40.033

Borreliosis Increased Multisynrome Pathology Even in Albania


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Introduction: Borreliosis are systematic infectious which make their evolution in three stages and are characterized by a great variety of anatomical and clinical forms.

The scope: Making evident the frequency, polysynrome and diagnosis of Lyme disease.

The material: It comprises 27 cases 18–64 years old, with Lyme disease during the period of 1982–2007. The diagnose was verified through indirect immunofluorescence 5 cases, ELISA test (IgM, IgG) 22 cases, 2 cases with PCR.

Methodology: Epidemiological aspects: We have analyzed cases on geography, timing, sesonal basis. Clinical aspects: cases were classified according syndrome appearance.

The results: Epidemiology: 1 geographical origin: we identified 20 autochthon cases and 7 imported cases (Germany 2 cases, USA, Italy, Austria, Czech Republic, Macedonia 1 case).


3. Seasonality: spring 9 cases, summer 15 cases, autumn 3 cases, winter 0 cases.

B) Clinically: We have noticed skin affected 15 cases (unique erythema 10 cases, multiple erythema 5 cases); 2. Locomotor system 7 cases (knee articulation 4 cases, coxophemoral articulation 3 cases). 3. Cardiovascular system 1 case (Endocarditis); 4. Neuro-psychiatric system 3 cases (meningitis 1 case, depression 1 case, bipolar disorders 1 case). 5 Audit system 1 case (deafness).

Conclusions: 1. Borreliosis incidence in Albania is increasing like everywhere. 2. Imported cases are a new occurrence for us. 26% have been resulted imported cases and 74% autochthon ones. 3. We have noticed 5 clinical syndromes, skin affected 15 cases, locomotor system 7 cases, cardiovascular system 1 case, neuro-psychiatric system 3 cases, audit system 1 case.

doi:10.1016/j.ijid.2008.05.543

40.034

Clinical Manifestations and Treatment of Typhoid Fever in Children

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Aim: To review the clinical manifestations and treatment of typhoid fever in children.

Materials and methods: All children with documented infection, hospitalized at our clinic, during the period January 2003–December 2005 were enrolled in this study. Epidemiological data, clinical manifestations, and treatment protocol were analysed.

The diagnosis of typhoid fever was confirmed by serologic examination. An antibody titer against TO antigen higher than 1:320 was considered positive.

Results: 37 children resulted infected by typhoid fever during the study period. The most affected age-group was that of 5–10 years old (60%).

49% were females and 51% were males.

56% of them were from Tirana district, meanwhile the others from different rural areas all over the country.

46% of cases result hospitalized in autumn, 33% in spring, the other part in winter and summer.

The fever was the most frequent sign, present in all cases. Liver enlargement was seen in 70% of children, spleen enlargement in 54%, the abdominal pain in 38%, vomiting and diarrhea were presented respectively in 32.5% and 0.8% of patients.

Maculopapulous rash was seen in 16% of cases.

Laboratory examinations revealed: All the patients had a positive Widal test. Leucopenia was present in 55% of children, anemia in 78% with lymphocytosis in 60%. High sediment was seen in 65% of cases.

Among the complications, pneumonia was present in 32% of children. A positive clinical response was seen approximately after 5 days of treatment.

The first choice antibiotic was Chloramphenicol used in 81% of cases, Ceftriaxone was prescribed in 16%, while Ampicillin as monotherapy in 13.5%.

No relapses were observed.

Conclusions: Systemic signs rather than gastrointestinal one dominated the clinical picture of our pediatric cases with typhoid fever. Chloramphenicol still remains an effective drug for this infection.

doi:10.1016/j.ijid.2008.05.544

40.035

Acute Insufficiency as a Complication in Salmonellal Infection

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Background of the study: Acute renal insufficiency (ARI) denotes acute deterioration of kidney function, which brings to compilation of degradation products, and clinically it is manifested with the decrease of diuresis and disorders of homeostasis. We will present the appearance of ARI in patients infected with salmonella as a result of very severe degree of dehydration caused by great loss of liquids due to vomiting and diarrhea.

Methods used: Out of 72 patients that were hospitalized at the Department for Infectious Diseases in Veles, in 2004, with clinical picture of salmonellal food intoxication, in 3 patients (4%) with severe clinical picture, an ARI complication appeared. The patients were treated depending on their age, clinical picture, laboratory-biochemical analysis and the treatment of the diseased.

