

2. There is a higher risk of skin laceration in emergency cesarean section than in vaginal delivery.
3. No vertical HCV transmission was noted among children born by elective cesarean section without skin laceration.

873 'BRAIN ABSCESS IN INFANTS AND CHILDREN: A RETROSPECTIVE STUDY OF 52 PATIENTS IN PEDIATRIC'S HOSPITAL OF CASABLANCA, MOROCCO

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Z Jouhadi, M Lahlimi, A Rachid, J Najib. *Pediatric, CHU Casablanca, Casablanca, Morocco*

Brain abscess is a serious disease of the central nerve system, it's a rare pathology in children; to review the clinical manifestation, and predisposing factors, causative organism and outcomes of brain abscess we conducted a descriptive retrospective study in children's hospital of Casablanca in unit of infectious diseases.

Fifty two infants and children with brain abscess admitted between 1998 a 2011 are retrospectively analyzed.

The mean age was 5, 6 years, 38% were aged less than 2 years. the male-to-female ratio was 0, 92. The most common predisposing factor was meningitis (29%); ORL causes (27%); otitis (17%) and congenital heart disease (11, 5%); the most common organisms are staphylococcus aureus; streptococcus intermedius and proteus mirabilis.

Clinical manifestation were dominated by fever (79%); cranial hypertension (57%); seizures (36%) and motor deficiency in 35%, sequellae were constated in 36%; mortality in 4%.

Brain abscesses result in significant morbidity and high fatality. Because brain abscesses can have subtle initial presentations, a high level of suspicion is very important for early diagnosis in pediatric patients, particularly those with underlying condition such as congenital heart disease.

874 SKEWING OF SAG MEDIATED THERAPY FOR A PREDOMINANT TH1 DURING VISCERAL LEISHMANIASIS ON TRIGGERING CD2 EPIOTOPE

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¹S Sinha, ²S Bimal, ¹S Sundaram. ¹Centre for Biotechnology, University of Allahabad, Allahabad; ²Division of Immunology, Rajendra Memorial Research Institute of Medical Sciences, Patna, India

Visceral leishmaniasis is a macrophage associated disorder which is linked with a profound decrease in the immunotherapeutic potential of the infected subjects especially children leading to a marked reduction in the CD4 linked Th1 protective immune response. Simultaneously the patients in Bihar are showing unresponsiveness towards SAG which is still a first line of drug in many countries around the world against Visceral Leishmaniasis. In the present part of the study we have tried to evaluate the use of CD2 antibody as an immunotherapeutic agent along with SAG in ensuring treatment of BALB/c mice induced with experimental Visceral leishmaniasis. It has been found in the present set of studies that stimulation of CD2 co receptor along with along with therapeutic dose of SAG has led to the enhancement in the release of IFN-gamma which leads to the release of TNF-alpha and activates the macrophages. An increase in the NO mediated killing further observed by the activated macrophages leading to the reduction in the parasitic load. The results indicate that enhancing the immune potential of a VL patient especially children will help in the better response of Sodium Antimony Gluconate which is the first line of drug against VL in many countries.

875 PROBIOTIC LACTOBACILLI LECTINS AS AUTOREGULATORS: SUPPORTING, MODULATION AND SELECTION OF LACTOBACILLI POPULATIONS FROM THE SAME HUMAN HEALTHY BIOTOPE

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V Lakhtin, A Bajrakova, M Lakhtin, Y Belikova, S Afanasiev, V Aleshkin. *G.N. Gabrichevsky Research Institute for Epidemiology & Microbiology, Moscow, Russia*

Background Probiotic bacterial lectins are important factors in biotope. The aim was to study autoregulation properties of lectins of lactobacilli (LL) isolated by us [1].

Methods Clinical strains of lactobacilli were freshly isolated from urogenital tract samples of young and adolescent patients using growth on Lactobacillus MRS Agar (HiMedia) and variant of Shaedler medium. Additional differential indication media were used. Bacterial growth was studied in the presence of disc- or drop-applied of LL on solid media or LL within bacterial suspensions (0.5–5 McFarland units). Samples studied were characterized with lactobacilli at the level of 10^6 – 10^8 CfU/ml, and did not contain a panel of standard bacterial and viral pathogens. Decreased contents of *Staphylococcus ssp.*, *Enterococcus ssp.*, *E. coli*, and *Candida ssp.* were registered.

Results All methods used gave similar results (supporting each other) of action of LL on lactobacilli populations growth. The following groups of lactobacilli populations were identified: LL-resistant or sensitive, weakly suppressive or stimulated, highly or moderate suppressive, highly modulated, cell condensation depended or not.

