

patients had low Haemophilus IgG, 79% of patients had low Pneumococcal IgG, and 1% of patients had low Tetanus IgG.

37/48 patients had low FAA; 29 of these patients were recommended to receive booster vaccines. 9/15 of parents reported reduction of RTI post booster vaccine. 10/12 of patients had their FAA documented to have returned to normal.

Conclusions 60% of patients with low FAA had reduced RTI post booster vaccine. FAA should not be done in children less than 13 months of age as the booster dose is due at 12–13 months and a low level may not necessarily change management. FAA is a useful tool for investigating children with recurrent RTI.

907 DIAGNOSING INFECTIOUS MONONUCLEOSIS IN PRIMARY CARE - CASE STUDIES FROM A PEDIATRIC OUTPATIENT CLINIC

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Background Although a common viral disease Infectious Mononucleosis may represent a diagnostic challenge for the primary care physician.

Objectives To describe the clinical and biological features of Infectious Mononucleosis by analyzing cases diagnosed, treated and followed up in an outpatient pediatric clinic.

Materials and Methods We conducted a retrospective study consulting the electronic medical records of all the children who were given the diagnosis "Infectious Mononucleosis" over a period of 3 years.

Results 40 children (aged 2 to 18 years) were given this diagnosis during the studied period. Out of these 3 cases were confirmed not to be "Infectious mononucleosis" being given an alternative diagnosis, 6 cases were not followed up for various reasons and were excluded from the study and 3 cases could not be confirmed because the parents refused blood withdrawal. 26 cases were confirmed serologically (positive Ig M for Epstein Barr virus). Most prevalent symptom was enlarged lymph nodes (84%), followed by altered general status (80.7%), fever (53%), exudative tonsilitis (34.6%). Lymphocytosis and elevated glutamic pyruvic transaminase were the most prevalent biological signs (50%) followed by elevated C reactive protein (42.3%). One case was found with thrombocytopenia and 1 case exhibit signs and symptoms of rhabdomyolysis (elevated CK, LDH, GOT; muscle pain).

Conclusions Infectious mononucleosis may have polymorphic manifestations. One should consider this diagnostic especially when investigating fever that lasts longer than 4 days, enlarged lymph nodes and exudative tonsilitis but be aware of particular forms of this disease.

908 ENVIRONMENTAL RISK FACTORS FOR HEPATITIS A

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Background and Aims Hepatitis A virus (HAV) is an enteric viral infectious disease that is endemic in Turkey. Asymptomatic or sub-clinical infection often occurs in children, and symptomatic acute infections are more common in adolescents and young adults. In this study, we investigated the seropositivity for HAV and the associated socioeconomic factors in children aged between 2 and 18 years.

Methods A questionnaire was administered that addressed gender, age, number of household members, monthly family income, history of jaundice and immunization, number of rooms in the house, education level of the parents, day-care/school attendance, and type of water supply. The socioeconomic status score of each child was determined by summing the scores for monthly family income, education level of the parents, number of rooms in the house and number of people living in the house. Blood samples were collected and analyzed for anti-HAV IgG.

Results Significant associations between anti-HAV seropositivity and socioeconomic status, age under 6 years old and attending day-care, a history of jaundice and monthly family income were found ($p<0.001$, $p=0.003$, $p<0.001$, $p=0.04$, respectively). Only the association between the history of jaundice and anti-HAV seropositivity remained significant in the multivariate analysis, with an adjusted Odds ratio of 13.1 (range: 2.9–59.5; $p=0.001$).

Conclusions Our findings showed an inverse correlation between HAV seropositivity and socioeconomic status. A high in-house population and paternal education level were not a significant factor increasing the risk of anti-HAV positivity. However, as the maternal education level increased, less HAV positivity was recorded.

