HOSPITALIZATIONS DUE TO MENINGITIS IN A PEDIATRIC INTENSIVE CARE UNIT IN WARSAW DURING 2002-2010

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Background: Meningitis is one of the most important reason of mortality among children with infectious diseases. The disease is a clinical and epidemiological problem. Meningitis may cause persistent neurological complications required long rehabilitation.

Objectives: To describe the epidemiology of meningitis among children hospitalized in a pediatric intensive care unit.

Materials and methods: The retrospective analysis of medical records of 1158 children hospitalized in one pediatric intensive care unit in Warsaw in 2002-2010 was conducted. The proportion of children with diagnosis of meningitis was calculated, the course and etiology of meningitis were analyzed.

Results: The mean proportion of children with meningitis among all hospitalized pediatric patients was 3.7% and varied from 1.8% (in 2006) to 6.2% (in 2010). Most of meningitis cases (65%) were diagnosed among children younger than 5 years. The cumulative mortality rate was 21% and all deaths were noted in children younger than 10 years. The most often complications of meningitis were: brain edema (30%), brain hemorrhage (28%), secondary nosocomial pneumonia (25.5%). 21% of children developed neurological complications required prolonged rehabilitation.

Conclusions: The proportion of meningitis cases among hospitalizations in the pediatric intensive care unit is at a stable level of about 4%. The general practitioner’s role should be to promote vaccinations against pneumococci and meningococci to decrease the number of meningitis and also to decrease the number of children requiring long and expensive rehabilitation due to neurological complications of meningitis.