Conclusions Results indicate further evidences that probiotic LL imitate cellular probiotics. It seems LL are involved in signal events (QS, cross-talking) in biotope. LL may act as a biotope tool of microbiota selection and may be used for both supporting probiotic-like lactobacilli and simultaneous elimination of other lactobacilli possessing decreased survival (non-probiotic-like strains) in conditions of healthy or close to normal balance in biotope.

Reference [1]. V. Lakhtin, M. Lakhtin, V. Pospelova, B. Shenderov (2006) Microb. Ecol. Health & Dis. 18: 55–60.

876 CHARACTERIZATION OF ENTEROCOCCI CAUSING CATHETER- ASSOCIATED URINARY TRACT INFECTIONS IN CHILDREN IN IRAN

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¹MR Pourshafie, ²M Talebi, ³M Saifi. ¹Microbiology Department, Pasteur Institute of Iran; ²Microbiology Department, Tehran University of Medical Sciences; ³Mycobacteriology Department, Pasteur Institute of Iran, Tehran, Iran

Background and Aims Urinary tract infection is one of the most common diseases in children. Precise and untimely diagnosis and comprehensive treatment can significantly decrease late serious complications. Among microorganisms causing UTI, enterococci are one of the most prevalent reported one. Microorganisms causing UTI are resistant to most of antibiotics which lead to increasing the duration of hospitalization, morbidity, mortality and there are medical and financial implications associated with UTIs. The aim of this study was to determine enterococci prevalence, its antimicrobial resistance and its genetic diversity isolated in children.

Methods Urine samples were cultured by standard loop method. The 10^5 CFU/ml cultures were assumed as positive. After identification of enterococci by biochemical tests, susceptibility of each isolate was assessed by disk diffusion method according to CLSI guidelines. In order to analyzing bacterial genotypic diversity, pulsed-field gel electrophoresis (PFGE) were performed using *SmaI* enzyme in CHEF DRIII apparatus.

Results Out of 500 urine samples, 50 were positive for vancomycin resistant Enterococci. Out of 50 VRE isolates, 3 were isolated from catheter-associated urinary tract infections from neonatal intensive care unit and Pediatric ward. All of 3 VRE isolates showed a high level vancomycin resistance ($MIC \geq 128$) and harbored *vanA* gene. Genotyping by PFGE using *SmaI* enzyme revealed the presence of two types.

Conclusion The prevalence of VRE catheter-associated urinary tract infections among NICU patients and Pediatric ward has been rare in Tehran. PFGE results revealed that among *enterococci* isolates PFGE patterns were diverse.

877 PREVALENCE OF PANDEMIC (H1N1) AND SEASONAL INFLUENZA VIRUS INFECTION IN PEDIATRIC AGE GROUP IN SOUTHERN IRAN

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A Moattari, A Emami. *Bacteriology & Virology, Shiraz University of Medical Sciences, Shiraz, Iran*

Background A novel strain of H1N1 Influenza (A/California/7/2009) has been prevalent since April 2009. Epidemiological and clinical studies showed that children at high risk for severe infection. Influenza virus infections are associated with significant morbidity and mortality in children with acute respiratory infections.

Aim To determine the prevalence of new H1N1 and seasonal influenza viruses in children with fever, cough, bronchiolitis, pneumonia wheezing and asthma symptoms.

Methods Pharyngeal swabs were taken from 450 children aged (1–60 months) with respiratory tract symptom between June 2009 to March 2012. The specimens were tested using Real Time Reverse Transcriptase PCR.

Results Out of 450 samples 130 were tested positive for pandemic H1N1, 75 H3N2 and 15 influenza type B infections.

Conclusion According to our results 28.8% of respiratory infection in children in the south of Iran was due to new H1N1, 16.7% H3N2, 3.3% B Influenza viruses during the foregoing pandemic. Our analysis revealed no significant correlation between males and females.

878 THE PREVALENCE OF HUMAN BOCAVIRUS AND ADENOVIRUS IN HOSPITALIZED CHILDREN IN SHIRAZ-IRAN

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A Emami, A Moattari, N Pirbonyeh. *Bacteriology & Virology, Shiraz University of Medical Sciences, Shiraz, Iran*

Background Acute respiratory infection is common cause of morbidity and mortality especially during childhood. The most important viral respiratory infection, such as: *Influenza viruses*, *Adeno virus*, *Respiratory syncytial virus* and *Bocaviruses* are the most common infections in upper and lower respiratory tract diseases. Different studies show Adenoviruses and *HBoV* are the most important potential respiratory pathogen after influenza virus with the same manifestations. *HBoV* in the parvovirus family first was detected in 2005 by molecular methods.