Results: The greatest number of the patients who were hospitalized at our Department were in mild to severe clinical form of the disease. The basic disease brought to
worsening of kidney function in 4% of the patients. The beginning of the disease was acute, with the appearance of fever, high temperature, stomachaches, vomiting and profuse diarrhea. All that brought to water electrolytic misbalance, reduction of diuresis, increase of the concentrations of urine from 15 to 35 mmol/l, creatinin from 300 to 800 mikromol/l, and potassium to the value of 6 mmol/l. The diseased were treated and cured conservatively at the Department with intensive rehydration parenteral and symptomatic therapy.

Conclusion: Intoxication with salmonella through food due to infective-toxic influence by the bacteria Salmonella itself from one side, as well as the loss of liquids on the other side, can bring to ARI. Conducting timely and optimal rehydration is of great importance, since only with adequate approach towards basic disease and the possible complications, they could be prevented or could be adequately treated.

doi:10.1016/j.ijid.2008.05.545

40.036
Genomic Fingerprints Analysis of Coagulase-Positive and Negative Staphylococci Isolated from Patients with Bacteremia by Rep-PCR Method
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Keywords: rep-PCR; Fingerprint patterns; Staphylococci; Bacteremia

Background: Staphylococci are important organisms involved in many of infections, including bacteremia or septicemia. Spreading of these bacteria from hospital environments, particularly from personals to the patients, could result in dissemination of infections. Repetitive sequence-based PCR (rep-PCR), is a useful method for generation of staphylococcal DNA fingerprint patterns, especially when the origins of these organisms are unknown. Also, the source of infection can be determined by rep-PCR method, particularly in hospitalized and immunocompromised patients.

The objective of this survey was to determine of DNA fingerprint patterns of coagulate positive and negative staphylococcal strains in patients with bacteremia and detection of their relationships.

Methods: In this cross-sectional study, staphylococcal positive blood cultures were collected from patients with bacteremia which hospitalized in four hospitals dependent to Ahwaz Jundi Shapour University of Medial Sciences. The patients with 2 positive cultures out of 3 samples were considered for this study. Isolated staphylococci were studied more, for identification of their species by standard biochemical tests. DNA was extracted from bacterial cells and genomic fragments which inserted between repetitive ERIC elements were amplified by rep-PCR. Furthermore, relationship of staphylococcal strains was determined based on the similarities between DNA fingerprints by using Jaccards coefficient.

Results: In this survey, 88 cases of bacteremia caused by coagulase positive Staphylococcus aureus (36 cases), and coagulase negative strains (52 cases), were studied. Rep-PCR of genomic DNA from staphylococcal isolates produced multiple fingerprints in sizes ranging between 600 and 2642 bp. Also, the frequencies of 2642 bp and 600 bp bands among isolated strains were 87.5% and 61%, respectively. The fingerprint patterns of S. aureus (33 strains), S. epidermidis (32 strains) and S. lugdunensis (7strains) were 31, 30 and 7 types, respectively.

This study showed being of the same & closely related patterns among staphylococcal strains which could be due to dissemination of epidemic strain in the studied hospitals. The greatest similarities have seen in isolated strains of Razi hospital reflecting contamination of this hospital.

Conclusion: Detection of DNA fingerprint patterns of staphylococcal strains by rep-PCR and their comparison to other genotypic and phenotypic properties could be suitable method for future epidemiological studies.

doi:10.1016/j.ijid.2008.05.546

40.037
Evaluation of T Lymphocytes CD4 and CD8 Subsets in Various Clinical Forms of Human Brucellosis
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Keywords: T lymphocytes subsets; Human Brucellosis

Cellular immune responses are critical parts of the host's defense against Brucella species. In this prospective study, evaluation of T lymphocytes and their subpopulations (T helper CD4 and T cytotoxic CD8) was conducted in patients suffering from brucellosis.

Methods: This study included 92 outpatients and 29 healthy persons. All data were obtained using a questionnaire data sheets. The infections of patients were confirmed by the positive results of blood serological tests: Wright test and 2-Mercapto-Ethanol test (2-ME). The enumeration of blood T lymphocytes and their subsets was performed by an indirect Immunofluorescent method, using monoclonal antibodies against surface markers of CD3, CD4, and CD8 T lymphocytes.

Results: The study's results were analyzed by the SPSS program. The disease infected all age groups. The mean value for the percentages of CD3 positive T cells in patients was 79% and in healthy controls 84%. Significant differences were noted, however, among the means of acute, sub-acute, chronic, and recovered sufferers of brucellosis P > 0.27. While mean value in these clinical groups did not reveal any significant differences P > 0.55. Decreased results for CD4 positive T lymphocytes showed significant differences, compared with healthy persons P < 0.001.

Increased results for CD8 positive cells in above four clinical groups were significantly different, compared with healthy subjects P 0.45. The mean ratios of CD4/CD8 in all patient (1.28), compared with healthy subjects (2.28), was about two times lower P < 0.001. The obtained mean ratios