

physiological course of pregnancy most often results in the thinning, thickening and presentation of the chorion, and to the increase of its echogenicity.

2. At reactivation of chronic CMVI in pregnant women (IgM to CMV 1:200 and IgG titer growth to CMV 1:200-1:800) in comparison with latent chronic CMVI (IgG to CMV 1:400-1:400), the frequency of visualization of thickening and thinning of chorion as well as of retrochorionic hematoma increases.

3. In pregnant women with the reactivation of chronic CMVI (IgM to CMV 1:200 and titer growth of IgG to CMV in four times) against latent chronic herpesvirus infection in comparison with the reactivation of chronic CMVI (IgM to CMV and the absence of 4-times growth of IgG titer to CMV) combined with the latent chronic herpetic infection, retrochorionic hematoma develops oftener, which shows that antiviral immune response affects the changes of the echostructure of chorionic villi.

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The influence of intrauterine respiratory-syncytial virus infection on anthropometric characteristics of children who often get ARVI (ARD) during the first year of their life

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Summary: The influence of intrauterine respiratory-syncytial virus infection on anthropometric characteristics of children with ARVI (ARD) 1-3 times (the first group) and 4 times and more (the second group) during the first year of their life was studied. It was found out that at antenatal virus infection in children of the second group in comparison with the first one, vesicular rash, anemia and cerebral ischemia of II degree were diagnosed oftener. Frequently sick children at the third month of their life in comparison with the control group had lower parameters of body weight, head and chest circumference, and at the sixth month they had lower parameters of the weight and length of the body, head and chest circumference. In the patients of the second group at the 12th month in comparison with healthy children there was the decrease of body weight and length, head and chest circumference as well as of the number of teeth by the first year of their life.

Key words: intrauterine respiratory-syncytial virus infection, newborns, the children of the first year, anthropometric characteristics, frequent development of the acute respiratory virus infection.

At present the role of intrauterine respiratory virus infection in the disturbance of physical development of the newborns is known quite well [2, 3]. But up until now the influence of antenatal respiratory-syncytial virus infection on the changes of anthropometric parameters in children of the first year has not been found. That's why the aim of the present research is to study the influence of respiratory-syncytial virus infection on anthropometric parameters of children who frequently get ARVI (ARD) during the first year of their life.

Material and methods of the research

The body weight (gr), the body length (sm), the head and chest circumference (sm) at birth, the first, the third, the sixth and twelfth months (the main group) were studied in 42 children with antenatal respiratory-syncytial virus infection. While characterizing the state of the health of the newborn the Apgar scale and the number of diseases in the early neonatal age were used. All the children were registered upon the dates of the umbilical cord falling-off and the number of teeth by the first year of life. At serological diagnosing of antenatal respiratory-syncytial virus infection the blood serums of "mother-child" were used; antiviral antibodies in the blood of parturient women and in the vein of newborns' umbilical cords were identified [1]. In the main group two subgroups were formed. The first subgroup consisted of 22 children who suffered ARVI (ARD) 1 or 3 times a year, the second subgroup had 20 children who got ill with ARVI (ARD) 4 times and more during the first year of their life.

The control group included 50 children from mothers with physiological course of pregnancy who also had the same morphometric parameters measured. The estimation of differences reliability of the parameters values under comparison was carried out with the help of the unpaired Student's test and Fisher's criterion (ϕ).

Results and discussion

In antenatal anamnesis in children of the second subgroup in comparison with the patients of the first subgroup late gestosis of a light degree ($p_{\phi} < 0.05$) as well as chronic subcompressive placental insufficiency ($p_{\phi} < 0.05$) were revealed more frequently. In the clinical picture of the disease they predominantly had the signs of the acute form of chronic bronchitis, more intensive clinical markers of intoxication with the body temperature rise till 39.3° ($p_{\phi} < 0.05$), heavy hidrosis ($p_{\phi} < 0.05$), heavy headache ($p_{\phi} < 0.05$) as well as with the continuous cough with the mucoid and mattery sputum ($p_{\phi} < 0.05$). The newborns of the second group in comparison with the first group did not have reliable differences in the estimation of the state of health by Apgar Scale and the dates of the umbilical cord falling-off. At the early neo-natal age the increase of the frequency of vesicular rash ($p_{\phi} < 0.05$), anemia ($p_{\phi} < 0.05$) and cerebral ischemia of the II degree with the syndrome of hyper excitability ($p_{\phi} < 0.05$) and motor disturbances ($p_{\phi} < 0.05$) was registered.

