

OPTIMIZATION OF THE TREATMENT OF ATOPIC DERMATITIS IN CHILDREN WITH ZINC DEFICIENCY

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Abstract.

The aim of the study was to evaluate the clinical significance of zinc deficiency in children with atopic dermatitis and its correction. **Materials and Methods:** The study was conducted at the multidisciplinary clinic of Tashkent Medical Academy in the department of pediatric allergology on 38 children aged 2-7 years with atopic dermatitis (AD). The children were divided into 3 groups: the main group - children with AD diagnosis receiving the main treatment + zinc, n=15 (39.5%); the comparison group - children with AD receiving only the main treatment, n=23 (60.5%); and the control group - almost healthy children, n=15. The clinical manifestations of AD were assessed using the SCORAD index. Clinical examination included anamnesis collection and objective examination. All children underwent standard laboratory tests and evaluation of zinc levels in blood serum (using X-ray fluorescence analysis). **Results:** All children with AD were divided into 2 groups based on the Zn content in their blood serum. The first group (main group) included children with serum Zn concentrations below 9.5 $\mu\text{mol/L}$. The second group (comparison group) included children with serum Zn concentrations above 10 $\mu\text{mol/L}$. In the main group, nail hyperkeratosis was observed in 7 children (46.7%), perioral dermatitis in 11 children (73.3%), and perianal dermatitis in 7 children (46.7%). In the comparison group, nail hyperkeratosis was observed in 2 children (8.7%), perioral dermatitis in 6 children (26.1%), and perianal dermatitis in 3 children (13.4%). Children in the main group received the main treatment and additionally took a zinc-containing preparation for 1 month. In the comparison group, children received only the main treatment. After treatment, a positive dynamic of AD symptoms was observed in the main group. The introduction of zinc-containing preparation not only significantly improved the SCORAD index but also helped to moisturize the skin. In the main group, an increase in blood zinc levels was recorded, and further treatment with zinc-containing preparation was recommended. For children with normal zinc levels, zinc-containing preparations were added to their diet. **Conclusion:** Thus, zinc deficiency in serum was found in 39.5% of children in the study group. Zinc deficiency in children with AD was accompanied by clinical manifestations such as nail hyperkeratosis, perioral and perianal dermatitis. It is recommended to prescribe zinc-containing preparations for correcting zinc deficiency in patients with AD.

Key words: Respiratory syncytial infection, clinical and laboratory features, respiratory failure,

Mavzuning dolzarbligi. So'nggi o'n yilliklarda allergik kasalliklarga chalingan bolalar soni sezilarli darajada oshdi. Rasmiy statistik ma'lumotlarga ko'ra, dunyo aholisining 30-40% allergik patologiyaning turli shakllariga moyil. [2,3,12]. Ko'pincha bolalarda aniqlangan allergik reaksiyalar atopik kelib chiqadi. Bolalardagi allergik kasalliklar orasida atopik dermatit (AD) keng tarqalgan. [15].

AD bo'lgan bolalarda qattiq gipoallergen parhezlardan foydalanish ko'pincha rux, magniy, kaliy, kaltsiy va boshqalar kabi makro va mikroelementlarning yetishmasligiga olib keladi. [9]. Ushbu elementlar orasida rux ayniqsa muhim rol o'ynaydi. Ushbu element inson organizmidagi ko'plab biologik jarayonlar, jumladan metabolizm, oqsil sintezi, immunitet tizimining ishlashi va terining sog'lom bo'lishini ta'minlash uchun zarurdir [11,13]. Rux normal o'sish va rivojlanish uchun zarurdir, ayniqsa homiladorlik, bolalik va o'smirlik davrida.

Ko'pgina ilmiy tadqiqotlar tanadagi rux yetishmovchiligi terining gomeostazasi yaxlitligini buzishini tasdiqlaydi, chunki ruxning muhim qismi epidermisda joylashgan. Bundan tashqari, rux

organizmdagi turli fermentativ reaksiyalarda ishtirok etadi. [13,7,8].

Shunday qilib, atopik dermatitda tanadagi rux darajasi diagnostika va davolash jarayonida uning ahamiyatini ta'kidlab, muhim omil bo'lib qolmoqda.

Ushbu tadqiqotning maqsadi atopik dermatitli bolalarda rux yetishmovchiligidaning klinik ahamiyatini va uni tuzatishni baholashdir.

Materiallar va tadqiqot usullari. Tadqiqotlar Toshkent tibbiyot akademiyasi ko'p tarmoqli klinikasi, bolalar allergologiyasi bo'limida 2 yoshdan 7 yoshgacha bo'lgan 38 nafar AD bilan og'rikan bolalarda o'tkazildi.

Biz barcha tekshirilgan bolalarni 3 guruhga ajratdik: 1-asosiy guruh, AD tashxisi bo'lgan bolalar n=15 (39,5%) (asosiy davu + rux o'z ichiga olgan dori), 2-qiyoslash guruhi, AD bilan og'rikan bolalar faqat asosiy davu n=23 (60,5%). 3-o'rinda deyarli sog'lom bolalar (nazorat guruhi, n=15).

Tadqiqotlar Toshkent tibbiyot akademiyasi ko'p tarmoqli klinikasi, bolalar allergologiyasi bo'limida 2 yoshdan 7 yoshgacha bo'lgan 38 nafar atopik dermatit (AD) bilan og'rikan bolalar o'rtasida o'tkazildi.

