SPEECH DEVELOPMENT DISORDERS WITH NEUROLOGICAL DISEASES IN CHILDREN

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ABSTRACT

The causes and variants of speech development disorders, modern principles of their diagnosis and treatment are discussed. Clinical forms of speech development disorders are considered: motor and sensory developmental dysphasia (alalia), selective mutism, speech disorders in autism spectrum disorders, various forms of childhood epilepsy. Specific speech development disorders (synonym: developmental dysphasia) are the most widespread disorders of neuropsychiatric development, the frequency of their occurrence in the child population reaches at least 5-10%. Since these children are characterized by a high level of anxiety, in some cases it is necessary to differentiate developmental dysphasia (alalia) with selective mutism - one of the forms of anxiety disorders in children, manifesting at the age of 2-5 years with a frequency of occurrence in the child population of less than 1%. Currently, selective mutism is not considered within the framework of oppositional behavior, but opposition reactions can take place if a child is forced to speak. Speech development disorders are one of the main manifestations of autism spectrum disorders (ASD). The main manifestations of ASD become apparent before the age of three and are characterized by a lack of normal speech development, impaired interpersonal interaction, limited repetitive patterns in the behavior of the child. Speech and its development can suffer from a number of forms of epilepsy, among which epileptic dysphasia, autistic epileptiform regression, rolandic epilepsy are described. The main directions of therapy for developmental dysphasia in children are: speech therapy, psychological and pedagogical correction, psychotherapeutic assistance to the child and his family, drug treatment. The data on the therapeutic efficacy o

INTRODUCTION

Speech is a complex socially mediated function that includes 2 main components:
1) perception and understanding of language constructions;
2) formation and formulation of thoughts using the means of language.

Speech zones of the cerebral cortex located in the dominant hemisphere (in right-handers - in the left, left-handers - in the right) take part in the implementation of speech. The speech-hearing analyzer (sensory speech center, Wernicke center) is located in the temporal lobe of the dominant hemisphere and is responsible for the perception and differentiation of speech signals, the process of understanding speech - its receptive (impressive) side. The speech motor analyzer (motor speech center, Broca's center) is located in the frontal lobe and provides a speech utterance program, i.e. the expressive side of speech.

MATERIALS AND METHODS

The child's brain has a physiological predisposition to respond to speech sounds: when an infant hears words addressed to him, speech centers are activated in his brain [1]. In the course of neuropsychic development, children master the laws of their native language - an ordered system in which all parts of speech are interconnected according to certain rules. At the same time, the complex of brain structures providing speech functions undergoes dynamic changes (both functional and structural). The role of the two large hemispheres at 18 months and at an older age differs [2]. It is assumed that in infants, the right hemisphere plays the main role in processing intonational aspects of verbal information, as well as recognizing keywords. When there is a need for complex forms of verbal perception in ontogenesis, and syntactic structures appear in speech (sentences of 3 words), the left hemisphere begins to play a dominant role, and this dominance becomes complete by the age of 4-5, when speech acquires coherence. The older the child gets, the more significant the contribution of the dominant (left) hemisphere to speech processes. Thus, the age period from the first year of life to 4-5 years is critical for the formation of speech. This period is also designated as sensitive, and in it there is the formation of strong connections between the speech zones of the central nervous system (CNS). Despite the fact that the formation of speech areas of the central nervous system proceeds with the greatest intensity in the first years of life, it is assumed that their maturation continues throughout childhood.

The child's speech is formed under the influence of adult speech and to a great extent depends on speech practice, normal speech environment, upbringing and training, which begin from the first days of life. The formation and changes of brain structures and interneuronal connections are determined not only by a genetically determined program of neuroontogenesis, but are also influenced by individual experience and external stimulation. The social environment stimulates speech development and gives a sample of speech. The lack of stimulation under the influence of unfavorable social factors (insufficient communication and education) leads to a rapid delay in the development of speech.

However, the leading role in the genesis of speech development disorders is played by neurobiological factors, including early organic damage to the central nervous system due to perinatal pathology, and genetic predisposition, which can be combined in a number of patients. The CNS lesions suffered at an early age negatively affect both the general intellectual development and the formation of certain higher mental functions. Speech and its development can suffer from various diseases affecting specialized centers in the dominant hemisphere and their emerging connections (connectome).

The standards of speech development in children are presented in recent publications. During the examination-research institutes of children need to take into account the following pathological conditions, accompanied by a lag in speech development:

- hearing loss;
- general intellectual disability;
- speech development disorders;

• autism spectrum disorders;
• neurological diseases.

Motor alalia (dysphasia). The cause of motor alalia is a violation of the functions of the speech motor analyzer (motor speech center). The child has difficulty organizing speech movements, their coordination, so speech development is delayed. The understanding of speech is not impaired. Independent speech does not develop for a long time or remains at the level of individual sounds, words. Parents note the taciturnity, characterize children as understanding the addressed speech, but not willing to speak. Instead of speech, children tend to use facial expressions and gestures, especially in emotionally colored situations.

The first words and phrases appear late. Parents note that in addition to lagging in speech, in general, children develop normally. As the vocabulary increases, the difficulties of children in mastering the structure of the word become more noticeable. Speech is slow, impoverished, vocabulary is poor, limited to everyday topics. There are a lot of reservations (paraphasias), permutations, perseverations in speech. Growing up, children understand these mistakes and try to correct them.

