

European Respiratory Society Annual Congress 2013

Abstract Number: 3856

Publication Number: P4387

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Infections **Keyword 2:** Bronchiectasis **Keyword 3:** Tuberculosis - diagnosis

Title: Isolation of *M. abscessus* from patients with *M. avium* complex (MAC) lung disease

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Body: MAC and *M. abscessus* lung diseases occur predominantly in females with bronchiectasis. Both organisms are sometimes isolated from the same patient (Griffith et al, ARRD 1993, 147; 1271-8). In that circumstance, the clinical significance of *M. abscessus* may be difficult to determine. Between 2006 and the present we identified 53 patients treated for MAC lung disease who also had *M. abscessus* isolated from sputum. Patients were 92% female, age 73.2 ± 7.6 yrs and divided into 2 groups. Group 1 consisted of 32 patients not diagnosed with clinically significant *M. abscessus* infection. Group 1 had 1.4 ± 0.9 *M. abscessus* isolates per patient out of 39.3 ± 19.4 total cultures per patient. 25/32 (78%) patients had only 1 *M. abscessus* isolate. Group 2 consisted of 21 patients with clinically significant *M. abscessus* infection who had 15.0 ± 11.1 *M. abscessus* isolates per patient out of 41.7 ± 19.4 total cultures per patient ($p < 0.001$ vs Group 1). Group 1 patients had significantly more frequent isolation of other water-associated mycobacteria (*M. gordonae*, *M. terrae*, etc.) than Group 2 patients, 41% vs 14% ($p < 0.05$). There was no difference in the frequency of isolation of bronchiectasis-related bacterial pathogens (*Pseudomonas*, *Stenotrophomonas*, etc.) between Groups 1 and 2 (86% vs 81%). In Group 2, 11/21 (52%) patients were treated for *M. abscessus* infection including 5/9 (56%) diagnosed with concomitant MAC and *M. abscessus* infections. Determining the clinical significance of *M. abscessus* isolates in MAC lung disease patients is generally not difficult, however, due to the many challenges of *M. abscessus* treatment, therapeutic decisions remain quite difficult.