

**BOLALARDA SBKDA OG‘IZ BO‘SHLIG‘I SHIKASTLANISHI
RIVOJLANISHINING ASOSIY XAVF OMILLARI**

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ANNOTASIYA

Surunkali buyrak kasalligi chuqur ijtimoiy-iqtisodiy oqibatlariga ega bo‘lgan umumtibbiy muammo bo‘lib, uning aholi orasida keng tarqalishi (aholining 10-15 foizi), terminal buyrak yetishmovchiligi va yurak-qon tomir asoratlari rivojlanishi natijasida mehnat qobiliyatini yo‘qotish va o‘lim bilan bog‘liq bo‘lib, buyrak faoliyati buzilgan bemorlarda xavf o‘nlab barobar ortadi. Shunga qaramay, bolalarda SBK tarqalishi hech qachon tizimli ravishda baholanmagan va bu masala bo‘yicha izchil ma‘lumotlar mavjud emas. Turli xil tibbiy holatlar bemorlarning og‘iz bo‘shlig‘i salomatligiga ta‘sir qilishi mumkin.

Kalit so‘zlar: *surunkali buyrak kasalligi, qon tomir, milk, parodont, karies.*

**ОСНОВНЫЕ ФАКТОРЫ РИСКА РАЗВИТИЯ ПОРОЖЕНИЙ
ПОЛОСТИ РТА ПРИ ХРОНИЧЕСКОЙ БОЛЕЗНИ ПОЧЕК У ДЕТЕЙ**

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АННОТАЦИЯ

Хроническая болезнь почек – общемедицинская проблема, имеющая глубокие социально-экономические последствия, связанные с ее широкой распространенностью в популяции (10–15% населения), утратой трудоспособности и смертностью вследствие развития терминальной почечной недостаточности и сердечно-сосудистых осложнений, риск которых у пациентов с нарушенной функцией почек возрастает в десятки раз. Тем не менее, распространенность ХБП у детей никогда не подвергалась систематической оценке, и последовательной информации по этому вопросу не хватает.



Различные медицинские состояния могут повлиять на здоровье полости рта пациентов.

Ключевые слова: хроническая болезнь почек, кровеносные сосуды, десна, пародонт, кариес.

MAJOR RISK FACTORS FOR THE DEVELOPMENT OF ORAL LESIONS IN CHILDREN WITH CHRONIC KIDNEY DISEASE

ANNOTATION

Chronic kidney disease is a general medical problem with deep socio-economic consequences associated with its widespread prevalence in the population (10-15% of the population), loss of working capacity, and mortality due to the development of terminal renal failure and cardiovascular complications, the risk of which increases tenfold in patients with impaired renal function. Nevertheless, the prevalence of CKD in children has never been systematically assessed, and consistent information on this issue is insufficient. Various medical conditions can affect the health of patients' oral cavity.

Keywords: chronic kidney disease, blood vessels, gum, periodontium, caries.

Surunkali buyrak kasalligi asosiy kasallikning ta'siri tufayli ham, qo'llaniladigan patogenetik terapiya tufayli ham immunitet funksiyasining buzilishi bilan bog'liq bo'lib, bu bolalarni infeksiyalarga, shu jumladan og'iz bo'shlig'i infeksiyalariga ko'proq moyil qiladi.

Nefronlarning progressiv va qaytarilmas yomonlashuvi glomerulyar filtratsiya tezligining pasayishiga olib keladi va qattiq hamda yumshoq to'qimalarda keng ko'lamli og'iz bo'shlig'i o'zgarishlariga sabab bo'lishi mumkin. Bu o'zgarishlarga ammiak hidi, metall ta'mi, milklarning kattalashishi kiradi, keyinchalik esa emal gipoplaziyasi, tish toshi, og'iz qurishi, uremik stomatit va glossit, shuningdek milklarning yallig'lanishi rivojlanadi. [1,2]

