USE OF RAPID INFLUENZA DIAGNOSTIC TEST IMPROVES APPROPRIATENESS OF ANTIVIRAL TREATMENT AMONG HOSPITALIZED CHILDREN

A. Nitsch-Osuch¹, E. Kuchar², I. Gołębiak¹, K. Kanecki¹, P. Tarka¹ and L. Brydak³

¹ Department of Social Medicine and Public Health, Medical University of Warsaw, Poland, Oczki Str 3, 02-007 Warsaw, Poland, phone/fax: 48 22 62 15 256, e-mail: anitsch@wum.edu.pl

² Department of Pediatrics and Clinical Decisions, Medical University of Warsaw, Poland

³ National Influenza Center, National Institute of Public Health - National Institute of Hygiene, Warsaw, Poland

Background. Influenza burden among children is underestimated.

The aim of the study was to analyze the appropriateness of the causative treatment with oseltamivir of influenza among children hospitalized due to influenza-like illness (ILI).

Material and methods. We conducted a comparison of the treatment among children hospitalized with ILI in two consecutive seasons: 2014/2015, while no rapid influenza diagnostic test (RIDT) was used, and 2015/2016, while RIDT was implemented. In both seasons nasopharyngeal swabs were collected and examined retrospectively with a real time RT-PCR method as a gold standard for influenza diagnosis.

Results. In the season, when no RIDT was used, the influenza was diagnosed in 15/52 (29%) children, none of them received oseltamivir, while 14/15 (93%) patients received antibiotics. In the season, when RIDT was introduced, influenza was diagnosed in 11/68 (16%) children, 7/11 (64%) of them received oseltamivir (all patients had a positive result of RIDT) and 7/11 (64%) of patients were treated with antibiotics. These differences in the use of oseltamivir and antibiotics were statistically significant (p<0.05).

Conclusion. The implementation of RIDT improves the appropriateness of the treatment of influenza with oseltamivir and decreases the frequency of antibiotic therapy. RIDT should be conducted to optimize influenza treatment.