

European Respiratory Society Annual Congress 2013

Abstract Number: 1327
Publication Number: P1878

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Viruses **Keyword 2:** Infants **Keyword 3:** No keyword

Title: Disease severity in RSV and non-RSV bronchiolitis: Usefulness in clinical decision-making

Dr. Fabiola 13122 Stollar fabiola.stollar@hcuge.ch MD ¹, Dr. Gabriel 13123 Alcoba gabriel.alcoba@hcuge.ch MD ², Prof. Dr Alain 13124 Gervaix alain.gervaix@hcuge.ch MD ² and Prof. Dr Constance 13125 Barazzone Argiroffo constance.barazzone@hcuge.ch MD ¹. ¹ Pediatric Pulmonology Unit - Child & Adolescent Department, Children's Hospital, University Hospitals of Geneva, Geneva, Switzerland, 1211 and ² Pediatric Emergency Division - Child & Adolescent Department, Children's Hospital, University Hospitals of Geneva, Geneva, Switzerland, 1211 .

Body: Background: Bronchiolitis morbidity remains a major health problem and identifying risk factors for disease progression can help in clinical decision-making Aims: To assess differences in disease severity between RSV (respiratory syncytial virus) and non-RSV bronchiolitis during two consecutive RSV seasons (2010-2012). Methods: Medical records of all patients <1 year admitted to the Emergency Department with bronchiolitis were reviewed. We compared length of hospital stay (LOS), admission to intensive care unit (ICU), oxygen and nasogastric tube (NGT) need and duration, and mortality. We divided the analysis into two models (Model 1: all episodes; Model 2: hospitalized) to avoid bias related to our hospitalization criteria (feeding <50% of the required amount, SpO₂ of <92% in air). Results: We analyzed 479 patients (317M:162F) and 582 episodes of bronchiolitis. In the two models the number of children who required supplemental oxygen, the LOS and length of oxygen therapy were significantly higher for the RSV episodes. In model1 the number of children who required ICU (odds ratio[OR]=6.9; 95% confidence interval[CI]:2.4-20.0), non invasive ventilation (OR=10.6; 95%CI: 3.0-38.5) and a NGT (OR=17.7; 95%CI: 10.0-31.3) was significantly higher in the RSV group. In model2 the length of NGT was longer for children in the RSV group (5.4±4.7 vs. 3.3±2.4; P=0.01). However, the need for intubation did not differ between groups in both models. No death was documented. Conclusions: RSV episodes were more severe compared to non-RSV. Our findings show that viral diagnosis is useful not only for cohorting babies but also to determine the prognosis and to assist in clinical decision-making.