

European Respiratory Society Annual Congress 2012

Abstract Number: 927

Publication Number: P2463

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Airway management **Keyword 2:** Bronchiolitis **Keyword 3:** Infants

Title: Effects of nebulizer therapy by hypertonic saline, gender and breastfeeding on evolution of acute bronchiolitis

Ms. Ekaterina 3586 Kutsia kutsiamd@gmail.com MD , Prof. Dr Tina 3587 Ghonghadze tinatin_gh@yahoo.com MD and Dr. Tamar 3589 Zhorzholiani tzhorzholiani@cra.com.ge . ¹ PICU, M.lashvili Children's Central Clinic, Tbilisi, Georgia, 0159 and ² Infant's Department, G. Zhvania Pediatric Clinic, Tbilisi, Georgia, 0159 .

Body: Acute bronchiolitis is most common viral infection of lower respiratory tract in infants. In 90% it is caused by respiratory syncytial virus. One of the main protective factors from infants morbidity is breast milk. In literature is data about infants gender factor in risks of acute respiratory infections. Reveal influence of breastfeeding (BF) on evolution of infant's acute bronchiolitis(AB) in gender aspect, assuming results of nebulized therapy by hypertonic saline (HS). A retrospective study of medical records in Pediatric Clinic (2010-2011) was carried out. The data was statistically analyzed in the program packet _SPSS 16.0. The data of 86 1-12 month(s) of age infants with moderate AB was analyzed; 25-girls (29%),61-boys(71%). On exclusive BF 47(54.7%), artificial feeding -39(45.3%).The Management of AB included: respiratory therapy, hydration (oral), nebulized therapy: NaCl 0.9%, NaCl 3% solutions, bronchodilators. We compared clinical improvement days among BF and formula fed boys and girls. In BF infants with acute bronchiolitis the clinical improvement occurred more rapidly (2-3 day) than the formula fed infants (3-4day) ($p<0.01$); There was no statistically evident association between gender and feeding type in improvement day ($p>0.05$). The effectiveness of nebulized HS in acute bronchiolitis is statistically significant, it improves patients clinical condition and makes a rapid recovery ($p<0.01$) Study revealed higher incidence of morbidity in boys.Was evident tendency of improvement in girls. BF improves clinical condition from 2th-3th day ($p<0.01$).The Duration needed for clinical improvement in the group treated by 3% HS was shorter ($p<0.001$).