

RAPID TEST FOR RESPIRATORY SYNCYTIAL VIRUS IN DIAGNOSIS OF RESPIRATORY TRACT INFECTIONS IN INFANTS

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Introduction: Lower respiratory tract infections such as bronchiolitis and bronchitis are frequent causes of hospitalization in infancy and early childhood. **AIM:** The aim of study was to evaluate the usefulness of Respiratory Syncytial Virus (RSV) rapid diagnostic test in diagnosis and treatment of children hospitalized due to respiratory tract infection. **Material and Methods:** The study included 256 of 1,544 (16.65%) children aged 0-3 years old hospitalized due to lower tract infections (bronchitis, bronchiolitis, pneumonia) in the Department of Pediatrics, Bielanski Hospital, Warsaw, from March 2009 to June 2012 (40 months). All children were tested with RSV Test (QuickVue, Biomerieux). The group consisted of 152 (59.5%) boys and 104 (40.5%) girls, aged 7.3 days to 3 years. Average age was 5.4 months. Within the study group, the patients were assigned to one of the following subgroups: GROUP A: 0-6 months - 194 (75.8%); GROUP B: 7-12 months - 42 (16.4%); and GROUP C: 12 months and more - 20 (7.8%). **Results:** In 123 out of 256 cases (49%), test results were positive (8 out of 28 in 2009, 38 out of 86 in 2010, 50 out of 93 in 2011 and 27 out of 49 in 2012). Group A included 96 positive test results (78%), group B - 23 (18.7%), and group C - 4 (3.3%), respectively. All patients with a positive test result need to be hospitalized. 134 out of 256 children included in the study had chest X-ray taken, which showed inflammatory lesions in 77 (57.5%) cases. In a group of 123 patients with positive RSV test result, X-ray was taken in 59 cases (48%), with inflammatory lesions found in 36 (29.3%) cases. Analysis of the above results revealed a decrease in quantity of radiological examinations in children with positive RSV test, on a year-to-year basis: in 2009, the X-ray was performed in 6 out of 8 (75%) cases, in 2010 - 29/38 (76.3%), in 2011 - 18/50 (36%) and in 2012 - 5/27 (18.5%). In 54 (43.9%) children with positive RSV test results, antibiotic treatment was used: in 2009 - in 7/8 (87.5%) children, in 2010 - 22/38 (57.9%), in 2011- 19/50 (38%) and in 2012 - 6/27 (22.2%). For comparison, in a group of all 256 studied children, antibiotic treatment was used in 121 (47.3%) cases. **Conclusions:** Routine use of RSV tests in children with lower respiratory tract infection reduces a number of chest radiography and frequency of antibiotic treatment.

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