PO-1032 EFFICACY OF THE INHALATION THERAPY WITH COLISTIMETHATE SODIUM IN PS. AERUGINOSA INFECTION IN INFANTS WITH CYSTIC FIBROSIS

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Background Ps.aeruginosa pulmonary infection in children with cystic fibrosis (CF) is a major problem with negative impact on the evolution of disease and quality of life in these patients.
Aim Elucidate the efficacy of the inhalation therapy with Colistin in children with CF and Ps.aeruginosa pulmonary infection.
Methods The study included 15 children with CF and Ps. aeruginosa pulmonary infection aged 1.5 to 4-year, who underwent bacteriological examination of bronchial secretion before and after treatment with titration diagnosis of germ.
Results In the step of including in inhalation therapy with Colistimethate sodium 13 children (86.6%) had BMI 14.48 ± 0.15, which during 1–1.5 years increased significantly to 16.32 ± 0.2 ($p < 0.036$). All children included in the study suffered from pulmonary infection with Ps. aeruginosa diagnostic titer from 10^8 to 10^3 micr/ml. After the treatment with Colistin the infection was eradicated in 6 children (40%), in 8 children (53.3%) the concentration decreased up to 10^5–10^3 micr /ml and in only one case the titer of Ps.aeruginosa bronchial secretions remained unchanged (10^4 micr/ml).
Conclusion Antibacterial inhalator therapy with Colistimethate sodium in infants with CF, affected by Ps.aeruginosa pulmonary infection, produces beneficial effects on the nutritional status of children, offers high chance (40%) eradication of this infection and improves the prognosis of the disease.

PO-1033 MIXED VIRAL-BACTERIAL AND VIRAL-VIRAL ALVEOLAR PAEDIATRIC COMMUNITY-ACQUIRED PNEUMONIA (PCAP)BEFORE THE START OF BROAD-BASED PNEUMOCOCCAL VACCINATION

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Introduction Early etiologic diagnosis can help for effective treatment of PCAP as well as for elaboration of guidelines of empirical antibioticotherapy of PCAP.
Objectives The aim of the study was to detect the etiological viral and bacterial agents in children with X-ray confirmed alveolar PCAP.
Material and methods From May 2011 until December 2012 we prospectively enrolled 118 children with a diagnosis of X-ray confirmed alveolar PCAP admitted to hospital. Sputum cultures were taken for microbiology. Respiratory secretion samples also were analysed by multiplex real time PCR (Seeplex RT-PCR Magicplex; Seegene, Korea) for 9 viruses and 6 bacteria. A real-time PCR assay was used to identify the rhinovirus in the enterovirus / rhinovirus positive samples. Children were divided into two groups: 3 months – 4 years (1st) and 5–17 years (2nd).
Results 104 children (88.1%.) were positive for at least one virus: the most frequently detected was adenovirus (33.9%.). Rhinoviruses were significantly more frequently detected in 1st group ($p < 0.05$). Viral co-infections with 2–7 viruses were found in 47 children (39.8%). *S.pneumoniae* and *H.influenzae* were detected using PCR more often than in microbiological cultures in 1st group. Correlation was found between adenovirus and *S.pneumoniae* in 1st group ($p = 0.012$) and between HMPV, rhinoviruses and *S.pneumoniae* in 2nd group ($p = 0.01$ and $p = 0.021$ respectively).
Conclusions The results of the study confirmed high incidence of viral-bacterial as well as viral-viral infection in alveolar PCAP. It was found virus specific co-infection in pneumococcal PCAP in preschool and school age children.

PO-1034 THE USE OF CT IN THE MANAGEMENT OF PAEDIATRIC PLEURAL EFFUSION

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Background Current UK (British Thoracic Society, 2005) guidance recommends that CT is not routinely used in the initial investigation of pleural effusion in children. Ultrasound is recommended to confirm the presence of pleural fluid and to guide drain insertion. However, optimal imaging is also essential in delineating 'simple' parapneumonic pleural effusion from necrotising pneumia with complications.
Method We review the evidence comparing ultrasound to CT imaging for paediatric pleural effusion and present four cases where early CT imaging could have altered clinical outcomes.
Results Three cases presented with complete unilateral 'white-out' on chest X-ray, limiting the information available about the underlying lung parenchyma from that modality. These patients had a total of six ultrasound scans, only one of which identified underlying parenchymal complications. All three patients had evidence of necrotic pneumonia; one developed a pneumatocele post percutaneous drainage; two required surgical management and had evidence of bronchopulmonary fistula formation, one in conjunction with diaphragmatic necrosis and perforation. The fourth patient had a discrepancy between chest X-ray and ultrasound findings and also went on to develop pneumatocele following percutaneous drainage.
Discussion Previously published evidence and our case series show that ultrasound is less successful than CT at identifying lung necrosis in the setting of paediatric pleural effusion. The early use of CT may help to reduce length of hospital stay by avoiding inappropriate percutaneous drainage and subsequent complications or by prompting earlier surgical intervention.

PO-1035 A LARGE PLEURAL EFFUSION IN A WELL CHILD - THINK ABOUT THE PANCREAS!

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Although pleural effusion is a recognised (if unusual) complication of pancreatitis in adults, it is very rare in children.

We present the case of a nine year-old male patient, previously well,who presented after a holiday in Thailand with chronic back pain. Initial investigations were clear but he was admitted two weeks later with a massive right sided pleural effusion requiring repeated draining. Investigation showed no evidence of infection or malignancy, but he had a serum amylase level of 2096 (normal <106) and a pleural level of 35,240. His blood film showed an eosinophilia up to 2.5×10^9/L (normal <0.4). Pancreatic ultrasonography and a subsequent MRCP and ERCP revealed material in an ectatic pancreatic duct with a