

# THE PREVALENCE OF ATOPIC DERMATITIS AMONG CHILDREN IN SAMARKAND REGION

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## Abstract.

Atopic dermatitis (AD) is one of the most common chronic inflammatory skin diseases among children. This article presents the results of a retrospective study on the prevalence of AD among children in the Samarkand region in 2024. The analysis of the disease was conducted based on region, gender, and age groups, and associated comorbidities were identified. The clinical characteristics of the patients, diagnostic criteria used, and methods for assessing the severity of the disease were determined. **Research Objective.** The aim of the study is to analyze the frequency of atopic dermatitis (AD) cases among children in the Samarkand region, as well as to investigate the clinical features of the disease. **Materials and Methods.** The study was conducted in 2024 at the Samarkand branch of the specialized scientific-practical medical center for dermatovenereology and cosmetology. The study included children who sought medical attention for skin diseases. In 2024, the total number of patients visiting the center was 42,917, of whom 1,330 (3.1%) suffered from atopic dermatitis. **Research Results.** The following clinical forms were identified in patients with atopic dermatitis: Erythematous-squamous form – 61 cases (39 boys, 22 girls); Exudative form – 18 cases (10 boys, 8 girls); Lichenoid form – 12 cases; Pruriginous form – 9 cases. The SCORAD index was used to diagnostically assess the severity of the disease. According to the examination results: Mild form (up to 40 points) – 51%; Moderate form (40-60 points) – 37%; Severe form (over 60 points) – 12%. **Conclusions.** In the Samarkand region, the prevalence of atopic dermatitis among children is 3.1% of the total number of patients with skin diseases. The highest incidence rate was recorded in the Taylak, Urgut, and Samarkand districts, where 60.8% of all cases were identified. Gender analysis showed a predominance of the disease among boys (63.5%).

**Key words:** Atopic dermatitis, children, Samarkand region, SCORAD, diagnosis.

**Kirish.** Atopik dermatit (AD) - erta boshlanishi, klinik ko'rinishlarining polimorfizmi va turli patomorfologik xususiyatlar, shuningdek, bemorning butun hayoti davomida boshqa atopik patologiyaga aylanish tendentsiyasi bilan tavsiflangan bolalik davridagi eng keng tarqalgan atopik kasalliklardan biri (1,3,6,18,23). Ko'pgina tadqiqotchilar atrof-muhit omillari, turmush tarzi, yomon odatlar va umuman allergik kasalliklar va ayniqsa, AD kasallanishning yanada oshishini bashorat qilishiga ishonishadi. Mavjud vaziyat muammoni hal qilishning yangi usullarini, jumladan, kasallikning patogenetik mexanizmlarini, diagnostika mezonlari va prognostik belgilarini, oldini olish va davolashning zamonaviy usullarini yanada o'rganishni talab qiladi. Zamonaviy tushunchalarga ko'ra, AD multifaktorial kasalliklar guruhiga kiradi, ularning rivojlanishi genetik va atrof-muhit omillarining ta'siri bilan belgilanadi [4,5,7,8,11,13]. Bugungi kunga qadar atopiya rivojlanishida 40 dan ortiq genlarning ishtiroki isbotlangan, ularning aksariyati mahalliyashtirilgan [11,12,14,15,16,17,19,20].

AD - qichishish, quruqlik, peeling va takroriy toshmalar bilan tavsiflangan surunkali yallig'lanishli teri kasalligi. So'nggi yillarda bolalar orasida gipertoniya bilan kasallanishning ko'payishi kuzatilmoqda, bu yesa uni muhim tibbiy va ijtimoiy muammoga aylantiradi. Kasallik yerta bolalik davrida rivojlanadi va allergik reaksiyalar, bronxial astma va boshqa atopik holatlar bilan birga bo'lishi mumkin [21, 22].

**Ushbu tadqiqotning maqsadi** Samarqand viloyatidagi bolalar orasida AD ning chastotasini tahlil qilish, shuningdek kasallikning klinik xususiyatlarini o'rganishdan iborat.

**Materiallar va usullar.** Tadqiqot 2024-yilda dermatovenerologiya va kosmetologiya

ixtisoslashtirilgan ilmiy-amaliy tibbiyot markazining Samarqand filialida o‘tkazildi. Unda teri kasalliklari bo‘yicha tibbiy yordamga murojaat qilgan bolalar ishtirok yetdi. 2024-yilda markazga tashrif buyurgan bemorlarning umumiy soni 42 917 kishini tashkil yetdi, ulardan 1330 nafari (3,1%) AD bilan kasallangan.

