CARDIOVASCULAR DISORDERS IN NEWBORNS WITH INTRAUTERINE GROWTH RETARDATION IN THE EARLY NEONATAL PERIOD

Gonchar M.A., Znamenskaya T.K., Kondratova I.Yu., Boychenko A.D.,

Riga E.A., Senatorovа A.V., Podgalaya E.V.

Kharkiv National Medical University

[margarytagonchar@gmail.com](mailto:margarytagonchar@gmail.com)

**Aim:** Improvement of early diagnosis of cardiovascular disorders in newborns with intrauterine growth retardation (IUGR) in the early neonatal period.

**Methods:** Сlinicоanamnestic, dopplerechocardiography.

**Results:** Newborns with IUGR were born from mothers with age 26.7±4.6 years. 90.6% (р≤0,05) women had complicated course of pregnancy, 68.8% had somatic pathology, 15.6% mothers burdened by heredity from cardiovascular system. At 65.4% newborns revealed IUGR asymmetric variant (aIUGR), 34.6% symmetric (sIUGR). The birth weight of newborns with aIUGR 2370±220g (p≤0.05), sIUGR 2224±221g (p≤0.05) compared with control group healthy full-term newborns. Newborns with sIUGR (p≤0.05) characterized by tendency to bradycardia (114±7.0 b/m). Normorkinetic type central hemodynamics registered at 46.2% newborns, hyperkinetic at 28.8%, hypokinetic at 25.0% children (p≤0.05 compared with control group). At newborns with sIUGR ejection fraction LV 65.4±5.3% (p≤0.05), systolic index 2.6±0.6 l/(min×m2) (p≤0.05), Tei index LV 0.33±0.11 (p≤0.05). In 26.9% newborns were diastolic disfunction LV. In 23.5% children with aIUGR closing of рatent ductus arteriosus (РDА) on the second day of life. In 51.4% newborns with sIUGR persistence РDА, preservation of pulmonary hypertension (28.3±3.4 MmHg) to 4-5 days of life.

**Conclusions:** In 23.5% newborns with aIUGR is registered early closure of РDА. In 51.4% newborns with sIUGR long persistence РDА, lengthening of terms pulmonary hypertension. Hypokinetic type central hemodynamics in 25.0% (p≤0.05) is marker of low adaptive reserve of cardiovascular system.