Double pneumonia and other infections

P201 LIVING YOUR LIFE WITH BRONCHIECTASIS: AN EXPLORATION OF PATIENTS AND CARERS INFORMATION NEEDS INFORMING DEVELOPMENT OF A NOVEL INFORMATION RESOURCE

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Introduction/background Bronchiectasis is a chronic lung condition, causing breathlessness and chronic productive cough, with intermittent infective exacerbations. Patients often have recurrent hospital admissions, poorer quality of life, and significant fatigue. Treatment concordance can be problematic. There is little patient information currently available, yet information and education could support patients to self-manage, improve understanding and optimise engagement with treatment. Previous exploratory interviews with patients suggested that a lack of credible patient information was available and that having information could help patients learn to live with and manage their condition.

Aims/objectives

1. To further identify, explore and understand the information needs of patients with bronchiectasis and their carers.
2. To co-develop, with the user group, a novel patient information resource.

Methods In-depth interviews were conducted with 17 people who have bronchiectasis and 9 carers. Three focus group style workshops were subsequently held with 11 patients and 3 carers in total. All were recruited from respiratory clinics in the North of England. Interviews and workshops were audio-recorded and transcribed and thematic analysis was undertaken to identify common themes.

Results Ages ranged from 33 to 78 years, including both newly diagnosed and longstanding patients. The focus of the interviews was to identify, explore and understand information needs. A core mediating issue emerged, however: what it means to learn to live your life with bronchiectasis. Embedded in this journey are issues around developing support and coping mechanisms, how people learn to connect with information and how they start to take back control and develop new, active, partnerships with the medical team.

Using these qualitative data in the workshops, we co-developed a novel online and paper-based information resource for patients and their families. This resource is currently being piloted in a feasibility study comparing use of the resource to usual care.

Conclusions Understanding patient and carer experiences of living with bronchiectasis, the biographical disruption (s) that it imposes and the ways in which patients and carers connect with health information over time, has enhanced our understanding of their information needs and how these could be met. The outcomes of the feasibility study are expected in March 2016.

P202 ASSESSMENT OF BRONCHIECTASIS SCORING SYSTEMS: A LONG TERM COHORT STUDY

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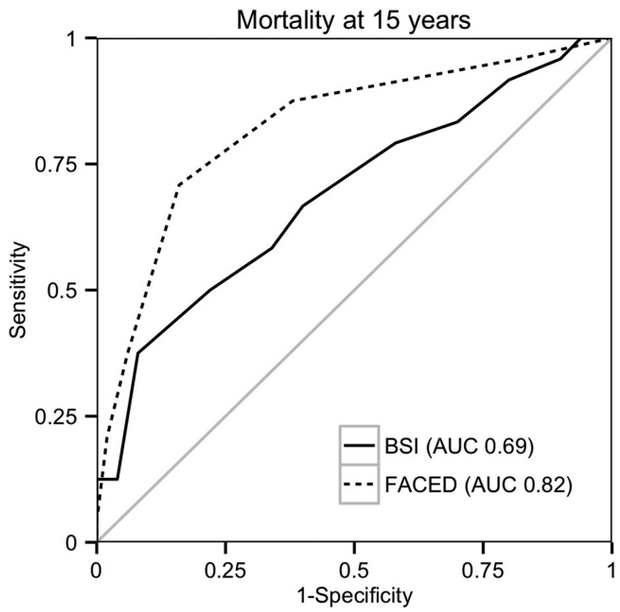
Introduction Bronchiectasis is a chronic, disabling illness with an unpredictable clinical course. Two multidimensional scores have been developed to predict mortality in bronchiectasis: the bronchiectasis severity index (BSI) and the FACED score.[1,2] This study is a retrospective cohort study aiming to compare these scores and test their ability to predict long-term mortality in bronchiectasis.

Methods Data was obtained for 74 subjects with bronchiectasis who had previously taken part in research at our centre. BSI and FACED scores were calculated and outcomes were ascertained after a median of 18.8 years follow-up. Receiver operator characteristic (ROC) curves for mortality were generated and survival between groups compared using univariate Cox proportional hazards analysis.

Results Both scoring systems had similarly excellent predictive power for 5-year mortality, with area under the ROC curve (AUC) 0.79 for BSI and 0.8 for FACED. Both scores were also able to predict 15-year mortality (Figure 1), with the FACED score showing superior predictive power (AUC 0.82 vs 0.69 $P = 0.0495$). For both scores subjects with high scores had an increased risk of death compared to the low scoring group (hazard ratio (HR) for death 3.6 for BSI $P = 0.02$, 12.5 for FACED $P < 0.001$). The intermediate scoring FACED group was also at an increased risk of death (HR 5.9 $P < 0.001$), whereas the intermediate BSI group was not (HR 1.4 $P = 0.58$). The BSI tended to assign higher scores; accordingly the high BSI group was larger (33 vs 6 subjects) with a lower mortality (57% vs 83%) than the equivalent FACED group.



