over the country, Hacettepe University Medical Faculty Obstetrics and Gynecology Department, Obstetrics Unit, in October 2009, just before pandemic influenza vaccine is implemented clinically to evaluate the perception of vaccine. Our study was conducted as applying questionnaire to 86 pregnant women admitting to Hacettepe University Medical Faculty Obstetrics and Gynecology Department, Obstetrics Unit. Age, trimester and gravida of pregnancy, seasonal influenza vaccine status, whether she finds pandemic influenza vaccine necessary was noted after questionnaire. Pregnant women contributing to our questionnaire were between 18–39 years of age, 13 of them were in first trimester, 31 were in second trimester, 42 were in third trimester. Out of 86 pregnant women 66 expresses that they did not find it necessary to have pandemic influenza vaccine. In our study it was found that pregnant women find pandemic influenza vaccine necessary with a percentage of 23.3% and although the study population is small, finding it necessary was not affected by mother’s age, trimester of pregnancy, gravida of pregnancy. The only factor demonstrated to effect the acceptance of pandemic influenza vaccine was having seasonal influenza vaccine. It is very important to inform this group having the major risk, to remind and advise the vaccine in routine controls.

**NEUROBRUCELLOSIS IN CHILDHOOD: FOUR NEW CASES AND A REVIEW OF THE LITERATURE**

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**Background and Aims** Neurobrucellosis accounts for < 1% of cases of brucellosis in children and has a broad range of clinical manifestations. In this report we describe our experience regarding the epidemiological, clinical, laboratory and therapeutic findings in four children with neurobrucellosis.

**Methods** During the past nine years we treated four children with neurobrucellosis in the pediatric department, of Islamic Hospital Amman, Jordan.

The diagnosis was based on epidemiological evidence of brucellosis, as well as Serum & cerebrospinal fluid (CSF) serology, quantitative changes in C.S.F and favorable response to treatment. Therapy consisted of combinations of two or three of the following drugs for three months: rifampin, gentamycin, streptomycin and trimethoprim-sulfamethoxazole.

**Results** The main presenting clinical features included fever, neck stiffness. Neurologic signs appeared during the active phase in two patients and later in their two patients. The interval from onset of symptoms to diagnosis was from 3 days to 5 months. The mean age of children was 7.2 years, and the male: female ratio 3:1.

Brucella anti bodies were detected in all sera with levels ≥ 320 in two cases and ≥ 1280 in the other two cases.

Cultures in the blood or C.S.F for brucella were unrevealing in all patients.

Cerebrospinal fluid showed: lymphocytosis (500–2160) /µl in all cases, elevated proteins in three cases, decreased glucose in two and Brucella microagglutination test titre of ≥ 1:80 in 2 cases.

Treatment was successful in all patients after 12 months.

**Conclusion** We suggest that neurobrucellosis should be considered when neurological manifestations ensues with unknown etiology in endemic areas.

**SALMONELLA TYPHI SEPTICEMIA WITH ACUTE RENAL FAILURE IN A 11 YEAR OLD BOY SECONDARY TO PROLIFERATIVE GLOMERONEPHRITIS: A CASE REPORT**

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An 11 year-old boy was admitted to our hospital because of high fever, gross hematuria and pain in abdomen. He also had hypertension, nephritic range proteinuria with renal failure, for which hemodialysis was required. Salmonella Typhi was isolated from blood culture and was diagnosed to have typhoid fever. In view of low C3 levels, renal biopsy was done, showed evidence of proliferative glomerulonephritis. On discharge, he had mildly deranged renal function with persistence of gross hematuria and proteinuria which gradually resolved over a period of one year. Renal involvement with enteric fever is noticed only in 2–3% cases. The common complications of typhoid related to the urinary tract include cystitis, pyelitis, pyelonephritis, and mild proteinuria. Few cases have been reported of acute nephritic syndrome in typhoid fever requiring renal replacement therapy. Here, we report a case of Salmonella typhi septicemia associated with acute renal failure secondary to proliferative glomerulonephritis requiring renal replacement therapy.

**SLAPPED-CHEEK INFECTIONS IN CHILDREN WITH SEVERE COMPLICATIONS IN PRESCHOOL CHILDREN**

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**Background** The most common illness caused by parvovirus B19 infection is ‘fifth disease’, a mild rash illness that occurs most often in children. The infection often results in no obvious illness. It commonly infects children and typically causes a mild rash that may resemble a ‘slapped-cheek’. Other symptoms that can occur include joint pain (arthralgia), fever and general flu-like symptoms.

