units but this is not felt to account for the high *Pseudomonas* rates. Ongoing surveillance of individual and geographically local microbiological profiles is important in managing patients with nCF-Br.

Abstract P240 Table 1 Longitudinal study of sputum microbiology in adult non-CF bronchiectasis

	Isolated*	Colonising†
Organism	n (%)	n (%)
Haemophilus influenzae	75 (52)	47 (33)
Pseudomonas aeruginosa	62 (43)	50 (35)
Streptococcus pneumoniae	42 (30)	13 (9)
Coliforms (including *Klebsiella sp, Serratia sp, Proteus sp, E. Coli and Enterobacter cloacae*)	42 (30)	13 (9)
Moraxella catarrhalis	39 (27)	9 (6)
Staphylococcus aureus	34 (24)	12 (8)
Aspergillus sp.	13 (9)	3 (2)
Stenotrophomonas maltophilia	12 (8)	2 (1)
MRSA	5 (3)	3 (2)
Acinetobacter sp.	5 (3)	3 (2)
Achromobacter xylosoxidans	4 (3)	2 (1)
Non-tuberculous mycobacteria	4 (3)	1 (0.7)
Comamonas testosteroni	2 (1)	1 (0.7)
Others	9 (6)	1 (0.7)
No organism isolated	28 (20)	

*Organism isolated from a patient one or more times within a 1-year period.
†Organism cultured on at least two occasions, 3 months apart within a 1-year period.

REFERENCES

1. **King PT,** *et al*. Microbiologic follow-up study in adult bronchiectasis. *Respir Med* 2007.
2. **Pasteur MC,** *et al*. An investigation into causative factors in patients with bronchiectasis. *Am J Respir Crit Care Med* 2000.

P241 FUNCTIONAL IMPAIRMENT IN PATIENTS WITH BRONCHIECTASIS

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Background Patients with bronchiectasis have impaired quality of life and exercise capacity[1]; however, other functional impairments have not been fully evaluated. We hypothesised that patients with bronchiectasis would have impaired functional activities; reduced grip strength, increased timed up and go test (TUG) and increased fatigue which would be associated with reduced quality of life (QoL).
Methods We studied 20 (4 male) clinically stable patients with bronchiectasis and 20 age, sex and smoking matched controls. In all subjects FEV_1%, BMI, TUG, grip strength and 6 minute walk distance (6MWD) were measured. The TUG is a measure of functional mobility which records the time for a person to stand up from a chair, walk 3 m, turn around and sit down again. All subjects completed the multidimensional fatigue inventory which includes five domains of fatigue (each scored out of 20, higher scores indicate greater fatigue), and a self-reported physical activity score. Quality of life was measured in patients using the validated Saint Georges Respiratory Questionnaire (SGRQ).[2]
Results Patients and controls had similar demographics (Abstract P241 Table 1). However, patients had increased TUG and reduced grip strength and 6MWD compared to controls. They also reported greater fatigue and reduced physical activity. In patients, the TUG was inversely related to grip strength ($r=-0.528$, and 6MWD ($r=-0.478$), (both $p<0.05$) but not fatigue, QoL or FEV_1%. The 6MWD related directly to all domains of fatigue (except mental) and the SGRQ (all $p<0.05$). All domains of fatigue (except mental) related to total SGRQ.

Abstract P241 Table 1

	Controls (n=20)	Patients (n=20)
Age (years)	62 (36–69)	65 (42–80)
FEV_1 (% predicted)	105.1 (9.1)	67.8 (25.8)**
BMI (kg/m^2)	25.1 (4.6)	25.8 (4.3)
6MWD (m)	498.8 (86.4)	352.5 (115.8)**
Time up and go (s)	7.0 (5.3–8.0)	8.5 (7.0–17.8)**
Handgrip (kg)	27.3 (14.0–44.5)	23.5 (15.0–41.0)*
Physical activity score (METs)	39 (29–75)	33 (26–47)*
General fatigue	10 (4–13)	16 (5–20)**
Physical fatigue	6.5 (4–11)	13.5 (5–20)**
Reduced activity	6 (4–9)	10 (4–20)**
Reduced motivation	5.5 (4–8)	9 (4–16)**
Mental fatigue	8 (4–15)	8 (4–19)

*$p<0.05$, **$p<0.001$.
Data are mean (SD), or median (range).
6MWD, 6 min walk distance; METs, metabolic equivalents.

Conclusions Patients with bronchiectasis have impaired functional activities and increased fatigue. Fatigue may result in reduced physical activity and reduced endurance (measured by 6MWD) which affect QoL more than short-lived functional activities.

P242 THE TREATMENT OF *PSEUDOMONAS AERUGINOSA* (PA) IN NON-CF BRONCHIECTASIS

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Introduction Pseudomonas aeruginosa (PA) is a common bacteria in bronchiectasis, and infection with PA is associated with worsening symptoms that may lead to an accelerated decline in FEV_1.
Aims To review the current treatment of infection with PA, at the Regional Respiratory Centre, City Hospital Belfast to determine the success rate of eradication treatment and to assess if PA had any impact on lung function following 3 months of treatment.
Methods Medical notes of patients that had positive culture for PA requiring nebulised antibiotic treatment from August 2007 to October 2008 were reviewed. Where available, data relating to antibiotic therapy prescribed, presence of PA and lung function was recorded at the start of treatment, following 1 month of treatment and following 3 months of treatment.
Results Data from 91 patients, mean age (SD) 65 (11) years, baseline FEV_1 1.5 (0.7) %, FVC 58 (21.4) % were analysed. 58/91 (64%) patients had a first ever recorded isolate of PA and 29/91 (32%) had previous sputum cultures with PA. First line treatment included oral ciproxin (n= 49/91; 54%) and IV anti pseudomonal antibiotics (n=27/91; 30%). 10/91 (11%) did not have a complete treatment due to side effects. Mean (SD) treatment duration of oral ciproxin was 3.67 (2.1) weeks; range 2–12 weeks. Patients were also prescribed nebulised antibiotic treatment: colomycin (n=84/91; 92%) and tobramycin (n=7/91; 8%). After 1 month of nebulised treatment (n=76) 55/76 (72%) had eradicated PA. Following 3 months of treatment (n=83), treatment of new isolates of PA in sputum was successful in eradication in 57/83 (69%) of patients. No improvements in lung function were noted.