SECTION: MEDICAL PSYCHOLOGY
РОЗДІЛ: МЕДИЧНА ПСИХОЛОГІЯ

УДК 159.922.76:616.853:616.89-008.45/.47]:159.98
DOI: 10.26565/2410-1249-2019-11-03

COGNITIVE DISORDERS AND THEIR CORRECTION IN CHILDREN WITH EPILEPSY

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The article is devoted to the analysis of literature data on the study of cognitive disorders in children. The issues of the prevalence of these disorders are considered. Ir was noted the fact that the high prevalence of epilepsy in the population, frequent combination with mental retardation and personality changes and the need for long-term therapy anticonvulsant therapy determine the exceptional importance of this problem in pediatric neurology and psychiatry. The issues under consideration are due to the fact that the presence of cognitive disorder is one of the essential aspects in epileptological practice, as well as the fact that neurologists and psychiatrists involved in the treatment of epilepsy in children and adolescents often underestimate these disorders. The article pays attention to the etiological and pathogenetic aspects of the cognitive disorders formation, the dependence of the occurrence of these disorders on the localization of the epileptic focus, on the nature of the seizures and age-related features of the epilepsy course. It is indicated that cognitive disorders in patients with epilepsy is determined by biological and social factors interaction complex. The main points that can explain the cognitive and behavioral problems in children with epilepsy are underlined. Two mechanisms in the violation of the cognitive activity of patients with epilepsy are identified. It is indicated that psychosocial problems for patients often come to the fore, including cases when control over seizures has not been achieved yet. In particular, depression in patients with difficult to control epilepsy affects quality of life more than frequent suizures. In addition, depression can have a significant impact on cognitive function. Complaints on speech functions, memory, attention, thinking disorders that patients can present at the doctor's appointment, are in second place after complaints on seizures. It was also given attention to the views on approaches to the treatment of cognitive disorders. It is indicated, that providing assistance to children with cognitive disorders should have a comprehensive and individual approach, combining non-medicament and medication methods.bThe funds belonging to the group of nootropic drugs, and also directed psychological correction, supported by antiepileptic therapy are applied traditionally for the treatment of cognitive disorders.

KEYWORDS: cognitive disorders, epilepsy in children, correction of cognitive disorders in children.

The problem of cognitive disorders is now very relevant and significant from a medical and social point of view in modern epileptology. There are quite a few publications in the literature concerning to the study of cognitive disorders in the adult population. However, violations of these functions are quite common among children (according to some, about 20% of children and adolescent). Some sources state that among 50 million registered epilepsy patients at least 15 million children. The high prevalence of epilepsy in the population, the frequent combination with mental retardation and personality changes, the need for long-term anticonvulsant therapy determine the exceptional importance of this problem in pediatric neurology and psychiatry. Considering the study of the prevalence of speech and language disorders in children with epilepsy, including reading and writing disorders, 5-20% of children have been diagnosed with these disorders according to some sources.

Availability of cognitive disorders is one of the essential aspects in epileptological practice. At the same time, neurologists and psychiatrists involved in the treatment of epilepsy in children and adolescents, often underestimate these disorders. Ignoring the cognitive disorders that present in patients in the

initial stages of the disease in the future may lead to their deepening condition and complicate treatment. Sometimes, on the contrary, there is a reassessment of existing cognitive disorders in patients with epilepsy, when virtually any behavioral, personal characteristics of patients are associated with others or themselves with the existing disease. It is known that an epileptic attack and antiepileptic drugs (AED) affect on the functioning of the central nervous system, including to higher mental functions (attention, gnosis, memory and thinking).

Currently, there are not enough works in domestic and foreign literature on the study of cognitive function in patients with epilepsy. It is estimated that more than 60% of patients with epilepsy have disorders of intellectual-mental processes. Some authors have shown that more significant cognitive disorder is observed in patients with generalized epileptic seizures compared with patients with partial seizures. There is a view that indicators of cognitive function in patients with remission of seizures are close to those of healthy individuals, statistically and significantly not differ from them, but in another study noted that after achieving stable remission, there is an improvement in cognitive functions, however, none of the examined patients had complete recovery.

