Infectious Diseases

PO-0173 PECULIARITIES OF INTERFERON STATUS IN NEWBORN BABIES WITH THE HUMAN HERPESVIRUS 6 INFECTION

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Background Diseases caused by viruses of Herpesviridae family belong to socially significant ones due to the diversity of their clinical manifestations, including even lethal outcomes. One of the most important mechanisms, by means of which immunocompetent cells participate in the defense against the herpetic infection, is connected with the production of immunoregulatory cytokines, particularly interferons α and γ (IFN- α and IFN- γ).

Aim To estimate the content of IFN- α and IFN- γ in newborn babies with the infection caused by human herpesvirus 6 (HHV-6).

Methods We examined 36 newborn babies with HHV-6 infection. Our control group consisted of 34 healthy for our purpose newborn babies without human herpesvirus infection. The level of interferon- α (IFN- α) and interferon- γ (IFN- γ) in the blood serum was determined by means of the reagent kit for the enzyme-linked immunosorbent assay ProCon IF2 Plus, ProCon If Gamma (Protein Contour LLC, Saint-Petersburg, Russia).

Results In the newborns with the human herpesvirus 6 infection there was a significant increase of the level of IFN- γ in the blood serum [1.28 (1.11–1.75) pg/ml] as compared to the control group [0.965 (0.7225–1.125) pg/ml] (p

Conclusions The increase of IFN- γ level in the blood serum in the newborn babies with the human herpesvirus 6 infection is a reflection of antenatal antigen stimulation and indicates the timely start of IFN- γ participation in the process of antiviral defense. The absence of changes in IFN- α level indicates that it performs rather physiological than protective function.

PO-0174 ATTITUDES OF PAEDIATRIC HEALTH CARE WORKERS TOWARDS INFLUENZA VACCINATION IN QATAR

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Background Influenza is a communicable but preventable viral illness; despite safe, effective vaccine availability compliance rates are globally low, there is no Local data on percentage and reasons for poor compliance among paediatric health workers in Qatar.

Aims To estimate the percentage of vaccinated health care providers at paediatrics department and their attitudes towards influenza vaccination.

Methods Cross-sectional Survey was conducted from November 2012 till April 2013 among 90 physicians and 133 allied health at main tertiary teaching hospital, included details of demographics, frequency, perceptions and suggestive ways to improve the compliance.

Results Our study showed that percentage of flu vaccination (68.3%) with (31.7%) were not vaccinated, nurses were significantly more likely to be vaccinated than doctors (45.7% vs

40.6%), overall (71.7%) of responders will recommend it to colleagues and patients compared to (28.3%) will not, main reasons for noncompliance included: fear of side effects, contracting the flu, vaccine safety and lack of proper information about the effectiveness. to promote uptake participants believe that offer an evidence based statement ensuring safety, effectiveness is a practical intervention to be used along with providing no cost on site campaigns.

Conclusions Poor compliance and low acceptance of influenza vaccination by paediatric health care workers had negative impact on our children immunisation rate perception that medical provider had not recommended it, they appear to have many of the same misconceptions about influenza vaccine, findings will be useful to used for urgent action to design and implement education programs to improve vaccination rate.

PO-0175 SUCCESSFUL TREATMENT OF FLUCONAZOLE-RESISTANT CANDIDA ALBICANS ENDOCARDITIS WITH CASPOFUNGIN IN AN INFANT WHO HAD A PULMONARY ARTERY BANDING PROCEDURE

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Background and aims Despite the application of surgery and antifungal therapy, *Candida* endocarditis remains a life-threatening infection with significant morbidity and mortality. We report an infant with fluconazole-resistant *Candida albicans* endocarditis who had a congenital heart defect and was treated successfully with caspofungin.

Methods A 13-month-old girl was admitted to our centre with a 3-day history of vomiting, fever and cough. She had a history of pulmonary artery banding for a large ventricular septal defect at 4 months of age. After the operation she had been hospitalised about 3 months in the intensive care unit and had been discharged with tracheostomy and home ventilation due to chronic lung disease. At admission, she had irritability, dyspnea and a severe systolic murmur. Laboratory tests revealed an increase in acute-phase reactants and anaemia. Transthoracic echocardiography showed a vegetation measuring 7 × 10 mm on the wall of right pulmonary artery, just distal to the pulmonary banding region. Blood cultures were obtained and empiric antibiotic treatment with ampicillin/sulbactam and gentamicin was started.

Results *C. albicans* was isolated from two of her blood culture samples, which was not responsive to one-week course of fluconazole treatment. The isolate was found to be resistant to fluconazole. Patient recovered completely with a six-week course of caspofungin treatment.

