Infectious Diseases

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

Lr Kravchenko, AA Altn, MV Deridova, MA Lekovich, LM Zaurova, Pediatric Department, Rostov Scientific-Research Institute of Obstetrics and Pediatrics, Rostov-on-Don, Russia; Department of Medical-Biological Problems, Rostov Scientific-Research Institute of Obstetrics and Pediatrics, Rostov-on-Don, Russia

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). 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 newborns without human herpesvirus infection. The level of interferon-α (IFN-α) and interferon-γ (IFN-γ) in the blood was determined by means of the reagent kit for the enzyme-linked immunosorbent assay ProCon IFP2 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 (0.722–1.125) pg/ml] (p < 0.05). The absence of changes in IFN-α level indicates that it performs rather physiological than protective function.

**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.

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

A Alhammady, H Abdalrahman, M Khalifa, EMAN Almuslemani, A Alhodhi, M Janahi, Pediatrics, Weill Cornell Medical and Hamad Medical Corporation (HMC), Doha, Qatar; Pediatrics, Hamad Medical Corporation (HMC), Doha, Qatar

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, including 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 (28.3%) with (68.3%) were not vaccinated, nurses were significantly more likely to be vaccinated than doctors (45.7%) vs (68.3%) 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 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

M Deewe, O Kayabey, ZU Yujan, K Babaglo, ES Arisoy, Department of Pediatrics, Kocaeli University Faculty of Medicine, Kocaeli, Turkey

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 fungai pathogens in endocarditis. Microbiologic diagnosis contributes to successful treatment of Candida endocarditis.

**PO-0176** A CASE OF CUTANEOUS DIPHTHERIA

S Anzar, V Watkins, H Saleh, P Sharma, S Bandi, Paediatrics, Leicester Royal Infirmary, Leicester, UK

A 15 year old girl presented with painful, weeping lesions on both lower limbs. She returned from Ethiopia the day before the
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. Sera from lesions grew group A betahemolytic streptococcus and non-toxigenic Corynebacterium diphtheriae. She was initially started on Peni-
cillin and Fluclouxacinil. Erythromycin was added after the cul-
tures results, as C. diphtheriae was penicillin resistant. She made a
complete recovery following 7 days of antibiotics.
C. diphtheriae is a non-sporing, non-encapsulated and non-
motile gram positive bacilli.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 diph-
theria can be caused by both toxigenic and nontoxigenic 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.

REFERENCES
1 Mandell GL, Bennett JE, Dolin R, editors. Principles and practice of infectious dis-
2 Tiley SM, Kocubia KR, Heron LG, Munro R. Infective endocarditis due to non-toxi-
genic Corynebacterium diphtheriae: Report of seven cases and review. Clin Infect
Dis 1993;16:271–5
entific Publications, 1989
4 Bonnet JM, Begg NT. Control of diphtheria: Guidance for consultants in commu-

PO-0176

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

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 pat-
tern 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 para-
typhi 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 comp-
lication rate was less than 1%.

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