

THE IMPORTANCE OF PREVENTIVE STUDIES IN THE ELIMINATION OF MENINGOCOCCAL INFECTION

Antusheva T. O.¹, Shakun E. A.²

¹V. N. Karazin Kharkiv National University, Kharkiv, Ukraine

² National University of Pharmacy, Kharkiv, Ukraine
microbiology@nuph.edu.ua

Introduction. Meningococcal meningitis is a bacterial form of meningitis, a serious infection that affects the shell of the brain. It can lead to severe brain damage, and in the absence of treatment in 50% of cases ends in a fatal outcome.

The causative agents of meningitis are a number of different bacteria. One of these bacteria, capable of causing major epidemics, is *Neisseria meningitidis*.

Aim. Study meningococcus background prevalence among different age groups of healthy individuals.

Materials and methods. The material for the study was mucus from the back wall of the nasopharynx. Detection meningococcus are performed by standard methods in accordance with the order of the Ministry of Health of Ukraine of 15.04.2005 № 170 "On Approval of guidelines on microbiological diagnosis of meningococcal infection and purulent bacterial meningitis."

Results and discussion. The prevalence of meningococcus among different age groups of healthy individuals, massiveness indicators of meningococcus and dominant serogroups pathogen, which are important components of epidemiological surveillance, prognosis and control of purulent meningococcal meningitis of bacterial etiology are analyzed by the example of Kharkiv region. It is noted that despite the decrease in the incidence, the total number of studies on meningococcus in the Kharkiv region over the past 2 years has increased by almost 30 % due to preventive researches and epidemiological indications. The share of preventive research amounted to 20% of the total. Among strains formed by groups in the laboratory of the region, meningococcus of serogroup B – 62,5 % are prevailed. Meningococcus strains that cannot be put into serogroup amounted to 16,7 % of all allocated. The study involved 200 healthy individuals (children and young people) who are in closed groups (specialized boarding schools) aged from 6 to 20, it was found that 2,5 % of them are carriers of *N. meningitidis*. The most vulnerable have turned to be children age 6 – 7 (1 % of carriers).

Conclusions. Thus, preventive studies are important for the detection of *N. meningitidis* carriers. This allows it possible to conduct timely sanitation and prevent the spread of infection.