**Diagnostika mezonlari.** Atopik dermatitni o‘rganish uchun bemorlar quyidagi diagnostika mezonlari asosida tanlangan (Hanifin, Rajka. Acta Derm. 92/44, 1980): Terining qichishi (prurigo), hatto toshmalarning minimal namoyon bo‘lishi bilan ham; Qonda IgE darajasining oshishi; Kasallikning 2 yoshdan oldin boshlanishi; Kaftlar va interdigital bo‘shliqlar terisining giperlinearligi; Pityriasis alba (yuz va elkada rangsiz dog‘lar); Follikulyar giperkeratoz; Peeling, kseroz, ichtiyoz; Qo‘l va oyoqlarning o‘ziga xos bo‘lmagan dermatitis; Tez-tez teri infeksiyalari (stafilokokk, qo‘ziqorin, gerpetik); Oq dermografizm; Terlash paytida qichishish; Bo‘yin burmalari; Ko‘z ostidagi qora doiralar; Suv protseduralaridan keyin terining tirnash xususiyati (2 yoshgacha bo‘lgan bolalarda) va boshqa belgilar.

Teri toshmalarini lokalizatsiya qilishda ularning yuz, bo‘yin, qo‘ltiq osti, tirsak burmalari, tos suyagi, bosh terisi va quloq orqasida paydo bo‘lishi hisobga olingan.

Bundan tashqari, bolalarda atopiyaning individual yoki oilaviy tarixi, shuningdek kasallikning surunkali takrorlanadigan kursi aniqlandi.

**Istisno mezonlari.** Istisno mezonlari seboreik dermatit, dermatomikoz, qo‘tir, bolalar qo‘tirlari, quruq streptoderma, ekzema va boshqa teri patologiyalari kabi dermatologik kasalliklarning yo‘qligi edi. Tadqiqot ma‘lumotlari bemorning ahvolini samarali boshqarishga imkon beradigan bo‘lsa-da, shuni ta‘kidlash kerakki, atopik dermatit (BP) diagnostikasi uchun mutlaq «oltin standart» mavjud emas. Buni mualliflar kasallikning chastotasini, uning tarqalishini va boshqa patologiyalar bilan bog‘liqligini tahlil qiladigan tibbiy adabiyotlar tasdiqlaydi [2].

Mavjud ma‘lumotlarga asoslanib, 2024-yilda tug‘ilgan bolalar orasida kasallanish holatlari har bir tuman va viloyat bo‘yicha tahlil qilinib, jami 148 nafar bemorga nisbatan solishtirilmog‘da.

Atopik dermatit eng ko‘p Toyloq, Urgut va Samarqand tumanlarida qayd etilgan. Eng kam holat Jomboy, Kattaqo‘rg‘on, Qo‘shrabot, Nurobod, Narpay tumanlarida hamda Toshkent shahrida kuzatilgan bo‘lib, ularda atigi bitta murojaat ro‘yxatga olingan.

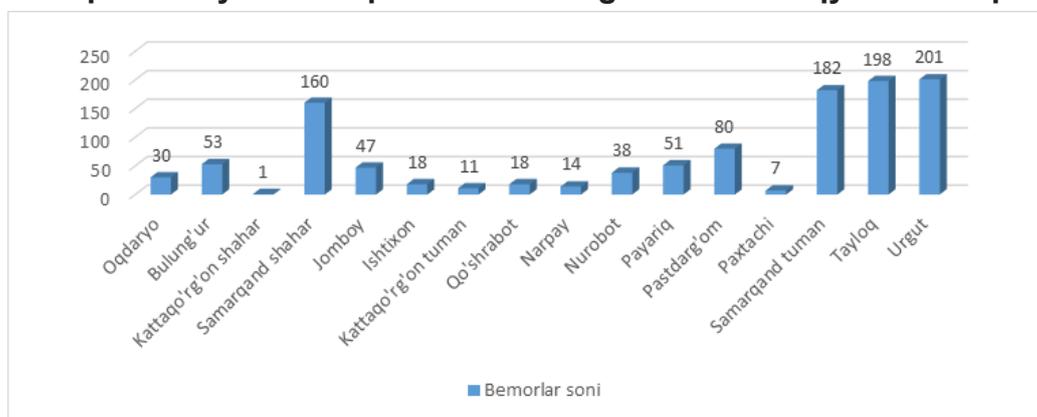
Kasallanishning eng yuqori darajasi quyidagi hududlarda kuzatiladi: Toyloq – 36 ta holat (24,3%); Urgut – 28 ta holat (18,9%); Samarqand – 26 ta holat (17,6%) ni tashkil etdi.

