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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

enrolled patients simultaneously by the use of Reverse Transcription-Multiplex PCR technique (RT-m PCR). Viral pneumonia was detected in one third of enrolled patients (8/24), with predominance of respiratory syncytial virus A (4/8), followed by Influenza A virus (3/8) and Influenza B virus (1/8) while no cases of respiratory syncytial virus B were detected. The same results were identified in both blood and respiratory specimens.

Conclusion Reverse Transcription-Multiplex PCR technique Multiplex has a significant advantage in that it permits simultaneous amplification of several viruses in a single reaction making this well suited for use in epidemiological studies and to improve etiology-directed clinical management of viral pneumonia.

914 CLINICAL FEATURES OF MYCOPLASMA PNEUMONIA AT EARLY AGE CHILDREN

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Background and Aims In recent years the problem of mycoplasma pneumoniae, especially in early age children attracted the attention of pediatricians around the world. Purpose - to study the peculiarities of clinical course of mycoplasma pneumoniae in early age children.

Methods From 2009 to 2011 among children with pneumonia analyzed for the presence of mycoplasma pneumoniae. The study involve 450 children aged 5 months to 3 years. Antibodies to Mycoplasma pneumoniae were detected by ELISA in 60 children. Raising antibodies indicated more than 4 times. Conducted clinical observations, X-ray methods, the method of ELISA for the detection of IgM antibodies to Mycoplasma pneumoniae, DNA display M. pneumoniae in sputum by PCR.

Results Mycoplasma pneumoniae began sharply at 80% of children with high fever, cough was dry and unproductive. Outpatient treatment starting antibiotics penicillin group did not give the effect. Pyrexia over 38°C was observed in 95% of children.

On radiographic studies, the bilateral homogeneous lobular infiltration revealed in the lungs at the majority of children (75%). Segmental nature of the infiltrative changes detected in 5% right-sided focal character pneumonic process occurred in 20%, left-side lung had 9.5% of children. In the analysis of peripheral blood revealed anemia in 25% of children, moderate leukocytosis in 89%, marked lymphocytosis (95%) and accelerated erythrocyte sedimentation rate (89%).

Conclusion For early age children with mycoplasma pneumoniae is characterized by severe intoxication, prolonged dry cough. On the radiograph indicated bilateral focal mainly infiltration. In the hemogram - a moderate leukocytosis, lymphocytosis, ESR acceleration.

915 FURAZOLIDONE AS AN ANTIBIOTIC FOR CHILDHOOD GASTROENTERITIS AND ITS COMPARISON WITH WHO GUIDELINE: IS IT USED STILL?

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Background Furazolidone is an anti-parasitic and anti-bacterial drug that used specifically for Giardia as a second-line choice. Some complications was reported that in 10% of children complication occur with diarrhea-vomiting, in children with lack of G6PD, and in children less than 1 years old this drug is not prescribed and is forbidden. This study was conducted to compare of the prescriptions of Furazolidone for treatment of diarrhea in children with the prevalence of Giardiasis.

Methods This is a cross-sectional study was done in North-west of Iran. As first step, we obtained the prevalence of acute gastroenteritis in this area for 2009 then all of related prescription that had inclusion criteria were evaluated in 2010. Related prescriptions adjusted by Furazolidone using frequencies.

Results In the primary study we found out that the total usage of drugs in first nine month of 2009 as below: 840425 Cotrimoxazole, 619044 Metronidazole, 174817 Furazolidone. There are total 1231 antibiotic syrup prescribed by physicians and pediatricians that 174 (14.1%) of them include the furazolidone. From this amount, 18.9% prescribed for children less than 1 years old, 23.6% prescribed for children 1–2 years old, 14.2% for 2–3 years old, 23.4% for 3–5 years old and 19.1% prescribed for children 5–7 years old. Conclusion: According to Giradia' prevalence (3.5%) and Furazolidone prescribing (174) for acute diarrhea, we can conclude that 75% of usage is more than prevalence of it's indication for acute diarrhea. Further studies and effective training programs are urgently needed to reverse current irrational treatment practices.

916 CLINICAL PARACLINICAL CHARACTERISTIC OF MEASLES IN THE CHILDREN IN THE ENDEMIC REGION

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Background and aims In this article we showed features of duration Measles in children from endemic region.

Methods We investigated 69 children with Measles in age from 3 to 15 months which used treatment in Uzhgorod Regional Clinical Infectious Hospital during 2012 years. All children were conducted by complex anamnestic and clinical paraclinical inspection.

Results 61 children (88.4%) had positive measles Ig M. Nobody of inspected in the past have't Measles and had routine measles vaccination. The first sign of measles were a high fever (55 children, 79.7%). A runny nose, a cough, red and watery eyes, and small white spots inside the cheeks developed in the initial stage. The first elements of rash appeared in patients were on face, which then spread on the neck, overhead part of breast, and on the second days were appeared on a trunk, hands, on the third days on legs. Rash in the prevalence cases was maculopapular, but in 19 children, 27.5% was generally slight; in 4 children, 5.7% patients-slightly hemorrhagic. Duration of rash was amount 4.7 days. Local pneumonia was confirmed in 7 patients (10.1%), in 5 (7.2%) - bronchiolitis, 5 (7.2%) - had obstructive bronchitis. Biochemistry investigation of blood serum identified decline of Albumin-2 (2.8%), Creatinine-22 (31.8%), Protein-23(33.3%), General Bilirubin-2(2.8%), ALT-3(4.3%), AST-31(44.9%), Alkaline Phosphatase-12(17.3%).

Conclusions Routine measles vaccination for children, combined with mass immunization campaigns in countries with high case and death rates, are key public health strategies to reduce global measles complication.

917 ROTAVIRUS DIARRHOEA IN THE CHILDREN FROM ENDEMIC REGION

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Background and aims: In Ukraine frequency of Rotavirus infection (RI) contain 35–75% of all cases of acute intestinal infections. Methods We investigated 90 children with rotavirus infection (age 1–5 years), which used treatment in the infectious hospital during 2011 year. The group of children with RI distributed by gender signs: boys — 47 (52.2%), girls — 43 (47.8%). And by age: 1–3 years - 60 (66.6%), 3–4 years - 20 children (22.2%), after 4 years - 10 children 11.1%).