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

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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.