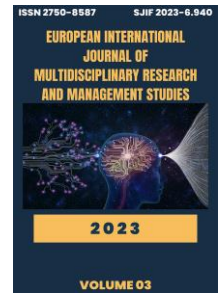


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THE STUDY OF THE ISSUE OF CEREBRAL PALSY IN CHILDREN

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ABOUT ARTICLE

Key words: Epileptiform activity, cerebral palsy, epilepsy.**Received:** 30.01.2024**Accepted:** 04.02.2024**Published:** 09.02.2024**Abstract:** The characterization of epileptiform activity in children with cerebral palsy without epileptic seizures is useful for determining the risk of developing epilepsy and identifying criteria and frequency of idiopathic epilepsy. The assessment of motor functions according to GMFCS was used as a method for such studies; the presence or absence of epileptiform activity is comorbid with the severity of motor status, but its presence does not affect the severity of cognitive impairment; epilepsy is benign. Epilepsy has a benign course.

INTRODUCTION

Objectives and significance of the study: Cerebral palsy ranks first among disabling diseases in neurological children. Cerebral palsy occupies the first place in the structure of disability in children of a neurological profile [1, 2, 5]. According to various studies, the frequency of cerebral palsy ranges from 1 to 9 cases per 1000 children. Epilepsy occupies a special place among the complications of cerebral palsy. The occurrence of epileptic seizures is a factor that worsens the prognosis of cerebral palsy. Epilepsy exacerbates the severity of existing neuropsychiatric disorders [9,13]. When epileptic seizures occur, the choice of antiepileptic drugs (AEDs) comes to the fore, interrupting much-needed rehabilitation measures. Almost all measures to improve motor and mental functions, such as electrical procedures and psychotropic drugs, become impossible (10, 12). On the other hand, a high level of alertness to epilepsy in children with cerebral palsy often leads to overdiagnosis of epilepsy in this group, which in turn leads to unjustified prescription of antiepileptic drugs and termination of habilitation [2, 3, 4]. Therefore, prognostic factors of the occurrence of epilepsy and methods of differential diagnosis of seizures are of particular importance, among which electroencephalography

occupies a special place. Severe neurological consequences of a combination of cerebral palsy and epilepsy, a high incidence of persistent disability, mental retardation and mental retardation. In more than 80% of cases of cerebral palsy, the main clinical manifestation is spasticity, a motor disorder characterized by increased muscle tone and tendon reflexes. The clinical picture of cerebral palsy depends on the size and shape of the traumatic brain injury, as well as on the intensity and duration of previous treatment and rehabilitation.

Early symptoms of cerebral palsy:

- Delayed motor and language development;
- Absence or delay of innate reflexes;
- Delay or absence of development of installation reflexes;
- Disorders of muscle tone;
- Increased tendon reflexes;
- The appearance of pathological synkinesia (volitional movement of one muscle leads to involuntary contraction of other muscles at the same time);
- Pathological formation of a pose (for example, arm flexion poses, hip reduction poses).

The most common type of cerebral palsy is spastic diplegia (Little's disease). It is often found in premature infants and is characterized by the following signs:

- The damage to both legs is greater than the damage to the arms;
- Early formation of deformations and contractures;
- The presence of concomitant symptoms (delayed mental and linguistic development, pseudobulbar paralysis, pathology of cranial nerves leading to optic nerve atrophy, dysarthria, hearing impairment and moderate intellectual decline).
- Cerebral palsy (cerebral palsy) is a stable and clinically diverse group of syndromes that occur as a result of abnormal brain formation or damage in the early years of life. The clinical picture of the disease is characterized by abnormal development of static motor reflexes, impaired tone and impaired motor function associated with paralysis. In addition, changes in nerve and muscle fibers, joints, ligaments and

cartilage occur for a second time during life. Various neurological and mental disorders are also often observed [1620].

- The severity of mental disorders ranges from mild emotional abnormalities to severe mental retardation. Thus, motor disorders in cerebral palsy can be associated with mental retardation, epileptic seizures, impaired perception and learning. They can be accompanied by pathological changes in vision, hearing and sensitivity, as well as various lesions of the internal organs, which exacerbate the degree of psychomotor retardation. The term "cerebral palsy" does not reflect the full variety of neurological disorders present in this disease, however, it is used in the world literature, since no other term has yet been proposed [2326].

