



PERPLEXING PERIPHERAL PNEUMONIA

General Medicine

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ABSTRACT

Invasive mucinous adenocarcinoma is a rare subtype of lung carcinoma with varied presentations. The atypical nature of the tumour has led to many diagnostic dilemmas. We present a case of invasive mucinous adenocarcinoma of lung presenting with clinico -radiological features mimicking pneumonia

KEYWORDS

Invasive mucinous adenocarcinoma, organizing pneumonia, COP, cryptogenic organizing pneumonia, atypical lung carcinoma

INTRODUCTION

Primary invasive mucinous adenocarcinoma is a rare subtype of lung carcinoma with varied presentations. It has a worldwide prevalence rate of approximately 5% of lung adenocarcinoma. It has a uniqueness of presenting atypically which pose a challenge in early diagnosis. We present an unusual case of Primary invasive mucinous adenocarcinoma with clinico-radiological features of pneumonia.

CASE REPORT

57 year old office goer, euglycemic, normotensive, non smoker woman presented with progressively worsening breathlessness 6 months and right sided chest pain 2 months. There was no fever or other comorbidities. There was no history of malignancy in the family. Patient had resting tachycardia and auscultation of respiratory system showed crepitations in inter scapular, infra scapular area bilaterally. Other systems examination was normal. Routine haematology was normal. Chest x ray showed bilateral patchy multiple areas of consolidation & reticularity in mid & lower zone. Workup for connective tissue disorders were normal. CT chest showed bilateral patchy multiple peripherally placed areas of consolidation with surrounding ground glassing as in Figure 1.

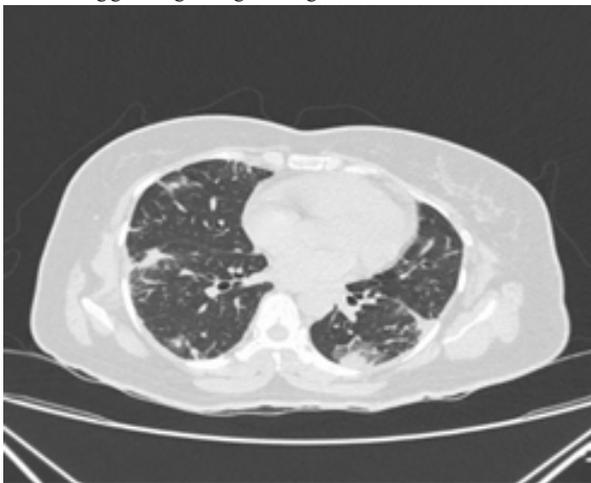


Figure 1 : Bilateral peripheral Patchy areas of consolidation with surrounding ground glassing

As the lesion was peripherally placed CT guided biopsy was performed. CBNAAT for mycobacterium tuberculosis was negative and histopathology showed lung parenchyma infiltrated by mucinous tumour, cells arranged in lepidic & acinar pattern features suggestive of Invasive mucinous adenocarcinoma of lung as in Figure 2. PETCT

showed only minimal uptake owing to the mucinous nature of the tumour.

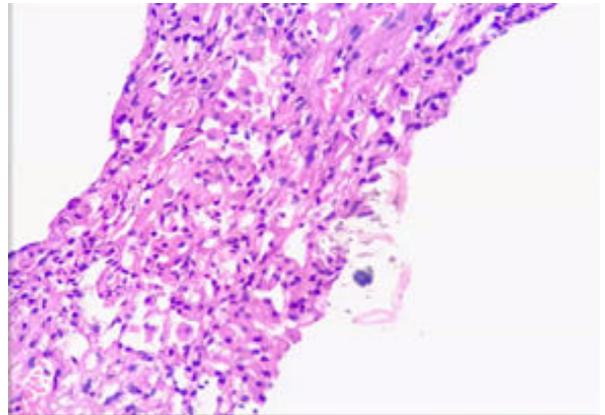


Figure 2 : Parenchyma infiltrated by mucinous tumour cells arranged in lepidic & acinar pattern with atypical cells with abundant apical intracytoplasmic mucin features suggestive of mucinous adenocarcinoma

DISCUSSION

Primary pulmonary mucinous adenocarcinoma is a rare subtype of primary lung adenocarcinoma

Mucinous adenocarcinomas account for approximately 2-10% of lung adenocarcinomas. It is an uncommon histological subtype of primary lung adenocarcinoma formerly known as mucinous bronchoalveolar carcinoma (BAC) with poor prognosis than non-mucinous adenocarcinoma. There is no significant correlation between smoking and invasive mucinous adenocarcinoma but still may contribute towards prognosis. Mucous production is a typical feature of mucinous adenocarcinoma which can be discharged as sputum, but if the growth of cancer cells is uncontrolled, it may cause excessive production of mucus, which obstructs the upper airways. In consequence, filling of alveoli by mucin secreted by the tumour cells results in organizing pneumonia. The minimal uptake in the PET CT due to the mucinous nature of the tumour pose a diagnostic challenge in such cases. This patient had clinical and radiological features of pneumonia. The workup for differentials like connective tissue disorders, chronic eosinophilic pneumonia, viral pneumonia, fungal etiologies were ruled out. In spite of conventional treatment for organizing pneumonia patient rapidly progressed and clinico radiologically worsened as in Figure 3 creating a suspicion in clinicians mind stressing the importance of tissue diagnosis. PETCT was indeterminate and CT guided trans thoracic biopsy revealed mucinous adenocarcinoma

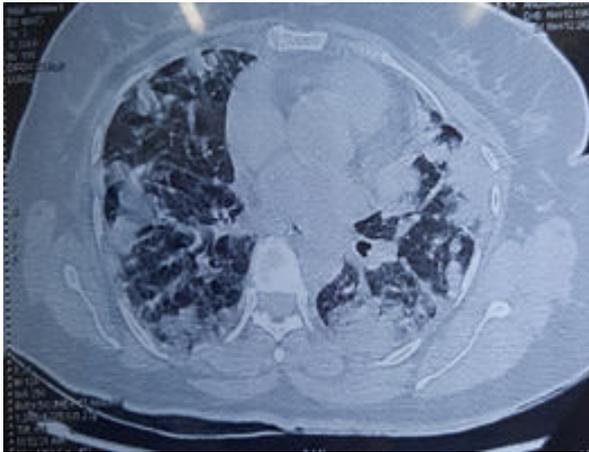


Figure 3 : Rapidly progressed bilateral multiple subpleural confluent/mass like consolidatory changes with surrounding ground glassing predominantly in lower lobes

CONCLUSION

Lung cancer is one of the leading cause of mortality in the world. Carcinoma should be in the differential diagnosis of any patient if there is clinical and radiological worsening after conventional treatment. This case highlights the difficulties faced in the diagnosis of lung carcinoma if it presents atypically. It also reinforces the importance of tissue diagnosis in diagnosing lung cancer.

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