



## BRONCHOGENIC CARCINOMA UNDER CAP OF BRONCHIAL ASTHMA – A CASE REPORT

### General Medicine

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### KEYWORDS

#### INTRODUCTION

Bronchogenic carcinoma is a malignant neoplasm of lung, arising from epithelium of bronchus or bronchiole. It tends to form an intraluminal mass which may partially or completely obstruct the lumen of bronchus, giving rise to repeated episodes of obstructive symptoms initially.

Bronchogenic carcinoma may present with variety of clinical manifestation but major findings are cough, dyspnea, weight loss and chest pain. This case reveals underdiagnosed case of bronchogenic carcinoma, that repeatedly precipitates bronchial asthma.

#### CASE REPORT

A 40year old female patient, known case of bronchial asthma, presented to the department with acute exacerbation associated with cough with expectoration, low grade fever, dull aching chest pain, anorexia and 5kg weight loss since last 2 months. Worsening of dyspnea rushes the patient to the emergency department for urgent medical attention.

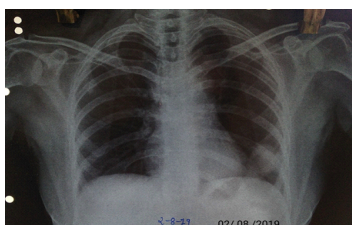
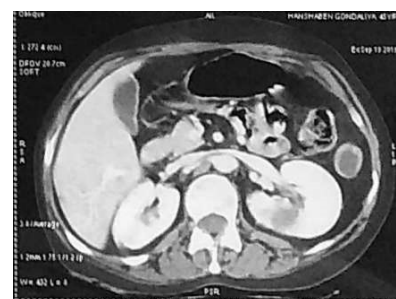
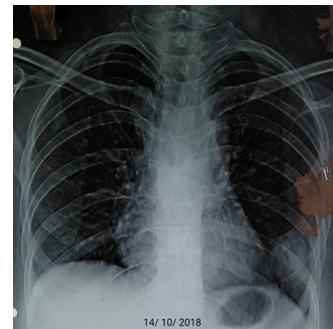
Patient had history of repeated hospitalization for similar complaints in last 1year. She underwent multiple chest X rays , pulmonary function test, allergy testing, sputum & blood culture and serological investigations like serum absolute eosinophil count, serum total IgE level, serum aspergillus galactomannan antigen level etc. She was treated by various physicians by short & long acting bronchodilators, inhaled & systemic corticosteroids, intravenous & oral antibiotics and nebulization. Constant symptomatic worsening of the disease despite maximal medical therapy seek the patient for multiple hospital visits.

#### EXAMINATION

Patient was hemodynamically stable. Digital Clubbing (Grade two) was present. No any palpable lymphnodes. On R/S auscultation, bilateral extensive wheezing present.

#### INVESTIGATIONS & MANAGEMENT

CXR (AP) view was normal. CXR (PA) view demonstrated left lower zone solitary lung nodule.



Sputum for AFB and GeneXpert were negative. Culture for bacterial and fungal hyphae were negative. Serum Absolute Eosinophil Count was raised three times than upper normal limit. Serum Total IgE was raised (>2500 IU). Serum IgE specific for aspergillus was raised. Patient underwent bronchoscopy and Bronchoalveolar Lavage (BAL) culture positive for klebsiella pneumonia and BAL cytology was negative for malignant cells. Overall findings suggested possibility of ABPA (Allergic Bronchopulmonary Aspergillosis) or atypical/fungal pneumonitis.

Ultrasonography (USG) was carried out. USG Chest suggestive of left lower zone posterior aspect 23x25mm sized solitary lesion. USG Neck suggestive of bilateral enlarged supraclavicular lymphnodes of subcentimetric size. Further, Contrast enhanced CT-scan was done. CECT Thorax-Abdomen suggestive of left lung bronchogenic carcinoma with metastatic mediastinal, bilateral supraclavicular lymphadenopathy with liver, pulmonary, left suprarenal, bilateral renal and bony secondaries. Then, CT guided Lung Biopsy from Left lower zone of lung lesion was performed which revealed adenocarcinoma lung.

#### **CLINICAL INFERENCE**

Initially, clinical scenario would have led to differential diagnosis of ABPA or atypical or fungal pneumonitis most likely. But later on, upon investigations, clinical suspicion led towards diagnosis of malignancy. CECT Thorax-Abdomen suggestive of lung mass with metastasis. CT guided Lung Biopsy confirms the diagnosis of adenocarcinoma lung. Patient referred to oncologist for further management.

#### **CONCLUSION**

Patient with persistent symptoms, despite adequate medical therapy for asthma requires diagnostic re-evaluation for early therapeutic interventions and clinician should include lung malignancy as differential diagnosis.

The likelihood of lung malignancy increases if adequate medical therapy remains unsatisfactory to improve bronchial asthma with atypical radiographic findings and clinical symptoms.

Thus careful assessment and timely interventions could lead to early therapeutic intervention and better outcome.

#### **REFERENCES**

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