Nosocomial infections (hospital-acquired infections)*

Nosocomial or hospital-acquired infections (hereinafter - HAI) are a special group of infectious diseases, which differ from other diseases by demonstrating a variety of pathogens and epidemiological patterns, and causing complications in prevention and management. HAI are frequent in all countries. HAI prevalence depends on many factors: the duration of treatment in the hospital, the patient’s immune status, the number of invasive procedures, its nature, resistance of microorganisms to antibiotics, etc. Despite the modern infection control and prevention measures, HAI remains an important personal and public health problem.

The overall prevalence of HAI in Lithuanian hospitals slightly increased from 3.9% (in 2010) to 4.3% (in 2014).

In 2014, HAI prevalence among children (1.9%) was 2.4 times lower than in adults (4.5%). The highest prevalence of HAI was registered in general hospitals, in supportive care and nursing facilities (7.7%). In 2014 the highest prevalence was observed in general hospitals, in intensive care units and nursing facilities - palliative treatment units.

The dominant infections in HAI structure were pneumonia and other lower respiratory tract infections.

In recent years, intravascular catheters were prevailing risk factors for HAI in hospitals of Lithuania. Intravascular catheters in Lithuanian hospitals were used in 33.3% of tested patients. In intensive care units, the most common risk factor for adults was urinary bladder catheter or stoma.

In 2014, fewer HAI cases were confirmed by microbiological tests, compared to previous years. In specialized hospitals HAI agents were not identified, as patients’ clinical material was not examined in clinical microbiology laboratory. Only in 1 HAI case (out of 140) in hospitals of supportive care and nursing facilities microbiological tests were performed.

Most common agents in Lithuanian hospitals: S. aureus, E coli, Klebsiella spp., Ps. aeruginosa, Acinetobacter spp.

In 2014, the use of antimicrobial drugs for preventive purposes decreased (14.9 % compared to 25% in 2010). Most antibiotics in intensive care units were prescribed for empirical treatment and only 16.5% of antimicrobial drugs were prescribed after micro-organism was identified.