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IRON DEFICIENCY ANEMIA AS A RISK FACTOR FOR HYPOGALACTIA IN NURSING MOTHERS

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Abstract.

Objective. Study of the effect of IDA in nursing mothers on the formation of their lactation function. **Material and methods of the study.** The main group consisted of 241 nursing mothers with varying degrees of anemia: grade I (mild) in 132 (54.8%) with hemoglobin (Hb) and erythrocyte content of 96.7± 0.32 g/l and 3.67±0.018 x 1012/l, grade II (moderate) - in 84 women (34.9%) with the content of Hb (78.4 ± 0.91 g/l) and erythrocytes (3.09 ± 0.027x1012/l) and III degree (severe) - in 25 women (10.3%) with the content of Hb (62.3±0.60 g/l) and erythrocytes (2.74±0.22x1012/l). The severity of anemia was identified by studying hematocrit – Ht («dilution effect»), serum iron. **Study results:** In nursing mothers, as the severity of IDA worsens, there is a steady decrease in the level of daily volume (ml/day), the excretion of breast milk per unit of time (ml/min) and the number of attachments of children to the breast. During the lactation period in nursing mothers with IDA, delayed forms of hypogalactia (against the background of lactation crisis and its late form) are most often detected, with a deficit of daily milk volume ≥ 50.0%, which is the basis for the development of postnatal forms of chronic nutritional disorders on a macro- and micronutrient basis. **Conclusions**. In nursing mothers, as the severity of IDA worsens, there is a steady decrease in the level of daily volume (ml/day), the excretion of breast milk per unit of time (ml/min) and the number of attachments of children to the breast. During the lactation period, in nursing mothers with IDA, delayed forms of hypogalactia (against the background of lactation crisis and its late form) are most often etected, with a deficit of daily milk volume ≥ 50.0%, which is the basis for the development of postnatal forms of chronic nutritional disorders on a macro- and micronutrient basis.

Key words: IDA, breastfeeding, lactation, hemoglobin, erythrocytes, hematocrit, hypogalactia.

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O'zbekiston Respublikasi mustaqillik yillarida ko'krak suti bilan oziqlantirishni saqlab qolish muammosi haqiqatan ham pediatriya ilmining eng muhim masalalaridan biriga aylandi [3,9]. Agar 90-yillarda emizish davomiyligi 6 oygacha atigi 9,0% ni tashkil yetgan bo'lsa [3], so'nggi yillarda bu ko'rsatkich sezilarli darajada ortdi - 26,4% (UNICEF, MICS-2006).

Biroq, bu ko'rsatkich bizning mintaqamizdagi ayollar farzandlarini avlodlarimiz singari ko'p oylar davomida faqat ko'krak suti bilan emizishga hali tayyor emas ekan. Ma'lumki, galaktopoez, ya'ni sekretlangan sutning to'planishi (atsinusning epitelial hujayralari tomonidan), alveolalarning bo'shashi va sekretsiyaning sut kanallariga o'tishi, bolaning emishi va yutishi tufayli sutni ajralishi murakkab gormonal va neyroendokrin jarayon bo'lib hisoblanadi [1.4.6].

Gormonal va neyroendokrin jarayon kechishining buzilishi oqibatlaridan biri gipogalaktiyaning (GG) turli shakllari, ya'ni sut bezlari sekretsiyasining qobiliyati yetarli emasligi hisoblanadi [7, 8, 12]. Tadqiqotchilar GG etiologik omillarning asosiysi (65,0% gacha) homiladorlik va laktatsiya davrida onadagi turli hil ekstraginetal patologiyalarning onalar sog'lig'iga va laktatsiyasiga salbiy ta'siri xisoblanadi [3, 5].

Ularning orasida temir tanqislik kamqonliklar (TTA) asosiy qismini (80,0%) tashkil etadi. Bu borada emizikli onalarda TTA ning laktatsion faoliyai shakllanishiga ta'sirini o'rganish ilmiy-amaliy ahamiyatga ega bo'lib, bu ishning asosiy vazifasi bo'lib xisoblanadi.

Tadqiqotni maqsadi: emizikli onalarda TTA ning laktatsion funktsiyasining shakllanishiga ta'sirini o'rganish.