Conclusions Physicians should be aware of the possibility of fungal pathogens in endocarditis. Microbiologic diagnosis contributes to successful treatment of *Candida* endocarditis.

PO-0176 A CASE OF CUTANEOUS DIPHTHERIA

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A 15 year old girl presented with painful, weeping lesions on both lower limbs. She returned from Ethiopia the day before the

Abstract PO-0176 Figure 1 Ulcers on the right lower leg

hospital visit after having stayed for 40 days. There was a history of injury to her right ankle 3 weeks ago and was treated with oral antibiotics. The wound started to heal but subsequently became itchy and started discharging blood stained fluid. A week later similar lesions developed on her left lower limb. She was born in UK and had all her immunisations. Swab from lesions grew *group A beta-hemolytic streptococcus* and non-toxigenic *Coryne bacterium diphtheriae*. She was initially started on Penicillin and Flucloxacillin. Erythromycin was added after the culture results, as *C. diphtheriae* was penicillin resistant. She made a complete recovery following 7 days of antibiotics.

C. diphtheriae is a non-sporulating, non-encapsulated and non-motile gram positive bacillus.¹ The epidemiological significance and mechanism of pathogenicity of nontoxigenic *C. diphtheriae* is unclear. In Australia, seven cases of endocarditis due to non-toxigenic *C. diphtheriae* have been reported.² Cutaneous diphtheria can be caused by both toxigenic and non-toxigenic strains and the lesions usually appear on exposed parts. The lesions start as vesicles and quickly form small, clearly demarcated ulcers.³ Symptomatic infections with non-toxigenic *C. diphtheria* are rare but when identified needs appropriate treatment. There is no need to carry out clearance swabs or to trace contacts of these individuals.⁴ Skin ulcers not responding to conventional antibiotic treatment should be investigated for rarer causes such as cutaneous diphtheria.

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PO-0177 WITHDRAWN

PO-0178 ENTERIC FEVER IN INDIA – CLINICO-HEMATOLOGICAL PROFILE, ANTIMICROBIAL SENSITIVITY AND RESPONSE

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Aims Enteric fever is endemic in India and its diagnosis in early stages is a clinician nightmare. Our aim was to study the clinical profile, haematological features, antimicrobial susceptibility pattern of the isolates, time to defervescence with the treatment received of culture proven typhoid cases.

Material and methods This was a retrospective chart review of 154 cases of culture proven enteric fever carried out at a tertiary care private hospital in Gurgaon over the period January 2010 to December 2013.

Results All patient enrolled were culture positive 78% of the isolates were *Salmonella typhi* while 22% were *Salmonella paratyphi A*. Clinical feature of dry parched lips and coated tongue was seen in 100% patient and abdominal symptoms in 70% patient. Enteric fever was seen in younger age group and infancy in 15% patient. An absolute eosinopenia was seen in 81.8% of the patients. Before being admitted to the hospital, 24.6% received antibiotics. The mean time to defervescence in patients who received prior antibiotics was 3.4 days while that in those who did not receive prior antibiotics was 5.1 days. Severe complication rate was less than 1%.

Conclusions A high culture positivity despite prior or ongoing antibiotic treatment was seen. Absolute eosinophil count and high acute phase reactant in early stage could be an important marker of typhoid. High prevalence of resistance to fluoroquinolones was observed. Early defervescence was seen in patient with combination treatment in comparison to single antibiotic.

PO-0179 WITHDRAWN

PO-0180 INFECTIOUS DISEASES IN HOSPITALISED CHILDREN IN IRAN

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Background 54 million deaths occurred worldwide and about one third was due to infectious diseases in developing countries and among children, globally. Infectious diseases are important causes of mortality and morbidity in children and have particular concern in paediatrics' wards. Distinguishing the features and subtypes of infectious diseases could facilitate avoiding advanced interventions, therefore, we aimed to investigate infectious disorders in hospitalised children in Rasht/ Iran.

Materials and methods This is a descriptive cross-sectional study which was conducted on 1 months to 14 years old hospitalised children in north part of Iran, Rasht. data were gathered through a checklist which assessed age, sex, place of inhabitants, season of admission, duration of hospitalisation and final diagnosis. Descriptive statistics such as mean, standard deviation, frequency, maximum and minimum were used to report the results by SPSSv16 software.

Results During the study, 4676 hospitalised children were admitted and 29% reported infectious disorders. 83.2% of infected patients were children aged less than 5 years. The mean duration of hospitalisation for infectious disease was $5 \pm 4/6$ days. Results demonstrated that infectious diseases were more frequent in male, winter and urban residents. Also, Respiratory tract and gastrointestinal infections showed the highest frequencies which were 40.1% and 37.2%, respectively. Bacterial pneumonia was