SBK bilan og'rigan bemorlarda yallig'lanish, shuningdek, milk va atrofdagi to'qimalarning infeksiyalanishi parodont kasalliklariga olib keladi, bu esa o'z navbatida tizimli yallig'lanishni kuchaytirishi va buyraklar holatini yomonlashtirishi mumkin. So'nggi tadqiqotlar shuni ko'rsatdiki, buyrak yetishmovchiligi bo'lgan bolalarda tish karashining hosil bo'lishi va milk yallig'lanishining rivojlanishi, shuningdek, tish toshlari to'planishining tezligi sog'lom bolalarga nisbatan yuqori bo'lgan [9,21,22,27-29]. Tish toshlari miqdorining bunday ko'payishining sababi so'lakdagi mochevina va uning pH darajasining yuqoriligi, shuningdek, karashning



substrati bo‘lib xizmat qiluvchi kalsiy fosfat va kalsiy oksalatning cho‘kishiga olib keladigan fosforning yuqori darajasidir [9,17,32].

Og‘iz bo‘shlig‘ida qonda mochevina miqdori oshganda ko‘plab ko‘rinishlar kuzatilishi mumkin, bu birinchi navbatda bemordan ammiak hidining paydo bo‘lishiga olib keladi [14]. Og‘iz qurishi og‘izda yaralar paydo bo‘lishiga, Candida infeksiyasining ko‘payishiga va ta‘m sezishning yo‘qolishiga olib kelishi mumkin. Metall ta‘mini his qilish va uremik nafas olish so‘lakdagi ko‘p miqdordagi mochevina tufayli yuzaga keladi, so‘ngra u ammiak-46 ga aylanadi, shuningdek, so‘lakda oqsil va fosfat miqdorining ko‘payishi va Ph o‘zgarishi natijasida yuzaga keladi [3].

Bundan tashqari, diuretiklar, beta-blokatorlar va boshqa dorilar bilan kombinatsiyalangan davolash natijasida lixenooid kasalligi yoki tilning tukli bo‘lishi mumkin [4, 19].

SBK bilan og‘rigan bolalarda kuzatiladigan emal gipoplaziyasi tishlarning oq yoki jigarrang tusga kirishi bilan namoyon bo‘ladi [8,13]. Bu SBKda tishlar mineralizatsiyasi paytida kalsiy yetishmovchiligi, qon zardobida 1,25-digidroksisolekalsiferol darajasining pasayishi va qon zardobida fosfatlar, qalqonsimon oldi bezlari va ftor darajasining oshishi tufayli yuzaga kelishi mumkin [6]. Oila tarixi, irqi, ota-onasining etnik kelib chiqishi, ovqatlanish holati, ijtimoiy-iqtisodiy holati va tekshiruv turi yoki toifalash tizimiga qarab, emal gipoplaziyasining uchrashi 31% dan 83% gacha qayd etilgan [7,13]. Emal rivojlanish nuqsonlari (EDN) emal a‘zosining buzilishi va/yoki shikastlanishi natijasida tish emalining sifati va miqdoridagi o‘zgarishlar sifatida aniqlanadi [2,5].

Emalning sifatiga mineralizatsiya bosqichida kalsiy va fosfat ionlarining biosinguvchanligi ta‘sir qiladi. SBK bilan og‘rigan bolalarda odatda DRE mavjud bo‘lib, u faqat emalning rivojlanishi va minerallasuvi davrida ishlab chiqariladi [15]. DREning paydo bo‘lish chastotasi bemorning yoshiga ham, metabolik buzilishlar va tishlarning dekalsifikatsiyasini minimallashtiradigan buyrak kasalligini erta davolashga ham bog‘liq. Stomatologik holat patologiyasini aniqlashning mumkin bo‘lgan izohi sog‘lom bolalarga nisbatan SBK bilan og‘rigan bemorlarda induksiyalangan so‘lak ishlab chiqarishning pasayishi hisoblanadi. SBK bilan og‘rigan ko‘plab bolalarda og‘iz qurishi bir nechta omillar natijasida yuzaga keladi, jumladan, buyraklarning ajratish funksiyasini pasaytirish uchun zarur bo‘lgan suyuqlik iste‘molini cheklash, elektrolitlar muvozanatining buzilishi va diuretiklar kabi dori-darmonlarni qabul qilish [1,6,19]. Antixolinergik, sitotoksik, simpatomimetik preparatlar, shuningdek, atsinar hujayralarda ionlarni tashish yo‘llarining buzilishi so‘lak bezlari disfunktsiyasini keltirib chiqarishi mumkin, ammo bu preparatlarning