- Cerebral palsy is characterized by a non-progressive course. However, as the child grows and develops, the clinical picture may change, giving the impression that the disease is progressing. This is due to the increasing weakness caused by the growing discrepancy between the capabilities of the nervous system and the environmental requirements for developing organs. As a result, the following limitations arise.

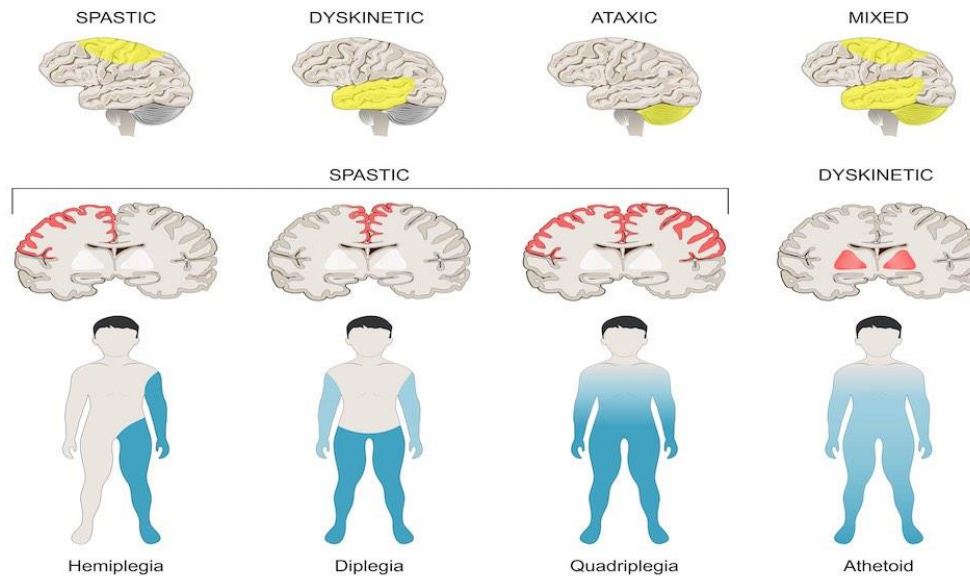
- The limitations of a developing organism are caused by a number of factors: difficulties in self-care, mobility, psychological problems, problems associated with communicating with peers and others, difficulties in the educational process and in carrying out future work activities. As a result of all of the above, the quality of life of children with cerebral palsy and their environment inevitably decreases significantly [2731].

- According to the International Classification (ICD 10), there are: G80.0 Spastic cerebral palsy; G80.1 Spastic diplegia; G80.2 Infantile hemiplegia; G80.3 Dyskinetic cerebral palsy; G80.4 Ataxic cerebral palsy; G80.8 Other types of cerebral palsy.

- There are also a number of clinical and functional classifications of cerebral palsy developed by the authors. In Russia, the most common classification is K.A. Semenova (1972) and L.O. Badalyan et al. (1988). Thus, according to the clinical classification developed by K.A. Semenova, the following forms of cerebral palsy can be distinguished: diplegic, hyperkinetic, strenuously arrested and hemiplegic. There are also stages of cerebral palsy development: early - up to 45 months, early residual - from 6 months to 3 years and late residual - older than 3 years.

- Classification of L.O. Badalyan et al. shows the distribution of cerebral palsy by age group:

Cerebral palsy



METHODS

34 domestic and 12 foreign literary sources on this topic were analyzed. Based on the results of the analysis of scientific data, the concept of the prevalence of cerebral palsy in Russia and abroad has been clarified. The review describes the risk factors associated with the development of this disease, the main approaches to the classification of cerebral palsy, the characteristic clinical picture, diagnosis and treatment. Despite the large number of studies devoted to this topic, at this stage there is no consensus on the etiology of the disease, and the issue of early diagnosis remains unresolved until the end.

CONCLUSION

Cerebral palsy remains an urgent problem for modern society. According to our analysis, this disease is multifactorial, and currently there is no consensus on the predominant influence of specific factors on the development of cerebral palsy. There is also the problem of early diagnosis and initiation of treatment, which largely determines the course of the disease. All this points to the need for further research on this issue.

