



Conclusions. Children aged 9-17 showed deficiency or insufficiency of vitamin D3 reaching 100%. The “transient osteopenia” during growth spurt was not associated with a greater deficiency of 25OHD. In children who experienced growth spurt, a reduced BMD proved more frequent and correlated with the spurt intensity. Therefore, during the second growth spurt, disrupted mineralization of the bone tissue was influenced not only by the vitamin D deficit but also by the correlation between the bone tissue mineralization rate and intensity of growth in the children.

*Tokariiev Vladyslav, Kolesnikov Ivan, Borovlova Kateryna*

## **NEONATAL HEART RHYTHM DISTURBANCES OF PARVOVIRUS ETIOLOGY**

Kharkiv National Medical University  
Department of Pediatrics No.1 with Neonatology  
Kharkiv, Ukraine  
Scientific advisor: ass. Ivanova Yevheniia

Relevance. Parvovirus infection is a widespread disease in the population. Most often, it is transmitted by airborne, parenteral, and vertical routes. The B19V serotype piques the interest of clinicians due to its ability to cause complications during pregnancy in the form of inhibition of embryonic erythropoiesis, hypoxia, dropsy and fetal death. In addition to the effect on erythrocytes, endothelial cells, hepatocytes, the pathogen can have a direct cytopathic effect on fetal cardiomyocytes with the subsequent development of carditis in newborns.

Clinical case. Child V. was born from the 3rd pregnancy, which proceeded against the background of arterial hypertension, gestational diabetes mellitus, placental dysfunction, oligohydramnios. At 36 weeks gestation, the mother had a respiratory viral infection, hyperthermia up to 37.70C. Prenatally at 37 weeks of gestation, fetal arrhythmia was diagnosed. The baby was born from 3 vaginal deliveries at 38 weeks of gestation. After birth, the child had auscultation of cardiac arrhythmias - extrasystole (35-40 extrasystoles per minute). Taking into account the presence of neonatal arrhythmia, a differential diagnosis was made between congenital carditis of viral



etiology and congenital heart rhythm disturbances of another etiology. The newborn was examined: C-protein - 10.7 mg/L (N is up to 5 mg / L), creatine phosphokinase - 118.40 U/L, myocardial creatine phosphokinase - 98 U/L, lactate dehydrogenase - 1970 U/L, troponin I - 1.2 ng/ml (N is up to 0.29 ng / ml), Parvovirus B19 IgG - 2.45 units (negative up to 1.1 units), Ig M - 0.05 units (negative 0.8 units). According to the data of daily ECG monitoring, 41697 episodes of extrasystole with wide complexes were established, including in the form of allorhythmia of the type of bigeminia, trigeminia, quadrogemina, ST segment elevation. According to Doppler echocardiography, the morphology of the chambers and vessels is not changed, the contractility of the myocardium is not impaired. Plain X-ray of the chest organs showed no pathological changes. Taking into account the anamnesis, the presence of symptoms indicating lesions of the cardiac conduction system, the data of laboratory and instrumental studies, a diagnosis of congenital carditis of parvovirus etiology with congenital heart rhythm disturbances (atrioventricular extrasystole) was made. The child received antibacterial and supportive therapy, and was discharged on the 21st day of life in a satisfactory condition.

Conclusions. Based on the data of anamnesis, instrumental, biochemical and specific immunological diagnostics with the determination of antibodies, the influence of the transferred intrauterine parvovirus infection on the occurrence of cardiac arrhythmias in newborns was proved.

*Qalasi Mohanad*

## **COMPARE CAUSES AND DATA OF INFANT MORTALITY IN THE EUROPEAN UNION AND UKRAINE**

Kharkiv National Medical University  
Department of Pediatrics No.1 with Neonatology  
Kharkiv, Ukraine  
Scientific advisor: assist MD. Tetiana Teslenko

Introduction. Infant mortality is an indicator of child health, and an explanatory variable to reflect socioeconomic development of the country.