Umumiy hisobda, ushbu hududlar ro‘yxatga olingan holatlarning 60,8 foizini tashkil etadi. Bu esa mazkur hududlarda atopik dermatitning kengroq tarqalganligini ko‘rsatadi. Vaziyatga ta‘sir ko‘rsatuvchi omillar sifatida ekologik sharoitlar, iqlim xususiyatlari va tibbiy xizmatlarning mavjudligini ko‘rsatish mumkin.

Kasallanishning o‘rtacha darajasi quyidagi hududlarda qayd etilganda Samarqand shahri – 13 ta holat (8,8%), Pastdarg‘om timanida – 8 ta holat (5,4%), Bulung‘ur timanida – 9 ta holat (6,1%) hamda Payariq tumanida – 6 ta holat (4,1%) ni ko‘rsatdi.

Rasm-1

**Samarqand viloyatida atopik dermatitning tumanlar miqyosida tarqalishi**



Ushbu hududlarda kasallanish darajasi eng ko‘p holatlar qayd etilgan hududlarga qaraganda past bo‘lsa-da, baribir sezilarli darajada saqlanib qolmog‘da.

Kam uchraydigan holatlar quyidagi tumanlarda qayd etilganligi aniqlandi Ishtixon va Nurobod tumanlarida – 3 tadan holat, Jomboy, Kattaqoʻrgʻon, Qoʻshrabot, Nurobod, Narpay – 2 tadan holat hamda Toshkent shahri – 1 ta holat va Qashqadaryo viloyati – 5 ta holat.

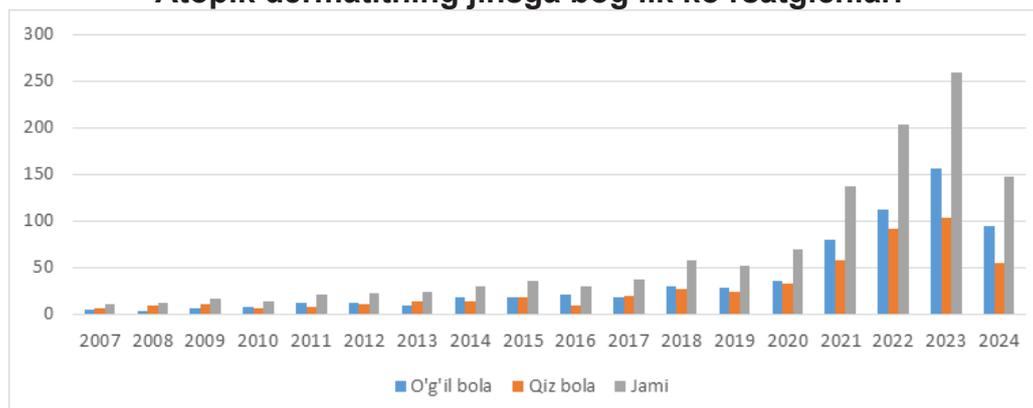
Ushbu hududlarda atopik dermatit bilan bogʻliq murojaatlar kamroq qayd etilgan. Ehtimol, bemorlar oʻz yashash joylaridagi tibbiyot muassasalariga murojaat qilishgan (Rasm. 1).

**Jins boʻyicha tahlil.** Kasallangan bolalar orasida oʻgʻil bolalar 63,5 foizni, qizlar esa 36,5 foizni tashkil etadi: Oʻgʻil bolalar - 94 ta holat (63,5%), qizlar - 54 ta holat (36,5%).

Shundan oʻgʻil bolalar eng koʻp kasallangan hududlarga Tayloq - 25 ta holat, Urgut - 21 ta holat, Samarqand - 14 ta holatni tashkil etgan boʻlsa qizlar eng koʻp kasallangan hududlar Samarqand - 12 ta holat, Tayloq - 11 ta holat va Urgut tumanlarida - 7 ta holatda kuzatildi (Rasm. 2).