REFERENCES

1. Alekseeva GJu, Sholomov II. Dynamics of indicators of disability in children with cerebral palsy in the city of Saratov. *Saratov Journal of Medical Scientific Research*. 2010; 6(1): 114-117. Russian (Алексеева Г.Ю., Шоломов И.И. Динамика показателей инвалидности у детей с заболеванием детским церебральным параличом в г. Саратове //Саратовский научно-медицинский журнал. 2010; 6(1): 114-117.)
2. Vanieva VJu. Technologies of correction of muscle tone disorders in children with cerebral palsy. *Sovremennye tehnologii v obrazovanii*. 2012; XII 1: 56-60. Russian (Ваниева В.Ю. Технологии коррекции нарушений мышечного тонуса у детей с ДЦП //Современные технологии в образовании. 2012. № XII 1. С. 56-60.)
3. Aronskind EV, Zjuzgina EA, Kovtun OP, L'vova OA, Shershnev VN, Dugina EA et al. Evaluation of the effectiveness of spiral kinesiotherapy in children with cerebral palsy. *Neurosurgery and pediatric neurology*. 2013; 1(35): 30-34. Russian (Аронскинд Е.В., Зюзгина Е.А., Ковтун О.П., Львова О.А., Шершнева В.Н., Дугина Е.А. и др.)
4. Оценка эффективности метода спиральной кинезиотерапии у детей с ДЦП //Нейрохирургия и неврология детского возраста. 2013. № 1(35). С. 30-34.)
5. Pacula AT, Braun K Van Naarden, Yeargin Allsop M. Cerebral palsy: classification and epidemiology. *J. Cerebral palsy*. 2009; 20(3): 437. DOI: 10.1016/j.pmr.2009.06.001.
6. Kolomenskaja AN. Improvement of the system of prevention of disability of children at high neurological risk in outpatient settings (since the neonatal period): abstract dis. ... cand. med. sciences. M., 2010. 25 p. Russian (Коломенская А.Н. Совершенствование системы профилактики инвалидности детей высокого неврологического риска в амбулаторных условиях (начиная с периода новорожденности): автореф. дис. ... канд. мед. наук. М., 2010. 25 с.)
7. Cerebral palsy and epilepsy. Modern approaches to treatment: guidelines /ed.: Batysheva TT, Trepilec SV, Trepilec VM, Badaljan OL, Kvasova OV, Klimov JuA et al. M., 2016. 16 p. Russian (Детский церебральный паралич и эпилепсия. Современные подходы к лечению: методические рекомендации /под ред. Батышева Т.Т., Трепилец С.В., Трепилец В.М., Бадалян О.Л., Квасова О.В., Климов Ю.А. и др. М., 2016. 16 с.)
8. Williams CM, Tinley P, Curtin M. Idiopathic toe walking and sensory processing dysfunction. *Journal of Foot and Ankle Research*. 2010; 3: 1-6. DOI: 10.1186/1757-1146-3-16.
9. Kodaneva LN, Adijatullina NV. The possibility of hydro kinesiotherapy in the rehabilitation of children with the disease Little. *Uchenye zapiski universiteta im. P.F. Lesgafta*. 2018; 1(155): 122-126. Russian (Коданева Л.Н., Адиятуллина Н.В. Возможности гидрокинезотерапии в ре

абилитации детей с болезнью Литтля //Ученые записки университета им. П.Ф. Лесгафта. 2018. No 1(155). С. 122 126.)