In the first subgroup in comparison with the control one there were no reliable changes of the body length and weight. But intrauterine virus infection led to the reliable decrease of the head circumference till 33.9 ± 0.32 sm ($p < 0.001$) and the chest circumference till 33.3 ± 0.32 sm ($p < 0.01$). In the second subgroup in comparison with the control there was also the decrease of the head circumference till 33.9 ± 0.30 sm ($p < 0.001$) and chest circumference till 32.8 ± 0.31 sm ($p < 0.001$). At the comparison of the above-mentioned anthropometric parameters we did not find any reliable difference between the subgroups.

In the first month in children of the first subgroup anthropometric parameters did not differ from those of healthy children. At frequent ARVI (ARD) there was the decrease of the body weight. In the three-month age in the second group there were lower parameters of the body weight 6118.0 ± 134.5 gr. ($p < 0.05$), head circumference 40.4 ± 0.27 sm ($p < 0.01$) and chest circumference 39.5 ± 0.40 sm ($p < 0.01$). In the second subgroup the babies at the sixth month had lower body weight and length and head and chest circumference. At the 12th month they had the decrease of the body weight till 9825.0 ± 185.1 gr ($p < 0.01$), head circumference till 46.2 ± 0.20 sm ($p < 0.001$) and chest circumference till 46.7 ± 0.22 sm ($p < 0.001$), the number of teeth was also lower by the first year of their life in comparison with healthy children.

Conclusion

1. The children who get ill with ARVI (ARD) 4 times or more during the first year of life in comparison with the patients who get ill 1-3 times a year have often been diagnosed with vesicular rash, anemia and cerebral ischemia of II degree at the early neonatal age.
2. At antenatal respiratory-syncytial virus infection in the pathogenesis of frequent development of ARVI (ARD) during the first year of life the disturbance of physical development plays an

important role. This may be caused as a result of the changes of hormonal status and phosphorus-calcium metabolism.

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Vascular changes vertebrobasilar in chronic obstructive lung diseases

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Summary: In chronic obstructive pulmonary disease is changing vessels vertebrobasilar as a thickening of the inner lining of arteries and secondary due to proliferation and hypertrophy of smooth muscle cells, increased collagen content, changes in the internal elastic membrane, manifested its thickening, thinning, destruction.

Key words: chronic obstructive pulmonary disease, blood vessels vertebrobasilar, morphology, thickness of the inner, middle lining of arteries, the thickness of the intima-media.

Chronic obstructive pulmonary disease is a crucial less widely and social problem and is considered the illness of the century (along with ischemic heart disease), due to the steady increase in morbidity, disability, mortality, and economic damage done to society [4]. The most frequent complication and poor prognosis of COPD is chronic pulmonary heart (CPH) [1]. Because of the numerous clinical manifestations in recent years have increasingly seen COPD as a systemic disease. Found that patients with COPD have the endothelial dysfunction (ED) and cerebral vascular main basins, characterized by significant and increasing prevalence of constrictor activity [2]. Severity of vascular disorders of cerebral blood flow, increases with the progression of the disease [3]. Remodeling cerebral arteries can lead to inadequate perfusion of the brain and the development and progression contribute encephalopathy.

Materials and methods: In order to study the morphology of vascular vertebrobasilar autopsy material studied 72 COPD patients who were divided into 3 groups according to the stage of development of the CPH. Group I consisted of 15 patients with COPD without CPH. Group II - 28 patients with COPD with CPH in the compensation stage. III In the third group of 29 patients with COPD decompensation CPH. The control group consisted of persons of corresponding sex and age, died from injuries and acute surgical pathology.

The object of the research were basilar, vertebral artery.

On microscopic examination, measured the thickness of the inner (intima) (mm), medium (media) of the shell (mm), the thickness of the intima - media (TIM) (m), as well as the ratio of the inner layer to the middle (I / M) (cond. unified the difference). Histological sections were stained with hematoxylin and eosin surveillance, calling genes and elastic fibers and picrofuchsin fukselinom, Van Gieson.

Results and discussion: In the test vessels at all stages of the CPH showed statistically significant relative to the control group and other investigations of the increase TIM with maximum performance in Group III.