Aim In this study we tried to evaluate the prevalence of *HAdV* and *HBoV* in patients with respiratory tract infection.

Materials and Methods In this cross sectional study for two years (2009–2010), 150 nasopharyngeal swabs collected from youth age (≤ 15) with acute upper respiratory tract syndromes referring to the Shiraz University of Medical Hospitals. Adenoviruses were detected by nested-PCR and bocavirus was detected by usual conventional PCR with specific primers.

Results Among the 150 taken samples, 40 samples (27%) was positive for adenovirus and in 1 sample (0.66%) *HBoV* was amplified which was co-infected with adenovirus.

Conclusion The result of this study showed that Adenoviruses have more prevalence in south of Iran compare to influenza viruses during this two years, but Bocavirus has no more prevalence in this region between this groups of patients. Up to the result of this study it has been recommended for optimizing the treatment of this group of patients, other viral respiratory infections must be evaluated.

879 CHARACTERISTICS OF CHILDREN'S LEISHMANIASIS IN MONTENEGRO

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B Andric, D Terzic, B Dupanovic, D Nikcevic. *Clinic for Infectious Diseases, Clinic Center of Montenegro, Podgorica, Montenegro*

Background Montenegro is an endemic area for visceral leishmaniasis. Natural condition and geographical position (Mediterranean area) allow of visceral leishmaniasis existence. Epidemiological studies warn on the increase in number of disease in Montenegro, which are 3 patients on 646000 inhabitants per year.

Methods The investigations used epidemiological, clinical and laboratory methods.

Diagnosis was etiologically confirmed through bone marrow bioplate analysis, by direct microscoping of serial sections colored with the Giemsa s stain, Reticulin (Gordon and Sweet method), PAS method, and by immune-biochemical methods, and serological method.

Results In the period from 1992 to 2011 in Montenegro, 67 cases of leishmaniasis have been diagnosed, with 4 lethal outcomes. The children population participate with 36 (%) cases, age 0–4 years in 22 (40%) and age 5–15 years in 14 (%). Which the prevalence of general infective syndrome (high febricity, exhaustion), in all children cases, enlarged of spleen in 28 cases, and liver in 26 cases, anemia in 29 cases, pancytopenia in 22 cases, increased serum transaminases in 27 cases. Recidives were registered in 9 patients. According to the geographic area where the disease was diagnosed the expansion include the entire coastal area of Montenegro from Ulcinj to Herceg Novi, Cetinje, the area of Skadar lake including Podgorica and even some northern parts of Montenegro.

Conclusion Expansion of the primary endemic focus, more severe types of the disease, co-infective types and increase in mortality, therapy resistance, coinfective forms of disease are the new features of leishmaniasis in Montenegro.

880 THE RESISTANCE OF S. AUREUS TO ANTIBACTERIALS IN CHILDREN

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¹OA Nazarchuk, ²GG Nazarchuk, ³DV Paliy, ⁴DV Dmytriiev. *¹Microbiology, Virology and Immunology; ²Ophthalmology and Eye Diseases; ³Infectious Diseases; ⁴Anesthesiology and Intensive Care, Vinnitsa N. Pyrogov Memorial National Medical University, Vinnitsa, Ukraine*

Background and Aims Clinical strains of *S. aureus* are one of the most widely spread microorganisms, causing nosocomial purulent infections in pediatric anesthesiology practice. Treatment of infectious diseases caused by *Staphylococcus* is a difficult task in conditions of developing resistance to antibiotics.

Methods Our research work is dedicated to the problem of antibiotic resistance of *S. aureus* clinical strains, obtained from children with purulent-inflammatory diseases. The *Staphylococcus* strains' sensitivity to the spectrum of antibiotics, nowadays widely used in clinical practice, was studied by means of disc-diffusion method.

Results The results of the study show high resistance of *S. aureus* to antibiotics of penicillin (26.79–53.57%). About 42.86% of strains were resistant to oxacillin. It proves the presence of methicillin-resistant strains of *S. aureus* in children with purulent diseases. *S. aureus* had also low sensitivity to ureidopenicillins, aminopenicillins, carbenicillins. As for aminopenicillin with clavulan acid only 1.78% of strains were resistant. The 1st (cafazolin-83.93%) and the 3rd generation of cephalosporins (ceftriaxone-89.28%, ceftazidime-80.36%) had high activity against *S. aureus*. Obtained isolates of *S. aureus* were sensitive to meropenem (87.5%) aminoglycosides (14.29–89.29%). 67.86% of strains were sensitive to rifampicin. But only in 41.07% of cases *S. aureus* was sensitive to vancomycin. Doxycycline was effective in 57.14%.