10. Baranov AA, Namazova Baranova LS, Kurenkov AL, Klochkova OA, Karimova HM, Mamedjarov AM et al. Complex assessment of motor functions in patients with cerebral palsy. M: Pediatr, 2014. Russian (Баранов А.А., Намазова Баранова Л.С., Куренков А.Л., Клочкова О.А., Каримова Х.М., Мамедъяров А.М. и др. Комплексная оценка двигательных функций у пациентов с детским церебральным параличом. М: ПедиатрЪ, 2014.)
11. Stavsky M, Mor O, Mastrolia SA, Greenbaum S, Than NG, Erez O. Cerebral palsy – trends in epidemiology and recent development in prenatal mechanisms of disease, treatment, and prevention. Front Pediatr. 2017; 5: 21. DOI: 10.3389/fped.2017.00021.
12. Graham HK, Rosenbaum P, Paneth N, Dan B, Lin JP, Damiano DL et al. Cerebral palsy. Nat. Rev. Dis. Primers. 2016; 2: 15082. DOI: 10.1038/nrdp.2015.82.
13. Woolfenden S, Galea C, Smithers Sheedy H, Blair E, McIntyre S, Reid S et al. Impact of social disadvantage on cerebral palsy severity. Dev Med Child Neurol. 2018; 17. DOI: 10.1111/dmcn.14026.
14. El Tallawy HN, Farghaly WM, Shehata GA, Rageh TA, Metwally NA, Badry R et al. Cerebral palsy in Al Quseir City, Egypt: prevalence, subtypes, and risk factors. Neuropsychiatr Dis Treat. 2014; 10: 1267 1272. DOI: 10.2147/NDT.S59599.
15. Batysheva TT, Guzeva VI, Guzeva OV, Guzeva VV. Improving the availability and quality of medical care and rehabilitation of children with cerebral palsy. Pediatr. 2016; 7(1): 65 72. Russian (Батышева Т.Т., Гузева В.И., Гузева О.В., Гузева В.В. Совершенствование доступности и качества медицинской помощи и реабилитации детей с детским церебральным параличом //Педиатр. 2016. Т. 7, No 1. С. 65 72.)
16. Zafirova VB, Amlaev KR. Analysis of morbidity and disability of children in the North Caucasus Federal district and Stavropol territory. International Research Journal. 2015; 5 4(36): 64 65. Russian (Зафирова В.Б., Амлаев К.Р. Анализ заболеваемости и инвалидности детского населения в Северо Кавказском федеральном округе и Ставропольском крае //Международный научно исследовательский журнал. 2015. No 5 4(36). С. 64 65.)
17. Troska ZA, Shershneva OA. Improvement of professional rehabilitation of children with cerebral palsy. Scientific notes of the Russian State Social University. 2015; 14(3/130): 156 167. Russian (Троска З.А., Шершнева О.А. Совершенствование профессиональной реабилитации детей, больных ДЦП //Ученые записки Российского государственного социального университета. 2015. No 14(3/130). С. 156 167.)

- 18.** Aronskind EV, Moroshek EA, Afanas'eva NA. Organization of assistance to children with cerebral palsy in the rehabilitation center «Healthy childhood». Herald of physiotherapy and health resort therapy. 2015; 21(2): 97-97. Russian (Аронскинд Е.В., Морошек Е.А., Афанасьева Н.А. Организация помощи детям с ДЦП в реабилитационном центре «Здоровое детство» //Вестник физиотерапии и курортологии. 2015. Т. 21, No 2. С. 97-97.)
- 19.** Kozhevnikova VT. Modern technologies of physical rehabilitation of patients with the consequences of perinatal damage to the nervous system and cerebral palsy. M.: Madzhenta, 2013. Russian (Кожевникова В.Т. Современные технологии физической реабилитации больных с последствиями перинатального поражения нервной системы и детским церебральным параличом. М.: Маджента, 2013.)
- 20.** Nemkova SA. Cerebral palsy: modern technologies in complex diagnostics and rehabilitation of cognitive disorders. M.: Medpraktika M, 2013. Russian (Немкова С.А. Детский церебральный паралич: современные технологии в комплексной диагностике и реабилитации когнитивных расстройств. М.: Медпрактика М, 2013.)
- 21.** Nemkova SA, Maslova OI. The effectiveness of the method of dynamic proprioceptive correction in patients with cerebral palsy with cognitive impairment. S.S. Korsakov Journal of Neurology and Psychiatry. 2013; 8: 26-32. Russian (Немкова С.А., Маслова О.И. Эффективность применения метода динамической проприоцептивной коррекции у больных детским церебральным параличом с когнитивными нарушениями //Журнал неврологии и психиатрии им. С. С. Корсакова. 2013; 8: 26-32.