

CHILDHOOD AUTISM ON PERINATAL BRAIN DAMAGE CHILDREN AND CHILD-MOTHER RELATIONSHIPS: CLINICAL PICTURE AND CORRECTION

B. V. Mykhaylov, N. G. Mikhanovskaya*, I. V. Romanova

Kharkov Medical Academy of Postgraduate Education,

*Institute of Children and Adolescents Health Care of the Academy of Medical Sciences

The obtained results testify to the presence and possibility of rating the distinct clinical autism spectrum disorders markers at an early age, which enables the researchers to carry out timely appropriate abilitational measures at the initial stages of the disorder development. Based on the data obtained in psychodynamic approach there were substantiated, worked out and tested certain methods of medico-psychological interactive assistance model, which foresaw some steps, directed on the child, mother, and their interaction.

Keywords: autism, children of an early age, child-mother relationships, clinics, correction.

РОЗЛАДИ АУТИСТИЧНОГО СПЕКТРА
В ДІТЕЙ РАНЬОГО ВІКУ
З ПЕРИНАТАЛЬНОЮ ТРАВМОЮ ГОЛОВНОГО
МОЗКУ І СТОСУНКИ ДИТИНА–МАТІР:
КЛІНІЧНА КАРТИНА ТА КОРЕКЦІЯ

Проф. Б. В. Михайлов, д-р мед. наук Н. Г. Міхановська*,
доц. І. В. Романова

Рання діагностика психопатологічних станів і розладів аутистичного спектра (за останні 5 років захворюваність в Україні збільшилася на 2,8 рази і було зареєстровано 1804 дітей з аутизмом) є актуальним завданням, яке слід розв'язати для забезпечення своєчасної абілітації дітей і зведення до мінімуму потенційних соціальних обмежень протягом усього їхнього життя. У нашому дослідженні було розглянуто 352 дитини віком від 3 міс. до 5 років із перинатальним гіпоксично-ішемічним пошкодженням головного мозку різного ступеня тяжкості. На основі отриманих даних обгрунтовано, розроблено та апробовано деякі методи інтерактивних моделей медико-психологічної допомоги, які було спрямовано на дитину, матір та їх взаємодію.

Ключові слова: аутизм, діти раннього віку, стосунки дитина–матір, клінічна картина, корекція.

РАССТРОЙСТВА АУТИСТИЧЕСКОГО
СПЕКТРА У ДЕТЕЙ РАННЕГО ВОЗРАСТА
С ПЕРИНАТАЛЬНОЙ ТРАВМОЙ ГОЛОВНОГО
МОЗГА И ОТНОШЕНИЯ РЕБЕНОК–МАТЬ:
КЛИНИЧЕСКАЯ КАРТИНА И КОРРЕКЦИЯ

Проф. Б. В. Михайлов, д-р мед. наук Н. Г. Михановская*,
доц. И. В. Романова

Ранняя диагностика психопатологических состояний и расстройств аутистического спектра (за последние 5 лет заболеваемость в Украине увеличилась в 2,8 раза и было зарегистрировано 1804 детей с аутизмом) является актуальной задачей, которая должна быть решена для обеспечения своевременной абилитации детей и сведения к минимуму потенциальных социальных ограничений на протяжении всей их жизни. В нашем исследовании были рассмотрены 352 ребенка в возрасте от 3 месяцев до 5 лет с перинатальным гипоксическо-ишемическим повреждением головного мозга различной степени тяжести. На основе полученных данных были обоснованы, разработаны и апробированы некоторые методы интерактивных моделей медико-психологической помощи, направленные на ребенка, мать и их взаимодействие.

Ключевые слова: аутизм, дети раннего возраста, отношения ребенок–мать, клиническая картина, коррекция.

INTRODUCTION

Autistic disorder is neuropsychiatric disorder with the first years of life manifestation with confirm delays and deviance in social, communicative, behavioral and cognitive development and with restricted repertoire of activities and interests. Early diagnosis of psychopathology and autism spectrum disorders (ASD) (over the last 5 years the morbidity in Ukraine increased by 2,8 times, and 1804 children with autism have been registered) due

to their steady growth is an urgent problem which needs to be solved to ensure the timely abilitation of children and minimize the potential social limitations throughout their lives.