Materiallar va tadqiqot usullari. Asosiy guruhga turli darajadagi kamqonlik bilan og'rigan 241 nafar emizikli onalar kiritildi: I daraja (yengil) 132 (54,8%) ayollarda gemoglobin (Hb) miqdori 96,7±0,32 g/l va eritrotsitlar soni 3,67±0,018 x 1012g /l, II darajadagisi 84 nafar ayollar bo'lib, (34,9%) Hb miqdori (78,4 ± 0,91g/l) va eritrotsitlar soni (3,09 ± 0,027x1012/l), III daraja (og'ir) anemiya bilan xastalangan 25 ta nafar ayolda

(10,3%) Hb miqdori (62,3±0,60 g/l) va eritrotsitlar soni (2,74±0,22x1012/l) tashkil etdi.

Anemiyaning darajasini gematokritni (Ht) aniqlash usuli orqali o'rgandik («syueltirish effekti»), zardobdagi temir (≤ 12,5 mmol / l), umumiy temirni bog'lash qobiliyati - (UTBQ) (≥ 72,0 mmol/l), ferritin (≤ 12,0 mg /l), transferrinni to'yiniish koeffitsienti (≤ 16,0%), o'rtacha konsentratsiyasi (O'K ≤ 16,7 mmol /l) va bitta eritrotsitdagi gemoglobin tarkibi (GM ≤ 1,67 mmol), bir eritrotsitning o'rtacha hajmi (BEO'X, ≤ 75,0 fl). Nazorat guruhida TTA ning klinik - laborator belgilari bo'lmagan 126 nafar yemizekli ayolardan iborat bo'ldi.

Yoshiga ko'ra TTA bilan og'rigan onalar tekshirildi: 20 yoshgacha TTA bo'lgan onalar - (17,4 ± 2,44%), 21-29 yoshgacha (66,8 ±3,03%) va 30 yoshdan katta (15,7 ±2,35%). Nazorat guruhidagi ayollarda ham proportsional bir hil bo'ldi (16,7 ± 3,32%, 66,6 ± 4,2%, 16,7 ± 3,32%, P>0,05), (24,0 ± 0,03 va 24,5 ± 0,27, P>0,05). TTA bo'lgan bemorlar orasida qayta tuqqan ayollarda (58.2 ± 3.5%) bo'lib nazorat guruhidagilardan deyarli farq qilmadi (62.7 ± 4.43%, P>0.05).

Laktatsiyani baholashda bolalarni control tortib ko'rish orqali amalga oshirildi. Bunda aseptika tamoillariga to'la amal qilingan xolda, bolani ovqatlantirmasdan avval, so'ng emizilganidan keyin tortildi va ular orasidagi farqni belgilab, so'ng ikkala ko'krakdagi qolgan sut sog'ib toshlandi (ko'krak bezlari va qo'llar tozalandi).

Laktatsiya hajmining kunlik o'zgarishlarini istisno qilish maqsadida bolalarni tortishini hafta davomida nazorat (ikkitasi ish kunlari va bittasi yakshanba) kunning turli vaqtlarida (6, 12, 18, 22 s) takrorlandi. Emizikli onalar laktatsiyasini baholash uchun biz sutning kunlik xajmini (SKX, ml / kun), bir martalik iste'mol qilgan sut xajmini (BIQSX, ml), vaqt birligida sutning tarqalishi (IM, ml / min / kun) va bolalarning ko'krakka tutishlar soni (KTS, marta / kun) o'rtasida farqlarni aniqladik. 10 kungacha bo'lgan bolalar uchun JSST jadvali bo'yicha kerakli sut xajmini bolaning vazniga ko'ra olingan va hayotining 2 haftasidan so'ng hisob-kitoblar kaloriya usulu orqali amalga oshirildi.

Haqiqiy material parametrik (t-mezonlari) va noparametrik usullar - nisbiy qiymatlarni hisoblash uchun burchakka o'zgartirish (φ) bilan Fisherning aniq usuli (TMP) Microsoft Office XP (Excell, 2003) yordamida olib borildi.

Tadqiqot natijalari va ularning muhokamasi. Tadqiqotimiz davomida emizikli onalarda (jadval) TTA ni og'irlik darajasining orta borishi fo'nida (kunlik sut xajmi, sut ajralishining pasaya borishi aniqlandi (P<0.001).