**Methods** Children who are at risk of severe parvovirus complications might benefit from blood tests that can help determine if they’re immune to parvovirus or if they’ve recently become infected. Most cases of slapped cheek syndrome diagnosed by making a visual examination of the distinctive rash. No further testing was usually required in children during three years period 2009–2011 in capital town of Bosnia, Sarajevo.

**Results** Parvovirus infection in children with anemia may stop the production of red blood cells and cause an anemia crisis. Children with severe anemia may need to be hospitalized and receive blood transfusions. Percentage of hospitalized of parvovirus infections in children with anaemia is 19% in Bosnian preschool children, what is only less 1% of complications in this disease.

**Conclusions** Fifth disease can cause fetal anemia, which if undetected can have severe consequences. Several days after the appearance of early symptoms, a distinctive bright red facial rash may appear usually on both cheeks. In most children, parvovirus infection is mild and requires little treatment. Slapped cheek is actually the Parvovirus B19 that only affects humans, especially younger children.

**REFRACTORY CASE OF KAWASAKI DISEASE WITH HEMOLYTIC ANEMIA: CORRELATION WITH MYCOPLASMATIC INFECTION**

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**Introduction** Kawasaki Disease (KD) is a systemic disease, usually affecting children 6months-5 years old. Optimal therapy is...
intravenous immune globulin (IVIG) (single dose) and aspirin, in order to prevent development of coronary artery aneurysms. Fever persists in 10–15% of the patients and KD is considered refractory then.

**Case Report** A 15 months old boy, with unremarkable medical history, was admitted with manifestations and laboratory findings of KD. Initially, IVIG (2g/kg) and aspirin (30mg/kg/24h) were given. Fever insisted and there was a further increase of the PLTs and hemolytic anemia was added. A second dose IVIG (2g/kg) was repeated. As fever remained, pulse IV solu-medrol (30mg/kg/24h) was given in 3 days. There was a new recur of the fever and of the laboratory findings, thus a third dose of IVIG (2mg/kg) was administered, with complete recession of all manifestations. The extended laboratory investigation revealed positive IgM antibodies for Mycoplasma pneumonia. During the boy’s hospitalization, cardiologic echograms where normal.

**Conclusions**

1. Refractory KD cases might respond to 2 or 3 doses of IVIG (2g/kg), with the addition of pulse IV solu-medrol or other immunoregulator agents (e.g. infliximab). Since the disease is very rare, there are few controlled available data about the benefits of treatment.
2. Mycoplasma pneumoniae is considered as a trigger factor for KD, by producing superantigens, and can also trigger hemolytic anemia.
3. Though refractory KD is considered as high risk for development of coronary aneurysms, in the case herein, coronary arteries remained intact during all follow up visits.

**RESPIRATORY SYNCYTIAL VIRUS AS CAUSE OF LOWER RESPIRATORY TRACT INFECTION IN YOUNG CHILDREN IN CENTRAL AND EASTERN EUROPE**

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**Background** Respiratory Synctial virus (RSV) infection can cause severe morbidity leading to hospitalization and admission to paediatric intensive care unit (ICU). Limited epidemiological data exist about RSV as cause of lower respiratory tract infection (LRTI) requiring hospitalization in Central and Eastern Europe (CEE).

**Methods** This is a prospective cross-sectional observational multi-country epidemiological study. Children younger than 1 year hospitalized for RRTI between October 2009–April 2010 and/or October 2010-April 2011 are included (two consecutive RSV seasons). We present data on differences in LRTI disease severity comparing RSV detection versus 12.6% RSVnorf group (p<0.001). 41.4% of RSVppos required ICU hospitalization versus 12.6% RSVnorf (p<0.001). RSVppos exhibited a longer mean duration in ICU stay versus RSVnorf (13 days vs 6 days, p<0.001). 2.6% of RSVppos died during hospitalization versus 0.8% RSVnorf (p<0.001).

**Results** 3,474 evaluable subjects were included from 12 CEE countries. In 3,584 cases (96.5%) a RSV rapid test was performed: 1,423 cases (42.4%) were tested RSV positive. Among the RSV positive group, 266 infants were prematurely born (RSVppos), 1,054 presented without risk factors (RSVnorf). Mean hospitalization duration were 17 and 8 days respectively for RSVppos group and RSVnorf group (p<0.001). 41.4% of RSVppos required ICU hospitalization versus 12.6% RSVnorf (p<0.001). RSVppos exhibited a longer mean duration in ICU stay versus RSVnorf (13 days vs 6 days, p<0.001). 2.6% of RSVppos died during hospitalization versus 0.8% RSVnorf (p<0.001).

**Conclusions** Premature infants hospitalized for RSV LRTI exhibit a longer stay in hospital, more frequent and longer stay in ICU and a higher mortality compared with infants without risk factors.