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Markaziy nerv sistemasining perinatal zararlanishi bilan tug'ilgan bolalardagi ko'ruv analizatorining o'ziga xos klinik ko'rinishi

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Annotation

Markaziy nerv sistemasining perinatal zararlanishi bilan tug'ilgan 50 ga yaqin chaqaloqlarning natijilari bayon etilib, ularning yosh ko'rsatkichlari 10 kundan to 8 yoshgacha bo'lgan davr oralig'iда bo'lgan. Ushbu chaqaloqlarni tekshirish maqsadida oftalmologik, klinik-labarator va instrumental-diagnostik usullardan foydalilanilgan. Bundan tashqari tor mutaxassislar ko'rigi ham amalga oshirilgan. Markaziy nerv sistemasining perinatal zararlanishi bilan aziyat chekagidan bolalarning ko'ruv analizatorlaridagi klinik o'zgarishlarning tahlili quydagi ko'rsatgichlarni bayon etdi: glaukoma 14 ta (35%), katarakta 12ta (32%), ko'ruv nervi diskii atrofiyasi 5 ta (8%), birlamchi g'ilaylik 2 ta (1%), ko'ruv nervi diskii gipoplasiyasi 5 ta (4%), chaqaloqlardagi bosh miyaning onkologik kasalliklari (1%), to'rparda angiopatiyasi 3 ta (2%) holatlari ko'rsatildi. Bulardan tashqari 9 ta (18%) nistagm va ikkilamchi g'ilaylik holatlarini ham kuzatildi. Neyrosografiya tahlillari asosida shu narsa ma'lum bo'ldiki, gipokso-ishemik ensefopalatiya va ventrikulo-dilyatatsiya holatlarini glaukoma (10 ta 72%) va katarakta (3 ta 21%) bilan tug'ilgan bchaqaloqlarda qon tomirlar stenozi bilan namoyon bo'lgan. Elektroensefalografija tekshirish usullari olib borilganda po'stloq osti tuzilmalarning epiaktivlik holatlarini 6 ta (12%) chaqaloqlarda kuzatilgan bo'lib, ularning barchasida tug'ruq travmalari natijasida ko'z tubi jarohatlari va buning oqibatida g'ilayliklar kuzatilgani aniqlandi. Yuqorida bayon etilgan oftalmopatiya holatlariga olib keladigan perinatal xavf omillari quydigilarini tashkil etadi: temir tanqisligi bilan bog'liq bo'lgan anemiya 23 ta (46%), homiladorlikdagi erta toksikoz holatlarini 17 ta (34%) va o'tkir respirator infeksiyalarini 13 ta (26%).

Kalit so'zlar: Markaziy nerv sistemasining perinatal zararlanishi, chaqaloqlardagi bosh miyaning onkologik kasalliklari, neyrosografiya, elektroensefalografija, oftalmopatiya, perinatal xavf omilli.

Специфическая клиническая картина зрительного анализатора у детей, родившихся с перинатальным поражением центральной нервной системы

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Аннотация

Представлены результаты обследования 50 больных в возрасте от 10 дней до 8 лет с перинатальной патологией центральной нервной системы. Были проведены офтальмологические, клинико-лабораторные, инструментальные методы исследования, а также организованы консультации узких специалистов. Изучены клинические особенности изменений органа зрения у детей с сопутствующей перинатальной патологией центральной нервной системы, которые были представлены следующим образом: глаукома 14 (35%), катаракта 12 (32%), атрофия диска зрительного нерва 5 (8%), патология придаточного аппарата (первичное косоглазие) 2 (1%), гипоплазия диска зрительного нерва 5 (4%), онкологические заболевания головного мозга новорожденных (1%), ангиопатия сетчатки 3 (2%) случая соответственно. Также выявлены нистагм и вторичное косоглазие – 9 (18%) случаев, которые сочетались с некоторыми из выше перечисленных патологий. При анализе данных нейросонографии, гипоксико-ишемические нарушения с усиленной пульсацией сосудов головного мозга и вентрикуло-дилатацией отмечены у детей с врожденной глаукомой в 10 (72%), с врожденной катарактой в 3 (21%), со стеноzem слезно-носового канала в 1 (7%) случаях соответственно; по данным электроэнцефалографии, эпикактивность подкорковых структур головного мозга была выявлена у 6 (12%) детей с патологией глазного дна и косоглазием при детском церебральном параличе и последствиях родовой травмы. Представлены перинатальные факторы риска развития выявленной офтальмопатологии: железодефицитная анемия 23 (46%), ранний токсикоз беременных 17 (34%), острые респираторные инфекции 13 (26%) случаев.