Emizikli onalarda TTA ning I, II va III darajalarida mos ravishda kunlik sut xajmi. sut ajralishi va bolani ko'krakka tutishlar soni o'rtasida uzliy korrelyatsion aloqalar mavjud (r = +0,562±0,05, r = +0,624 ±0,13 va r = +0,634 ±0,05, p<0,05, <0,001). TTA ning I darajasi mavjud emizikli onalarda bir martabalik sut xajmi (ml) ko'rsatkichlari tahlil qilinganda, bu ko'rsatkichning pasayishini (90,2 ±2,13 ml, p<0,05) va patologiyaning II darajasida (98,6 ±1,76, p<0,01) ortishi aniqlandi, ya'ni, bir marotabalik sut xajmi (ml) ortganidek «kontsentratsiya effekti» paydo bo'layotganday tuyuladi. Biroq, bu sog'lom emizikli (6,70 ± 0,14) va I darajali (5,52 ±0,08) TTA bilan xastalangan onalarga nisbatan bolani ko'krakka tutishlar soni kamroq bo'lganida (4,56±0,04, p<0,001) sezilarli darajada pasayishi kuzatildi.

Shunisi qiziqki, emizikli onalarning TTA ning I va, ayniqsa II darajasida ona sutidagi oqsil va yog'lar miqdori (g/l) bo'yicha ham xuddi shunday «kontsentratsiya effekti» qayd etildi [10]. Ona organizmida yoki bolalarning o'zlarida soxta tasurat qoldirshi paydo bo'ladi (teskari buologik aloqa turi bo'yicha) bolani ko'krakka qo'yishni kamaytirish orqali bir marta ovqatlanish paytidagi (BSX, ml) sut xajmi va ingredientlarning yetarli miqdorini qoplashga harakat qilinadi. Biroq, kunlik sut xajmi (ml/kun) ning pasayishi tufayli uning vaqt birligida (VB, ml/min) sutning ajratilishi ko'krak suti tarkibidagi ushbu ozuqa tarkibiy qismlarining kunlik yalpi koeffitsienti pasayadi [10].

Laktatsiya fiziologiyasidan ma'lum bo'lishicha, [1,8,11] bola tomonidan emishga intilishi, ya'ni onaning ko'kragiga taktil va mexanik ta'siri bir vaqtning o'zida ayollarning gormonal profiliga (laktatsion amenoreya) rag'batlantiruvchi (prolaktin va oksitotsin darajasi jihatidan) va bostiruvchi ta'sirga (estrogen) ega va shu munosabat bilan ona sutining yetarli ishlab chiqarilishi ta'minlanadi.

Adabiyotlarda bu masala bo'yicha yetarli dalillar mavjud bo'lib, bu sut bezlariga laktopoezni kuchaytirishi bo'yicha mexanik va taktil ta'siri ijobiy natijani ko'rsatdi [6,7]. Biz onalarning gormonal profilini o'rganmadik, ammo I darajali TTA bilan og'rigan 17 nafar (12,9%, P φ <0,037) emizikli onalarda, II darajadagi 14 nafar (16,7%, P φ <0,001), III daraja TTA da nafar 7 (28,0%, P φ <0,003) emizikli onalarda va nazorat guruhidagi 8 (6,4%) ayollarda hayz tsiklining qisman yoki to'liq tiklanishi anamnezidan aniqlandi.

Tadqiqot davomida TTA bilan og'rigan 18 nafar (14,3%) sog'lom va 96 (39,8%, P

φ <0,001) yemizikli onalarda (rasm A) gipogalaktiyaning I, II, III va IV darajalaridagi mos ravishda 25%, 26-50%, 51-75% va 76% gacha kunlik sut miqdori yetishmasligi aniqlandi.

Gipogalaktiyani namoyon bo'lish vaqti bo'yicha erta shakli (tug'ruqdan keyingi birinchi haftada) sifatiga mos ravishda, emizikli onalarning nazorat va asosiy guruhlarida (7,94% va 13,3% P φ <0,048), laktatsiya susayishi fo'nida (laktatsiya davrining 2-3 oyida) onalarning 3,97% va 10,8% da (P φ <0,006) va uning kech shaklida (hayotning 5-6 oyligida) emizikli onalarda 2,38% va 15,8% (P φ <0,001).

