

European Respiratory Society Annual Congress 2013

Abstract Number: 3387
Publication Number: P4388

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Infections **Keyword 2:** Bronchiectasis **Keyword 3:** No keyword

Title: Species differences in NTM pulmonary disease (pNTM)

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Body: Background: pNTM represents a heterogeneous group of species with varying pathogenicity, making management challenging. Aims: To describe the distribution and clinical features of species causing pNTM. Methods: pNTM cases were identified and recruited from a tertiary referral clinic over 6 months. They underwent clinical assessment and lung function testing. Results: 57 cases were recruited; their details are shown in table 1. There was significant variation in species amongst disease groups ($p=0.0004$) with *M. avium* complex (MAC) more common in bronchiectasis and *M. xenopi* in COPD. There was also variation between sex ($p=0.024$), with MAC more common in females and *M. abscessus* in men. There were no significant differences in lung function, BMI, SGRQ or the proportion requiring treatment.

Table 1

	MAC	<i>M. kansasii</i>	<i>M. xenopi</i>	<i>M. abscessus</i>	<i>M. malmoense</i>	<i>M. fortuitum</i>	<i>M. simiae</i>
Total	31	8	6	5	3	3	1
Female	25 (81%)	3 (38%)	4 (67%)	1 (20%)	2 (67%)	1 (33%)	1 (100%)
Age diagnosed (y)	59.7	65.1	60.9	66.7	67.5	65.9	46.9
Diagnosis							
Bronchiectasis	22 (71%)	5 (63%)	0	2 (40%)	2 (67%)	0	1 (100%)
COPD	0	2 (25%)	4 (67%)	2 (40%)	1 (13%)	1 (33%)	0
None	6 (19%)	1 (13%)	1 (17%)	1 (20%)	0	0	0
Other	3 (10%)	0	1 (17%)	0	0	2 (67%)	0
FEV1*	1.57	1.38 (55%)	1.39 (55%)	1.21 (42%)	1.76 (68%)	2.04 (69%)	-

	(62%)						
FVC*	2.67 (88%)	2.96 (90%)	3.12 (105%)	3.02 (84%)	3.91 (115%)	3.46 (96%)	-
TLCO*	4.89 (61%)	4.75 (58%)	5.32 (66%)	5.54 (60%)	5.82 (71%)	4.50 (54%)	-
SGRQ	41.2	51.1	46.6	47.3	18.5	65.8	79.1
BMI (kg/m ²)	21.8	23.7	20.5	21	23.1	24.9	25.8
Ever treated	11 (35%)	2 (25%)	3 (50%)	2 (40%)	2 (67%)	0	0

*SI units (% predicted)

Conclusion: Species vary with underlying disease. Despite perceived differences in pathogenicity, the proportion requiring treatment did not vary significantly between species.