Ключевые слова: перинатальная патология центральной нервной системы; онкологические заболевания ЦНС у новорожденных; нейросонография

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A specific clinical picture of vision analyzer in children born with perinatal damage of the central nervous system

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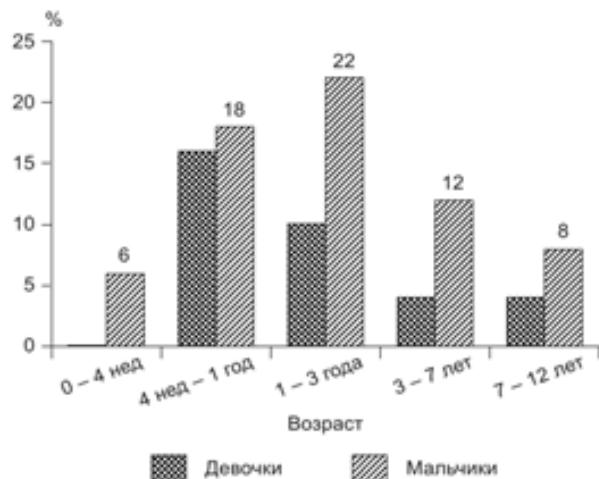
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Abstract

The results of examination of 50 patients aged from 10 days to 8 years with perinatal pathology of the central nervous system are presented. Ophthalmological, clinical-laboratory, instrumental research methods were carried out, as well as consultations of narrow specialists were organized. The clinical features of changes in the organ of vision in children with concomitant perinatal pathology of the central nervous system were studied, which were presented as follows: glaucoma 14 (35%), cataract 12 (32%), atrophy of the optic disc 5 (8%), adnexal pathology (primary strabismus) 2 (1%), hypoplasia of the optic disc 5 (4%), oncological diseases of the brain of newborns (1%), retinal angiopathy 3 (2%) cases, respectively. Nystagmus and secondary strabismus were also detected - 9 (18%) cases, which were combined with some of the above pathologies. In the analysis of neurosonography data, hypoxic-ischemic disorders with increased pulsation of cerebral vessels and ventriculo-dilation were observed in children with congenital glaucoma in 10 (72%), with congenital cataract in 3 (21%), with stenosis of the lacrimal canal in 1 (7%) cases, respectively; According to electroencephalography data, epicityvity of the subcortical structures of the brain was detected in 6 (12%) children with pathology of the fundus and strabismus in cerebral palsy and the consequences of birth trauma. Perinatal risk factors for the development of the identified ophthalmopathology are presented: iron deficiency anemia 23 (46%), early toxicosis of pregnant women 17 (34%), acute respiratory infections 13 (26%) cases.

Keywords: perinatal pathology of the central nervous system; oncological diseases of the central nervous system in newborns; neurosonography; electroencephalography; ophthalmopathology; perinatal risk factors.

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1.rasm. Bolarning jinsi va yoshiga bog'liq holda taqsimlanishi. Abssisa o'qi bo'yicha bolalarning jinsi va yoshi; ortonata o'qi bo'ylab esa bolalarning miqdori % ko'rsatgichlarida ifodalangan.

