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**Background and Aims** One third of the world population has been infected by the hepatitis B virus (HBV), causing an enormous worldwide burden of chronic hepatitis, cirrhosis and hepatocellular carcinoma. We make review of clinical characteristics of acute hepatitis B infection in children in Montenegro.

**Methods** 180 children suffering from acute virus hepatitis were examined on Clinic for infectious diseases in Podgorica during the period 2006–2012. We used epidemiological and clinical data and blood tests for hepatitis viruses, Epstein-Barr virus, CMV and adenoviruses. Research sample is consisted of 18 children, which are old from 7–15 years with clinical, laboratory and virology verification of acute hepatitis B.

**Results** Epidemiological data have indicated the infection through blood or blood products in 14 children and in 4 the way of infection remained unknown. HBsAg and antiHBc IgM were positive, values of alanine aminotransferase were elevated and PCR HBV DNA was higher than 200000 U/l in all children. The most frequent symptoms were the loss of appetite (88%) and fatigue (70%). Fever was registered in 30% of children, while the diarrhea is reported in 25%, hepatomegaly in 86%, enlarged spleen in 20% and icterus in 60% of cases. Patients without symptoms were present in 12% of cases. Three children after a follow-up longer than one year developed chronic infection.

**Conclusions** Even though immunisation for hepatitis B virus is mandatory since 2002 in Montenegro, the acute hepatitis B isn't rare infection. Children are at the greatest risk for developing potentially fatal complications of the infection.

939 **EPIDEMIOLOGIC STUDY ON PATHOGENIC BACTERIA CAUSING DIARRHEA IN CHILDREN AND DETECTION OF ANTIBIOTICS RESISTANCE PATTERNS IN HAMADAN, WEST OF IRAN**

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**Background and Aim** Bacterial diarrhea is very common in particular in developing countries and is still one of the most causes of mortalities in children. The aim of present study was to identify the most common of bacterial agents causing acute bacterial diarrhea in children under 14 years old and detection of their resistance to antibiotics.

**Methods** During two years, 610 samples obtained from children under 14 years old with gastroenteritis were investigated for bacterial cultures, frequency of age, serogrouping of isolates and antibiogram patterns. Polyvalent (I, II, III, IV) and monovalent antisera were used for serogrouping of *E. coli* (EPEC). Antibiogram tests were also performed by gel-diffusion method of Kirby-Bauer. The data were gathered through a questionnaire and analysed using spss software.

**Results** Out of 610 tested samples, 155 cases (25.4%) had positive culture for intestinal pathogenic bacilli. The most common isolate was; *Escherichia coli* (EPEC) with 105 cases (67.8%) and the lowest isolate was *Shigella* with 18 cases (11.6%). The most common serogroup of *E. coli* was 0128 (26.6%) and the lowest serogroup was 0119 (5.7%). The most common serogroups of *Salmonella* were *S. typhi* (34.4%) and *S. typhimurium*. The most common serogroup of *Shigella* was *S. sonnei* (55.6%). The most effective antibiotics against bacteria were ceftriaxone, nitrofurantoin, imipenem, amikacin and gentamycin.

**Conclusions** The present study showed that *Escherichia coli* (EPEC) and *Salmonella species* are predominant causes of bacterial diarrhea in children under 14 years old in this region. Most species showed

high resistance to routine antibiotics such as ampicillin, trimethoprim and chloramphenicol.

940 **CLINICAL SPECTRUM OF RESPIRATORY TRACT INFECTIONS: A STUDY AMONG CHILDREN IN AJMAN, UAE**

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**Background and Aims** Respiratory tract infection (RTI) among children is one of the most common reasons for physician visits and hospitalization and associated with significant morbidity. It is a leading cause of sickness among school children and parental absenteeism from work. Accordingly, this study was conducted to evaluate the spectrum of the respiratory tract infections among the children attending the outpatient department (OPD) of pediatrics in GMC Hospital, Ajman.

**Methods** A cross-sectional study was conducted from the medical records of pediatric patients (aged 0–12 years) diagnosed with RTIs during January 2011 at GMC Hospital, Ajman. The demographic data and the clinical diagnosis were analyzed (descriptive statistics) using SPSS version 19.

**Results** A total of 2416 patients attended the OPD of pediatrics during the study period of which RTI accounted for 20.2% (n=488). 55.5% (n=271) were males and 44.5% (n=217) were females. Majority of the patients were Egyptians followed by Emiratis and Indians. Forty six percent of the patients (225) were between 1–5 years of age. The four most commonly diagnosed RTIs were unspecified upper respiratory tract infections (URTI) (20.3%), common cold combined with bronchitis (17.8%), tonsillitis (8.8%), followed by bronchitis (8%) in rank order. URTI was most commonly presented by children of 1–5 years (50.5%), while common cold combined with bronchitis was frequent among those below 1 year (47.1%).

**Conclusions** Comparable to previous reports upper respiratory tract infections were the most common RTI among this population and children of 1–5 years were most vulnerable to RTI.

941 **AUTONOMIC DYSFUNCTION IN INFANTS WITH RSV INFECTION**

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**Background** Apnea can be a presenting symptom in respiratory Syncytial Virus (RSV) infection. The incidence of apnea in RSV infected infants varies between 16 and 25% with a particularly high risk associated with young age (< 3 mo) and prematurity. Apnea is frequently observed in early RSV infection when symptoms are still confined to the upper airways, suggesting inflammatory response induced autonomic dysfunction.

**Objective** The aim of the study is to assess autonomic dysfunction as indexed by Heart Rate Variability (HRV) in severe RSV infection. The secondary parameter is to analyze the effect of other viral pathogens on autonomic function in infants with LRTI requiring mechanical ventilation.

**Methods** Prospective observational study in a tertiary PICU in infants with viral LRTI requiring mechanical ventilation. Controls were age matched infants without signs of infection. Autonomic function was assessed via HRV, monitoring low frequency (LF) and high frequency (HF) indices of short time recordings (5 min).

**Results** In 7 patients and 13 controls 36 recording were analyzed. Total HRV, LF and LF/HF ratios were significant lower in RSV patients versus controls ( $p < 0.0045$ ,  $p < 0.0002$  and  $p < 0.0001$  respectively). In ventilated infants with LRTI caused by other respiratory