KHARKIV NATIONAL MEDICAL UNIVERSITY

INFECTIONOUS DISEASES
test system "VectoToxo-IgG-avidity". We performed parallel estimation of Index of Avidity of IgG to T. gondii by IEA in blood serum and CSF.

Results. Finally, specific IgG to T. gondii in the blood serum of our patients were found in 27 patients (90%). In serum of all patients who had positive result by IEA, specific antibodies IgG to T. gondii detected in high concentrations and avidity more then 40%, and we considered the fact as a presence of chronic infection. In the same time, CSF tests showed presence of specific IgG to T. gondii was found only in 7 (23%) patients. Important, that in all patients showed presence of IgG to T. gondii in CSF, they also were present in blood serum samples, taken in the same time. Our results suggest impossible isolated appearance of specific antibodies to T. gondii in CSF in case of their absence in a blood serum. In patients, whose blood serum only showed presence of IgG to T. gondii with negative results of CSF tests, in further process of diagnostics and a treatment diagnosis of cerebral toxoplasmosis was not proved.

Conclusion. Method of parallel detection of avidity of IgG to T. gondii by IEA in CSF and in blood serum can be useful in order to improve specific diagnostics of CT in HIV – infected patients with IV clinical stage. High informative capacity of test system for detection of index of avidity of IgG to T. gondii can be used in algorithm of specific diagnostics of neuroinfections in HIV – infected patients.

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EVALUATION OF ANTIBIOTIC RESISTANCE OF STAPHYLOCOCCUS STRAINS ISOLATED FROM PATIENTS IN HOSPITAL OF RAYON LEVEL, KHARKIV OBLAST, UKRAINE

Introduction. Antimicrobial resistance is a global threat to human health, which continues to grow worldwide every day. Antibiotic resistance of Escherichia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa, Staphylococcus aureus (S. aureus), which have epidemiological significance, reaches a critical point. It becomes difficult to
ensure the successful conduct of surgical interventions and further treatment of patients of medical setting.

Microbiological monitoring in hospitals allows to study the spectrum of microorganisms circulating in a hospital, evaluate the biological properties of pathogens, including antibiotic resistance, and timely reveal the occurrence of hospital strains of microorganisms.

Aim. To study the antibiotic resistance of Staphylococcus Strains, circulating in the Central rayon hospital (CRH) of the Kharkiv oblast during microbiological monitoring.

Materials and methods. The results of the one of stages of microbiological monitoring, which included a bacteriological investigation of clinical specimens, obtained from patients with suspected bacterial infection, were evaluated. The results of a bacteriological investigation of 42 clinical samples (urine, swabs of the upper respiratory tract, specimens of the wound discharge), obtained from patients of the outpatient, therapeutic and surgical wards of the CRH in Kharkiv oblast, in 2016-2018.

Antimicrobial susceptibility testing of Staphilococcus isolates was conducted by the disk - diffusion technique.

Results. Strains of Staphylococcus (S. aureus (62.5 %), S. saprophyticus (12.5 %), S. epidermidis (25 %)) were isolated in 24 (57.1 %) clinical samplings from 42. Staphylococcus strains were isolated from the wound (45.8 %). The proportion of isolated from urine was 20.8 %, from upper respiratory tract – 33.3 %. There was the high proportion of antibiotic-resistant strains among Staphylococcus strains that were identified. Proportion of resistant Staphylococcus strains to the cephalosporins group ranged from 4.2 % to 12.5 %, while the most pronounced resistance was to third-generation cephalosporins (cefoperazone to 12.5 %). The proportion of Staphylococcus resistant strains to quinolone and fluoroquinolone groups ranged from 4.2 % to 41.7 %. Resistance to levofloxacin reached of the highest proportion among isolated strains (41.7 %). Proportion of resistance Staphylococcus strains to norfloxacin and ciprofloxacin was 4.2 %.

Proportion of resistance Staphylococcus strains to antibiotics of the beta-lactam group ranged from 4.2 % to 25 %. Resistance to oxacillin was 25 % of strains. 95.8 % of researching strains were sensitive to aztreonam. Staphylococcus strains were resistant to
antibiotics of the aminoglycoside group within 8.3 % to 20.8 % and 16.7 % of strains were resistant to penicillin.

Conclusion. Number of bacteriological studies which was carried out for three years indicates low capacity of the laboratory in CRH of the Kharkiv oblast. Frequent detection of Staphylococcus strains from patients’ wounds can explain the presence of purulent-septic complications after operations. Because of this it is necessary to improve infection control to prevent outbreaks of healthcare associated infection in hospitals. S. aureus prevailed in the structure of circulating Staphylococcus. This pathogen has a significant pathogenic potential and high resistance to antibiotics of different groups. Therefore, antibiotic therapy should be prescribed to patients only for strict indication and according to antibioticogram.

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STUDY OF INSULIN RESISTANCE IN DRUG-SUSCEPTIBLE PULMONARY TUBERCULOSIS PATIENTS BEFORE AND DURING ANTITUBERCULAR THERAPY

Aim The study was performed to reveal initial insulin resistance in drug-susceptible newly diagnosed pulmonary tuberculosis patients and to evaluate its dynamics during the first month of antitubercular therapy.

Materials and methods. The study was performed on 45 patients aged 20 - 60 years (34 men (75.5%) and 11 women (24.5%)) with new cases of pulmonary TB. Group I - 23 non-insulin resistant patients (HOMA-IR index < 2.7); Group II – 22 insulin resistant patients (HOMA-IR index > 2.7). The excluded criteria were: drug-resistant TB, body mass index > 25 kg/m2, comorbid diseases (HIV/AIDS, DM, liver diseases, cancer diseases, and alcohol consumption). Patients were treated with standard treatment four-component scheme (Isoniazid, Rifampicin, Ethambutol and Pyrazinamide).

Results. Baseline median fasting insulin level in non-IR-patients was 7.95 mcU/ml and we found it not significant increase after 30 days of ATT (up to 11.85 mcU/ml). At the