

Acute exacerbation of bronchiectasis secondary to *Achromobacter xylosoxidans* in a patient with *Mycobacterium-Avium* Intracellulare infection

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Published: 14 December 2023

Introduction: We report the rare case of a patient with known history of *Mycobacterium-avium* intracellulare (MAI) presenting with bronchiectasis exacerbation due to multidrug resistant organism (MDRO) *Achromobacter xylosoxidans*.

Case Presentation: A 79-year-old female with history of acquired bronchiectasis secondary to MAI infection presented with worsening dyspnea and pleuritic chest pain for 1 month duration. Chest auscultation revealed coarse breath sounds bilaterally and CT chest showed diffuse bronchiectasis with multifocal bronchial opacification bilaterally and diffuse bronchial wall thickening.

Laboratory testing showed normal immunoglobulins, cyclic citrullinated peptide, antinuclear antibody and alpha-1-antitrypsin levels. Flexible fiberoptic bronchoscopy with bronchoalveolar lavage showed copious amounts of mucopurulent secretions. Respiratory culture was negative for acid fast bacilli and fungal smear but positive for *Achromobacter xylosoxidans*.. Sensitivity testing showed resistance to multiple antibiotics including cephalosporins, penicillin, fluoroquinolones, aztreonam, and aminoglycosides. Patient received trimethoprim/sulfamethoxazole for 1 week and reported improvement in symptoms.

Conclusion: A 79-year-old female with history of acquired bronchiectasis secondary to MAI infection presented with worsening dyspnea and pleuritic chest pain for 1 month duration. Chest auscultation revealed coarse breath sounds bilaterally and CT chest showed diffuse bronchiectasis with multifocal bronchial opacification bilaterally and diffuse bronchial wall thickening.

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