Rasm-2

Atopik dermatitning jinsga bogʻliq koʻrsatkichlari



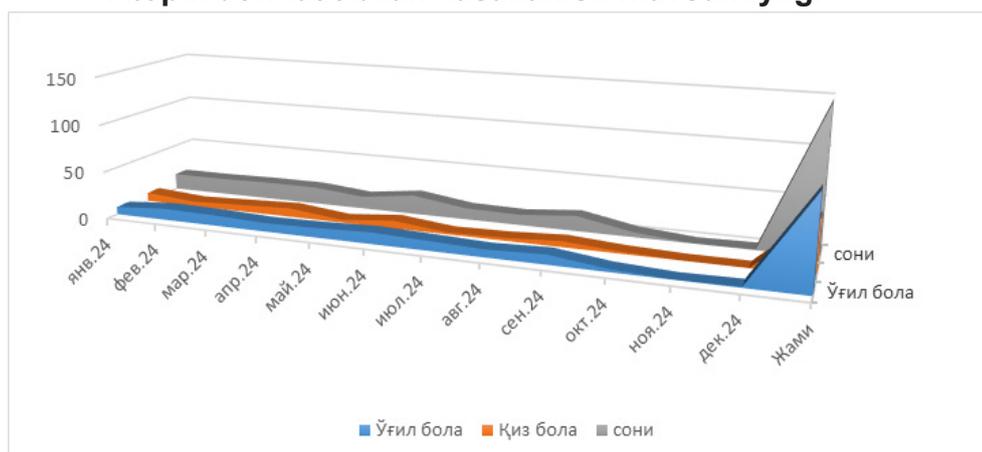
**Yosh boʻyicha statistic maʼlumotlar tahlil qilinganda** 2024-yilda atopik dermatit tashxisi bilan murojaat qilgan bemorlarning 88,3 foizi 2007-2024-yillar oraligʻida tugʻilgan. Murojaatchilarning umumiy sonidan 38,4 foizini qizlar va 49,9 foizini oʻgʻil bolalar tashkil etadi.

Shundan eng yuqori kasallanish yoz va bahor davrlarida kuzatilgan va 2024-yil iyun - 13,5% holatda boʻlsa 2024-yil mart-aprel - 12,2% holatda uchragan.

Eng kam holatlar qayd etilgan: 2024-yil dekabr - 0,7%, 2024-yil oktyabr - 3,4% (Rasm. 3).

Rasm-3

Atopik dermatit bilan kasallanish mavsumiyligi



**Klinik xususiyatlari AD shakllarini taqsimlash.** Atopik dermatit bilan ogʻirigan bemorlarda quyidagi klinik shakllar aniqlandi. Eritematoz-skvamoz shakli - 61 holat (39 oʻgʻil, 22 qiz); Ekssudativ shakl - 18 holat (10 oʻgʻil, 8 qiz); Likenoid shakli - 12 ta holat; Prurigoid shakli - 9 ta holat; Kasallik ogʻirligini diagnostik baholash (SCORAD);

Scorad indeksi ADning ogʻirligini aniqlash imkonini berdi. Umumiy tekshiruvda oʻtkazilgan kasallardan yengil shakli – (40 ballgacha) - 51%, oʻrtacha shakl (40-60 ball) - 37% va ogʻir shakl (60 balldan ortiq) - 12%ni tashkil etdi.

**Xulosa.** Tadqiqot natijalari shuni koʻrsatdiki, Samarqand viloyatida bolalar orasida AD bilan

kasallanish teri kasalliklari bilan og'rigan bemorlar umumiy sonining 3,1 foizini tashkil qiladi. Eng yuqori kasallanish Tailoq, Urgut va Samarqand tumanlarida qayd yetilgan bo'lib, bu erda barcha holatlarning 60,8% qayd etilgan. Gender tahlili o'g'il bolalar orasida qon bosimining ustunligini aniqladi (63,5%). Kasallikning eng keng tarqalgan shakli eritematoz-skuamoz shakl (51,2% hollarda). Tadqiqot erta tashxis qo'yish va AD ni davolashga kompleks yondashuv, shu jumladan terapiyani individual tanlash, turmush tarzini tuzatish va allergenga xos davolash zarurligini tasdiqlaydi.

