tract infections (45% cases), skin and soft tissue infections, meningitis). For decades the genus Acinetobacter has undergone several taxonomical modifications. In the last few years these organisms are genetically modifying into highly resistant forms resulting in untreatable nosocomial infections and health care associated infections. A. baumannii can cause severe or fatal illnesses, especially in critically ill patients with low immune responses, and can increase patient mortality along with hospital costs. Studies show that the mortality rate of hospitalised patients infected with A. baumannii is 8-23%, and 10-43% at intensive care units.

Aim of the study. Determining the degree of spread of nosocomial infections caused by Acinetobacter spp., nosological structure, epidemiological features, antibiotic resistance.

Materials and methods. A descriptive cross-sectional study was conducted for 2014–2016 on the model of the Republican Clinical Hospital, the Institute of Neurology and Neurosurgery, and the Institute of Emergency Medicine.

Results. In 2014-2016, in the three hospitals mentioned above, 1,005 cases of purulent-septic infections caused by Acinetobacter spp. were investigated. Most often they are found in intensive care units, anesthesiology and intensive care (56.32%), surgery (15.72%) and traumatology and orthopedic (14, 82%). The largest share is occupied by A. baumannii (98.69%), compared with A. iwoffii (0.95%) and A. haemolyticus (0.36%). Acinetobacter strains are mainly found in monocultures (65.77%), but in 34.23% - in associations in which gram-negative microorganisms significantly prevail (79.86%), including P. aeruginosa (33.49%), K pneumoniae (17.33%) and E. coli (11.48%). In 81.13%, Acinetobacter strains are resistant to antibiotics, and only 18.87% are sensitive to them. Acinetobacter strains were more resistant to penicillins (97.02%), penicillins + beta-lactamase inhibitors (96.73%), cephalosporins I generation (99.40%), cephalosporins II generation (98.86%), cephalosporins III generations (97.44%), IV generation cephalosporins (93.88%), nitrofurans (98.97%), macrolides (94.38%). A higher sensitivity is manifested in the following groups of antibiotics: cyclic polypeptides (94.42%), tetracyclines (85.12%) and other antibacterial agents (50.96%).

Conclusions. Most infections caused by Acinetobacter baumannii have been detected in patients hospitalized in intensive care units and surgical departments. Acinetobacter baumannii is resistant to most antibiotics, and sensitivity to the currently used antibiotics is significantly reduced. High prevalence of antibiotic-resistant strains of Acinetobacter spp. emphasizes the importance of the use of selective antibiotic therapy and the strict monitoring of measures to combat nosocomial infections.

Key words: nosocomial infections with Acinetobacter, incidence, nosologic forms, antimicrobial resistance

339. IMMUNOGENICITY OF INFLUENZA TETRAVALENT INACTIVATED SUBUNIT ADJUVANT VACCINE IN HEALTHY AND IN PATIENTS WITH PRIMARY IMMUNE DEFICIENCY

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Introduction. Vaccination is the most effective means of influenza prevention. The current epidemiological influenza situation in the world indicates that trivalent vaccines are not able to protect the population from all circulating strains of type B influenza virus, that necessitates the improvement and expansion of the composition of the vaccines.

Aim of the study. To evaluate the immunogenicity of influenza tetravalent inactivated subunit adjuvant vaccine in healthy adults and in patients with common variable immune deficiency.
Materials and methods. In a single-center, open-label, non-randomized, prospective, cohort, controlled study before the flu season 2018-2019 were involved 32 healthy volunteers aged 18-50 years and the comparison group which consisted of 6 patients with a confirmed diagnosis of common variable immune deficiency (CVID). All patients received 1 dose (0,5 ml) of the first Russian quadrivalent inactivated subunit vaccine (IIV4) with a decreased amount hemagglutinin protein (20 mkg of influenza H-antigens instead of 60 mkg in standart non-adjuvant IIV4 in the world) due to the use of azoximer bromide (500 mkg per dose). The antibody levels against the influenza type A viruses (H1N1 and H3N2) and two type B viral cell lines (B/Yamagata and B/Victoria) were evaluated using a hemagglutination inhibition reaction. The seroprotection, seroconversion, geometric mean titer rates, CD-subpopulations (CD3+, CD4+, CD8+, CD16,56+, CD19+, CD21+) and expression of toll-like receptors 3, 8, 9 were analized.
Results. Adjuvant IIV4 in healthy adults elicited comparable immune response for matched 4 influenza strains with explored non-adjuvant IIV4 in the world. Patients with common variable immune deficiency failed to form a protective humoral immune response to adjuvant IIV4 although CD-subpopulations and expression of toll-like receptors 3, 8, 9 were similar to healthy controls that may indirectly indicate the possibility of the formation of cellular immunity in response to vaccination in these patients.
Conclusions. The use of adjuvant IIV4 allows to form protection against 2 circulating influenza B lineages without reduction of the immunogenicity in relation to influenza strains type A. To evaluate the effectiveness of the influenza vaccine in patients with PID it is necessary to study other mechanisms of the development of a postvaccinal immune response.
Key words: tetravalent inactivated influenza adjuvant vaccine, CVID, vaccination

340. TRAVEL MEDICINE, TRAVEL-RELATED DISEASES AND REQUIRED VACCINES

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Introduction. Tourism is an important socioeconomic phenomenon in continuous development. Every traveler is exposed to nearly all infectious risks which may occur during his travel time. Some of the main risk factors can be temperature, water quality, high humidity and the exposure to multi-resistant microorganisms. However, studies suggest that very few people seek health advice prior to travel.
Aim of the study. This study was conducted to determine the level of knowledge, attitudes and practices of medical students in the field of travel medicine.
Materials and methods. A cross-sectional study was conducted between October and November 2019, using a self-administered questionnaire. The 345 students who took part in this study were enrolled in 5th or 6th year of general medicine program, in different medical centers from Romania and they have traveled abroad at least once in their lifetime. The data were analyzed using the statistical program SPSS (Statistical Package for Social Sciences). We used the Chi square test to identify differences in knowledge, attitudes and practices between students. Differences with a value of $p \leq 0.05$ were considered statistically significant.