A cognitive disorder in patients with epilepsy is determined by the complex interaction of biological and social factors. Scientists have identified five main points that can explain cognitive and behavioural problems in children with epilepsy:

1) structural pathology of the brain,

2) epileptogenic lesion,

3) epilepsy (as the basis of electrophysiological dysfunction),

4) medicines,

5) psychosocial factors.

There are two mechanisms in disorder of the cognitive activity of patients with epilepsy :

1) reducing the degree of action of mental activity by reducing its energy supply level.

2) qualitative changes in intelligence against the background of maintaining its level characteristics, which are caused, apparently, by localization and lateralization of lesion of paroxysmal activity in the brain.

In general, 30-60% of patients with epilepsy have neuropsychiatric problems [Zavadenko N.N., Suvorinova N. Yu., Rumyantseva M.V., 2006, Luria A.R., 1969, 1973]. Psychosocial problems for patients often come to the fore, including cases where control over seizures has not yet been achieved [Luria A.R., 1973], as well as cases of the controlled disease. In particular, depression in patients with severely controlled epilepsy has a greater impact on the quality of life than, saying, frequent seizures. In addition, depression can have a significant impact on cognitive function. Complaints on impaired language functions, memory, attention, thinking, which patients may present during a visit to the doctor, are in second place after complaints of seizures.

There are some differences between cognitive and behavioural functions disorders in childhood and adulthood. In children, epileptic seizures, as well as therapy with antiepileptic drugs (AED), affect on the development of structures of the central nervous system and the formation of higher mental functions (HMF), which ensure the adaptation of the child's body to the environment. This leads to marked changes in the personal sphere and functions that form the basis of cognitive activity (attention, gnosis, memory, thinking). At the same time, the plasticity of mental processes in childhood causes the possibility of compensation for disorders in the directional correction. In addition, children have special conditions - epileptic encephalopathies (early malignant encephalopathies (childhood) and caused by prolonged activity on the electroencephalogram during slow-wave sleep). A long history of the disease, diffuse or gross local lesions of the brain structure and other factors can lead to both intellectual and mental impairments, up to the degree of dementia, and also to severe mental impairments, which are more rigorous to therapy and psychological correction in adults and especially the elderly, [Larrabee GJ, Crook TM].

It should be noted that the development of these disorders is polyetiological [Kyle R., 2003]. The main group of factors is directly related to the disease itself: age of debut (correlates with reading impairment); form of epilepsy, duration, type, duration and frequency of seizures, their

polymorphism (correlated with impaired counting functions); localization of the epileptic lesion and other electroencephalographic features, including the presence of prolonged epileptiform activity during slow-wave sleep (associated with memory, attention disorders, as well as language functions and disorders in the behavioural sphere); the presence of epileptic status in the anamnesis (associated with delayed development of various cognitive functions). Gender differences have been described (boys with difficult-to-detect epilepsy are more likely to have impaired academic performance). Structural anomalies and their localization (especially cortical dysplasia), which are manifested in neuroimaging, and developmental delay may be associated with certain disorders of cognitive function and behaviour. However, the correlation between disorders in the higher mental sphere and the localization of the structural centre, as well as regional epileptiform activity, is not always observed. It is important to take AED in mono or polytherapy. In addition, the disorders described leading to social maladaptation and stigmatization, which in turn have a negative effect on disorders in the higher mental sphere, forming the so-called vicious circle.

A unified classification of disorders in the higher mental sphere in patients with epilepsy has not been developed. In general, there are cognitive disorders and mental disorders. Domestic psychiatrists distinguish mental disorders in relation to the seizure period, including disorders that are a component of the seizures, in addition, allocate paroxysmal and permanent mental disorders in epilepsy [Bawden H.N., Knights R.M., Winogren H.W.]. Epileptic mood disorders include to paroxysmal mental disorders (dysphoria, depressive disorders); twilight darkening of consciousness; epileptic psychoses, - different variants of personality change include to permanent mental disorders. In addition, the concept of epileptic encephalopathies has been widely developed recently, as discussed above [Voronkova K.V., 2002, Voronkova K.V., Pylaeva O.A., 2004].

