

agents followed by symptomatic medications of which decongestants were the most prevalent. On average, the number of drugs per prescription was 3.86. The combination of amoxicillin + clavulanate and azithromycin were the most prescribed antimicrobials.

Conclusions Overall, prescriptions of antimicrobials among pediatric patients suffering from RTIs were appropriate. There is scope for further improvement through formulation of institutional antibiotic guidelines for common RTIs.

903 MULTIDRUG RESISTANT CLONES OF CA-MRSA ISOLATED FROM CHINESE CHILDREN AND THE RESISTANCE DETERMINANTS TO CLINDAMYCIN AND MUPIROICIN

doi:10.1136/archdischild-2012-302724.0903

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This study aims to correlate the multidrug resistance (MDR) and ST clones of community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA), to identify the genes responsible for clindamycin and mupirocin resistance in *Staphylococcus aureus* (SA) isolated from pediatric hospitals of Mainland China. Up to 435 SA isolates were collected. The findings indicated that in comparison with community-associated methicillin-susceptible *S. aureus* (CA-MSSA), the resistance rates of CA-MRSA to ciprofloxacin, chloramphenicol, gentamicin and tetracycline were higher. The resistance rates to clindamycin and erythromycin were high (92.0% and 85.9%, respectively) in CA-MRSA. The MDR rates were 49.6%, 100% and 14% in CA-MRSA, HA-MRSA and CA-MSSA isolates, respectively. Five of seven ST (sequence typing) clones in CA-MRSA, namely ST59, ST338, ST45, ST910 and ST965, had MDR rates of more than 50% (67.9%, 87.5%, 100%, 50% and 83.3%, respectively). The constructive phenotype of macrolide-lincosamide-streptogramin B (MLSB) resistance (69%) and the ermB gene (38.1%) predominated among them. The resistant rate to mupirocin was 2.3%, and plasmids carrying the mupA gene varied in size between 23 and 54.2 kb in 6 strains with high-level resistance by Southern blot. The present study showed that the resistance to non- β -lactam antimicrobial agents, especially to clindamycin, was high in CA-MRSA isolated from Chinese children and the profile of resistance was related to clonal type.

904 COMPARISON OF CLINICAL AND MICROBIOLOGICAL FEATURES OF VULVOVAGINITIS IN PREPUBERTAL AND PUBERTAL GIRLS

doi:10.1136/archdischild-2012-302724.0904

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Objective Vulvovaginitis is the most common gynecological problem of childhood. The aim of the study was to determine and compare clinical and microbiological features of vulvovaginitis in prepubertal and adolescent girls.

Material and Methods In this retrospective study, the records of patients who were diagnosed with vulvovaginitis between January 2005 and December 2010 in the Pediatric outpatient clinic at Fatih University Hospital were retrieved. Information regarding age, symptoms, history of antibiotic use within 1 month prior to presentation, findings on urinalysis, serum antistreptolysin-O levels, and results of urine/vaginal cultures was collected.

Results The records of 112 patients were evaluated, 72 of which were prepubertal (64.2%) and 40 were pubertal (35.7%) at the time of diagnosis. Thirty-eight prepubertal patients (52.7%) had a positive result on vaginal culture, the most commonly encountered

microorganism being group A beta hemolytic streptococcus (15.2%). Culture positivity rate in the pubertal group was 47.5% (19 patients), with *Candida albicans* being the most frequently isolated microorganism (27.5%).

Conclusion The etiopathogenesis and culture results differ between prepubertal and adolescent girls with vulvovaginitis, which should be taken into consideration in the treatment approach of this disorder.

905 INCIDENCE OF BRONCHIOLITIS HOSPITALIZATIONS IN THE PEDIATRIC TEACHING HOSPITAL ALCIDES CARNEIRO - PETRÓPOLIS - RIO DE JANEIRO - BRAZIL

doi:10.1136/archdischild-2012-302724.0905

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Background and Aims The Bronchiolitis is the most common cause of hospitalization among infants under 6 months in developed countries and less than 1 year in developing countries. Respiratory syncytial virus is the main etiologic agent responsible for 60–80% of cases during the months of autumn and winter. The objective of this study was to describe the incidence of bronchiolitis in our country compared with the international literature.

Methods A transversal descriptive study of patients admitted to the pediatric ward of the Teaching Hospital Alcides Carneiro - Petrópolis - RJ in the period June 2006 to June 2010 with clinical and radiological diagnosis of bronchiolitis. Excluding cases associated with underlying disease. We studied seasonal distribution, gender, age distribution, the most prevalent complications and hospital stay.

Results The bronchiolitis accounted for 5% of total admissions during the study period. Of these, 63% were male and mean age of 5.4 months in hospital stay of 7.5 days. Complications occurred in 48% of cases: pneumonia, atelectasis, 78.4% and 3.2%. For fall-winter seasonality in 74% and 22.3% incidence in the month of May.

Conclusions This study demonstrates the seasonal nature and prevalence of males, age range and prevalence of pneumonia as the most frequent complication. The percentage of hospitalizations in this study in relation to the total number of hospitalizations is referenced by the above literature.

906 FUNCTIONAL ANTIBODY ASSAY: HOW USEFUL IS IT IN RECURRENT RESPIRATORY TRACT INFECTIONS?

doi:10.1136/archdischild-2012-302724.0906

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Background and Aim Recurrent respiratory tract infection (RTI) is a frequent presenting complaint in the general paediatric clinic. Children are often tested to screen for possible underlying immunodeficiency and Cystic Fibrosis. We aim to evaluate the indications for performing functional antibody assay (FAA) and how the results affected our clinical management.

Methods We retrospectively studied children who had FAA (*Haemophilus*, *Pneumococcus*, and *Tetanus*) sent over a 1-year period in our district general hospital. Clinical records were examined for patient's characteristics and FAA results.

Results Between September 2010 and September 2011, 48 patients had FAA performed. Ages ranged between 1 and 18, with 6% under 13 months old, and 85% under 8 years old. In 77%, FAA was performed because of recurrent RTI; 10% because of other recurrent infections; and in 13% no indication was documented. 35% of

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

doi:10.1136/archdischild-2012-302724.0907

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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 diagnose during the studied period. Out of these 3 cases were confirmed not to be "Infectious mononucleosis" being given an alternative diagnostic, 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

doi:10.1136/archdischild-2012-302724.0908

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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 TOXOPLASMOIS IN PREGNANCY ALCIDES CARNEIRO HOSPITAL IN PETROPOLIS - RJ BRAZIL

doi:10.1136/archdischild-2012-302724.0909

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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 Petropolis, 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

doi:10.1136/archdischild-2012-302724.0910