

P67 CHARACTERISTICS AND AETIOLOGY OF NON-CF BRONCHIECTASIS IN EAST LONDON CHILDREN

SMN Brown, C Pao, R Smith. *Barts Health NHS Trust, London, UK*

10.1136/thorax-2019-BTSabstracts2019.210

Introduction Worldwide, non-cystic fibrosis bronchiectasis is a significant cause of morbidity and mortality, particularly in indigenous communities, and prevalence is higher than cystic fibrosis (CF). Despite this, research into non-CF bronchiectasis is limited. Often the aetiology is unknown and presumed to be secondary to a significant respiratory infection. We sought to characterise our cohort of non-CF bronchiectasis patients with regard to aetiology and disease progression.

Method We identified children within our service with a radiological diagnosis of non-CF bronchiectasis through a retrospective review of patient notes. We excluded those with a confirmed diagnosis of primary ciliary dyskinesia

Results We identified 15 children with non-CF bronchiectasis. Patient details are outlined in table 1. All patients except one had undergone a chest CT scan in the past 2 years (with the interval between scans being at least 2 years). All patients had stable image findings with no disease progression. One patient had resolution of bronchiectasis (secondary to inhaled peanut). Staph aureus was the most frequently encountered pathogen - reported in 40% [6] patients over the past year.

Conclusion This is a limited data set but highlights some areas of note worth further exploration. The aetiology was varied but a significant proportion had historical aspiration or infantile respiratory infection. It is therefore worth considering aspiration as a potential aetiology in these patients. 33% of patients had been admitted to hospital over the past year and FEV1 was quite varied implying a spectrum of disease severity. There was no evidence of radiological disease progression suggesting that disease stability with appropriate management is possible.

Abstract P67 Table 1 Patient characteristics and aetiology of bronchiectasis

Aetiology	Number of children (n=15)
Severe infantile respiratory infection	3
Historical aspiration	4
Endobronchial TB	1
Peanut inhalation	1
Adenovirus with obliterative bronchiolitis	1
Unclear	3 (one with IgA deficiency)
Eosinophilic lung disease	1
Familial bronchiectasis with ABPA	1

Patient Characteristics	Results (% or median with IQR)
Female (%)	53
Age at diagnosis (years)	5 [4–13]
Recent FEV1 (% predicted)	74 [64–111]
Hospital admission over the past year (%)	33 [5]
Nebulised hypertonic saline (%)	47 [7]
Prophylactic azithromycin (%)	80 [12]
Antacid (%)	73 [11]
Steroid inhalers (%)	33 [5]

P68 THE MANAGEMENT OF ACUTE WHEEZE- WHAT DO PAEDIATRIC TRAINEES DO?

L Duthie, V Currie, P Nagakumar. *Birmingham Children's Hospital, Birmingham, UK*

10.1136/thorax-2019-BTSabstracts2019.211

Background Current guidelines of acute management of wheeze in children are open to interpretation (Keeley:2018). Individual clinician preference and many 'local guidelines' influence the initial management by the frontline paediatric trainees. We hypothesised that there is greater variation in practice with acute preschool wheeze than the school age children with acute asthma.

Methods Online survey of paediatric trainees in West Midlands using three clinical scenarios of children of different ages presenting with acute wheeze. Trainees were asked to select the most appropriate management plan out of giving inhalers, nebulisers or 'back to back therapy'. Following reassessment trainees were then asked for the next line of treatment

Results 82 responses from ST1-ST8 trainees between March and July 2019. 85% were managing at least one child with wheeze every day. 66% of respondents had a minimum of 3 years of paediatric experience.

In a pre-school child with wheeze and saturations of 94%, 77% of trainees gave 10 puffs of salbutamol as initial treatment. 34% would give 2 further bronchodilators 'back to back' after initial improvement.

In both cases of older children with asthma, half of trainees gave a nebuliser an initial therapy despite the oxygen saturations >92% at presentation.

20% of respondents understand the term 'back to back' to mean an interval of between 15 and 30 minutes.

97% of trainees give written wheeze information to families with 87.5% opting for 3 day salbutamol weaning plan at discharge.

Conclusions Contrary to our hypothesis, the survey demonstrates that there is more consistency in the initial management of preschool wheeze compared to older children with asthma.

This may reflect the service pressures to decide about admitting or discharging the child rather than an uncertainty about clinical situation.

In older children where clinical assessment is more predictable, surprisingly, half of the trainees administered nebulised bronchodilators despite normal oxygen saturations. Older children may have had inhalers for a period of time (not acknowledged in current BTS guidelines) prompting trainees to take a different approach.

Discharging children with a Salbutamol weaning plan is unique to the UK practice (Levy:2018) which needs to be addressed by prospective studies.

P69 THE UNCERTAIN ROLE OF SPIROMETRY IN MANAGING CHILDHOOD ASTHMA IN THE UK 2019

SW Turner. *University of Aberdeen, Aberdeen, UK*

10.1136/thorax-2019-BTSabstracts2019.212

Introduction Asthma guidelines recommend that spirometry should be used for monitoring the condition in children. Surprisingly there is no link between rising or falling spirometry