

9 (26%) patients experienced mild side effects. FEV₁ improved significantly at 4 weeks (1.53 vs 1.41 p = 0.01). Leicester Cough Questionnaire improved significantly at 4 weeks (mean total score 13.7 vs 11.8 p = 0.0003) with a mean difference in LCQ of 1.9 (minimum clinically important difference MCID > 1.3²). St Georges Respiratory Questionnaire improved significantly at 6 months (mean total score 56.1 vs 67.8 p = 0.01) with a mean difference of 11% (MCID > 4%³).

Conclusions In this uncontrolled study, HTS was well tolerated and resulted in improved lung function and quality of life in patients with non-CF bronchiectasis.

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P105 OUTPATIENT SURVEY OF PATIENT EXPERIENCE OF HYPERTONIC SALINE USE IN NON-CYSTIC FIBROSIS BRONCHIECTASIS

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Introduction and Objectives Hypertonic Saline (HTS) is known to accelerate tracheobronchial clearance and is felt to provide a useful adjunct to physiotherapy for airway clearance in bronchiectasis¹. Previous studies have demonstrated improvement in lung function, quality of life and healthcare utilisation with the use of HTS in non-CF bronchiectasis². We have surveyed use and patient experience of HTS in our non-CF bronchiectasis clinic.

Method All patients seen in our non-CF Bronchiectasis clinic over a four month period were invited to answer a questionnaire. Questionnaires were filled in anonymously and either returned to a box in clinic or by post.

Results A total of 96 patients returned a questionnaire. Overall 114 patients were invited to respond, resulting in a response rate was 84%. 55 respondents (57%) were current or past users of HTS, with 36 (65%) of these still using HTS. 49 (89%) of those who had used HTS had done so for at least a month. The percentage of patients using HTS who indicated an improvement in Airway Clearance, Breathlessness and Quality of Life, were 80%, 60% and 67% respectively. Of the 19 patients who had stopped treatment, only 6 (32%) did so due to side effects. The total number of patients who had experienced side effects was 10 (18%).

Conclusion Our survey demonstrates that a significant proportion of attendees to our non-CF Bronchiectasis clinic are taking, or have taken HTS treatment. Continued treatment is supported by positive feedback by patients on impact on symptoms and quality of life, as well as reasonable tolerability and side effect profile.

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P106 LUNG CLEARANCE INDEX IS A REPEATABLE TEST OF LUNG FUNCTION AND SUPERIOR PREDICTOR OF CT SCAN ABNORMALITIES IN BRONCHIECTASIS

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Introduction In cystic fibrosis, lung clearance index (LCI) is a sensitive predictor of CT scan determined lung pathology. In bronchiectasis (BE) there is a need for improved markers of lung function to gauge disease severity and response to interventions in clinical trials.

Aims To assess if LCI is a repeatable and superior predictor of CT scan abnormalities compared with FEV₁ in BE.

Methods 60 patients with stable BE were recruited. LCI (using SF₆ multiple breath washout), spirometry and CT scores were collected. Health related quality of life (HRQoL) was measured using the St. George's Respiratory Questionnaire. A separate group of 30 BE patients were recruited and LCI, spirometry and HRQoL were assessed when clinically stable on 2 occasions, 2 weeks apart.

Results Mean (SD) age was 62 (10) years, FEV₁ 76.5 (18.9)% predicted, LCI 9.1 (2.0) and total CT score 14.1 (10.2)%. FEV₁ negatively correlated with LCI (r = -0.51, p < 0.0001.) Across all CT score subscales, there was clear evidence of a relationship with LCI, with no or very weak evidence of any additional effect of FEV₁. The strongest correlations of subgroup CT scores with LCI were seen in),% parenchymal score (r = 0.56, p < 0.001), % mucus plugging (r = 0.49, p < 0.001),% total score (r = 0.55, p < 0.001)% bronchiectasis (r = 0.41, p < 0.01. There was no association for either FEV₁ or LCI with% airway thickening and for % bronchiectasis score and FEV₁. There were no significant associations between LCI or FEV₁ and HRQoL. The inter-visit ICC for LCI was 0.94 (95% CI 0.89 to 0.97, p < 0.001).

Conclusions LCI is a valid and repeatable test of lung function in BE. It is a superior predictor of lung function than FEV₁ in the detection of abnormalities demonstrated on CT scan. LCI is a useful test in patients with early lung disease or those with preserved spirometric scores. LCI also has the potential to be an alternative outcome measure to spirometry in clinical trials.

P107 IMPLICATIONS OF ADVERSE DRUG REACTIONS TO ANTIBIOTICS IN THE MANAGEMENT OF BRONCHIECTASIS

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Introduction and Objectives Antibiotic adverse reactions present a challenge when choosing appropriate treatment for patients with Bronchiectasis. We explored our data for antibiotic allergy and microbiological resistance in Bronchiectasis patients in a specialist clinic at the Queen Elizabeth Hospital Birmingham.

Methods We collected retrospective and prospective data on 243 patients from our Bronchiectasis clinic. We limited our microbiological data to colonised or most recent sputum culture.

Results We have 243 patients on our register. There were 84 (34.6%) males and 159 (65.6%) females. Bronchiectasis was confirmed in 234 patients with CT (Computerised Tomography) scan. The most common aetiology was post-infective.