The notion that autism has its origins early in life is not new. In the first clinical description of autism, Leo Kanner (1943) proposed that, from early infancy, children with autism have an innate inability to form social relationships. Many parents of children with autism

report an early onset of symptoms. Several studies based on parental report have identified the average age of symptoms onset as between 16 and 20 months. Moreover, onset in the children studied was reported to occur within the first year of life for 31 to 55% and within the first 2 years of life for 75 to 88%. In recent years, interest in identifying the manifestations of autism at young ages has increased, perhaps reflecting several political and scientific trends [4].

There is strong evidence for a genetic factor in the etiology of autistic disorders [2] but various conditions affecting brain function can be associated with these disorders — for example, prenatal infections of neurodegenerative pathology, etc [9].

The neurological diagnosis depends on the neurological signs, but these may be delayed in onset and preceded by behavior disorders or behavioral phenotypes personality characteristic of specific biological syndromes that can take different forms, including autistic spectrum disorders [3, 15, 16].

The integration of behavioral and mental health institutions into primary healthcare has been identified as both a strategic and logical goal for some time. This is the main stream goal of the Declaration and action plan in mental health protection in Europe. Primary care clinicians are in an ideal position to make meaningful interventions for individuals with mental health needs. They frequently represent the first point of contact, are in a position to identify problems early, and may have contact with the family, thus providing an opportunity to garner support for the benefit of the affected individual. Primary care is often territory closer and may cost less than specialty care, and there may be less of a stigma associated with receiving mental health assistance from a primary care provider compare compare with psychiatry service [6].

As far as autism goes, there are some aspects of what's being proposed that are very interesting and innovative, particularly those looking at dimensions of function/dysfunction. The question of moving from this funny term "pervasive developmental disorder" — which was coined back in 1980 — to "autism spectrum disorder" is being discussed, which is in some ways in keeping with how people are using the term. Since the discovery of early infantile autism (1943), the etiology of the disease has for long been a matter of dispute—from a form of innate schizophrenia, maltreatment by "refrigerator mother", to dysfunction of speech development. After the re-discovery of Asperger syndrome by Wing (1981), the concept of this diverse syndrome complex has merged to pervasive developmental disorders (PDD) or autism spectrum disorders (ASD). People suffering from Asperger syndrome do not show impairments in speech development, in fact, they have good linguistic abilities. They can explain their own psychopathology, which helps in the understanding of classical autism with profound mental retardation. Currently, ASD is prevalent

in 1 of 150 births with strong genetic inheritance. ASD is therefore thought a psychiatric common disease. Asperger syndrome has frequently been the subject of neuroimaging studies, since social communication is an important characteristic of human behavior [5].

X. Zhang and colleagues conducted a case-control study using 190 Han children with and without autism to investigate prenatal and perinatal risk factors for autism in China. Cases were recruited through public special education schools and controls from regular public schools in the same region (Tianjin), with frequency matching on sex and birth year. Unadjusted analyses identified seven prenatal and seven perinatal risk factors significantly associated with autism. In the adjusted analysis, nine risk factors showed significant association with autism: maternal second-hand smoke exposure, maternal chronic or acute medical conditions unrelated to pregnancy, maternal unhappy emotional state, gestational complications, edema, abnormal gestational age (<35 or >42 weeks), nuchal cord, gravidity >1, and advanced paternal age at delivery (>30 year-old) [13].

It is thought that autistic children do not form attachments to parents or caregivers because of their difficulties in social interaction. Yet, the findings of the B. Pehlivanürk's studies demonstrate evidences for the existence of attachment between autistic children and their caregivers. The aim of the present study is to review the studies that examine the attachment behaviors in autism. Autistic children show similar attachment behaviors when compared to children with normal development, children with other psychiatric disorders, children with Down syndrome and mentally retarded children. Children with autism prefer their mothers to strangers and attempt to remain close to them as much as other children. However they do not engage in attention sharing behaviors such as pointing or showing objects. They also do not seem to recognize the meaning of facial expressions and emotions. Although autism does not exclude the development of secure attachment relationships, it may delay the development of secure attachment and change the behavioral patterns related with attachment security. It is concluded that the awareness of the parents and the clinicians might help to establish treatment alternatives that preserve and improve the attachment behaviors of autistic children [12]. D. Bilder and colleagues in their study suggests a shared etiology rather than causal relationship. Additional investigation focused on both genetic and environmental factors that link these autism spectrum disorder risk factors individually or collectively is needed [14].

The purpose of the study. In connection with the above, the purpose of the work was to study the distinct clinical ASD markers at an early age and worked out and tested certain methods of medico-psychological interactive assistance model, which foresaw some steps, directed on the child, mother, and their interaction.

