

## 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  $\alpha$  and  $\gamma$  (IFN- $\alpha$  and IFN- $\gamma$ ).

**Aim** To estimate the content of IFN- $\alpha$  and IFN- $\gamma$  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- $\alpha$  (IFN- $\alpha$ ) and interferon- $\gamma$  (IFN- $\gamma$ ) 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- $\gamma$  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- $\gamma$  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- $\gamma$  participation in the process of antiviral defense. The absence of changes in IFN- $\alpha$  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. 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