Respiratory infections

HIGH ANTIBIOTIC PRESCIPTION RATES AMONG CHILDREN WITH INFLUENZA

*A. NITSCH-OSUCH¹, E. Gyrczuk¹, K. Wardyn¹, L. Brydak², K. Zycinska¹ ¹WARSAW MEDICAL UNIVERSITY, DEPARTMENT OF FAMILY MEDICINE (WARSAW, Poland) ²National Institute of Public Health - National Institute of Hygiene, National Influenza Research (Warsaw, Poland)

Introduction. The important factor in the development of antibiotic resistance is their overuse, especially for the treatment of viral respiratory infections and influenza-like illness. The aim of our study was to find out the frequency of the antibiotic therapy administrated to children with laboratory-confirmed influenza. **Material and methods**. The total number of 114 children younger than 59 months seeking care for the acute respiratory tract infection (ARTI) at the ambulatory care setting or hospitalized at the General Pediatric Ward was enrolled into the study. Patients reported influenza-like symptoms (ILI): fever > 38°C, cough and/or sore throat of less than 4 days duration. Respiratory specimens, one nasal and one pharyngeal swab, were tested for influenza A and B virus with a real-time PCR. **Results.** The total number of 34 cases of influenza was diagnosed: 34 influenza A (H3N2) and 2 influenza B virus infections. The attack rate of influenza in the study group was 32%. The antibiotic therapy was ordered for 58% patients with influenza, less frequently for ambulatory care children (33%) compared to hospitalized patients with influenza (93%), this difference was statistically significant (p<0,05, OR 0,036 95% CI 0,005-0,27). The most often administrated antibiotics were amoxicillin with clavulanic acid, cefuroxime and amoxicillin. None of children with influenza received oseltamivir. **Conclusions.** Antibiotics were overused, while antivirals were underused among children with influenza. To improve health care quality, more efforts on the laboratory diagnosis of influenza and appropriateness of antimicrobial and antiviral therapy are required.