

LONG-TERM CONSEQUENCES OF BRONCHOPULMONARY DYSPLASIA IN CHILDREN: A MODERN VIEW OF THE PROBLEM

L. Besh¹, O. Matsyura¹, O. Borysiuk^{1,2}, O. Besh¹, O. Bezpalko²

¹Danylo Halytsky Lviv National Medical University, Lviv, Ukraine

²Lviv Regional Clinical Hospital, Lviv, Ukraine

Abstract. The article discusses the controversial problems of bronchopulmonary dysplasia. The issues of optimal definition of the disease, long-term consequences, diagnosis, treatment and prevention are considered, which raises many ambiguous questions among different specialists — neonatologists, intensivists, pulmonologists, paediatricians and family doctors.

The nature of morphological changes in the bronchopulmonary system of children who were on artificial lung ventilation in neonatal and infantile age was analysed on the example of 50 autopsy reports. Most of the children were born prematurely (94 %) and received different duration of mechanical ventilation: Group I (30 cases) 1 — 72 hours, Group II (4 cases) — 72-120 hours, Group III (2 cases) — 120-150 hours, Group IV (14 cases) — more than 150 hours. The morphological study of lung necropsies of children who required respiratory support during neonatal and infantile periods allows us to assert that with increasing duration of respiratory therapy, pathological changes in the bronchopulmonary system deepen. The images of structural changes in the lungs that led to respiratory disorders of the restrictive or obstructive type are presented.

A literature review was conducted and algorithms for the outpatient follow-up of children with bronchopulmonary dysplasia were systematised, taking into account short-term and long-term consequences.

Key words: bronchopulmonary dysplasia, long-term consequences, artificial lung ventilation, clinical observation, children.