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 allorrhythmia of the type of bigeminia, trigeminia, quadrogemenia, 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.

Aim. We aimed to examine the causes, changes and trends of infant mortality in Ukraine and the European Union (EU) in period between 1998 and 2018.

Methods. We extracted data of causes of deaths in children from WHO and Eurostat data base. We analyzed secular variation in the EU overall by country and by geographical region and in Ukraine particularly. Ukraine had used the Soviet definition of live birth for a long time (it has restrictions on weight and height in classification of live birth). Our study based on data after the new rules in Ukraine in 2007 and by using join point regression analysis. We conducted additional analyses to examine neonatal and early neonatal mortality trends.

Results. We observed that in the EU around 14600 children died before reaching one year of age in 2018. This is equivalent to infant mortality rate of 3.4 deaths per 1000 live births. During 10 years from 2008 to 2018, the infant mortality rate in the EU fell from 4.2 deaths per 1000 live births to 3.4 deaths per 1000 live births. Extending the analysis to the last 20 years, the infant mortality rate was almost halved (6.6 deaths per 1000 in 1998). While in 2018, the infant mortality rate in Ukraine was about 7.5 deaths per 1000 live births.

75% of all neonatal deaths occur during the first week of life, and 25–45% of those deaths occur within the first 24 hours of life.

The main causes of newborn deaths are prematurity and low-birth-weight, infections, asphyxia, birth trauma and congenital abnormalities. These causes account for nearly 80% of deaths in this age group.

Conclusions. Our findings, which are based on official data, provide consistent evidence that infant mortality has declined steadily in the EU in the past decades, most markedly in Eastern European and former Soviet Baltic countries. However, rates have risen or levelled off in some Western European countries in the past few years.

The main causes of death were preventable and treatable. Hence, improving the timing and quality of antenatal care is essential for early detection, anticipating high-risk newborns, and timely interventions. Furthermore, reducing the infant mortality is one of the most important thing in the socioeconomic state of the country.