Kirish. Nerv sistemasining perinatal zararlanishi homilaning antenatal davrda, tug'ruq paytida va tug'ilgandan keyingi birlinchi kunlarda zararli omillar ta'sirida yuzaga keladigan turli xil patologik holartlarni birlashtiradi. Bolalar nogironligi tuzilmasida nerv sistemasining perinatal zararlanishi taxminan 50% ni tashkil qiladi, 60-70% hollarda esa perinatal shikastlanishlar barqaror o'sayotgan xavf omili sifatida qayti etilmoqda [2].

Bola hayotning birlinchi kunlardan boshlab aniqlangan turli nevrologik kasalliklar (motor buzilish sindromi, tutqanoq sindromlari, gidrosefalik sindromlar va boshqalar) markaziy asab tizimining perinatal patologiyasi (MNSPP) oqibatlari bo'lib, ularning eng keng tarqalgan formasi bu bollar bosh miya falajligi hisoblanadi (BBMF). MNSPP va BBMF bilan tug'ilgan bolalar hayotining birlinchi kunlaridayoq ko'rish analizatori bila bog'liq bo'lgan muammolar kuzatildi. MNSPP va BBMFlıkları kuzatilgan bolalarning 25 foizida kasallikning klinik ko'rinishini sezilarli darajadagi ko'rishning buzilishi qayd etilgan [3, 4]. Bosh miyaning va ko'ruv analizatorining to'liq shakllanmasligi yoki yetilmaganligi ham bu holatning yuzaga kelishiga zamin yaratib beradi va hujayra darajasidagi o'zgarishlarni yuzaga keltiradi. Shu bilan birga, tizimli va funksional ko'rinishlar o'zlarining xavf davrlari bilan ajralib turadigan ma'lum kimyoiyi jarayonlar natijasida yuzaga keladi, bunda rivojlanayotgan sistemalarda zararli ta'sirlari mavjud bo'lgan moddalarga o'ta sezgir va zaif bo'ladi [5]. Teratogen omillar ta'sirida homiladorlik davrida patologik anormallilik bilan bog'liq bo'lgan bolalarda ko'z kasalliklari, bolaning onasida tug'ilishning noqulay kechishi, bemorning o'zida neonatal davrda ko'rishning zaiflashishiga va xattoki ko'rlikka olib kelishi mumkin. Neonotologlar, pediatrlar va nevrologlar bola tug'ilgandan keyin hayotining birlinchi oyida birlinchi navbatda hayotiy muhim ko'rsatgichlarni tiklash va nevrologik klinik belgilarni bartartaf etishga urinadilar, ammo lekin ko'rish analizatori bilan bog'liq bo'lgan muammolar esa anniq bir klinik ko'rinish bermaganligi sababli nazardan chetda qolib ketaveradi. Bolada mavjud bo'lgan ko'rish analizatori bilan bog'liq bo'lgan muammolar esa anche keyin diagnostika qilinadi bu esa jarayonning yanada og'irlashib kasallikning surunkali bosqichiga yetaklab keladi [6].

Maqsad: markaziy nerv sistemasining perinatal patologiyasi bilan tug'ilgan bolalardagi oftalmoplegiya holatlarini aniqlash.

Material va usullar. SamMU 1-son klinikasining nevrologiya va oftalmologiya bo'limida statsionar tarzda

davolanib kelayotgan hamda Samarqanddagi perinatal markazda konsultativ yordam so'rab murojat qilgan 50 ta bola (100 ta ko'z) tekshirishdan o'tkazildi. Bemorlarga quyidagi tekshirish usullari qo'llanildi: oftalmologik (vizometriya, tonometriya, biomikroskopiya, oftalmoskopiya), klinik-laborator va instrumental usullar: neyrosongrafiya, EEG. Hamda tor sohadagi mutaxassislar (nevrolog, pediatr va anesteziolog) ko'rigi joriy etildi.