Up to the XX century it was thought that patients with epilepsy had reduced mental capacity. In the framework of intellectual disorders was considered gross deficiency of the mental-intellectual sphere - mental retardation and epileptic dementia [Dennis M., Wilkinson, M., Koski, L. et al.]. However, in recent decades, it has been shown that the intelligence rate in these patients varies widely, sometimes reaching fairly high values, and only a small number of patients have progressive deterioration in the mental-intellectual sphere. In some patients, there is a total violation of WFP to the degree of epileptic dementia (more often in elderly patients) or diagnosed with mental retardation, mainly in patients with malignant epileptic encephalopathies of early childhood [Dennis M., Wilkinson, M., Koski L. et al., Chapman SB, Saez-Llorens X., McCracken GHJr.]. In turn, epilepsy may be diagnosed in 20% of people with intellectual disabilities, which is associated in most cases with structural disorders of the brain.

A group of epileptic syndromes that pathognomonic with a decline in intelligence is early malignant encephalopathies in children with onset seizures, mainly in the first year of life [Anderson V., Anderson P., Grimwood K., Nolan T.]. In most survivors, intellectual disabilities manifest almost simultaneously with the onset of seizures or are associated with mental retardation, a major symptom of the disease; the development of intellectual disabilities may subsequently become a plateau. Intellectual disorders are noted in patients with such rare diseases as Kozhevnikov - Rasmussen syndrome, progressive forms of epilepsy with myoclonus. Intellectual deficiency, which is noted even in the absence of seizures, may regress as the epileptiform activity is reduced by EEG in children with electrical epileptic slow-wave status . If therapy is not started in time, intellectual disabilities can be sustained. However, it is now convincingly shown that even when therapy is scheduled on time, intellectual deficits may persist in the future [Chandran A., Herbert H., Misurski D., Santosham M.]. It was shown in numerous studies that in children and adults with good attacks control of drug antiepileptic therapy, the prognosis for the intellectual sphere is favorable [Christie D., Viner RM, Knox K. et al., Bedford H., de Louvois J., Halket S. et al.].

Previously, cognitive deficits were also considered as an integral symptom of the clinical picture of epilepsy. It was further shown that not all

patients with epilepsy develop cognitive disorders. Male, the etiology of epilepsy and localization of the lesion of epileptogenesis in the brain, the presence of interectal epileptiform activity, intake of AED, disease course, local structural changes, and continuous spike-wave complexes in the slow wave of things in the brain are associated with the development of cognitive disorders. According to M.G. Harbord, cognitive disorders, and behavioral disorders are 3 times more likely to occur in children with prior intellectual disabilities than in children with normal intelligence.

In general, cognitive disorders, as well as mental disorders, can be transient (ictal or postictal), long-term or permanent (interictal). In addition, we can distinguish partial cognitive disorders, specific (for example, speech impairments in Landau - Kleffner syndrome) and total, as discussed above. It should be added that against the background of antiepileptic therapy, cognitive disorders most often have a dose-dependent transient or prolonged nature, but chronic side effects of AED with permanent, in some cases, progressive disorder of cognitive functions may also develop. In most episodes, transient cognitive disorder is transformed into permanent and even progressive in long-lasting, epilepsy-resistant epilepsy.

