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A Case of Atypical Presentation of Mycobacterium Kansasii Infection.

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ABSTRACT

A 64 year old male, tailor by profession, presented with complaints of episodic fever, high grade with chills and rigors, cough with mucopurulent sputum, shortness of breath, grade II MMRC for 2 months with history of hemoptysis. The patient had no history of similar complaints in the past. Chest X-Ray revealed a left upper lobe opacity. Bronchoscopy was performed and the sample of BAL(Bronchial Alveolar Lavage) showed growth of Mycobacterium kansasii.

Keywords: Haemoptysis, Bronchoscopy, Mycobacterium Kansasii

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INTRODUCTION

Pulmonary infection due to NonTuberculous Mycobacterium (NTM) is increasingly recognised worldwide. NTM are ubiquitous in the environment with the heaviest concentrations found in the soil and the water sources [1].

Mycobacterium kansasii is an acid fast, slow growing bacillus based on its characteristic photochromogenicity. It has been considered an important cause of pulmonary disease [2,3]. It causes pulmonary infection in patients with predisposing lung diseases, such as COPD, bronchiectasis, pneumoconiosis, tuberculosis or bronchogenic carcinoma and other debilitated conditions.

The author describes a otherwise healthy patient with pulmonary *Mycobacterium kansasii* infection, without pre existing lung disease.

CASE PRESENTATION

A 57 year old male, tailor by profession, presented with complaints of fever, high grade in nature with chills and rigors (on and off) , cough with mucopurulent expectoration, shortness of breath (grade II MMRC) for 2 months with a history of hemoptysis. The patient had no past medical history of respiratory illness.

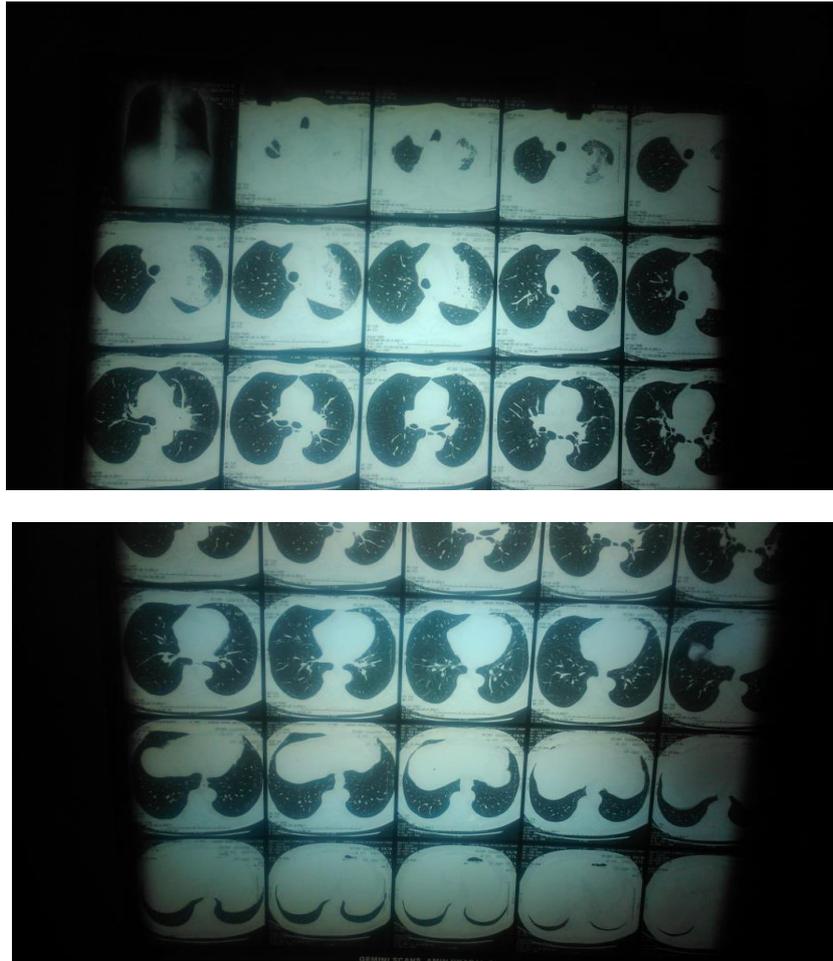
On examination, patient had a temperature of 101° Celsius, tachypnoeic and maintaining saturation of 96% at room air.

On auscultation, breath sounds were diminished on the left suprascapular area, supraclavicular area and left infraclavicular area. Coarse crepitations were heard on the left interscapular and infrascapular regions. Blood investigations showed increased neutrophil count and raised ESR.

Chest X ray showed irregular non homogenous opacity in the left upper zone. This was followed up with a CT scan of the chest showing air space consolidation with the surrounding ground glass opacities in the apico –posterior and anterior segment of the left upper lobe.



Figure 1: Chest X-Ray PA view



Sputum culture grew oronasal flora, sputum smear for AFB was negative. Bronchoscopy was performed and Bronchoalveolar Lavage (BAL) was done. BAL showed growth of *Mycobacterium kansasii*. The patient was treated with Rifampicin , Isoniazid and Ethambutol and clarithromycin.

DISCUSSION

This patient presents with an atypical presentation of *Mycobacterium kansasii* with no previous history of Pulmonary disease and with no predisposing factors. According to the 2007 ATS/IDSA guidelines, the general diagnostic criterion for all NTM pulmonary infections include clinical and radiological criteria. The criterion includes pulmonary symptoms with nodular or cavitary opacities on chest radiography or CT scan that shows multifocal small nodules. In terms of the microbiological criteria one of the following is required : positive culture results from endotracheal sample , BAL or a lung biopsy [4]. This patient fulfils the above mentioned criterion. The patient was started on rifampicin, isoniazid , ethambutol and clarithromycin which will be continued for atleast 18 months.

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