Barcha bolalar uch guruhga bo'lingan: 1-asosiy guruh - AD tashxisi qo'yilgan, asosiy davu va rux o'z ichiga olgan preparatni qabul qiluvchi n=15 (39,5%); 2-qiyoslash guruhi - faqat asosiy davu olgan ADli bolalar n=23 (60,5%); 3-nazorat guruhi - deyarli sog'lom bolalar (n=15).

AD klinik ko'rinishlarining darajasi ob'ektiv (teri shikastlanishining tarqalishi) va sub'ektiv (teri qichishi va uyqu buzilishining intensivligi) mezonlarini o'z ichiga olgan SCORAD (atopik dermatit reytingi) indeksi [1] bo'yicha baholandi.

AD bilan og'rikan bolalarning klinik tekshiruv anamnestik ma'lumotlarni to'plash va ob'ektiv tekshirishni o'z ichiga oladi. Barcha bolalar standart va qon zardobidagi rux darajasiga muvofiq laboratoriya tekshiruvlaridan o'tkazildi (qurilmaga kiritilgan ko'rsatmalarga muvofiq rentgen-fluoresan tahlil usuli - RFT yordamida).

Tadqiqot natijalari. AD bo'lgan barcha tekshirilgan bolalar qon zardobidagi Zn tarkibiga qarab 2 kichik guruhga bo'lingan. 1-guruh (asosiy guruh) qon zardobida Zn kontsentratsiyasi 9,5 mkmol/l dan kam bo'lgan bolalarni o'z ichiga oladi. 2-guruh (taqqoslash guruhi) bolalarda normal Zn miqdori bor - 10 mkmol / l dan ortiq. Tekshiruv davomida qiyosiy guruhda Zn miqdori 10 mkmol/l dan ortiq ekanligi aniqlandi. Biz ADning quyidagi klinik belgilarini kuzatdik: 2 bolada tirnoqlar giperkeratozi (8,7%), perioral dermatit 6 bolada (26,1%), perianal dermatit 3 bolada (13,4%).

Qon zardobida Zn miqdori kamaygan asosiy guruh bolalarida tirnoqlar giperkeratozi qiyosiy guruh bolalariga qaraganda 3 marta tez-tez (7 bola 46,7%), perioral dermatit 2 marta tez-tez (11 bola 73,3%), perianal dermatit 2 marta tez-tez (7 bola 46,7%) kuzatildi.

Asosiy guruhdagi bolalarda (rux yetishmovchiligi bilan) klinik simptomlarni baholashda ADning klinik ko'rinishlari sezilarli darajada tez-tez kuzatildi. Buning sababi, epidermisdagi rux kontsentratsiyasi terining chuqur qatlamlariga qaraganda yuqori. Rux keratinotsitlarning faol proliferatsiyasi va differentsiatsiyasi uchun zarurdir. Shunday qilib, epidermisdagi rux yetishmovchiligi ozuqa moddalarining yetishmasligi tufayli epidermisdagi turli fermentativ reaksiyalarga, transkripsiya faolligiga va oqsillar faoliyatiga ta'sir qiladi, bu teri gomeostazini buzadi[15].

Barcha bolalar laboratoriya tekshiruvlari natijalariga ko'ra davolandilar. Asosiy guruhdagi bolalar asosiy davu oldilar va qo'shimcha ravishda 1 oy davomida rux o'z ichiga olgan preparat, kuniga 1 marta ovqatdan keyin ertalab 1 tabletkadan buyurildi. Qiyosiy guruhda faqat asosiy davu buyurilgan.

Davodan so'ng asosiy guruh bolalarida AD belgilarining ijobiy dinamikasi qayd etildi. ADni kompleks davolashda rux o'z ichiga olgan preparatning kiritilishi nafaqat kasallikning og'irlik indeksining (SCORAD) sezilarli yaxshilanishiga, balki terining yanada aniq namlanishiga ham yordam berdi.

Asosiy guruhdagi bolalarning qonida rux miqdorini qayta tekshirilganda, n=8 (53,3%) da qondagi rux miqdori biroz oshganligi (12,8 mkmol/l) qayd etilgan. Keyinchalik, bu bolalarga rux o'z ichiga olgan preparat bilan davu davom ettirish tavsiya etildi.

5 ta bolada (33,3%) qon tahlilida rux miqdori me'yorda (N-9,8-16,8 mkmol/l) bo'lgan. Bu bolalar rux o'z ichiga olgan preparatlarni olib tashladilar. Ratsionga rux o'z ichiga olgan mahsulotlarni, masalan: bug'doy kepagi, mol go'shti, tovuq ko'kragi, pishloq, jo'xori uni va boshqalarni kiritish tavsiya etiladi.

Xulosa. Shunday qilib, tadqiqot guruhidagi bolalarda zardobdagi rux yetishmovchiligi 39,5% ni

tashkil etdi.

AD bilan og'riqan bolalarda rux yetishmovchiligi tirnoq giperkeratozi, periorbital va perianal dermatit kabi klinik ko'rinishlar bilan birga keldi. AD bilan og'riqan bemorlarda rux yetishmovchiligini tuzatish uchun rux o'z ichiga olgan preparatlarni buyurish tavsiya etiladi.

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