

despite receiving Intravenous antibiotics for presumed partially treated meningitis. He also received IVIG for the suspicion of atypical Kawasaki. Computerised tomography of the head and abdomen and bone marrow studies were also inconclusive. The mother subsequently revealed that a previous child had died during infancy with prolonged fever and no specific diagnosis. This alerted the treating physicians to the possibility of immunodeficiency. Our patient had received BCG vaccine at birth without any complications, and three gastric aspirate samples were negative for tuberculosis. A broncho-alveolar lavage was performed, despite the absence of any respiratory symptoms, to exclude any unusual organisms causing prolonged fever. The broncho-alveolar lavage revealed mycobacterium tuberculosis which was resistant to Isoniazid and the patient was started on appropriate anti-Tuberculous medications. The total immunoglobulin counts and Flow cytometry were suggestive of SCID.

Conclusion Pulmonary Tuberculosis should be considered as a differential diagnosis of FOU, especially in infants with suspected or proven SCID. Attaining a good family history is crucial in early diagnosis of SCID and hence possibly in saving lives.

PO-0009 INCREASED PNEUMOCOCCUS RESISTANCE TO ANTIBIOTICS AND DIFFICULTIES REGARDING THERAPEUTIC OPTIONS

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Background During childhood pneumococcus (*S.pneumoniae*) is identified not only in nasopharynx (carriers), but also as etiological agent in conjunctivitis, respiratory airways infections, meningitis etc. Choosing the optimal therapy is difficult due to: prolonged time necessary to antibiotic sensitivity test (AST) achievement, difficulty to perform it and pneumococcus strains growing resistance. In Romania vaccination against *S.pneumoniae* is not offered in routine immunisation program.

Aims 1. To analyse resistance spectrum for *S.pneumoniae* strains; 2. Establishing empirical therapeutic decisions according to pneumococcus resistance profile in our county.

Methods During October 2011–January 2014, there were performed AST for *S.pneumoniae* using Vitek AST-P576 cards. Samples origin 10 nasal secretions, 21 conjunctival secretions, 12 ear samples, 4 hemocultures, 1 cerebrospinal fluid sample, 1 urine culture. Correlated with minimal inhibitory concentration to penicillin, strains were divided into: sensitive, intermediate, resistant (penicillin resistant pneumococcus-PRP). Authors took also into consideration for AST: Amoxicillin (AMX), Cefotaxime (CTX), Ceftriaxone (CRO), Eritromicine (E), Levofloxacin (L), Vancomycin (VA), Trimethoprim-Sulfamethoxazole (SXT).

Results Among 51 validated AST, authors noticed: 58.8% Penicillin resistance (30 PRP strains); 43.7% AMX resistance; 38 E resistant strains (82.6%); 74.5% SXT resistance; for CRO resistance reached 33.3%; 21.5% CTX resistance. All strains were sensitive for L, VA.

Conclusions 1. Authors observed increased resistance to penicillin, E and STX in our county; 2. Therapeutic options are limited in *S.pneumoniae* infection; 3. According to resistance pattern, authors restrict use of macrolides and STX in otitis media (most frequent etiological agent is *S.pneumoniae*); 4. In severe infections, therapeutic choices are CTX, CRO, VA; 5. Implementation of educational measures is important in order to avoid antibiotic overuse.

PO-0010 THE PHYSICIANS APPROACH TO COMMUNITY-ACQUIRED PNEUMONIA IN CHILDHOOD

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Background and aims Diagnosis and treatment guidelines for community-acquired pneumonia (CAP) are prepared to avoid differences for the diagnosis and management of CAP between physicians. We investigated the approaches of physicians to diagnosis, laboratory findings, treatment and the compatibility with guidelines for CAP.

Method A total of 322 doctors were interviewed face to face and a 12 item-questionnaire including diagnosis, investigation, treatment criteria and drug choices was filled by the physician.

Results Contrarily to the guidelines 6.9% of physicians preferred auscultation and chest radiography (CXR) and did not use the symptoms for diagnosis. Only 11.8% preferred symptoms and diagnostic investigations. 58.8% did not use CXR, CBC and CRP, 24.5% did not use CXR, CBC, CRP and ERS and 4.9% of them did not prefer any investigations. Also routine CXR to confirm CAP in outpatient setting children is not recommended by guidelines physicians preferred CXR at high percentage. Physicians did not preferred Amoksisilin for mild CAP between 3 months - 2 years old children, 55% preferred parenteral treatment with ampicillin/sulbactam. Parenteral Seftriakson was preferred for hospitalised patients (>5 years) with severe pneumonia. 49.7% of physicians preferred ten day duration of therapy, 17.1% stopped treatment after disappearance of symptoms and auscultation findings, 13.7% completed the treatment after improvement of CXR.

Conclusion Physicians applied different approaches to the diagnosis and treatment of CAP in infants and children. According to our findings, we suggested that physicians should be educated about approaches for treatment of CAP according to guidelines.

PO-0011 LENGTH OF STAY IN INFANTS AND CHILDREN HOSPITALISED WITH ACUTE BRONCHIOLITIS: RSV VERSUS NON-RSV

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Background Respiratory Syncytial Virus (RSV) is a common lower respiratory tract viral infection. RSV and a wide variety of other respiratory viruses are common triggers for bronchiolitis.

Aim To determine the length of stay in infants with acute RSV bronchiolitis vs. Non-RSV.

Materials and methods A retrospective study was conducted at Hamad Medical Corporation (HMC). Infants and children ages 0 to 18 months hospitalised with acute bronchiolitis from October 2010 to March 2013 were included. The data collected: age at diagnosis, sex, direct fluorescent antibody (DFA) and length of stay.

