EB-1401-004

CLINICAL AND EPIDEMIOLOGICAL CHARACTERISTICS OF TICK-BORNE BORRELIOSIS IN THE KRASNODAR KRAI


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The purpose of the study – the improvement of early diagnostics of Lyme disease on the based of clinical and epidemiological analysis of the main clinical forms of the acute course of the disease in new natural foci in the Krasnodar Krai.

Patients and methods. There was analyzed the clinical course of disease and epidemiological data for 207 patients in the early period of acute course of Lyme disease within the period from 2004 to 2013.

Results. In the territory of the Krasnodar Krai and the Republic of Adygea there has formed a set of foci of tick-borne borreliosis (TB), i.e. Lyme disease (LD). The infection of cases is observed not only in the natural foci of disease, but also within the city limits. The disease is registered mainly in the erythematous form (74% of patients), non-erythematous form accounts for 26%. The average age of patients was 41,1±1,83, years, males - 38%, females - 62%. In the non-erythematous form initial clinical symptoms are recorded in average in 11,6 ± 2,20 days after tick suction; in the erythematous form - in 6,4 ± 0,70 days (p<0.05). The greatest difficulties are arised in the diagnosis of the non-erythematous form of TB running with prolonged fever and central nervous system involvement. Initial clinical manifestations of non-erythematous forms are symptoms of meningitis or meningoencephalitis of serous nature, and defeat of the third pair of cranial nerves. In the erythematous form of TB there are observed symptoms of peripheral nervous system damage in the form of radiculopathies.

Regardless of the clinical form, in the first month of disease diffuse myocardial changes (55.3%) or conduction disorders of varying severity (7.1%) are recorded.

Conclusion. In clinical diagnostics of TB distributed in the Krasnodar Krai, the early manifestation of signs of involvement of nervous and cardiovascular systems must be considered. The formation of new natural foci of TB requires the in-depth clinical and epidemiological study, introduction of the different methods of serological diagnosis (indirect immunofluorescence test, ELISA) and PCR studies.

Key words: tick-borne borreliosis; Lyme disease; the Krasnodar Krai; epidemiology; clinical picture.

EB-1401-011

ACQUIRED OVERT CYTOMEGALOVIRUS INFECTION IN IMMUNOCOMPETENT ADULT PATIENTS

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There has been analyzed the clinical course of the disease in 94 hospitalized patients with acute acquired overt cytomegalovirus infection, confirmed by serological tests and polymerase chain reaction. Males of young age were shown to suffer more often. In the clinical picture symptoms of intoxication (fever, weakness), hepatomegaly with increased activity of liver enzymes, splenomegaly, the involvement of the airways and lymph nodes available for palpation prevail. The clinical feature of the overt form of cytomegalovirus infection is a frequent combination with infection caused by the Epstein-Barr virus. The comprehensive treatment with introduction of antiviral drugs leads to normalization of temperature, removal of organ lesions and improvement of the patients.

Key words: acute overt CMV infection; clinical symptoms; antivirals.

EB-1401-017

PHYLOGENETIC ANALYSIS IN EPIDEMIOLOGICAL INVESTIGATIONS OF CASES OF HIV INFECTION

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There has been analyzed the clinical course of the disease in 94 hospitalized patients with acute acquired overt cytomegalovirus infection, confirmed by serological tests and polymerase chain reaction. Males of young age were shown to suffer more often. In the clinical picture symptoms of intoxication (fever, weakness), hepatomegaly with increased activity of liver enzymes, splenomegaly, the involvement of the airways and lymph nodes available for palpation prevail. The clinical feature of the overt form of cytomegalovirus infection is a frequent combination with infection caused by the Epstein-Barr virus. The comprehensive treatment with introduction of antiviral drugs leads to normalization of temperature, removal of organ lesions and improvement of the patients.

Key words: acute overt CMV infection; clinical symptoms; antivirals.
Phylogenetic analysis of nucleotide sequences of HIV-1 variants was applied in epidemiological investigation of the case of the group incidence of HIV infection for identification of the genetic relatedness and verification of clinical and epidemiological findings. The article also raises issues the solution of which will improve the quality of the performance of such investigations.

**Key words:** HIV; phylogenetic analysis; HIV transmission

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**EB-1401-021**

**MONITORING FOR INCIDENCE OF YERSINIOSIS AND ENVIRONMENTAL CONTAMINATION BY THESE PATHOGENS IN THE TYUMEN REGION**

**REPORT 1. REGULARITIES OF THE EPIDEMIC PROCESS OF YERSINIOSES IERSINIOZOV IN THE TYUMEN REGION**

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There was performed a retrospective epidemiological analysis of the incidence of Yersiniosis (Infections due to Yersiniosis enterocolitica and Yersiniosis pseudotuberculosis in the Tyumen region for the 19-year period.

