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LUNG DISORDERS IN THE NEWBORNS - 10 YEARS SINGLE CENTRE EXPERIENCE. SHALL WE EXPECT LONG-TERM CONSEQUENCES?

Danuta Jadamus-Niebroj, Alina Misiewicz, Janusz Gorny, Iwona Maruniak-Chudek

Neonatal Intensive Care Departament, Medical University of Silesia, Katowice, Poland

Background and aim: The continuous improvement of intensive therapy of premature babies with extremely low birth weight and extremely low gestational age and the newborns with severe congenital pneumonias, and congenital heart defects results in higher rate of survival of these neonates. Some of them suffer from chronic lung disorders beyond the neonatal and early infancy period.

The aim of the study is analysis of the structure of patients hospitalized in a third level nursery, who were on respiratory support and those who suffered from lung diseases but did not required respiratory support.

Methods: Data were retrieved from medical records of all patients (N=4136) hospitalized in the NICU from 2000 to 2010. The analysis included newborns who presented symptoms of respiratory distress, and those who obtained respiratory support, or those, who had been diagnosed with pulmonary pathology, regardless of the rate of respiratory support.

Results: 9.8% of neonates were diagnosed with pneumonia, of which 89.1% required respiratory support. 14.8% of babies had RDS, including severe (grade 3 and 4) in 27.5% of them. Broncho-pulmonary dysplasia was revealed in 32.1% of prematures. Medical intervention for the respiratory system in non-respiratory entitles was needed in more then one third of hospitalized newborns, mostly due to perinatal asphyxia and surgery.

Conclusions: The need for respiratory support is frequently observed in newborns hospitalized in ICU. Respiratory support is usually restricted to the neonatal period, and the clinical conditions at the time of discharge do not reveal symptoms suggesting future lungs problems.