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APPEARANCE AND DEVELOPMENT OF HYPERKINETIC DISORDERS IN TENDER AGE CHILDREN

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Introduction: Hyperkinesis disorders problem in children has got its great actuality for last 10 years. According to the researches increasing of children morbidity is connected with fetal hypoxia, bilirubin increasing for incorrect diet in first 3 years, educational disorders from their early childhood. In Ukraine there are increase of hyperkinetic morbidity of children. However diagnostics in early stages has a lot of complications because of general symptoms of disease which can be confused with different diseases, as organic lesions of CNS or comorbid psychosis and so treated incorrectly.

So the **aim** of our research is to study the main trigger factors leading to hyperkinetic disorders in tender age children manifestation.

Materials and methods. We processed medical histories and extracts of child development histories of 21 children of several rehabilitation groups of Regional children hospital №3 of Kharkov.

Results. As the results we've got such data. Among 21 children there are 11 males and 10 females. Average age for boys is 4 years and 2 months, for girls – 2 years and 10 months. According to the extracts we have 6 children born with body weight less than 3 kg, 5 children were born before 38 weeks, 8 children with 8-9 points of Apgar scale, 6 children – 7-8 points, less than 7 points – 3 children. Among the past history: hypoxic damage of CNS – 9, liquorodynamic disorders 5, metabolic disorders – 2, and frequent ARI cases – 3 children. Positive dynamics after treatment in rehabilitation center was observed almost in every child (20 of 21 sick ones). This includes increasing of communicative skills – 20 children, increasing of educability level 17 children, improving of verbal function – 15 children.

Conclusion Based on our research data we can make such a decision, that the development of hyperkinetic disorders in children is influenced by many factors, which are course of pregnancy, birth and afterbirth anamnesis, especially psychomotor development of child to one year, because in this period it is very important to diagnose timely the beginning of disease with its effective educational and speech therapy. Important fact is the presence of hypoxic and liquorodynamic disorders of CNS and transferred infection and allergic diseases.

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FEATURES OF THE BIOLOGICAL AGE IN PEOPLE WITH KONOVALOV-VILSON'S DISEASE

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Introduction. Vilson's disease (VD) is a serious, hereditary, autosomal recessive disorder, which is based on a violation of copper metabolism. Development of the disease determines ATP7B gene, which is located on the long arm of chromosome 13 and encodes a transmembrane protein P-type ATP-ase molecule, that integrates into the apo-copper and ceruloplasmin performs allocation of copper into the bile. As is well known, chromatin can

be submitted to a decondensed functionally active form euchromatin or heterochromatin functionally inactive form. The ratio of these forms depends on the functional state of the cell. Chromatin state may vary upon action of various external factors. Recent data show that the problem of age chromatin condensation is extremely important for understanding the key mechanisms of aging at the cellular level.

Material and methods. To determine the effect of hypercopperosis in patients with VD general processes of aging we have examined 32 patients, including 11 women and 21 men. For the period of the survey the average age of patients was 31,7 ± 8,43 years. The age range of the patients was 20 years and 50 years. 12 patients were examined in the dynamics. The age of patients in the appearance of the first symptoms of the disease averaged 26,0 ± 7,12 years. Varying from 15 to 49 years. Time from onset of symptoms to definitive diagnosis and, consequently, the beginning of etiopathogenic therapy was on average 2.8 years and ranged from 1 to 7 years. The disease duration was from 1 year to 15 years and averaged 9,2 ± 2,3 years. The diagnosis was confirmed by VD was placed in the clinic or institution based on the presence of rings Kayser - Fleischer, reduction of serum ceruloplasmin below 20 mg / dL and an increase in copper excretion in the urine of more than 100 mg / day. The control group was composed of 24 patients who had no symptoms associated with damage to the central nervous system. Age of the control group was within 20-42 years and averaged 31,1 ± 3,12 years. The content of heterochromatin granules (CHG) in the nuclei of buccal epithelium cells was determined by Yu.G. Shkorbatov (2001).

Results. The results of these studies have shown that patients with VD have a significant ($p < 0,05$) reduction of the content of heterochromatin granules (CHG). Gender analysis of the data showed that in healthy men have a tendency to higher content of heterochromatin granules in the nuclei of buccal epithelium than in healthy women. Patients with VD gender differences in the content of functionally inactive condensed chromatin were found. It was also not observed and the relationship between the form and the content of VD heterochromatin in the nuclei of the buccal epithelium.

Conclusions. Thus, our data may indicate, that when a certain period of VD and development of disease is inhibition on the growth and proliferation of cells of buccal, and on the contrary the stimulation of these processes. Since copper is one of the most important essential trace elements necessary for human life, and hence its part in many metabolic processes, we can assume, that with VD hypercopperosis occurs (a gradual increase in the body of toxic free copper). Therefore, in various systems and structures of the human body can not be the same as on the severity and direction of pathological and physiological effects of copper ions. Perhaps, this can be explained by the variety of manifestations of VD, the frequent lack of parallelism severity of hepatic and neurological manifestations of the disease, as well as a large latent period of clinical manifestations.

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PATHOGENIC ASPECTS OF CARDIOGENIC CEREBRAL EMBOLISM

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Introduction: Ischemic stroke is one of the major causes of disabilities and death in the adult population. Among pathogenic mechanisms of sharp anomaly of cerebral circulation cardial anomaly takes the lead. Cardial causes of brain ischemic abnormalities are