

INTRODUCTION

- Mycobacterium abscessus is a bacterium related to the ones that cause tuberculous and leprosy.
- It is found in water, soil, and dust and has been found to contaminate medical devices.
- It can cause a variety of infections including skin and soft tissue infections as well as pulmonary infections in those with chronic lung conditions.
- Symptoms are nonspecific including chills, fever, myalgia's.

CASE REPORT

Patient is a 69 y.o. male with history of COPD, pulmonary hypertension, bilateral hearing loss, supplemental oxygen at baseline, frequent hospitalizations and over a 50 pack-year smoking history. Lung imaging revealed nodules in the right upper and lower lobes. Patient was unable to undergo bronchoscopy so sputum cultures and lung biopsies were obtained.

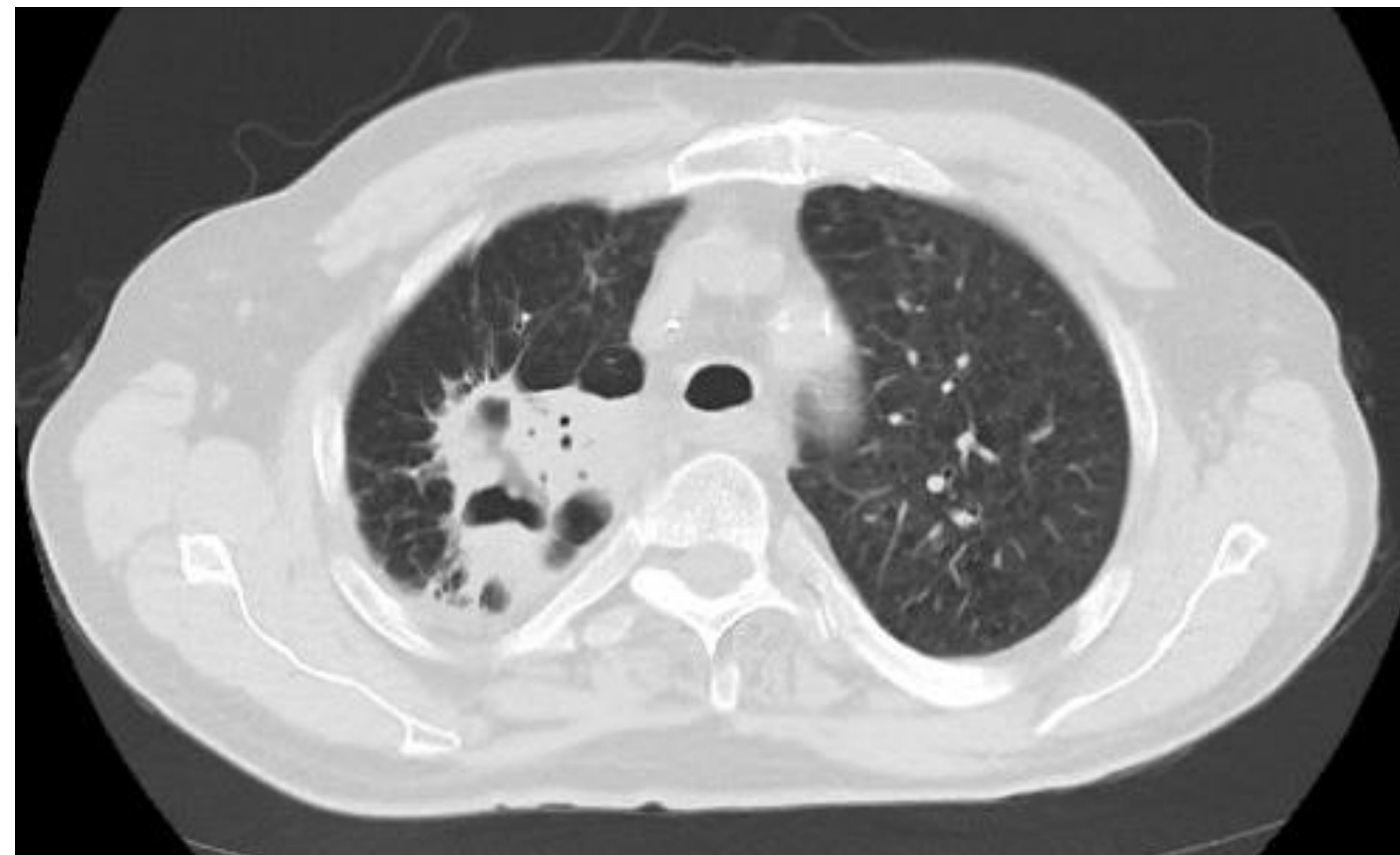


Figure 1: CT Chest 9/30/21



**Figure 2: CT Chest 12/17/21
After initiation of antibiotics**

Results

Initial CT scan showed increasing opacification of the right upper lobe with mild right hilar enlargement and new nodule in the inferior part of the right upper lobe. CT-guided biopsy was performed over bronchoscopy, due to increased risks of deteriorating respiratory status. Cultures were negative for organismal growth. Pathology revealed necrotizing granuloma. Patient was admitted for another COPD exacerbation and imaging showed new spiculated nodule in right upper lobe, and others unchanged. A repeat CT-guided biopsy was performed. Again no growth was detected and pathology again showed necrotizing granuloma. Patient was referred to an academic center for interventional pulmonology. Sputum culture obtained grew candida and mycobacterium abscessus. Patient was treated with IV amikacin, cefoxitin, clarithromycin. Patient discharged to long term care facility for antibiotic therapy, reporting improvement in respiratory symptoms and imaging showing slight decrease in size of nodules.

Conclusion

A patient with severe, repeated COPD exacerbations requiring hospitalization with extensive workup eventually revealing Mycobacterium Abscessus infection requiring IV antibiotic therapy for 12-18 months and now improving. This case supports what others have found during the diagnosis of mycobacterium abscessus infection such that the diagnosis of non-TB mycobacterial infection is often complicated by the difficulty in disguising between radiologic evidence and conventional diagnostic methods as well as the inherent drug resistance of these species.