The nature of ictal and periectal cognitive disorder is in most cases associated with the localization of the epileptiform activity site on the EEG and with the localization of the structural defect of the brain, and in children such disorders are more pronounced compared to adults. Ictal cognitive disorder may be manifested by speech disorders, memory disorders that differentiate with transient global amnesia and the onset of dementia in elderly patients. Ictal cognitive disorder may be associated with the unconscious status of lesion seizures and absences. Such conditions can be difficult to diagnose especially in elderly patients, in patients with debut epilepsy and with pre-existing disorders of cognitive function. During the status of absences, both mild cognitive decline and marked cognitive impairment may occur. During the status of lession atacks, there are disorders of cognitive functions that correlate with the localization of the cortical dysfunction lesion. Postictal variable cognitive disorder, as a rule, there is a positive dynamics of recovery after seizures. Interctal cognitive disorder in patients with epilepsy is quite variable, and it is impossible to distinguish any specific type of cognitive disorder, as it may depend on the location and nature of brain damage, age of onset of pathology, antiepileptic therapy, and disorders such as depression.

Memory disorder is one of the most cognitive problems that common in patients with epilepsy. Most researchers attribute the occurrence of dysmnestic syndrome with bilateral lesions of the temporal lobes of the brain or specific disorders of the verbal (with left-sided lesions of the temporal lobe) and spatial memory (with right-sided localization of lesions). In recent years, studies have emerged indicating that, more pronounced specific memory disorders occur after surgery on the temporal lobes in difficult-to-epilepsy. Earlier structural pathologies (eg, brain tumors) also show more severe memory disorder. Particularly relevant is the problem of studying cognitive disorder in patients with hippocampal sclerosis or hippocampal lesions due to other etiology. It is assumed that since this structural pathology is a consequence of impaired brain embryogenesis (cortical dysgenesis) or arises as a result of prolonged or serial febrile seizures, due to the plasticity of the brain (especially the child) functionally significant areas are formed in the intact areas of the ipsilateral or contralateral hemisphere. In this regard, patients with hippocampal sclerosis may not have memory disorder. However, the majority of patients with this pathology can be diagnosed with dysmnestic syndrome [Daffner K.R., Mesulam M.M., Scinto L.F., et al.].

Thus, B. Hermann and et al. suggest that temporal lobe epilepsy with the onset in childhood (up to 14 years) causes a significant reduction of brain tissue in the hippocampal area, with the spread to the extracranial areas [Hermann B., Seidenberg M.]. Patients with rolandic epilepsy (with or without seizures) describe minimal behavioral disorders and fine motility that may be associated with focal rolandic adhesions [Bedoin N., Herbillon V., Lamoury I., et al]. The presence of an epileptiform lesion on the side of the dominant

hemisphere can cause linguistic dysfunction [Berroya A.G., Mclntyre J., Webster R., et al.]. There are slight differences in the performance of cognitive tests, mainly on attention and visual-motor coordination, between the examined patients and the children of the control group intellectual or behavioral deficits in neuropsychological testing [Besag F.M.]. In patients, cognitive activity and success may be impaired [Besag F.M., Yung A.W.]. However, it is important to note that many children do not have cognitive deficits for epilepsy, and not all schooling problems are caused by epilepsy or anticonvulsant medication [Herranz J.L., Northcott E., Connolly A.M., Mclntyre J., et al.].

It is well known that the subjective patients' perception of their own disorders in the mystic sphere may be more negative than the objective results of neuropsychological testing. This is related, on the one side, to disorders in the affective-personal sphere, and on the other - to the fact that patients with disorders in the mystic sphere can affect long-term memory, and testing is carried out only at certain short intervals of time. Memory disorders during testing may be more pronounced or manifest de novo if an epileptic seizure has occurred within 24 hours before the study.

Patients with epilepsy may also be disturbed by attention-deficit problems, particularly in the context of attention deficit hyperactivity disorder (ADHD). According to many authors, ADHD is more common in patients with epilepsy than in the general population. Accordingly, these patients are defined by attention deficit. Absence forms of epilepsy can also be accompanied by impaired attention. In general, attention disorders can be observed in patients of both sexes with all forms of epilepsy.

