

RSV INFECTION IN CHILDREN AGED UP TO 2 YEARS

Tijana Relić¹, Nevenka Ilic², Dragoljub Djokic^{2,3}, Gordana Kostic^{3,4}, Vesna Velickovic⁵,
Dara Jovanovic¹, Slobodan Tosovic¹, Dejan Baskic^{2,3}

¹Institute of Public Health, Belgrade, Serbia;

²Institute of Public Health, Kragujevac, Serbia;

³Medical Faculty, University of Kragujevac, Serbia;

⁴Pediatrics Clinic, Clinical Centre of Kragujevac, Serbia;

⁵Children's Outpatient Facility, Community Health Centre of Kragujevac, Serbia.

ABSTRACT

Objective. Respiratory syncytial virus (RSV) is considered to be the most important cause of acute respiratory illness in children. The aim of our paper was to establish the frequency and characteristics of RSV infection in infants with wheezing.

Method. We examined a group of 104 infants, diagnosed with wheezing. The concentration of RSV-specific IgG was determined in the serum samples by using ELISA method.

Results. We found 24.0% of RSV seropositive children in our study group, with 12.9% in the first and 47% of RSV IgG seropositive children in the second year of life. Wheezing, as a symptom, was in most cases (61.5%) associated with the diagnosis of bronchitis, whereas in 29.8% of the examined children, it was jointly manifested with two or more other diagnoses. In children diagnosed with bronchitis, the frequency of RSV IgG seropositivity was 20.3%. In those children who had wheezing jointly manifested with two or more diagnoses, the frequency of RSV IgG seropositivity was 32.3%. The greatest percentage of RSV seropositivity (i.e. 40%) was detected in those children who had wheezing and three or more jointly manifested diagnoses. In the group of children who had had one episode of wheezing, the frequency of RSV IgG seropositivity was 19.6%, whereas in the group of children with relapsing wheezing (i.e. 4 or more than 4) it was 40.0%. The number of RSV infections was greater in female infants in the first year of life and in infants coming from urban environments. Breastfeeding was not found to be a significant factor in prevention of this viral infection.

Conclusion. The results of our investigations point to the need of a more effective diagnosis of respiratory infections of viral etiology and further study of local environment-specific risk factors. By knowing them better, we could be able to decrease acute RSV morbidity and chronic consequences of this infection.

Key words: infants; respiratory sounds; lung diseases, obstructive; respiratory syncytial viruses; immunoglobulin G.