



**Treatment of microalbuminuria in Metabolic Syndrome (survey)**

**Author:** Blagica Panova

**Co-authors:** G.Panova, N.Velickova, N.Panov, L.Nikolovska, V.Dzidrova

**Mentor:** Prof. Dr. Gordana Panova

**Faculty:** Faculty of Medicine Shtip

**Abstract Body:**

**Background:**

During the years, the definition of bronchopulmonary dysplasia (BPD) differs. That makes comparing the results difficult.

**Aim:**

To evaluate the frequency by birthweight and gestational age according to the new diagnostic criteria for BPD, and the main risk factors.

**Methods:**

563 very-low-birth-weight infants (<1,500 g) were admitted to NICU from 01.2008 to 06.2010. 485 survived more than 28 days and were included in this study. BPD was diagnosed if supplemental O<sub>2</sub> for the first 28 days was necessary. O<sub>2</sub>-requirements at 36 gestational weeks (gw) determine the severity level.

**Results:**

26.8% from the infants developed BPD. 13.6% were with supplemental O<sub>2</sub> at 36 gw (the classical diagnostic criteria for BPD). 10.9% were with moderate BPD, 2.7%—with severe BPD. The BPD frequency reduced progressively: from 100% at 23 gw or birthweight <600 g to 0% at 33 gw and 7% at birthweight 1,401-1,500 g. Mild BPD was more likely if gestational age was >27 gw. The need for ventilator support increased from 1.5 (± 2.8) days (non-BPD group) to 50.2 (± 20.1) days (severe BPD),  $p < 0.05$ . Patent ductus arteriosus was diagnosed in 25.4%; pneumothorax in 3% of the BPD infants compared with 1.7% and 0.5% of non-BPD infants respectively,  $p < 0.05$ . Sepsis and pulmonary hemorrhage were found more frequently in the BPD group too.

**Conclusion:**

According to the new diagnostic criteria, the frequency of BPD is about 2 times higher compared to the classical definition. The main risk factors are ELBW, ELGA, and duration of the assisted ventilation, patent ductus arteriosus and air leak syndrome.

**Keywords:** birthweight, bronchopulmonary dysplasia