

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 effected 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.

840 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 ther 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) μ l in all cases, elevated proteins in three cases, decreased glucose in two and a Brucella microagglutination test titre of of $\geq 1:80$ 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.

841 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, nephrotic 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 glomeronephritis requiring renal replacement therapy.

842 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.

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

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Introduction Kawasaki Disease (KD) is a systematic 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 (80mg/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 (30/mg/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 pneumoniae*. During the boy's hospitalization, cardiologic echograms were 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.

844 REYE'S SYNDROME AND DISSEMINATED INTRAVASCULAR COAGULATION PRESENTED BY ROTAVIRUS INFECTION

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Rotavirus is one of the leading causes of severe gastroenteritis in childhood, which is an infection known to be limited to the gastrointestinal system. However, a case of extra-intestinal complication developed during rotavirus gastroenteritis is presented here.

Case A five years old patient with febrile convulsion, also having complaints of vomiting, diarrhea, and fever was brought to our hospital. General condition of the patient was bad; she was unconscious and severely dehydrated. Her laboratory findings showed acidosis and renal failure; coagulation tests showed impairment. During her monitoring, gastrointestinal bleeding, increase in liver function test values, hyperammonemia, neutropenia, and hypoglycemia were developed. Rotavirus antigen was found to be positive in the gaita test. Patient's general condition was improved by giving antibiotics, liquids, fresh frozen plasma, and thrombocytes in the early stages after which she was discharged.

Close monitoring of patients with rotavirus gastroenteritis in terms of extra-intestinal complications and applying appropriate treatment in the early stages may save lives.

845 IMPACT OF THREE YEARS INFECTION WITH INFLUENZA A (H1N1) VIRUS IN CHILDREN

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Background and Aim Influenza A virus infection involved the public Health System worldwide so much that on June 2009 WHO announced the disease from epidemic as pandemic. Our purpose was to investigate the incidence, clinical characteristics, treatment

and outcome of H1N1 in children with respiratory tract infection required hospitalization in PICU.

Material and Methods Influenza A in children hospitalized in our unit with respiratory infection during the period April 2009–March 2012 was confirmed by special pharyngeal sample.

Results During this period, 58 out of 322 children were admitted in our Unit with respiratory infection. Seven patients (12%) (4 girls and 3 boys, age 2^{1/2}, 4^{1/2}, 5, 6^{1/2}, 8, 9 and 10 years), all unvaccinated for H1N1, were influenza A infected. Their initial symptoms were:

- Fever > 38° C (5 cases)
- Respiratory infection (2 cases of pneumonitis)
- Bronchial asthma and pneumomediastinum
- Febrile + status epilepticus
- Cardiac arrest, multiorgan failure

Five children needed intubation and mechanical ventilation. Five had underlying disease -two had asthma, one had bronchopulmonary dysplasia and heart disease, and two had cerebral palsy.

Oseltamivir was administered immediately and for 5 days in all cases and in one case, with persistent infection, for 15 days.

The outcome was good in 6 cases and only the child with bronchopulmonary dysplasia and heart disease developed multiorgan failure and eventually died.

Conclusion 12% of patients with respiratory infection in our PICU was H1N1 positive. One patient with severe underlying disease died. 71% need mechanical ventilation and the majority of them had co-morbidities.

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

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Background Respiratory Syncytial 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 LRTI 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 positive premature infants (gestational age ≤ 36weeks) with RSV positive infants without risk factors (gestational age > 36weeks, no congenital heart disease, no bronchopulmonary dysplasia and no neuromuscular disease).

Results 3,474 evaluable subjects were included from 12 CEE countries. In 3,354 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); 1,034 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 0.3% 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.