

## TUBERCULOSIS MIMIKING CARCINOMA - A CASE REPORT

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### **ABSTRACT:**

Tuberculosis is the most common infectious disease, having varied clinical presentation and has the ability to affect any organ in the body. Tuberculosis can mimic many diseases including malignancy and act as a diagnostic chameleon. Masses constitute a clinical problem for differentiating between tuberculosis and malignancy. Here we present a case of 33 years old female with a presumptive diagnosis of malignancy but subsequently turned out to be tuberculosis with no evidence of malignancy.

**KEY WORDS:** *Tuberculosis, Infectious disease, Mimicking, Malignancy*

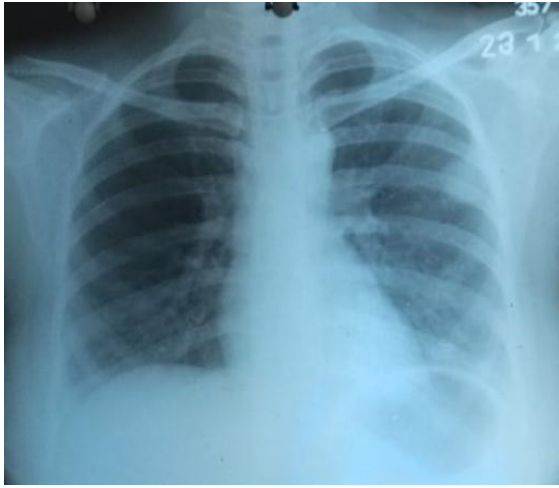
### **INTRODUCTION:**

Tuberculosis is the most common infectious disease in the adult population worldwide causing significant morbidity and mortality [1]. As per the Global TB Report 2021, the estimated incidence of all forms of TB in India for the year 2020 was 188 per 100,000 population (129-257 per 100,000 population) [2]. Tuberculosis is a diagnostic chameleon and can mimic many diseases including malignancy [3]. Due to its varied and atypical presentation there is a subsequent delay in the diagnosis of tuberculosis along with initiation of anti-tubercular treatment. This also warrants unwanted investigations [4].

### **CASE REPORT:**

A 33 years old female presented to our OPD with complaints of intermittent cough with haemoptysis and weight loss of four kgs in two months. She had no history of fever or other respiratory symptoms like shortness of breath, chest pain, and wheeze. She had no relevant past medical including prior history tuberculosis or surgical history. On general examination no abnormality was seen along with her respiratory system examination. Her blood routines

like CBC, LFT, RFT, RBS and Serum electrolytes were normal. Chest X ray revealed a mass lesion in the left upper lobe. CECT thorax revealed a mildly irregular soft tissue density lesion with air space opacities in the left superior lingular segment peripherally measuring 2.0 x 1.9 x 1.6 cms. Sputum AFB showed no AFB while her Gene X pert showed no MTB. Patient was then referred to mainland as Andaman and Nicobar Islands has to PET scan. PET scan revealed non FDG avid speculated dense soft tissue density mass with small air pocket of cavitation within measuring 2.8 x 2.3 x 3.1 cms in the left superior lingular segment abutting the chest wall along with non-segmental alveolar opacities with mild FDG uptake in bilateral upper lobe. PET guided biopsy from the lesion revealed granuloma with necrosis. Gene X pert from the biopsy tissue revealed MTB detected with rifampicin sensitive. Patient was then started on standard drug sensitive TB regimen containing rifampicin, isoniazid, ethambutol and pyrazinamide. After the initiation patient improved both clinically and radiologically. Chest X ray taken after treatment revealed complete resolution of the lesion.



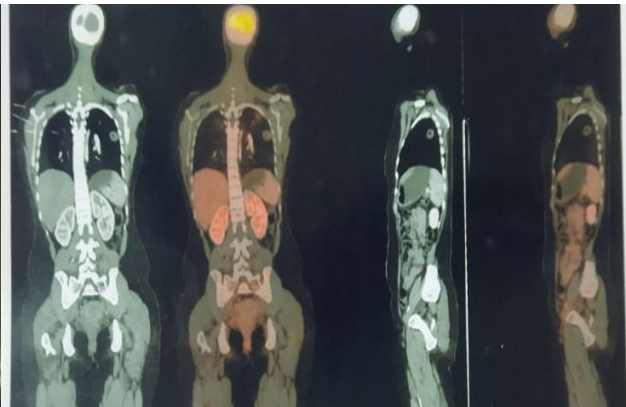
**Chest X-Ray Before Treatment**



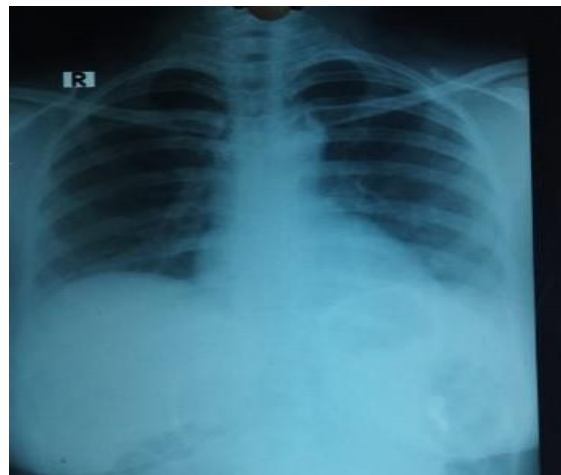
**CT Thorax Showing Mass Lesion**



**18-FDG-PET scan**



**18-FDG-PET scan**



**Chest X-Ray After Treatment**

**DISCUSSION:**

Tuberculosis and malignancies have been confused and misdiagnosed for centuries. Clinical and radiological features of PTB can resemble malignancies thus causing significant diagnostic dilemma [3]. Many symptoms like cough, haemoptysis, loss of weight, loss of appetite can be

seen in both the diseases [5]. Chest radiological findings like consolidations with irregular margins and thick-walled cavities can be seen in both tuberculosis and malignancies. Thus, a radiological basis for differentiating the two entities cannot be provided. For confirmation, pathological and microbiological tests are often required. Carcinoma of the systemic

malignancies like breast, ileocecal, uterus, head and neck can metastasize in the lung. Nodules can be either single or multiple and also varying in sizes. Occasionally nodular deposition can be so numerous and of such minute size it often gets confused with miliary tuberculosis [4].

### **CONCLUSION:**

Differentiating tuberculosis from malignancies can be challenging since both share more or less the same clinical and radiological features. High index of suspicion is required especially in TB endemic areas.

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