aniq ta'sir mexanizmi hali noma'lum [26]. Og'iz qurishi belgisi bo'lgan so'lak ajralishining kamayishi og'iz bo'shlig'ida tish kariyesi, milk kasalliklari va og'iz bo'shlig'ida zamburug'li infeksiya rivojlanishiga sharoit yaratadi. So'lak kislotalarni neytrallash, og'iz bo'shlig'ini tozalash va tish emalini himoya qilishda muhim rol o'ynaydi va uning yetishmasligi og'iz bo'shlig'i salomatligida ushbu muammolarning paydo bo'lish xavfini oshiradi [25].

Sog'lom odamlarda ham tez-tez uchraydigan tish kariyesi kavitatsiya yoki tish yuzasining g'adir-budurligi, shuningdek, tish karashini olib tashlashga to'sqinlik qiladigan bakteriyalar to'planishining ko'payishi natijasida kelib chiqishi mumkin, bu esa karioz shikastlanishlar paydo bo'lishi uchun zamin yaratadi [17].

SBK bilan og'rikan bolalarda azot chiqindilari miqdorini kamaytirishga qaratilgan oqsilli parhezning o'rmini bosuvchi yuqori uglevodli parhezni talab qilishiga qaramay, tish kariyesi bilan kasallanishning sezilarli darajada past darajasi qayd etilgan [16]. Bundan tashqari, SBK bilan og'rikan bolalar sog'lom odamlarga qaraganda kamroq yemirilgan va yo'qolgan tishlarga qo'shimcha ravishda kariyes bilan kamroq kasallangan [9, 11,13]. Buning sababi SBK bilan og'rikan bemorlarda so'lak bezlarining yuqori buferlik qobiliyati va so'lakdagi mochevina konsentratsiyasining oshishi bo'lishi mumkin [12, 17]. Bundan tashqari, SBK bilan og'rikan bolalarda kariyesning kamroq tarqalishi so'lakdagi mochevinaning ammiak va karbonat angidridga parchalanishi, tish emalini demineralizatsiya qilish uchun pH ning kritik darajadan oshishi bilan bog'liq bo'lishi mumkin [17,22]. Bundan tashqari, buyrak yetishmovchiligi bo'lgan bemorlarda kariyes rivojlanish xavfining pasayishi mochevinaning antibakterial ta'siri bilan ham bog'liq bo'lishi mumkin [21].

Eritropoetinning kamayishi anemiyani keltirib chiqaradi, natijada og'iz bo'shlig'i shilliq qavati oqaradi [10,15]. Bundan tashqari, gemodializda antikoagulyantlarni qo'llash trombotsitlar agregatsiyasining o'zgarishiga olib keladi, bu esa o'z navbatida og'iz bo'shlig'ida qon ketishi, petexiya va ekximozlarni keltirib chiqaradi [1,8]. Bundan tashqari, buyrak kasalliklari bakterial va kandidoz infeksiyalari bilan bog'liq bo'lib, glossit, mukozit, stomatit, ta'm bilishning o'zgarishi, disgevziya, og'riq, og'iz bo'shlig'i va til shilliq qavatining yallig'lanishiga olib keladi [11].