Linguistic disorders in patients with epilepsy are studied less frequently than disorders in the mental sphere. However, they can have serious consequences for patients' social functioning, including training. Moreover, language problems (most often when reading and writing) can occur in patients with epilepsy without impaired intelligence. Most authors attribute the occurrence of disorders in the lingual area to the pathology of the left temporal lobe [Haverkamp F., Honscheid A., Muller-Sinik K.]. Epileptic syndromes with specific speech disorders are described, such as syndrome or aphasia, Landau - Kleffner, in which speech disorders in the form of sensory and then motor aphasia occurring in children with prior normal language development at the age of 4 to 11 years, associated with regional epileptiform activity in the temporal or parietal branches of the EEG. Diagnosis of this syndrome is difficult due to the fact that in some patients' epileptic seizures do not develop. In some patients, seizures, on the contrary, can be preceded by aphatic disorders. In case of speech disorders in patients with epilepsy, correction of antiepileptic therapy may be performed, training with a speech therapist is recommended.

In the frontal parts of the brain, such disorders in the cognitive sphere as difficulty programming actions, decision-making, and strategies, abstract thinking, etc. have appeared mainly in localization of the pathological focus, which generally determines the ability of individuals to live independently and adapt in society. Numerous studies have been carried out regarding the lateralization of the functions discussed in the cortex of the frontal lobes of the brain, including observations [Parisi P., Verro A., Paolino M.C. et al.], which showed that in this aspect, the frontal lobes are the only area of operation without a clear difference of the parties. This may also be due to the high frequency of the phenomenon occurring in the form of electrical discharge at the localization of the epileptogenesis lesion in the frontal lobe from one hemisphere to another. In the following papers, D. Upton et al. reported that the most pronounced abnormalities occur when the pathological process is localized in both hemispheres [Waldier K.D., Hausmann M., Milne B.J., Poulton R.].

Many studies have addressed a wide range of issues related to the identification of global or specific cognitive deficits, behavioral problems, specific patterns of speech lateralization, the relationship between localization of the epileptic focus and the nature of cognitive dysfunctions [Piccirilli M., D'Alessandro P., S'Aarmaandro P., S'Aarmaandro P., al., Croona C., Kihlgren M., Lundberg S. et al.]. In 2000, T.W. Deonna et al. published the results of a long-term prospective study that identified "acquired prolonged reversible

dysfunction" associated with epileptiform EEG activity in children with rolandic epilepsy [Deonna T.]. More than 25% of patients had disabilities, family-related problems related to impulsivity, attention deficit, auditory and / or visual, verbal, or visual-spatial disorders occurring in the interval of two or more months from the onset of the disease, and lasted from 9 to 36 months. The cause of these disorders was centrotemporal spikes that persisted after the cessation of the seizures, sometimes for a very long time that poses a serious problem in addressing the duration of anti-epileptic treatment according to T.W Deonna et al. [Deonna T.W., Roulet E., Fontan D., Marcoz J.P.].

During neuropsychological examinations using computer systems indicated the presence of moderate partial deficits of cognitive function in most patients in our population of children with rolandic epilepsy. Only 29% of children had not deviation from the age limit. In patients with rolandic epilepsy Functions characterizing the quality of analytical and synthetic processes suffered most of all: attention distribution, short-term visual memory, imaginative thinking, rates of psychomotor activity [Balkanska S.V., Kuzenkova L.M., Studenikin V.M., Maslova O.I.].

Patients with rolandic epilepsy, aged 5 to 11 years, identified neuropsychological deficits and found a relationship with the duration and localization of regional epileptiform changes in another prospective study, during 5 years. All children who were supervised after reaching school age, studied in a secondary school. However, in neuropsychological testing, on the moment of applying for the appointment of AED, cognitive function was retained in only 11% of patients, and various dysfunctions were detected in most children. Most patients had a decrease of verbal intelligence in the preservation of nonverbal intelligence, reduced verbal memory, optical-motor coordination and the violation of arbitrary regulation. In more than half of all cases, language disorders such as dyslexia and verbal dyspraxia were identified. Behavioural disorder associated with impulsivity, attention deficit, and hyperactivity was detected in 1/3 of patients. All schoolchildren had a cognitive dysfunction that was not gross and did not significantly affected on the learning of the school program [Ermolenko N.A., Yermakov O.Yu., Buchnev I.A. et al.].