MATERIALS AND METHODS

Cause and effect interrelationships between biological, psychosocial and clinico-psychopathologic factors, which determine formation of psychopathologic disturbances, some peculiarities of sensomotor functions, prespeech development, cognitive and social activity, as well as emotional response at an early age, were established on the basis of systemic approach to estimating the results of integrated clinico-psychopathologic (participant observation with narrative interview and Clinical Global Impression (CGI) scale), clinico-anamnestic and psychodiagnostic methods [11]. 352 children, aged from 3 months to 5 years, with perinatal hypoxic-ischemic brain damage of different severity were examined in our study and subdivided in such groups: from the group of 3–18-month-old infants ($n=97$) 54 had mild, transient neurological deficiency, and 43 were with a severe neurological pathology. In the group of 1,5–3-year-old children ($n=132$) 78 were with mild, transient grade of the pathology and 54 — with pronounced neurological disorders. The group of 3–5-year-olds ($n=123$) included 55 children with a transient pathology, and 68 children with a severe neurological deficiency. Their mothers and child-mother relationships also have been studied. The level of formation of motivational systems development was determined according to M. Maler [10]. Pathogenetic mechanisms of psychopathologic disturbances formation were defined with consideration of specificity in disregulative, emotional and behavioral features in children and the character of child-mother relationships. Estimation of the degree and severity of disturbances was performed using the CGI. The methodological basis of the study was the consideration and registration of stages in mental development and maturation of emotional and communicative capabilities of young children, that is sensory integration, providing a positive emotional state and self-regulation with a predominant involvement of the closest adults. In our study we considered the use of signs, initiation of presymbolic communication and physical contact during the interaction, the ability to form cycles of interaction and support of extracorporeal contact with singling out differentiated, polar manifestations with provision of adequate self-presentations [1].

RESULTS AND DISCUSSION

On the grounds of the data obtained there were singled out 3 clinical variants in the course of mental disorders, namely: emotionally labile, anxious-apatetic, and emotionally-nondifferentiated. Specificity and severity of their manifestations were determined by complex impact of biological and psychosocial factors, that is by severity of neurologic deficiency and quality of the child-mother interaction. It was found that some signs of sensory disintegration were established in 61,4% of cases in the group with a severe neurologic deficiency and in 19,5% of cases in the group with a light deficiency. Distortion of social and emotional response was registered in all

the examined children, as well as lack of differentiation, incongruity to the stimulus, the unpredictability concerning intensity and modality of the affect, and anxiety in trying to take the child in hand, autostimulations and stereotypy, undifferentiated prespeech signals, and distinct lack of communicability in their orientation. There were also established some signs as regards disturbed formation of the systems of socio-emotional development in both groups according to the severity of the neurological deficiency: research/mastering 27,8 and 51,16%; affiliation — 27,8 and 48,8%; fear/watchfulness — 9,3 and 34,9%, respectively. Generalized disorders were registered in 25,6% of cases only in the second group. Moderate autism spectrum disorder was diagnosed in about 10% from the anxious-apatetic and emotionally-nondifferentiated clinical variants: 11,11 and 11,63% from the group of 3–18-month-old infants with the mild, transient pathology and 8,97% of children aged 1,5–3-yr were from the group with a severe neurological deficiency [8]. There were also singled out 4 variants of maternal behavior in interaction with children, namely: manipulative-avoidance (depressive emotional deviation), anxious (anxious emotional deviation), depressive (offended and guilty), and mixed ones. There was shown the dependence of the singled out variants formation on emotional deviations of mothers, clinical variant of psychopathological disturbances, and on pronouncedness of neurologic deficiency in children. It was found that mothers with a manipulative-avoidance variant of behavior in interaction with their children formed ambivalent and avoiding types of attachment in mother–child diads; mothers with an anxious behavior variant formed ambivalent and desorganized types. Mothers with depressive behavior form desorganized type of attachment [11]. Basing on an early-age mental disorders International Classification (“0–3 Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood”) there was performed systematization of psychopathologic disturbances in children with consideration of clinical variants of their course, severity of perinatal brain damage, terms and quality of the major psychics organizers and motivation systems of mental development, as well as somatic health status in children and types of attachment in mother–child diads [7, 11].

CONCLUSIONS

Thus, studies have shown the dependence of the singled out variants formation on emotional deviations of mothers, clinical variant of psychopathological disturbances, and on pronouncedness of neurologic deficiency of early age children. There was performed systematization of psychopathologic disturbances of children with consideration of clinical variants of their course, severity of perinatal brain damage, terms and quality of the major psychics organizers and motivation systems of mental development.

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