Tish chiqishining kechikishi, ko'plab tadqiqotlarga ko'ra, noaniq etiologiyaga ega. Biroq, u somatik o'sishning umumiy pasayishi tufayli yuzaga kelishi mumkin [25]. Bundan tashqari, SBKning tipik tizimli belgisi bo'lgan kamqonlik og'iz orqali qabul qilinadigan temir preparatlari bilan davolanadi, bu esa buyrak kasalliklari bilan og'rikan bemorlarda tishlarning chiqishi kechikishiga va tish rangining o'zgarishiga olib keladi. Tish chiqishining kechikishi, odatda, og'iz bo'shlig'i salomatligiga salbiy



ta'sir ko'rsatmasa-da, stomatolog tomonidan vaqti-vaqti bilan klinik va rentgenologik kuzatuv tavsiya etiladi [20,26].

Bundan tashqari, SBK bilan og'rikan bolalarda tana va yuz o'sishining buzilishi aniqlangan, bu oqsil yetishmovchiligi, o'sish gormoni yetishmovchiligi, buyrak osteodistrofiyasi, anemiya, metabolik atsidoz, shuningdek, yuqoridagilarning kombinatsiyasi tufayli yuzaga kelishi mumkin [18]. Autosom-dominant polikistoz buyrak kasalligi bilan og'rikan bemorlarning yuzlarining uch o'lchovli fotosuratlarini tahlil qilindi, ularda yuzning vertikal cho'zilishi, yuz o'rta qismining yengil gipoplaziyasi va burunning o'rtacha cho'zilishi ko'rinadi [19]. Bu o'zgarishlar bosh-yuz xususiyatlarining standart qiymatlarga nisbatan keng tarqalgan variantlari hisoblanadi [4,14].

Shunday qilib, SBK bilan og'rikan bemorlar orasida milk va parodont kasalliklarining ko'proq tarqalishi infeksiyaga qarshilikning zaiflashishi, yaralarning sekin bitishi, buyrak osteodistrofiyasi tufayli alveolyar suyakning shikastlanishi, qandli diabet, qon ketadigan diatez, to'yib ovqatlanmaslik va og'iz bo'shlig'i gigiyenasini buzadigan umumiy holat bilan izohlanishi mumkin.

Adabiyotlar ro'yxati:

1. Andaloro C, Sessa C, Bua N, Mantia I. Chronic kidney disease in children: Assessment of oral health status. *Dent Med Probl.* 2018;55(1):23-28. DOI: 10.17219/dmp/81747
2. Baiko S. Chronic kidney disease in children: definition, classification and diagnostics. *Nephrology and dialysis.* 2020;22(1):53-70. doi: 10.28996/2618-9801-2020-1-53-70. (in Russian)
3. Chan JC, Williams DM, Roth KS. Kidney failure in infants and children. *Pediatr Rev.* 2002;23:47-60.
4. Dembowska, E.; Jaroń, A.; Gabrysz-Trybek, E.; Bladowska, J.; Trybek, G. Oral Mucosa Status in Patients with End-Stage Chronic Kidney Disease Undergoing Hemodialysis. *Int. J. Environ. Res. Public Health* 2023, 20, 835. <https://doi.org/10.3390/ijerph20010835>
5. Dinikulov J.A., Abduazimova L.A., Abbasova D.B., Kuchkarova M.K. Innovation Approach to Caries Treatment Among the Children Based on Algorithmic Diagnostics// *International Journal of Psychosocial Rehabilitation*, Vol24, Issue 09, 2020 ISSN: 1475-7192



