

IMMUNIZATION AGAINST CAPSULAR BACTERIA IN SPLENECTOMIZED PATIENTS IN POLAND

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Background: There is little data concerning the epidemiology of laboratory-confirmed pandemic influenza cases in children in Central European countries, including Poland, a country where pandemic vaccine was unavailable during 2009/2010 season. This knowledge is important to assess the problem and justify the use of prophylactic measures e.g. immunization.

Methods: We prospectively studied suspected influenza cases from the Mazovian Region in central Poland, obligatory reported to sanitary authorities during the pandemic season 2009/2010. Each case was traced and examined with detailed questionnaire. The samples were taken and tested for influenza A and B by RT-PCR.

Results: The first case of pandemic influenza was registered in Poland in May 2009. A total of 561 cases of influenza including 185 in children up to 14 years were detected, 484 people were hospitalized, including 73 children up to 4 year of age and 69 children 5-14 years old, 32 patients died, all with preexisting risk factors such as diabetes, obesity, hypertonia, asthma, cerebral palsy, nephritic syndrome, cancer, heart disease, solid organ transplantation, arthritis, brain insult or mental retardation. Influenza was regarded as primary reason in 15/32 cases. The most common serious complications were: pneumonia (130 incl. 19 in children up to 4 y and 17 in children 5-14 y), cardiac arrest (12 incl. 1 in child < 4 y and 2 in 5-14 y), septic shock (5 adults), circulatory insufficiency (4 incl. 1 child up to 4 y), multiorgan failure (3 adults), myocarditis in 2 and arrhythmia (tachycardia in 1 child). The majority of patients (388/484) was treated with oseltamivir, 53 patients (incl. 2 children up to 4 y and 7, 5-14 y) were mechanically ventilated, 52 patients were given oxygen only. ECMO was not used. Only 11/561 (about 2%) patients were immunized against seasonal influenza.

Conclusions: Pandemic influenza affects all age groups and is already resulting in dozens of deaths and hundreds of hospitalizations in central Poland and is regarded as an emerging health risk for the Polish population. Since influenza immunizations are neglected, even in a high risk population, prompt increasing in immunization coverage is necessary to prepare for imminent influenza pandemics in years to come.