

HITH patients were older, more likely to have failed prior oral antibiotics, less likely to have periorbital rather than limb cellulitis. Inpatients required longer IV treatment. Readmission rates, adverse events and rates of change of treatment were similar.

Conclusion Some children with moderate/severe cellulitis can be treated via HITH with IV ceftriaxone in this non-randomised study however further prospective work is required to define the most appropriate sub-group.

Primary Care: Infections

PS-374a PREDICTORS OF BACTERIAL COMMUNITY ACQUIRED PNEUMONIA IN CHILDREN: PRELIMINARY RESULTS FROM CAPES (COMMUNITY ACQUIRED PNEUMONIA AETIOLOGY STUDY)

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Background The majority of childhood community acquired pneumonia (CAP) in developing countries is believed to be bacterial in origin. However, the predictors of bacterial versus non-bacterial (viral) pneumonia are not clearly defined. This is essential for judicious use of antibiotic therapy.

Objective To determine the microbiologic aetiology of childhood CAP in India, and determine the predictors of bacterial pneumonia.

Methods Children (1 month–12 years) fulfilling World Health Organisation criteria for pneumonia (cough or difficult breathing, and tachypnea; for <7 days) were enrolled through a two-year (April 2011–March 2013) surveillance programme. Pneumonia severity was assessed using WHO criteria. Nasopharyngeal aspirate (NPA) culture, blood culture, IgM anti-Mycoplasma pneumoniae and IgM anti-Chlamydia pneumoniae were examined. Demographic characteristics, clinical profile, presence of ‘risk factors’, clinical examination findings, and radiographic features were evaluated as predictors of bacterial aetiology.

Results 2333 children with CAP were enrolled. 61% were 5–12 years. Figure 1 presents the pneumonia severity. Bacterial pathogens were isolated in 12.7% NPA cultures with Pneumococcus (n = 223), Staphylococcus aureus (n = 27), and Haemophilus influenzae (n = 23) predominating. Blood culture yielded bacteria in only 3.3%. S. aureus (n = 25), Gram negative bacilli (n = 21), and Alpha-hemolytic Streptococcus (n = 15) predominated.

Pneumococcus (n = 3) accounted for a minority. Serology for Mycoplasma and Chlamydia were positive in 4.4% and 1.6% samples respectively (Figure 2A,2B).

Table 1 highlights the unadjusted odds ratio for various factors explored as predictors of bacterial aetiology. Exposure to over-crowding at home appeared to be associated with a lower risk of bacterial aetiology, whereas exposure to tobacco smoke was associated with higher risk. None of the other factors predicted bacterial aetiology.

Conclusion The majority of childhood community acquired pneumonia appears to be non-bacterial in origin. Bacterial aetiology could not be predicted by demographic, clinical, or radiographic features, that are usually believed to be associated with bacterial aetiology.

Ventilation

PS-375 CAN LUNG ULTRASOUND CHANGE RESPIRATORY DISTRESS MANAGEMENT IN NEWBORNS?

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Background Lung ultrasound (LUS) has become an important method for diagnosis and monitoring of lung disease. Advantages over chest radiography include precision, low cost, simplicity, bedside care and specially avoids radiation.

Respiratory failure in late preterm infants (>32 weeks gestational age) and term infants is usually based on clinical and radiological (x-ray) manifestations.

However etiologic diagnosis in the early stage is difficult (respiratory distress syndrome (RDS), surfactant consumption or transient tachypnea) raising doubts in treatment (ventilation, surfactant administration, antibiotics) and short and medium term evolution.

Aims 1. Assess whether LUS is as effective as the usual clinical diagnostic methods in the neonatal respiratory distress in late pre terms infants and term infants.

2. Check if initial LUS has a prognostic value in the need for respiratory support.

Materials and methods From January through April 2014 were enrolled all late preterm infants and term infants consecutive admitted in NICU with respiratory distress (prenatal malformation diagnosis were excluded).

A blind neonatology performed LUS at admission and through first hours income without interrupting routine neonatologist clinical management.

Abstract PS-375 Table 1

LUS diagnosis	Number of cases	Concordance with clinical diagnosis (%)	x-ray (%)	performed	Non invasive ventilation (NIV)	Hours of NIV (mean)	Mechanical ventilation (MV)	Hours of MV (mean)	Surfactant
NNT	28	93% NNT	96%		96%	7.4	0%	0	0%
RDS	9	100% RDS	100%		100%	116.8	78%	84.3	89%
MAS	2	100% MAS	100%		100%	60	100%	84	0%
BL+	3	33% NNT	100%		100%	12.6	0	0	0%
BL	2	50% NNT	100%		50%	4	3.5	0	0%
AL	5	100% Normal	80%		100%	3.5	20%	3	0%
NT	1	100% NT	100%		0%	1	0%	0	0%