Results The study included 838 infants, mean age 3.6(±3.5) months, and boys constituted 60%. DFA was conducted on 770 infant, where 352 were RSV positive (45.7%), 142 were RSV negative (18.4%) and other non-RSV viruses (Adenovirus, Rhinovirus, Influenza Virus, Parainfluenzavirus, and Bocavirus) 276 (35.8%). The mean length of stay for RSV-positive was 8.03 days, 95% C. I. (7.26–8.79), and 6.94 days, 95% C. I. (5.89–

8.00) for RSV-negative compared to 9.76 days, 95%CI. I. (8.31–11.21) for other non-RSV. The p value was 0.723 when comparing the length of stay in infants who tested positive RSV to those tested negative RSV, while the p-value was (0.059) when comparing RSV-positive to other non-RSV viruses. There was a statistically significant difference in length of stay for RSV negative compared to other non-RSV viruses ($p = 0.010$).

Conclusions Our data showed, there is no difference in length of stay in infants hospitalised with RSV-positive bronchiolitis compared to the group with RSV-negative; however the length of stay was statistically significant longer with Non-RSV viruses compared to RSV-negative infection.

PO-0012 MANAGING CHILDREN WITH PROTRACTED BACTERIAL BRONCHITIS

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Introduction It is important that health professionals consider a list of differential diagnoses when faced with a child with chronic cough (acute cough usually lasts less than three weeks). Potential causes include: asthma, cystic fibrosis, foreign body aspiration, anatomical abnormalities of the airways and other disorders.

Studies have shown that children with chronic wet cough often have bronchitis and this is evident on bronchoscopy. Protracted bacterial bronchitis (PBB) is defined as persistence of isolated wet cough lasting more than four weeks and responding to antibiotic treatment.

Diagnosis Clinical is achieved by presence of wet cough lasting >4 weeks. It is primarily a neutrophilic disease and presence of respiratory bacterial pathogens has been demonstrated in bronchoalveolar lavage. Prolonged course of oral antibiotics of 2–3 weeks is suggested as the initial therapy. Treatment is likely to result in symptom resolution and may minimise the risk of developing bronchiectasis. Chest X-ray may be performed in some cases and will be found to be normal in most instances. Sputum culture may also be sent in older children.

Diagnosis may be confirmed by bronchoscopy with BAL followed by bacterial study; however, such an invasive approach may not be deemed necessary or may not be readily available in most cases.

Treatment The British Thoracic Society (BTS) advises using four to six weeks of oral antibiotics.⁴ In the absence of a bacterial culture a prolonged course of either amoxicillin or a macrolide antibiotic is suggested in most children with PBB.

PO-0013 THERAPEUTIC PRACTICE OF ACUTE RESPIRATORY INFECTIONS IN YOUNG CHILDREN

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Background In Moldova, acute respiratory infections (ARI) constitute 2/3 of infant morbidity and are in the top causes of mortality in last 20 years.

The aim of the study was to analyse the practical aspects of ARI treatment in young children in the light of national and international guidelines.

Materials and methods It was performed a retrospective study of 100 medical records of inpatients with IRA hospitalised in 2012. Mean age of patients was 12.58 ± 1.09 months, including 66% of infants. Analysis included: clinical signs of disease onset, clinical outcome and cause of hospitalisation, laboratory tests, home and in hospital treatment, treatment compliance with guidelines.

Results The most common syndrome at admission was fever (36% patients), but antipyretics were administered at lower levels than considered febrile, contrary to international guidelines.

In 93% cases were given anti-viral drugs, mucolytics, topical treatment, in 45% cases – antibacterial treatment. The antibiotics used at home were not according to local protocols in 31% cases. The average length of home treatment was 4.6 ± 0.3 days.

Serum levels of leukocytes ($8.9 \pm 0.35 \times 10^9/l$) at admission were not suggestive of bacterial aetiology.

Antibacterial treatment was applied in all patients. Antibiotic was changed within the first 24 h in 35.3% of children, after 48 h of hospitalisation – in 14.7% children, and after 72 h or more – in 50% children. Unjustified polypharmacy was found in 51% cases.

Conclusion Antibacterial treatment of ARI is not always according national and international protocols, but there are divergences between national and international guidelines.

PO-0014 OTITIS MEDIA IN CHILDREN WITH RECURRENT SOMATIC PATHOLOGY

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Background and aims Subclinical evolution of otitis media (OM) in childhood predetermines late diagnostics and treatment, chronicity and complications. We compared incidence and clinic evolution of otitis media in children with recurrent somatic pathology and healthy children.

Methods We monitored middle ear status of children at the age between 1 and 7 years with recurrent respiratory pathology (Group R), recurrent gastrointestinal pathology (Group G), and healthy children (Group H) by tympanometry and otoscopy during 1 year. Complete audiological assessment and otomicroscopy were carried out in children who failed the screening tests during 3 months. Treatment approaches included medical and surgical methods and treatment of somatic pathology. Surgical findings in different groups were compared.

Results There were significant dependence of OM development and evolution from somatic pathology and age of children. OM chronicity rate was 35% in group R, 16% in group G and 4% in group H. Chronic and recurrent forms of OM correlated to respiratory tract infection-prone children, aged younger than 5 years of life. Chronic inflammatory changes of tympanic cavity were most evident in Group G.

Conclusions High rate of OM chronicity was predetermined by somatic pathology. These groups of patients needed comprehensive diagnostics and intensive treatment, including the surgical