Approaches to cognitive disorders therapy.

Assistance to children with cognitive disorders has a comprehensive and individualized approach, combining non-medication and medication methods. Traditionally, nootropic drugs have been used to treat cognitive disorders. Nootropics - a group of drugs that differ in composition and mechanism of action, but have a number of common properties. As a result of improving of metabolism and interneuronal transmission in the central nervous system (CNS), nootropic drugs improve mental activity, attention, language, activate learning processes (nootropic action); improve memory, ability to reproduce information and translate current information into long-term memory (mnemotropic action); reduce the need of neurons in oxygen during hypoxia (antihypoxic action), and also increase the resistance of the CNS to adverse factors: hypoxia, intoxication and other extreme effects (cerebroprotective and adaptogenic action).

In the therapy of patients with partial and also total deficit of the higher mental sphere, directed psychological correction supported by anti-epileptic therapy plays a significant role.

Choosing methods of psychotherapy correction, the following should be considered:

- nosological diagnosis (level of mental disorders - psychotic, neurotic);
- syndromological qualification;
- the level of mental development of the child;
- the stage of ontogenetic development and the level of pathological response (somato-vegetative, psychomotor, affective, emotional-ideatory);
- type of personality or personality anomaly;
- the level and quality of the individual socialization, the presence of pedagogical neglect, also the conditions of life and of the child upbringing ;
- psychological settings available to the child;
- structural and dynamic characteristics of age psychology;
- existence of age crisis;

Psychotherapy should be directed not only at the child, but also at his(her) environment, at those adults

who are engaged in his(her) education, treatment and training.

Psychotherapy begins with contact with the patient and his or her relatives. Next is preparation for correction, creation of an optimal psycho-hygienic atmosphere, formation of a psychological setting for the implementation of psychotherapeutic recommendations, determination of the mode of life and nutrition.

Then – work on the correction of characterological disorders and the elimination of bad habits, on learning appropriate ways of psychological protection, optimal techniques of stress factors disactualization, conflict situations.

We pay great attention to group psychotherapy (group discussion, pantomime, psycho-gymnastics, projective drawing, music therapy, motion therapy, etc.).

The game methods are equally important. There is a release of emotional tension in the course of the game. This method is used for both correction and diagnosis. Special sets of cards are useful for younger teens.

Role-playing games (role-changing) that normalize the behaviors and reactions indicated to older teens. Homeworks that consolidate the effect of various types of psychotherapy are used to enhance the therapeutic effect.

Thus, the use of methods of psychocorrection and psychotherapy in neurotic and somatoform disorders in childhood is one of the main pathogenetic approaches to the treatment of psychogenic disease, which are most common in childhood.