Natija va tahlillar. Tekshirilgan bemorlarning 30 tasi (72%) o'g'il bolalar va 20 tasi (28%) qiz bolalar bo'lib, ularning yoshi 10 kundan 8 yoshgacha bo'lган. 4 haftadan 1 yoshgacha va 1 yoshdan 3 yoshgacha bo'lган yosh guruhlarida ko'pchilik o'g'il bolalar edi (1-rasm). Retrospektiv tahlil natijasida onalarning sog'lig'i, homiladorlik va tug'ish jarayoni, embrional rivojlanish bosqichlari va bolalar tug'ilishi to'g'risida anamnez ma'lumotlari to'plandi, bu esa bir qator omillarni aniqlashga imkon berdi. umuman bolaning tanasiga ham, tug'ruqdan keyingi shakllanishi va MNS faoliyatiga ham salbiy ta'sir ko'rsatadi, xususan, bu salbiy omillar 2 guruhga bo'lingan. Birinchi guruhga homiladorlik davrida ayollarga ta'sir qiluvchi tashqi omillar (82%) tashkil topgan; ikkinchisi - tug'ruq paytida ta'sir qiluvchi omillar kiritilgan bo'lib, ularning chastotasi 18% ni tashkil etgan (1-jadval). Adabiyotlarga ko'ra, embrion rivojlanishining 37-49 (9-12 hafta) kunida miyaning yon qorinchalarining rudimentlari paydo bo'ladi, orqa miya bilan aloqa o'rnatiladi va markaziy asab tizimining ultrastrukturali differentsiatsiyasi sodir bo'ladi; ko'rish organi tomonidan - rangdor parda stromasining rivojlanishi, gangliox hujayralaridan nerv tolalarining ko'ruv nervi orqali ko'ruv kanaliga kirishi, ko'rish traktining rivojlanishi, qisman dekussatsiya, xoroidal chigalning paydo bo'lishi, kuzatiladi [5]. Tekshiruv guruhidagi bolalarning onasida homiladorlikning aynan shu davrida noqulay tasir yuzaga kelgan va bu esa o'z navbatida MNSPP bilan tug'ilgan bolalarda oftalmoplegiyaning paydo bo'lishiga turki bo'lib xizmat qilgan. Anamnezlarni yig'ish davomida shu narsa ma'lum bo'ldiki 8 ta (14%) bola yaqin qarindosh orasidagi nikohdan tug'ilgan. MNSPP bilan tug'ilgan bemorlarda ushbu patologiyaning quyidagi davrlari joriy etilgan: o'tkir davr 2ta (4%), erta tiklanish davri 12 ta (20%), kechgi tiklanish davri 17 ta (4%) va qoldiq asoratlar bosqichi 11 ta (29%) ni tashkil etgan. MNSPP quyidagi sindromlar bilan birga namoyon bo'lgan: erta tiklanish davrida harakat buzilish sindromlari bilan(6%), asteno-nevrotik (7%), vegeto-vistral disfunksiya (8%), gidrosefal (4%), livoro-tomir distenziysi (2%); kechki tiklanish davrida harakat buzilish sindromlari bilan(5%), asteno-nevrotik (5%), psixomotor rivojlanishdan orqada qolish (10%), livoro-tomir distenziysi (10%), tutqanoq sindromlari (9%) va gipertenzion sindrom (8%); qoldiq asoratlar davrida BBMF (8%), MMD (13%), nutqiy rivojlanishdan orqada qolish (10%), epilepsiya holatlari esa (2%) ni tashkil etgan. Bosh miyaning anomaliyalaridan mikrosefaliya 12% holatda va ArnoldKiari 2 % hollarda kuzatilgan. Neyrosografik malumotlar asosida 28% holatda gipokso-ishemik jarayonlar va 72 % hollarda esa likvor yo'llari diliotatsiyasi joriy etilgan.

Bundan tashqari tug'ilgan bolalarda quyidagi oftalmopatologik holatlar ham kuzatilgan: glaukoma 12 ta (31%), katarakta 14 ta (29%) ko'ruv nervi atrofisi 9ta (21%), birlamchi g'ilaylik 3 ta (5%) ko'ruv nervi displaziysi 2 ta (3%), angiopatiya to'pardada 1 ta (4%), nistagm va ikkilamchi g'ilaylik 9 ta (7%) ni tashkil etgan.