6. Evenepoel P, Jørgensen HS, Bover J, et al. Recommended calcium intake in adults and children with chronic kidney disease-a European consensus statement. *Nephrol Dial Transplant*. 2024;39:341-366. 86.
7. Evenepoel P, Jørgensen HS, Bover J, et al. Recommended calcium intake in adults and children with chronic kidney disease-a European consensus statement. *Nephrol Dial Transplant*. 2024;39:341-366.
8. GBD Chronic Kidney Disease Collaboration. Global, regional, and national burden of chronic kidney disease, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2020;395(10225):709–733. doi: 10.1016/S0140-6736(20)30045-3
9. Ghada A Elhousseiny, Wafaa Saleh. Oral Health in Children with Chronic Kidney Disease, Hemodialysis, and Renal Transplantation: A Comprehensive Narrative Review of the Oral Manifestations and Dental Implications. *Clinical Medicine Insights: Pediatrics*. 2024. Volume 18: 1–13.
10. Khonsari RH, Ohazama A, Raouf R, et al. Multiple postnatal craniofacial anomalies are characterized by conditional loss of polycystic kidney disease 2 (Pkd2). *Hum Mol Genet*. 2013;22:1873-1885.
11. Limeira FIR, Yamauti M, Moreira AN, et al. Dental caries and developmental defects of enamel in individuals with chronic kidney disease: systematic review and meta-analysis. *Oral Dis*. 2019;25:1446-1464.
12. Mak RH, Iyengar A, Wang AY. Nutrition management for chronic kidney disease: differences and special needs for children and adults. *Semin Nephrol*. 2023;43:15144.
13. Moorthi RN, Moe SM. Recent advances in the noninvasive diagnosis of renal osteodystrophy. *Kidney Int*. 2013; 84 (5): 886-894.
14. Nakhjavani YB, Bayramy A. The dental and oral status of children with chronic renal failure. *J Indian Soc Pedod Prev Dent*. 2007;25:7-9.
15. Nrmala SVSG. Oral health and dental care of children with renal diseases – a narrative review. *J Dent Health Oral Disord Ther*. 2019;10(2):132-138. DOI: 10.15406/jdhodt.2019.10.00474
16. Padubidri M, Pawar N, Padmawar N, Nara A, Joshi S, Mopagar V. Dental Management of Patients with Nephrotic Syndrome-A Report of 2 cases. *In Pravara Med Rev*. 2018;10(1):33-38.
17. Proctor R, Kumar N, Stein A, Moles D, Porter S. Oral and dental aspects of chronic renal failure. *J Dent Res*. 2005;84:199-208.



18. Schmalz G, Patschan S, Patschan D, Ziebolz D. Oral health-related quality of life in adult patients with end-stage kidney diseases undergoing renal replacement therapy - a systematic review. *BMC Nephrol.* 2020;21:154.
19. Sezer B, Kaya R, Kodaman Dokumacıgil N, et al. Assessment of the oral health status of children with chronic kidney disease. *Pediatr Nephrol.* 2023;38:269-277.
20. Silva TMC, Alves LAC, Garrido D, et al. Health and oral health-related quality of life of children and adolescents with chronic kidney disease: a cross-sectional study. *Qual Life Res.* 2019;28:2481-2489.
21. Skorecki K, Green J, Brenner BM. Chronic renal failure. In: Kasper DL, Braunwald E, Fauci AS, et al, eds. *Harrisons Principles of Internal Medicine.* McGraw-Hill; 2005:1653.
22. Seraj B, Ahmadi R, Ramezani N, Mashayekhi A, Ahmadi M. Oro-dental health status | salivary characteristics in children with chronic renal failure. *Dent J.* 2011;8:146-151.
23. Thomas C. The roles of inflammation and oral care in the overall wellness of patients living with chronic kidney disease. *Dent Econ.* 2008;98:111-120.
24. Velan E, Sheller B. Oral health in children with chronic kidney disease. *Pediatr Nephrol.* 2021;36:3067-3075.
25. Клинические практические рекомендации KDIGO 2012 по диагностике и лечению хронической болезни почек. *Нефрология и диализ.* 2017; 19 (1): 22-26.
26. Морозова Н.С., Чугаева У.Ю., Козлитина Ю.А., Строгонова А.Г., Мазурина Л.А., Иванникова К.О. Оптимизация подходов к лечению стоматологических заболеваний у детей с хроническим поражением почек, находящихся на гемодиализе. *Вопр. практики. педиатр. (Клиническая практика в педиатрии).* 2020; 15(2): 63–67. DOI: 10.20953/1817-7646-2020-2-63-67.
27. Хусанбоева Ф.А., Ризаев Ж. А., Кубаев А. С. Проявления хронической болезни почек в полости рта// *Доктор ахборотномаси,* 2021. № 4 (101) С. 153-159.