There was established the stabilization of the incidence of these infections in the long-term dynamics, that is caused by constant acting factors. There are determined risk territories (Tyumen, one rural forest-steppe district and three rural districts of southern boreal forest), risk groups: children aged 3-6 and 7-14 years for Yersiniosis enterocolitica and Yersiniosis pseudotuberculosis and children 3-6 of years - for Yersiniosis enterocolitica, risk time: January – June for pseudotuberculosis and for January, March, May, June, August, October - for Yersiniosis enterocolitica. The intensity of contamination of vegetables and fruits by Yersinia-bacterias on months correlates with incidence of these infections (average, moderate relationship; r = 0.57 ± 0.19). To control the epidemic process of Yersinioses there is reasonable the improvement of the system of epidemiological surveillance and elaboration of the program of interrelationship and interaction between involved bodies and institutions of The Federal Service on Customers’ Rights Protection and Human Well-being Surveillance, State Agricultural Committee and the educational sphere.

**Key words:** the epidemic process; pseudotuberculosis; dynamics; risk factors.

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**EB-1401-025**

**MONITORING FOR INCIDENCE OF YERSINIOSIS AND ENVIRONMENTAL CONTAMINATION BY THESE PATHOGENS IN THE TYUMEN REGION.**

**REPORT 2. EPIDEMIOLOGICAL CHARACTERISTICS OF PSEUDOTUBERCULOSIS OUTBREAKS IN THE TYUMEN REGION**

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The Experience of investigation of pseudotuberculosis outbreak in the Tyumen region shows the need to improve epidemiological surveillance and control Yersinioses, within the frameworks of informational subsystem of which it is reasonable to take into account serotype landscape and genetic characterization of their pathogens, by means of introduction into practice the available methods of diagnosis and identification of Yersinia strains isolated from biomaterial and environmental objects with mandatory sending them to reference-centers for in-depth study with the use of molecular and genetic methods. The last is advisable for more qualitative investigation of foci of yersinioses and establishing epidemiological relationships that will increase the effectiveness of preventive measures.

**Key words:** pseudotuberculosis; Yesinia Pseudotuberculosis; epidemiology; clinical picture; sporadic incidence; outbreaks; pathogenicity factors; VNTR- typing.
EB-1401-031
EPIDEMIOLOGICAL ASPECTS OF REPRODUCTIVE HEALTH IN社會ALLY ADAPTED YOUTH IN THE OMSK REGION
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In the article there are presented epidemiological data on the state of health of socially - adapted youth of the Omsk region. There are given main characteristics of health with the analysis of body mass index. Performed medico - sociological analysis and the explication of anamnestic and somatic determinants with considering their combined effect on the health of youth are put in the basis of a regional programme of monitoring of youth reproductive health.
Key words: reproductive health; epidemiology; sociological studies; socio - adapted youth.

EB-1401-034
MODERN APPROACHES TO GENOTYPING OF CAUSATIVE AGENTS OF PARTICULARLY DANGEROUS INFECTIONS
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Currently genotyping of microorganisms is widely used in the investigation of outbreaks of infectious diseases, the implementation of epidemiological surveillance of infections and phylogenetic analysis of bacterial pathogens. Development of methods for genotyping is particularly topical for pathogens of such highly dangerous infections as plague, cholera, anthrax, brucellosis, tularemia, glanders and melioidosis, due to their high pathogenicity and contagiousness. In this overview there is presented the characteristics of different genotyping methods together with an indication of their advantages and drawbacks. There has been analyzed the frequency of the use of genotyping methods on an annual basis and in terms of the type of the causative agents of especially dangerous infections.
Key words: genotyping; particularly dangerous infection; restriction analysis; electrophoresis; polymerase chain reaction; hybridization; sequencing.

EB-1401-044
DERMATOBIASIS IN A RUSSIAN TOURIST TRAVELLED TO ARGENTINE AND BRAZIL. A CASE AND REVIEW OF THE LITERATURE
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A case of furuncular myiasis is presented as a 65-year-old man travelled to Iguaçu Falls in Brazil and Argentine. Furuncle- like lesions were observed on the top of his right shoulder blade and he complained of crawling sensations within his shoulder blade. Two invasive larva of botfly, Dermatobia hominis, were extruded from the furuncular lesion of the patient. This condition is endemic to the forested areas of Mexico, Central and South America. Because of widespread travel, furuncular myiasis has become more common in European countries. Awareness of cutaneous myiasis for clinicians should be considered for a patient who has a furuncular lesion and has recently returned from a botfly-endemic area. Misdiagnosis and mismanagement can occur owing to limited awareness of the condition outside endemic areas.
Key words: furuncular myiasis; tourist; botfly; Dermatobia hominis; Russia; Brazil; Argentine; Iguaçu Falls.

EB-1401-049
CURRENT PROBLEMS OF THE SIMULATION-BASED EDUCATION IN MEDICINE
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Practical skills of clinical work before applying them to real patients, students should acquire in special centers, equipped with high-tech simulators and computerized mannequins, permitting to simulate the clinical situations. One of the important prerequisites to the implementation of this principle is the creation of modern simulation centers. In the article there are discussed the problems which must be sold for the successful and effective implementation of a simulation training in the medical education.
EB-1401-062
ON THE OCCASION OF THE CENTENARY OF THE ESTABLISHMENT OF ANTI-PLAGUE STATE SERVICE IN TSARITSYN- STALINGRAD-VOLGOGRAD
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In the article there is presented a brief history of the formation and development of anti-plague service in Tsaritsyn – Stalingrad – Volgograd
Key words: anti-plague service; Tsaritsyn; Stalingrad; Volgograd.