Sensory alalia (dysphasia). Speech development delay is based on disorders of its understanding, which is associated with impaired functions of the speech-hearing analyzer (sensory center of speech). This leads to disorders of the analysis and synthesis of speech signals, as a result of which no connection is formed between the sound image of the word and the object or action designated by it. The degree of underdevelopment of the speech-hearing analyzer can be different. In more severe cases, the child does not understand the speech of others at all, treats it as noise devoid of meaning, does not even react to his own name. In other cases, he understands individual words, but loses them against the background of a detailed statement. In addressing him, the child does not catch all the words and their shades, so he may react incorrectly to them. Often children look into the face of the speaker, which helps to improve the understanding of speech due to reinforcement from the visual analyzer - "face reading". Sometimes a child understands only one person - the mother, the teacher, but does not understand when someone else says the same thing.

When pronouncing words, numerous mistakes are made in accents, sound substitutions, distortions, the nature of which often changes. The child learns new words and phrases slowly. His statements are inaccurate and difficult to understand. He is not critical of his own speech. There are incoherent repetitions of all words known to the child (logorrhea), repetitions of words and phrases (echolalia), while the words are not comprehended and are not remembered. In general, the speech of a child with sensory alalia can be characterized as increased speech activity against the background of impaired understanding of the speech of others and insufficient control over their own speech.

Sensory alalia in its pure form is much less common than motor alalia, much more often a lack of speech perception accompanies motor alalia. The existence of mixed forms of alalia indicates the functional continuity of speech-moving and speech-hearing components.

As a reaction to speech insufficiency, many children with alalia (developmental dysphasia) develop neurotic traits, isolation, negativism, self-doubt, internal tension, increased irritability, resentment.

RESULTS AND DISCUSSION

Taking this into account, in some cases it is necessary to differentiate alalia with selective mutism - one of the forms of anxiety disorders in children, manifesting at the age of 2-5 years. The prevalence in the child population is less than 1%. Selective mutism is more common in families with bilingualism, when moving to a new place of residence with a different language environment. Occurs during the period of active formation of speech or when entering kindergarten, the beginning of classes in preparation for school. It limits the communicative possibilities, can distort the mental development of the child, complicates his social adaptation.

The child stops talking to everyone except a small circle of familiar people. This has been going on for a long time (several months). Despite the preserved speech, the child consciously refuses speech communication (and sometimes any communication) in situations that are psycho-traumatic for him (both in the children's team and among adults). At the same time, he does not just refuse to speak, but is unable to do so because of the feeling that his speech seems to be "frozen" in the larynx. Gradually, he learns to anticipate situations that provoke mutism, and tries to avoid them.

An important feature is that most patients with selective mutism have manifestations of social anxiety disorder, and at an early age - separation anxiety disorder. School phobia is rare. A number of patients have a combination of selective mutism with disorders such as speech development disorders, enuresis, encopresis, delayed motor development, autism, in rare cases - attention deficit hyperactivity disorder. Currently, selective mutism is no longer considered within the framework of oppositional behavior, but opposition reactions can take place if a child is forced to speak.

Speech development disorders are one of the main manifestations of ASD. Delayed speech development in an autistic child is the most common reason for going to the doctor. Many children with ASD have signs of developmental dysphasia, while insufficiently developed verbalization aggravates their autistic behavior. With the combination of ASD with developmental dysphasia, there is a significant lag in psychorech development, starting with a delay in the phases of gurgling, babbling, lack of articulatory phonemes and imitation of speech sounds, along with weakness or lack of reaction to adult speech (pseudo-deafness). In other cases, ASD psychorechological development can proceed without obvious deviations until the age of 1.5-2 years, after which there is a stop and regression in development. The main manifestations of ASD become apparent before the age of 3 and are characterized by a lack of normal speech development, impaired interpersonal interaction, limited repetitive patterns in the behavior of the child.

CONCLUSION

Thus, early detection, timely and comprehensive diagnosis and correction of speech development disorders in children are extremely important. It is well known that the most effective is the correc-17. the help provided in the sensitive age period for speech formation from 2.5 to 18.5 years, when there is an active formation of the speech function and the structures of the central nervous system that provide it. The earlier 19. a problem in the development of a child's speech is noticed and specialists begin to work with him, the better the results achieved will be, since the reserve capabilities of the child's brain are highest in the first years of life.

References:

1. Alabuzheva S.V. Work on the development of creative abilities of preschool children / S.V. Alabuzheva. - Glazov: Publishing House of GPGI, 2005. - 198 p.

2. Leontiev A.A. Signs of coherence and integrity of the text / A.A. Leontiev. - Kiev: Higher School, 1978. - 230 p.

3. Lalaeva R.I. Logopathopsychology / R.I. Lalaeva. - M.: Vlados, 2011. - 113 p.

4. Rubinstein S.L. Fundamentals of general psychology / S.L. Rubinstein. - St. Petersburg: Publishing House: Peter, 2002. - 720 p.

5. Lebedeva I.N. Development of coherent speech of preschoolers. Teaching storytelling by painting / I.N. Lebedeva. - St. Petersburg: Central Committee of Prof. L.B. Baryaeva, 2009. - 175 p.

6. Shcherbak S.G. Studying the features of coherent monological speech of children with dysarthric disorders / S.G. Shcherbak // Defectology. - 2010. - No. 1. - pp. 47-56.