Abstract P202 Figure 1

Conclusion This study demonstrates the ability of the BSI and FACED score to predict mortality in bronchiectasis over a far longer period than previously described. Such tools will be

valuable for stratification in clinical trials and for identifying individuals in a higher risk group for intensified treatment.

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P203 WITHDRAWN: A DESCRIPTION OF IMMUNOLOGICAL AND SPECIFIC ANTIBODY PROFILE IN A COHORT OF NON-CF BRONCHIECTASIS PATIENTS

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P204 RISK FACTORS FOR REQUIRING INTRAVENOUS ANTIBIOTIC THERAPY DELIVERED IN HOSPITAL FOR EXACERBATIONS OF BRONCHIECTASIS

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Introduction Recurrent exacerbations requiring IV antibiotic therapy are a feature of advanced bronchiectasis. Our group has previously established the safety and efficacy of domiciliary antibiotic therapy compared to inpatient hospital treatment for exacerbations of bronchiectasis. In this study we aimed to identify factors at presentation that could predict the requirement for inpatient antibiotic therapy compared to domiciliary antibiotic therapy.

Methods We assessed the management of bronchiectasis exacerbations referred to a specialist respiratory unit over a 1-year period (April 2013 to 2014). All patients received 10 to 14 days of IV antibiotic therapy and were assessed at the beginning and end of their treatment course. We assessed demographic data, treatment outcomes, morbidity, mortality and 30-day readmission rates. Logistic regression analysis was performed to identify factors predictive of the treatment modality used.

Results A total of 72 patients were treated with 131 courses of IV antibiotic therapy. Thirty-six cases (27.5%) were managed as inpatients, 20 cases (15.2%) required initial admission and subsequently received early supported discharges (ESD) to complete IV antibiotic therapy at home and 75 cases (57.2%) received domiciliary IV antibiotics.

Logistic regression showed that Charlson Co-morbidity Index was independently predictive of the requirement for inpatient antibiotic therapy ($p = 0.03$). White Cell Count at presentation was also positively associated with the requirement for inpatient antibiotic therapy approaching statistical significance ($p = 0.05$).

There were no mortalities in the ESD or domiciliary antibiotic groups but 2 mortalities (5.6%) were noted in the inpatient group (Table 1). Morbidity in the inpatient, ESD and domiciliary antibiotic groups were 8.3%, 5.0% and 2.9% respectively ($p = 0.40$). The median length of stay before early supported discharge was 7 (interquartile range 7 – 9) days. Thirty-day readmission rates were 11.1%, 25.0% and 2.7% respectively (2×3 Chi-square; $p < 0.05$). Total bed days saved from ESD and domiciliary antibiotic therapy was 1153 days (interquartile range 9–14).

Conclusions Our study has demonstrated that the Charlson Co-morbidity Index is the independent risk factor that predicts the need for inpatient intravenous antibiotic therapy in exacerbations of bronchiectasis. Those patients that received domiciliary treatment received it safely.

Abstract P204 Table 1 Biochemical indices, Morbidity, Mortality and 30-day readmission between treatment groups

	Inpatient (n = 36)	Early supported discharge (n = 20)	Domiciliary (n = 75)
WCC (Median)			
Pre	9.6	12.5	8.1
Post	8.3	7.8	7.1
CRP (Median)			
Pre	21	34.5	13.5
Post	10	9	5
ESR (Median)			
Pre	29	50	26
Post	28	32	18.5
Morbidity	8.3% (3)	5% (1)	2.9% (2)
Mortality	5.6% (2)	0	0
Access related complications	2.8% (1)	5% (1)	1.3% (1)
Anaphylaxis	0	0	0
Readmission within 30 days	11.1% (4)	25% (5)	2.7% (2)

P205 ADMISSION TRENDS AND OUTCOMES OF INDIVIDUALS WITH BRONCHIECTASIS ADMITTED TO ADULT GENERAL CRITICAL CARE UNITS IN ENGLAND, WALES AND NORTHERN IRELAND

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Introduction Whilst studies suggest increasing incidence and mortality from bronchiectasis in UK, there are sparse data on outcomes of individuals with bronchiectasis admitted to intensive care (ICU). We investigated trends in bronchiectasis admissions to ICU and estimated outcomes in patients with bronchiectasis admitted to ICU compared to a better studied group, i.e. Chronic Obstructive Pulmonary Disease (COPD).

Methods We used data from the Intensive Care National Audit and Research Centre (ICNARC), a database of patient outcomes from adult critical care units across England, Wales and Northern Ireland. 95% of adult critical care units contribute data to ICNARC which includes information from 1.5 million individuals. Admissions from bronchiectasis and COPD from 1/1/2009 to 31/12/2013 were extracted. Bronchiectasis admissions included patients whose primary or secondary reason for admission was exacerbation of bronchiectasis, excluding people with cystic fibrosis. COPD admissions were those whose primary or secondary reason for admission was either COPD with acute lower respiratory infection; or COPD with acute exacerbation. Patients with COPD-bronchiectasis overlap were excluded. ICU mortality was defined as status on leaving ICU.

Results There were 614,352 admissions across 219 critical care units during the study period, 536 (0.1%) of which were from