

Patients and method: During the period 2000–2012, 400 children suffering acute viral hepatitis were examined on Infective Diseases Clinic, Clinical Center of Montenegro, Podgorica. Complete history, route of infection, an abdominal ultrasound and standard biochemical tests were done. During the research we used virus tests sensible to: HAV, HEV, HBV, HCV, EBV. Research sample is consisting from 27 examinees of both sex, different ages with clinical, laboratory and virology verification and description of acute hepatitis E viral infection and 27 examinees with acute hepatitis A infection.

Results Baseline characteristics were: 75% male, age 10 ± 3 . Examiness with infection HEV had most frequent symptoms loss appetite 70.8% and slackness (66.6%) while examiness with HAV infection had retch 70% and loss appetite 100%. Hepatomegaly, rice temperature were present at all examiness with hepatitis A, while examiness with acute hepatitis E had hepatomegaly at 66.6% cases and rice temperature at 45.8% race. Patients without symptoms was present in group with hepatitis E. (29%). Increase spleen was more frequent at patients with acute hepatitis A. Values alaninamino-transferasis was higer at patients with acute hepatitis A. Rice of all patients with acute hepatitis E had Glutamat dehydrogenasis (GGT) twice higer than referent values.

Conclusion Hepatitis E has many similarities with hepatitis A: enterically transmitted self-limited infections. We had important different of symptoms, clinic image and laboratory analysis between this both of virus hepatitis.

870 EFFECT OF EARLY TOOTH EXTRACTION ON THE DURATION OF HOSPITALIZATION IN FACIAL CELLULITIS OF ODONTOGENIC ORIGIN IN CHILDREN

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Purpose To investigate the clinical characteristics of pediatric facial cellulitis of odontogenic origin and the impact of early tooth extraction on the length of hospitalization in children.

Methods Medical records of all patients with a discharge diagnosis of facial cellulitis of odontogenic origin or buccal cellulitis were reviewed. Clinical characteristics, including age, sex, symptoms of infection, location of infection, type of tooth involved, length of hospitalization, and the timing of dental interventions, were gleaned. Variables were correlated to length of hospitalization.

Results A total of 106 children (62 boys and 44 girls) were diagnosed with facial cellulitis of odontogenic origin. Early tooth extraction (within 48 h) and white blood cell count at admission were significantly associated with length of hospitalization ($p = 0.007$ and $p = 0.03$, respectively). The length of hospitalization for upper face infections was significantly different than that for lower face infections ($p = 0.01$) and that for left face infections was significantly different than that for right face infections ($p = 0.01$). There was also a significant correlation between length of hospitalization and type of tooth involved ($p = 0.01$). Patients who had an infection of a primary first molar tooth had a shorter length of hospitalization.

Conclusion In the management of pediatric facial cellulitis of odontogenic origin, early tooth extraction may decrease the length of hospitalization. White blood cell count, site of infection, and the type of tooth involvement at admission have significant impacts on length of hospitalization.

871 FREQUENCY OF NOROVIRUS INFECTION IN CHILDREN WITH ACUTE GASTROENTERITIS

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Background and Aims Noroviruses are one of the common causes of acute gastroenteritis and have a great impact on child health. The aim of this study was to determine the prevalence of Norovirus in children with acute gastroenteritis in 2009 and 2010.

Methods Fecal samples were collected from children under 16 years of age who were suffering from acute gastroenteritis. All the children were referred to Yeditepe University Hospital, located in Istanbul. Norovirus was detected using immunochromatography.

Results Norovirus infection was detected in 112 of the 1027 collected samples (10.9%). Most of the positive cases were between 1 and 24 months of age ($n = 75$, 67%). The rate of norovirus infection peaked in winter in 2010 (in winter and spring: $n = 57$, 92%), however, the rates were not significantly different between seasons in 2009 (in winter and spring: $n = 26$, 52%, in summer: $n = 23$, 46%). We did not detect any positive cases in late summer and autumn in 2010.

Conclusions This study improves our epidemiological knowledge of the prevalence of Norovirus in Istanbul. Immunochromatography is preferable, that provides rapid diagnosis. The prevalence of Norovirus is similar but seasonal distribution is different between two years. Most of the cases were < 24 months of age. Because this virus is transmitted by contaminated food or water, and transmitted by personal contact, we recommend improved training in hygiene to reduce the incidence of Norovirus infection in children. Like Rotavirus, Norovirus vaccine can be developed to prevent infection.

872 NEONATE SKIN LACERATION DURING DELIVERY AS IATROGENIC RISK FACTOR OF MOTHER-TO-CHILD HCV INFECTION

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HCV mother-to-child transmission occurs mainly in the peripartum period. Cesarean section delivery is not recommended as prevention of HCV neonate infection. Available data from professional centers are conflicting. There is no information about association between neonate laceration during delivery and HCV infection.

The Aim of the study was to establish the rate of neonate injury during delivery and the role of this complication in the risk of mother-to-child HCV transmission.

Methods We collected data of mode of delivery in the group of 392 children born to anti-HCV+ mothers: 34 HCV infected children and 358 without HCV infection.

Results 235/392(60%) children were delivered vaginally, 157/392(40%) by cesarean section. Skin laceration was observed in 9(2.3%) children: 4/235(1.7%) delivered vaginally, 5/157(3.2%) by cesarean section. In the group of HCV infected children 25/34(74%) were delivered vaginally, 9/34(26%) by cesarean section. The rate of HCV infection among children delivered vaginally was 25/235 (10.6%), by cesarean section 9/157(5.7%). 5/9(55%) children with skin laceration were HCV infected. In the group of children without skin laceration HCV infection was diagnosed in 29/383(7.5%). There were 43 children delivered by elective cesarean section in 38Hbd and none of them was injured, none of them was HCV infected.

Conclusions:

1. Iatrogenic exposure to HCV during delivery may increase the risk of HCV mother-to-child infection.

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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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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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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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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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.