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КОГНИТИВНЫЕ НАРУШЕНИЯ И ИХ КОРРЕКЦИЯ У ДЕТЕЙ С ЭПИЛЕПСИЕЙ

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Статья посвящена анализу литературных данных, посвященных изучению когнитивных расстройств у детского населения. Рассмотрены вопросы распространенности указанных нарушений. Обращено внимание на то, что высокая распространенность эпилепсии в популяции, частое сочетание с умственной отсталостью и изменениями личности, необходимость длительной антиконвульсантной терапии определяют исключительную значимость данной проблемы в детской неврологии и психиатрии. Рассматриваемые вопросы обусловлены тем, что наличие когнитивных расстройств является одним из неотъемлемых аспектов в эпилептологической практике, а также тем, что неврологи и психиатры, занимающиеся лечением эпилепсии у детей и подростков, нередко эти расстройства недооценивают. В статье обращается внимание на этиологические и патогенетические аспекты формирования когнитивных нарушений, зависимость возникновения этих расстройств от локализации эпилептического очага, характера припадков, возрастных особенностей течения эпилепсии. Указано, что когнитивные нарушения у больных с эпилепсией детерминированы сложным взаимодействием биологических и социальных факторов. Выделены основные моментов, которые могут объяснить когнитивные и поведенческие проблемы у детей при эпилепсии. Выделены два механизма в нарушении познавательной деятельности больных эпилепсией. Указано, что психосоциальные проблемы для пациентов часто выходят на первый план, включая случаи, когда контроль над приступами еще не достигнут. В частности, депрессия у пациентов с трудно контролируемой эпилепсией в большей степени влияет на качество жизни, чем, скажем, частые приступы. Кроме того, депрессия может оказывать значительное воздействие и на когнитивные функции. Жалобы на нарушения речевых функций, памяти, внимания, мышления, которые пациенты могут предъявлять на приеме у врача, находятся на втором месте после жалоб на приступы. Уделено внимание и взглядам на подходы к терапии когнитивных нарушений. Указано, что оказание помощи детям с когнитивными нарушениями должно носить комплексный и индивидуальный подход, объединяя немедикаментозные и медикаментозные методы. Традиционно для лечения когнитивных расстройств применяются средства, относящиеся к группе ноотропных препаратов, а также направленная психологическая коррекция, поддерживаемая антиэпилептической терапией.

КЛЮЧЕВЫЕ СЛОВА: когнитивные нарушения, эпилепсия у детей, коррекция когнитивных нарушений у детей.

КОГНІТИВНІ ПОРУШЕННЯ ТА ЇХ КОРЕКЦІЯ У ДІТЕЙ З ЕПІЛЕПСІЄЮ

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Стаття присвячена аналізу літературних даних, присвячених вивченню когнітивних розладів у дитячого населення. Розглянуто питання поширеності зазначених порушень. Звернуто увагу на те, що висока поширеність епілепсії в популяції, часте поєднання з розумовою відсталістю і змінами особистості, необхідність тривалої антіконвульсантной терапії

визначають виняткову значимість даної проблеми в дитячій неврології і психіатрії. Розглянуті питання обумовлені тим, що наявність когнітивних розладів є одним з невід'ємних аспектів в епілептологическої практиці, а також тим, що неврологи і психіатри, які займаються лікуванням епілепсії у дітей та підлітків, нерідко ці розлади недооцінюють. У статті звертається увага на етіологічні і патогенетичні аспекти формування когнітивних порушень, залежність виникнення цих розладів від локалізації епілептичного вогнища, характеру припадків, вікових особливостей перебігу епілепсії. Зазначено, що когнітивні порушення у хворих з епілепсією детерміновані складною взаємодією біологічних та соціальних факторів. Виділено основні моментів, які можуть пояснити когнітивні і поведінкові проблеми у дітей при епілепсії. Виділено два механізми в порушенні пізнавальної діяльності хворих на епілепсію. Зазначено, що психосоціальні проблеми для пацієнтів часто виходять на перший план, включаючи випадки, коли контроль над нападами ще не досягнуто. Зокрема, депресія у пацієнтів з важко контрольованою епілепсією в більшій мірі впливає на якість життя, ніж, скажімо, часті напади. Крім того, депресія може мати значний вплив і на когнітивні функції. Скарги на порушення мовних функцій, пам'яті, уваги, мислення, які пацієнти можуть пред'являти на прийомі у лікаря, знаходяться на другому місці після скарг на напади. Приділено увагу і поглядам на підходи до терапії когнітивних порушень. Зазначено, що надання допомоги дітям з когнітивними порушеннями повинно носити комплексний і індивідуальний підхід, об'єднуючи немедикаментозні і медикаментозні методи. Традиційно для лікування когнітивних розладів застосовуються засоби, що відносяться до групи ноотропних препаратів, а також спрямована психологічна корекція, підтримувана антиепілептичної терапією.

КЛЮЧОВІ СЛОВА: когнітивні порушення, епілепсія у дітей, корекція когнітивних порушень у дітей