Oftalmologik o'zgarishlar bilan birga gidrosefaliya (12%), asteno nevrotik sindrom (10%), vegeto-visseral holat (6%) likvor yo'llari distenziysi 12%, MMD 16 % va BBMF 10% kuzatilgan(2-jadval).

Nevrologiya bo'limida davolanayotgan bemorlarda EEG malumotlariga tayangan holda shu narsa malum bo'ldiki 6 ta (12%) bolada po'stloq osti tuzilmalarida epiaktivlik kuzatilgan.

Xulosa. 1. MNSPP bilan tug'ilgan bermorlarda har ikkala ko'zlarida oftalmopatologiyalar kuzatilgan.

2. Tekshirish olib borilgan bermorlarda quyidagi oftalmoplegik holatlар qayd etilgan: tug'ma glaukomasi 16ta (31%), tug'ma katarakta 17 ta (32%), ko'ruv analizatori

yordamchi apparatlarining patologiyalari (g'ilaylik, nistagm, burun-ko'z yosh kanali stenozi) 5ta (11%), ko'z tubidagi o'zgarishlar (to'r parda qon tomirlari angiopatiyasi va ko'ruv nervi diskii atrofiyasi) 12 ta (26%) hollarda kuzatilgan.

REFERENCES

1. Onegin EV. A course of lectures on private neurology: Educational and methodological recommendations for students of the pediatric faculty. Grodno: GrGMU, (2009); 109. (In Russ)
2. Dadaeva OB, Ivanova IV, et all Influence of perinatal lesions of the nervous system on the quality of life of a child in different periods of ontogenesis. Polyclinic, 2007; 1, 78-80. (In Russ)
3. Salkov VN. Clinical and neurophysiological features of the visual analyzer and morphological changes in its central section in children with consequences of perinatal lesions of the nervous system (Doctoral dissertation, Russian Medical Academy of Postgraduate Education of the Ministry of Health of the Russian Federation) 2013; (In Russ)
4. Salkov V. N. Neuro-ophthalmic disorders in children with consequences of perinatal lesions of the central nervous system. Children's Hospital, 2011; (3), 19-22. (In Russ)
5. Baranshev YuI, & Ponomareva L P. Vision and hearing in newborns. M.: Triada-Kh. 2006; (In Russ)
6. Molchanova EV. Selective screening for the detection of ophthalmopathology in full-term newborns (Doctoral dissertation, Scientific Center for Children's Health of the Russian Academy of Medical Sciences). 2008; (In Russ)
7. Takhirovna DA, Otabekovich SA, Axmatjonovich GA, & Mirxamzaevna MM. The Nature Of Cognitive Impairment In Patients With Astheno-Neurotic Syndrome. nveo-natural volatiles & essential oils journal nveo, 2021; 5942-5948.
8. Toshtemirovich NS, Takhirovna D A, et al. Complex Forecast Of The Consequences Of Secondary Encephalitis In Children. The American Journal of Medical Sciences and Pharmaceutical Research, 2020; 2(08), 37-42.
9. Davronov L O, Niyozov ShT, et al. Treatment of encephalomyelitis and myelitis in children with ozone therapy. Managing editor: Sukiasyan AA, KEN, St. prep, 2015; 190 . (In Russ)
10. Niyazov ShT, Jurabekova AT, et al. Comprehensive prognosis of the consequences of secondary encephalitis in children. Proceedings of the National Academy of Sciences of Belarus. Medical Sciences Series, 2021;18(1), 89-93. (In Russ)
11. Gaibiev AA., Jurabekova AT, et al. Differential diagnostic criteria for polyneuropathy. Trends and perspectives for the development of science and explain in the mind of globalization, 2017; 569. (in russ)

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