Conferences* (Vol. 13, No. 1, pp. 169-173)

27. NUGMANOVNA, O. F. O. M. A. (2023). ABORTION AS AN ETHICAL PROBLEM. Journal of Modern Educational Achievements, 9(9), 31-39.

28. Makhmudova, A. N. (2024). Bioethics as a new direction in the moral and ethical discourse of modern society. *Science and Education*, 5(4), 268-271.

29. Бердиярова, Ш. Ш., Юсупов, Ш. А., & Назарова, Г. Ш. (2022). Клиниколабораторные особенности хронического гематогенного остеомиелита. *Central Asian Research Journal for Interdisciplinary Studies (CARJIS)*, 2(5), 116-125.

30. Юсупов, Ш. А., & Хакимова, Л. Р. (2023). ПРОГНОСТИЧЕСКАЯ ВОЗМОЖНОСТЬ ИММУНОГЕНЕТИЧЕСКИХ ИССЛЕДОВАНИЙ В ИЗУЧЕНИИ ЗАБОЛЕВАЕМОСТИ МОЧЕКАМЕННОЙ БОЛЕЗНЬЮ У ДЕТЕЙ. Вестник Авиценны, 25(3), 346-355

http://www.internationaljournal.co.in/index.php/jasass



31. Юсупов, Ш. А. (2009). Диагностика внутрибрюшных абсцессов в раннем послеоперационном периоде при аппендикулярных перитонитах у детей. Вестник Уральской медицинской академической науки, (3), 36-39.

32. Юсупов, Ш. А., Атакулов, Ж. О., Шукурова, Г. О., Аббасов, Х. Х., & Рахматов, Б. Н. (2023). Периоперационное ведение детей с распространенными формами аппендикулярного перитонита. *Science and Education*, 4(9), 118-127.

33. Юсупов, Ш. А., Мухаммадиев, А. А., & Джалолов, Д. А. (2020). КЛИНИКО-ДИАГНОСТИЧЕСКИЕ ОСОБЕННОСТИ ДИВЕРТИКУЛ МЕККЕЛЯ У ДЕТЕЙ. In *АКТУАЛЬНЫЕ ВОПРОСЫ СОВРЕМЕННОЙ НАУКИ И ОБРАЗОВАНИЯ* (pp. 169-172).