Case of Fungal lung abscess

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Date of Submission: 25-02-2023 Date of Acceptance: 05-03-2023

I. BACKGROUND

Despite of the advent of the antibiotic's lung abscess are a common encountered respiratory condition and contributes to significant morbidity and mortality in the world.

This case depicts a large lung abscess in a patient who was treated with anti-tubercular treatment (ATT), as it was believed that he was suffering from tuberculosis based on clinical presentation, radiologic findings, and epidemiology with no relieve in the symptoms. This initial misdiagnosis led to use of antifungal treatment which ultimately resolved the abscess, which suggest the efficacy of this approach in similar cases.

II. CASE PRESENTATION

A 50-years-old male presented to the tertiary hospital in Gwalior with the complaints of persistent productive cough along with dyspnoea on exertion, weight loss (5kgs in last 3-4 months) and decreased appetite for 2 years. He had been previously treated for tuberculosis with two courses of anti-tuberculous therapy (ATT) for 6 months and 9 months respectively. However, he didn't improve much, and his symptom persisted despite completing the treatment.

On clinical examination, he had crackles on auscultation and decreased breathe sound in the right lung. Clubbing was evitable on general examination. No significant finding was found on Complete blood count (CBC), liver function test (LFT), renal function test (RFT) and sputum acid fast bacilli (AFB) was negative, but the patient was started on ATT empirically. Culture sensitivity and fungal staining was negative for aspergillus. Chest x-ray showed a cavity with fluid level in right lung which is suggestive of lung abscess.



X-ray image here

Despite continuing ATT, the patient's symptom worsened. A repeat chest X-ray showed enlargement of cavitary lesion. Computed tomography (CT)scan of the chest was done 1 week later which confirmed the presence of lung abscess in the right lung.

Treatment with antibiotics was started initially for 1 week later based on microbiological finding antifungal was added. After 15 days of treatment repeat chest Xray was performed which showed resolving lung abscess. Antifungal treatment was continued for next 4 months which resulted the complete resolution of the abscess.

Discussion: In locations where tuberculosis is highly prevalent, a fungus-related lung abscess is susceptible to being mistaken for TB. Cough, fever, weight loss, and cavitary lesions are only a few of the clinical symptoms and radiological findings that can be comparable. In cases of TB and fungal lung abscess, AFB smear results may be negative.

High clinical suspicion and a thorough investigation, including a microbiological test and a chest x-ray, are necessary for the diagnosis of a

fungal lung abscess. In severe situations, surgical intervention may be necessary in addition to antifungal medication.

III. CONCLUSION:

In locations where tuberculosis is widely prevalent, it is especially possible to mistake a fungus-related lung abscess for TB. To diagnose this illness, a high level of clinical suspicion and a thorough evaluation are required. Antifungal therapy is used as a kind of treatment, and in more serious situations, surgery may be necessary. In individuals who continue to experience symptoms after finishing their TB treatment, it's crucial to look at the risk of a fungal lung abscess.

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