909 ANALYSIS OF NEWBORN SCREENING - BORN EXPOSED TO TOXOPLASMOSIS IN PREGNANCY ALCIDES CARNEIRO HOSPITAL IN PETROPOLIS - RJ BRAZIL

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Background and Aims Toxoplasmosis is a cosmopolitan infection caused by *Toxoplasma gondii*, clinical features varying from asymptomatic infection to severe systemic manifestations. Brazil has one of the highest incidence rates of congenital toxoplasmosis in the world with estimated rates of 1:3000 live births. Knowledge of the incidence, etiology, pathogenesis, diagnosis and management of infections during pregnancy, childbirth and neonatal period is relevant because it may cause damage to the fetus and newborn, representing a public health problem worldwide. The aim of this study is evaluate the quality of neonatal screening for congenital toxoplasmosis.

Methods Retrospective study based on data collected from the medical records of 39 newborns Alcides Carneiro Hospital (HAC) in Petrópolis, Rio de Janeiro, Brazil, from July 2010 to February 2012 whose mothers had seroconversion for toxoplasmosis during pregnancy. We analyzed maternal serology and treatment and clinical manifestations, laboratory and radiological newborn.

Results Forty percent of pregnant women under which seroconverted in the 3rd trimester of pregnancy, 33% at 2 and 13% in first trimester. Underwent treatment 35%, 15% and 0% respectively. There were no clinical manifestations of congenital toxoplasmosis, all showed negative IgM and IgG positive 62%. In imaging tests, 5% had changed transfontanel ultrasound (49% unknown), 1% funduscopy losses (51% ignored), and skull radiography unchanged (23% ignored).

Conclusion Given the survey data, we conclude that there was poor adherence to native implementation of adequate prenatal care, underestimation of suspected cases with disabilities in serological screening, limited availability of laboratory diagnostic capabilities and imaging.

910 PNEUMONIA IN CHILDHOOD: USE OF PENICILLIN AS MONOTHERAPY TREATMENT

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Background and Aims Pneumonia ranks second in the table of infant mortality in children under 5 years. The incidence of pneumonia is 5–10 times greater in developing countries. This study aimed to identify cases of pneumonia admitted to the Pediatrics Ward of the Hospital Alcides Carneiro, Rio de Janeiro, Brazil, from February to December 2008, which evolved satisfactorily using crystalline penicillin as monotherapy.

Methods Documentary analysis of the children diagnosed with pneumonia. The informed consent and informed about the objectives and procedures of the study was obtained from their legal guardians. Variables: age, sex, diagnosis, length of hospitalization, medication use, hospitalizations and outpatient medical care routine. We excluded children aged less than 61 days and those with chronic diseases.

Results Of 946 children admitted, 147 were diagnosed with pneumonia, outlining our study group. Ages ranged from 3 months to 13 years. Males predominated in 58%. The length of stay ranged from 2 to 38 days. Previous hospitalization occurred in 63 patients, respiratory causes prevalent in 80.55%. The irregular medical monitoring was present in 26 patients (17.69%) and of these, nine (34.6%) are belonging to the group who had had previous admissions.

Conclusion Of all children admitted, 115 (78.23%) started treatment with recommended Crystalline Penicillin, and only 10 (8.7%) required another antibiotic regimen, demonstrating the effective use of penicillin as a treatment of choice.

911 PARACOCIDIOIDOMYCOSIS IN CHILDREN: REPORT OF THREE CASES

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Background and Aims Paracoccidioidomycosis is the most frequent systemic mycosis in Latin America and mainly affects male adults, with a past history of working in rural areas, presenting with chronic pulmonary and mucosal lesions. However is rare in children and the clinical presentation is quite different, seemingly mostly with lymphoma or disseminated tuberculosis. The aim of this study is describe the clinical presentation, evolution and response to treatment of three cases of paracoccidioidomycosis affecting children, living in a city of Rio de Janeiro state, Brazil.

Methods Revision of the clinical charts of children who were admitted in a general pediatric ward of a teaching hospital, with confirmed diagnosis of paracoccidioidomycosis.

