COMPLIANCE OF THE RAPID TEST FOR THE RESPIRATORY SYNCYTIAL VIRUS (RSV) WITH THE RT-PCR METHODS IN THE DIAGNOSIS RESPIRATORY TRACT INFECTIONS IN INFANTS

T. Jackowska[1,2], A. Sapala-Smoczynska[2], M. Grzelczyk-Wielgorska[1,2], K. Pancer[3], E. Abramczuk[3]

[1]Department of Pediatrics, Medical Center of Postgraduate Education, 99/103 Marymoncka St., 01-813 Warsaw, Poland, tjackowska@cmkp.edu.pl

[2]Department of Pediatrics, Bielanski Hospital, 80 Cegłowska St., 01-809 Warsaw, Poland

[3]Departament of Virology, National Institute of Public Health – National Institute of Hygiene, 24 Chocimska St., 00-791 Warsaw, Poland

Introduction: Lower respiratory tract infections (LRTI) are frequent cause of hospitalization in infancy and early childhood.

The aim of the study was to evaluate RSV rapid diagnostic test (RSV-RDT) usefulness in the diagnosis and treatment of children hospitalized due to LRTI, in correlation with rt-PCR methods.

Material and methods: The study included 54 children (12days-24 months) with LRTI symptoms. 53 patients underwent the QuickVue RSV test (Biomerieux), from 51 of them material was taken for the rtPCR.

Results: In 46 patients (group A) RSV-RDT result was positive, while in the other 7 (group B) – negative. In 44 cases (93.6%) from group A the rtPCR was performed. The RSV etiology was confirmed in 41/44 (93.2%) cases, and in 3/44 (6.8%) it was ruled out. In Group B, the RSV-RDT was performed in 7 cases, out of which in 6 patients (85.7%) the rtPCR confirmed RSV infection. Out of the whole group, 24/54 (44.4%) children were treated with antibiotics, all of them with a LRTI-RSV confirmed the RSV-RDT. The RSV-RDT exhibited high sensitivity and was useful in reducing the antibiotics use in young children. Another benefit of the RSV-RDT is the fast result, while the rtPCR result takes few days.

Conclusion: The RSV-RDT is useful in the diagnostics of the LRTI etiology. In the case of a positive result, the RSV etiology can be confirmed. However, in the case of a negative result of the RSV-RDT, co-occurring with clinical symptoms of a LRTI, it is recommended to perform a rt-PCR test.

[1] *Supported by MCPE grant 506-1-20-01-14*