### List of references

- [1] Atopic dermatitis: a guide for doctors / edited by Yu. V. Sergeev - M.: Medicine for all, 2002. - 183 p.
- [2] Balabolkin, I. I. Food allergy in children / I. I. Balabolkin; edited by I. I. Balabolkin, V. A. Revyakina. - M.: Dynasty Publishing House, 2010. - 190 p.
- [3] Baranov, A. A. Children's allergology / A. A. Baranov, I. I. Balabolkin. - M.: GEOTAR-Media, 2006. - 688 p.
- [4] Ganiev A. G., Kholmatov D. N., Mirzaeva Z. U. The relationship between food allergy and atopic dermatitis in children // *Re-health Journal*. - 2020. - No. 2-3 (6). - P. 93-97.
- [5] Gimalova, G. F. Gene-gene interactions in the development of allergic diseases / *Biotechnology - from science to practice*. - Ufa: Bashkir State University, 2014. - T. 2. - P. 19-24.
- [6] Elisyutina, O. G. Genetic aspects of the immunopathogenesis of atopic dermatitis / O. G. Elisyutina, E. S. Fedenko, M. N. Boldyreva, G. O. Gudima // *Immunology*. – 2015. – Vol. 36, No. 2. – P. 122–128.
- [7] Ilyinskikh N. N. et al. The role of mutations in the FLG, GSTM1 genes and cytogenetic aberrations in the development of allergic occupational dermatitis in oil workers in northern Siberia // *Russian Allergological Journal*. – 2011. – No. 4. – P. 40–44.
- [8] Namazova-Baranova L. S. et al. Atopic dermatitis in children: current clinical guidelines for diagnosis and therapy // *Issues of modern pediatrics*. – 2016. – Vol. 15. – No. 3. – P. 279–294.
- [9] Korotkiy, N. G. Sharova N. M., Tikhomirov A. A. / New possibilities of therapy of atopic dermatitis in children depending on its clinical and pathogenetic variants // *Russian journal of skin and venereal diseases*. - 2000. - No. 5. - P. 35-38.
- [10] Ministry of Health of the Republic of Uzbekistan. Order No. 273 of 11/30/2021.
- [11] Smirnova, G. I. Disease management: atopic dermatitis in children / G. I. Smirnova // *Russian pediatric journal*. - 2014. - Vol. 17, No. 6. - P. 46-52.
- [12] Tamrazova O. B., Glukhova E. A. The unique molecule filaggrin in the structure of the epidermis and its role in the development of xerosis and pathogenesis of atopic dermatitis. *Clinical dermatology and venereology*. 2021; 20 (6): 102-110 // *Russian Journal of Clinical Dermatology and Venereology*. - 2021. - Vol. 20. - No. 6. - P. 104-112.
- [13] Shakhova N. V. et al. Atopic dermatitis in preschool children: prevalence, clinical and allergological characteristics and risk factors // *Russian Allergological Journal*. - 2018. - Vol. 15. - No. 1-1. - P. 55-62.
- [14] Agrawal R., Woodfolk J. A. Skin barrier defects in atopic dermatitis // *Current allergy and asthma reports*. – 2014. – T. 14. – P. 1-11.
- [15] Acar N. V. et al. Rare occurrence of common filaggrin mutations in Turkish children with food allergy and atopic dermatitis // *Turkish Journal of Medical Sciences*. – 2020. – T. 50. – No. 8. – S. 1865-1871.
- [16] González-Tarancón R. et al. Prevalence of FLG loss-of-function mutations R501X, 2282del4, and R2447X in Spanish children with atopic dermatitis // *Pediatric dermatology*. – 2020. – T. 37. – No. 1. – pp. 98-102.
- [17] Drislane C., Irvine A. D. The role of filaggrin in atopic dermatitis and allergic disease // *Annals of Allergy, Asthma & Immunology*. – 2020. – T. 124. – No. 1. – pp. 36-43.

- [18] Cabanillas B., Novak N. Atopic dermatitis and filaggrin // *Current opinion in immunology*. – 2016. – T. 42. – P. 1-8.
- [19] Čepelak I., Dodig S., Pavić I. Filaggrin and atopic march // *Biochemia medica*. – 2019. – T. 29. – No. 2. – pp. 214-227.
- [20] Gimalova G. F. et al. The study of filaggrin gene mutations and copy number variation in atopic dermatitis patients from Volga-Ural region of Russia // *Gene*. – 2016. – T. 591. – No. 1. – pp. 85-89.
- [21] Toropova N. P., Sorokina K. N., Lepeshkova T. S. Atopic dermatitis in children and adolescents: Evolution of views on the pathogenesis and therapeutic approaches // *Russian journal of skin and venereal diseases*. – 2014. – T. 17. – No. 6. – pp. 50-59.
- [22] Hanifin, J. M., Rajka, G. *Acta Derm.* 92/44, 1980.
- [23] SCORAD: International consensus on atopic dermatitis severity scoring, 1993.