Results During a period time of four years, there children (two boys and one girl), were admitted with a subacute clinical picture of a generalized lymphadenopathy (mainly cervical), fever, weighting loss, anemia, with had clinical diagnosis of lymphoma.

There was no apparent pulmonary or mucosal lesions and abdominal ultrasonography showed multiples lymphadenopathies. Biopsy of cervical lymphonode showed *Paracoccidioides brasiliensis*. They were initially treated with amphotericin B and then, followed by oral itraconazol (2 cases) and ketoconazol (1 case) for one year. All had a excellent response to treatment and are being followed at the out patient clinic of infectious diseases, without relapse.

Conclusion In Latin America, Paracoccidioidomycosis should be included in the differential diagnosis of lymphoma and tuberculosis in children presenting with subacute lymphadenopathy and biopsy looking for fungal forms is essential to establish the diagnosis.

912 INCIDENCE OF CYTOMEGALOVIRUS(CMV) PNEUMONIA AMONG CHILDREN PRESENTING WITH SEVERE LOWER RESPIRATORY TRACT INFECTION AT DR GEORGE MUKHARI HOSPITAL

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Background Pneumonia is a major cause of morbidity and mortality in under-five children with about 5million deaths annually in developing countries¹. CMV is responsible for serious morbidity and mortality in immunodeficient children with pneumonia².

Objective To determine the incidence of CMV associated pneumonia in children with severe lower respiratory tract infection (LRTI).

Methods Under-5year children with severe LRTI were enrolled over a 12months period. Severity criteria:accessory muscle use, supplemental oxygen, or assisted ventilation. Anthropometry and HIV status were recorded. Throat swabs were taken for CMV PCR and CMV serology was done. Consent and ethical approval obtained.

Results 107children, aged 2weeks to 46 months (mean 5.96 mths) enrolled. Incidence of laboratory confirmed CMV was 40%(35/87); 67% among HIV-infected and 28% among HIV-uninfected ($p<0.05$). Of 100 children tested for HIV infection, 30% were positive(30/100). The mean ages of HIV-infected and uninfected children were similar (5.83 ± 5.77 vs 5.99 ± 9.43 respectively). There was a slight difference in height-for-age Z-scores between HIV-infected (-2.51 ± 3.22) and uninfected (-1.17 ± 3.41) ($p=0.07$). Incidence of CMV was not associated with age or nutritional status. There were 18 deaths,17% mortality; this was significantly higher ($p<0.01$) among HIV-infected children (40%) than in HIV-uninfected (9%). Mortality was higher amongst those with positive CMV throat swabs (20%) compared to negative CMV throat swabs (12%), (not statistically significant). Children with a positive throat CMV were likely to receive assisted ventilation (17%) compared to those with negative throat CMV (11.5%); not significant ($p=0.058$).

Conclusion Many under-5 children with severe LRTI had laboratory confirmed CMV infection. Incidence and mortality rate of CMV is higher in HIV-infected children and these patients are likely to require assisted ventilation.

913 DETECTION OF RSV TYPES A & B AND INFLUENZA VIRUS TYPES A & B IN CAP BY REVERSE TRANSCRIPTION-MULTIPLEX PCR

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Respiratory syncytial virus (RSV) type A and B, influenza A and B cause about 80% of viral lower respiratory tract infections. Multiplex RT-PCR has a significant advantage in that it permits simultaneous amplification of several viruses in a single reaction facilitating cost-effective diagnosis and perhaps improved clinical management. In this study, our aim was to determine the frequency of Influenza A and B, and RSV types A and B among children with community-acquired pneumonia (CAP), by the use of the newly developed rapid, accurate, and pathogen-specific technique of multiplex RT-PCR. This study is a cross-sectional study involving 24 children admitted to Children's Hospital of Ain Shams University due to severe lower respiratory tract infection (LRTI). Clinical and radiological assessment of all patients were performed followed by molecular analysis of both respiratory and blood samples of all