British Thoracic Society
National Paediatric Bronchiectasis Audit 2013

National Audit Period: 1 October – 30 November 2013

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Introduction

The first national paediatric bronchiectasis audit took place in October - November 2013. Previous rounds of the BTS Bronchiectasis Audit included both adults and children, but from 2012, the care of bronchiectasis in adults and children will be audited separately. The standards for this audit are drawn from the BTS Guideline for non-CF bronchiectasis (1). Readers may also wish to note the BTS Quality Standards for clinical significant bronchiectasis in adults published in 2012 (2).

31 institutions took part in the first round of the BTS National Paediatric Bronchiectasis Audit, producing a dataset of 260 clinical records. The children included in the audit had a mean age of 9.5 years (standard deviation 4.5) and 52% were female. The diagnosis of bronchiectasis was by chest CT in 87%, clinically in 9% and not known in 4%.

Key points

The investigations of underlying aetiology are variably carried out (see Figure 1 below). 86% having immunoglobulins to exclude hypogammaglobulinaemia, 37% being tested for allergic bronchopulmonary aspergillosis, 69% having a sweat test to exclude cystic fibrosis with only 20% had cystic fibrosis genotypying. 30% had tests to exclude aspiration and Primary Ciliary Dyskinesia had been excluded in 29%. 25% had co-existent asthma.

Only 75% had seen a physiotherapist to teach chest clearance techniques. Regarding long term management, 35% receive inhaled corticosteroids, 16% nebulised saline of which 56% were using hypertonic saline (7%). No patients received carbocysteine or mannitol but 6% received DNAase. 11% received long term (ie more than 28 days) inhaled antibiotics, of which 93% received colomycin and 60% received long term oral antibiotics and the most commonly used was azithromycin (63%, Table 1).

In conclusion the BTS National Audit has highlighted significant heterogeneity in how bronchiectasis in children is managed in clinical practice.

Points for quality improvement:

1] Children with bronchiectasis and ongoing symptoms should be seen by a respiratory physiotherapist to be taught chest clearance.

2] A comprehensive investigation for underlying aetiology should be undertaken in all.

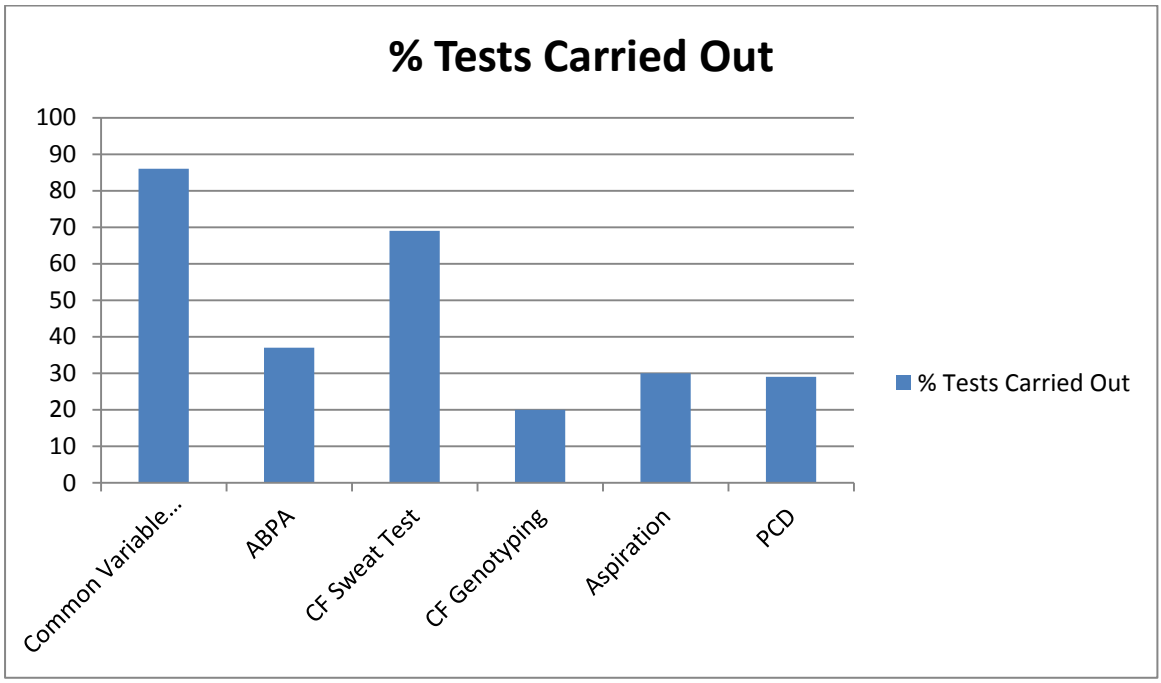

Figure 1: Investigations of underlying aetiology

Long Term Management	%
Seeing a physiotherapist	75
Inhaled corticosteroids	35
Hypertonic saline	16
DNAase	6
Carbocysteine	0
Mannitol	0
Inhaled antibiotics >28d	11
Oral antibiotics >28d	60

Table 1: Management of paediatric bronchiectasis

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References:

1. British Thoracic Society guideline for non-CF bronchiectasis. Pasteur MC, Bilton D, Hill AT; British Thoracic Society Bronchiectasis non-CF Guideline Group. Thorax. 2010 Jul;65 Suppl 1:i1-58.
2. BTS Quality standards for clinically significant bronchiectasis in adults 2012. http://www.brit-thoracic.org.uk/Portals/0/Guidelines/Bronchiectasis/244457_BTS_Quality_Standards_Bronchiectasis.pdf