Spoken sessions

REFERENCES

S74 IS BRONCHOSCOPY NEEDED IN CHILDREN WITH PERSISTENT BACTERIAL BRONCHITIS?
RK Narang, K Bakevell, J Peach, S Clayton, M Samuel, J Alexander, W Lenney, FJ Gilchrist; Academic Department of Child Health, University Hospital of North Staffordshire, Newcastle Road, Stoke-on-Trent, United Kingdom. 10.1136/thoraxjnl-2013-204457.81

Introduction and Objectives Persistent bacterial bronchitis (PBB) is increasingly recognised as a cause of chronic cough in young children but there is lack of consensus about investigation and treatment. At UHNS, children with a wet cough for >6 weeks unresponsive to oral antibiotics prescribed by the GP are investigated with CXR, baseline immune function and flexible bronchoscopy with bronchoalveolar lavage (FB-BAL). Patients with confirmed PBB are then treated with a prolonged course of an appropriate antibiotic. Some centres reserve FB-BAL for those who do not respond to blind treatment with co-amoxiclav or clinically relapse. The objective was to review bronchoscopic findings and immune function in children with chronic cough to determine which investigations are necessary.

Methods A retrospective case note review of all children investigated for chronic cough between May 2011 and June 2013.

Results The notes of 44 children with chronic cough were reviewed. BAL samples were taken from 6 lobes in every patient. Median (IQR) age at bronchoscopy was 3.3 (1.8–4.4) years. Positive BAL cultures were obtained from 35 patients (80%). Ten (23%) isolated ≥2 organisms. Haemophilus influenzae was identified in 20 (46%), Moraxella catarrhalis in 11 (25%), Staphylococcus aureus in 10 (23%) and Streptococcus pneumoniae in 6 (14%). Candida albicans, Group A Streptococcus, Haemophilus parainfluenzae and a gram negative bacillus were each identified in 1 patient (2%). In 13 (30%) at least 1 organism was isolated that was unlikely to respond to co-amoxiclav. If the right middle lobe (RML) had been the only lobe sampled (as per ERS guidance) organisms would have been missed in 14 patients (32%). Suboptimal functional antibodies to Haemophilus influenzae or Pneumococcus were identified in 7 patients (16%). Appropriate antibiotics were prescribed for all patients with a positive culture. Co-amoxiclav was the most commonly prescribed antibiotic and was used in 20 patients (57%). Treatment duration varied between 4 and 8 weeks.

Conclusions FB-BAL is a useful investigation to aid the diagnosis and guide treatment in PBB. The best time to perform FB-BAL is not known. In PBB a number of organisms will be missed if BAL is only taken from the RML.

S75 THE DEVELOPMENT AND VALIDATION OF A CLINICAL SEVERITY SCORE FOR INFANTS WITH BRONCHIOLITIS
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Introduction and Objectives Bronchiolitis is a viral lower respiratory tract infection of infancy.1 1–3% of all infants are admitted to hospital with 3% of hospitalised infants requiring critical care.2

Objective To develop and validate a scoring instrument for use by healthcare professionals (HCPs) in infants with bronchiolitis which has clinical utility.

Methods Psychometric methods were used to develop the scoring instrument and to test the instrument for validity and reliability in a variety of clinical locations.

Results Item generation, reduction & instrument development: 101 items were identified from the literature and focus group workshops (families & HCPs). Consensus for importance was achieved for 45 items (Table 1) following a Delphi survey of 195 HCPs. A scoring instrument with 12 domains was developed.

Abstract S75 Table 1. Signs, symptoms & risk factors.

<table>
<thead>
<tr>
<th>Respiratory Symptoms</th>
<th>Risk Factors &amp; Miscellaneous symptoms</th>
<th>Level of Consciousness</th>
<th>Hydration &amp; Perfusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Tracheal tug</td>
<td>27. HIV immunodeficiency</td>
<td></td>
<td>42. Sunken eyes</td>
</tr>
<tr>
<td>8. Respiratory pattern</td>
<td>28. Gestational age (~37 weeks)</td>
<td></td>
<td>43. Sunken fontanelle</td>
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<tr>
<td>9. PaCO2 on blood gas analysis</td>
<td>29. Low birth weight</td>
<td></td>
<td></td>
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<tr>
<td>10. Ph on blood gas analysis</td>
<td>30. Bacterial or viral co-infection</td>
<td></td>
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</tbody>
</table>

Level of Consciousness
31. Alertness
32. Irritability
33. Drowsiness
34. Responds to pain
35. Unresponsive
36. AVPU scale (alert, verbal, pain, unresponsive)

Hydration & Perfusion
37. Feeding
38. Urine output
39. Central capillary refill time measured over a given time
40. Peripheral perfusion
41. Mottled appearance
42. Sunken eyes
43. Sunken fontanelle
44. Heart rate
45. Pallor