

SPEECH PATHOLOGY IN INFANTS SUFFERING FROM INFANTILE CEREBRAL PALSY

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ABSTRACT

We observed 110 infants suffering from cerebral paralysis. The aim of the present investigation is to study infant speech formation under cerebral pathology. Clinical and psychopedagogical methods were used in the investigation.

The early period of the infant development is of great importance for the normal speech formation. It is conditioned by the peculiarities of the infant brain development, optimal periods of the maturing of the speech function system as well as by its abilities to compensate disturbed functions. There is a considerable number of works devoted to the problem of speech formation in normal development, whereas the question of the development of this system under pathology has not been studied enough so far. This trend is presented in the works of E.M. Mastyuchova /1/, E.F. Archipova /2/, M. Cass /3/.

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Infant cerebral palsy is a polyetiological illness of the central nervous system which appears in the pre- and natal period of the infant's development and is characterized by the affection of motor and psychic spheres. According to the data of different authors speech affections are found in 70-80 % of cases of infants suffering from this illness.

The first year of the infant's life is conventionally called a pre-speech period the initial stage of which is the cry. Infants with cerebral pathology may have no cry or have a weak constrained cry which is connected with the pathology of the intrauterine period or asphyxia during birth. Normally appearing in the first weeks of life sounds appear with a

considerable delay under cerebral pathology. In this case they are rare and monotonous. The early stage of baby-talk which under normal conditions appear at the age of 2.5 months develops spontaneously only at the age of 4-5 months and sometimes of one year of the infant's life under pathology. Besides the temporal delay of this stage of baby-talk development insufficient sounds melodiousness, rudimentary character of sounds realization and unmodularity take place. The main composition of the early stage of baby-talk is formed by the consonant sounds of indistinct locality - approximate vowels "a", "э", "и". Infants for a long time stay at the period of articulatory movements realization which takes its course independently of the infant's hearing. They pass over to the next stage (autoecholalia and echolalia) with great difficulty and delay.

Baby-talk is usually delayed and starts at 9-11 months and sometimes even later - at the age of 1.5 year. The baby-talk is often poor in the sound composition. Most frequent are bilabial ("п", "б") and backlingual ("к", "г") sounds, less frequent are alveolar ("т", "д") sounds. Even during favourable development the baby-talk stage is characterized by fragmentariness, poorness of sound complexes and little activity. The stage may last more than one year.

Conventionally the end of the first year of the infant's life is marked by the speech period formation. Children with cerebral paralysis have it at the age from 1 year and 2-3 months to 2-3 years which depends not only upon the level of the psychic development of the child but also on the severity of the speech-motor pathology. The retraced dependence of the speech transition period on the moment of the baby-talk points out to its great prognosis value.

Infant's speech formation under cerebral paralysis generally follows the main principles of speech formation in the norm, although it has its own peculi-

arities. They are - longer periods of acquiring separate groups of sounds and dependence of speech formation on severity and affected locality of the articulatory apparatus. Infant speech-motor images of the articulatory apparatus under cerebral pathology do not serve as a necessary basis for the auditory perception of sounds, as it is observed in the norm. Hearing under these conditions hinders, instead of stimulating, speech formation.

Substitutes acquire the same pathological character - in the norm they help in the transmission from one sound to another, whereas in this case they also play a hampering role. Substitutes are not of constant character, they often change.

The sound composition of infant speech is often characterized by the presence of one or two groups of sounds (according to the manner and place of articulation) which depends on the locality and character of affection of the articulatory organs. Thus if the affection of the tongue muscles prevails labial sounds are mainly present, while the lip muscles affection gives an opportunity for the formation of lingual sounds. As a rule, we come across a mixed type of pathology which affects all the muscles of the articulatory organs, although some areas are characterized by more explicit pathological changes as compared to the others.

The affections described above at the early age are characterized as a delay in prespeech or speech development which may eventually transform into a speech breach and make the speech communication of the child impossible.

/1/ - E. Mastyuchova "Clinical picture and rehabilitation therapy of cerebral palsy in infancy", Medicine, 1972.

/2/ - E. Archipova "The prespeech period peculiarities in infant cerebral palsy", MSPI, 1979.

/3/ - M. Cass "Speech habituation in cerebral palsy", Harver Publishing Company, 1965.