Vaqti bo'yicha gipogalaktiyani erta shaklining namoyon bo'lishi (tug'ruqdan keyingi birinchi haftada) emizikli onalarni asosiy va nazorat guruhlarida mos ravishda, (7,94% va 13,3% P φ <0,048), laktatsiya susayishi fo'nida (laktatsiya davrining 2-3 oyida) onalarning 3,97% va 10,8% da (P φ <0,006) va uning kech shaklida (hayotning 5-6 oyligida) emizikli ayollarda 2,38% va 15,8% (P φ <0,001) kuzatildi.

TTA ning II va III darajalari mavjud bo'lgan onalarda laktatsiya susayishi (61,5%, P φ <0,05) va uning kech shakli (78,9%, P φ <0,01) gipogalaktiya bo'lgan ayollarning ulushi I darajadagi bemorlarga nisbatan (38,5% va 21,1%) ko'payganligi kuzatildi.

Rasmdan ko'rinib turibdiki, emizikli onalarda kamqonlikning darajasi ortish fo'nida gipogalaktiya bilan xastalangan ayollarning umumiy ulushi mos ravishda 27,3%, 48,8% va 76,0% ko'paydi, bu ko'rsatgich sog'lom onalar ma'lumotlaridan ancha yuqori (14,3%, P φ <0,004, P φ <0,001) ekanligi bilan ajralib turadi.

Sog'lom emizikli onalarda gipogalaktiyaning ancha yengil darajalari (I va II) (7,94% va 3,97%) ko'proq kuzatiladi va TTA bilan og'rigan onalarda - uning og'ir darajalari (III va IU), mos ravishda, II (9,52% va 3,57%, P φ <0,02, P φ <0,003) va TTA ning III darajalari (28,0% va 8,0%, P φ <0,001) ko'proq uchraydi.

Temir tanqisligi ko'rsatkichlarining (zardob temir va umumiy temirni bog'lash hususiyati, mmol / l) emizikli onalarda sutning kunlik miqdori bilan korrelyatsion munosabatlarini o'rganish mos ravishda I (r = + 0,386 ± 0,08, P <0,01; r =+ 0,442 ± 0,07, P <0,01), II (r = +0,456 ±0,09, P <0,05; r = +0,514 ± 0,08, P <0,01) va TTA ning III darajasida (r = +0,534% ± 0,14 P <0,01; r = + 0,612 ± 0,09, P <0,01) musbat aloqalar aniqlandi.

Ushbu ma'lumotlar A.A. Buglanov va boshqalarning fikrlariga mos keladi [3], sog'lom emizikli onalar bilan taqqoslanganda (6,7 ± 0,28 mg / l) TTA bilan kasallangan ayollarda (3,23 ± 0,25 μmol / l)TTA (3,23 0,25 mmol / l) bilan kasallangan ayollarda Fe ning kontsentratsiyasi kamligini (8,25 ± 0,25 mg / l) va ona sutining temirni bog'lash qobiliyatining pastligini ko'rsatadi (3,23 0,25 mg / l) .

Natijada, emizikli onalarda temir tanqislik kamqonligi gipogalaktiyaning asosiy xavf omili bo'lib, ayniqsa uning kechki shakllari, ona-bola tizimida makro- va mikronutriyentlarni oldindan ta'minlash tamoyili uchun asos bo'lib, bu yangi tug'ilgan chaqaloqlar va ko'krak yoshdagi bolalarda kam vaznlik, anemiya, ovqatlanish surunkali buzilishlari singari shaklidagi asoratlarni kelterib chiqaradi [10].

Xulosalar.

1. Emizikli onalarda TTA ning darajalar kuchaygan sari kunlik sut hajmi miqdorining (ml / kun) (ml / min) tobora kamayishi, vaqt birligi ichida ona sutining ajralishi va bolalarni ko'krakka tutish sonining mutanosib pasayishi kuzatiladi.

2. Laktatsiya davrida TTA bilan xastalangan emizikli onalarda gipogalaktiyaning kechikkan shakllari ko'p kuzatiladi (laktatsiya susayishi va uning kech shakli fo'nida), sutkalik sut miqdori ≥ 50,0% ni tashkil qiladi, bu esa makro va mikroelementlar asosida surunkali ovqatlanish buzilishining postnatal shakllarini rivojlanishi uchun asos bo'ladi.

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