A CASE OF HAEMOPTYSIS DUE TO ENDOBRONCHIAL FIBROMA, A RARE BENIGN TUMOUR OF LUNG

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ABSTRACT
A case of recurrent haemoptysis due to fibroma is described in a 55 years old male patient. Clinical examination revealed anaemia and bilateral basal crepitations. Chest X-ray showed no abnormality. Bronchoscopy revealed polypoid fibroma in left main bronchus. It was removed bronchoscopically with no recurrence during 12 months follow up.

INTRODUCTION
Benign tumours of lung comprise fewer than 1% of all resected lung tumours. Except hamartomas and carcinoid tumours, all of the benign tumours of lung are rare. Endobronchial benign tumours often present with features of partial or complete bronchial obstruction, haemoptysis is occasionally noted. Fibroma of the lung may be pulmonary, endobronchial or pleural in origin. We report a case of endobronchial fibroma presenting with recurrent haemoptysis because of its rarity. The tumour was successfully removed bronchoscopically.

CASE REPORT

A 55 year old Hindu male farmer presented with cough, production of white mucoid sputum of moderate amount for one month and recurrent episodes of profuse haemoptysis of same duration. He had no history of fever, dyspnoea, chest pain or bleeding from other sites. There was no loss of appetite or weight. There was no history of anti-tuberculous drugs intake in the past. He was normotensive and nondiabetic. He was taking about 10 - 12 bidis / day for last 30 years.

On physical examination, he was of average built and nutrition with moderate anaemia but no clubbing, lymphadenopathy, edema or rise of temperature. Respiratory rate and heart rate were 24 / min. and 12q / min. respectively. His blood pressure was 100 / 76 mm Hg. Examination of respiratory system revealed only bilateral basal coarse crepitations. Examination of other systems was unremarkable.

On admission, he had haemoglobin of 8 g % with normal total and differential white blood cell count and

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normal platelet count (1.9 Lacs / cmm.). Bleeding time and clotting time were 1 min. 10 sec. and 4 min. 45 sec. respectively. Fasting plasma glucose, serum creatinine, liver function tests were within normal limits. Sputum was negative for acid fast bacilli (AFB). Chest X - ray PA view revealed no abnormality (Fig. 1). HIV 1, 2 serology was non - reactive. The patient was resuscitated with i.v. antibiotics, cough suppressants, hemostatics and 4 units of blood transfusion, following which his general condition improved with rise of haemoglobin to 11.2 g %.

**DISCUSSION**

Endobronchial benign tumours are frequently symptomatic, often causing partial or complete bronchial obstruction, resulting in recurrent pneumonia, bronchiectasis, unilateral wheezing, atelectasis, post - obstructive pneumonitis and post obstructive hyperinflation. Bronchoscopy usually reveals the location of tumours. As the tumours are often covered with normal mucosa, bronchial washings and brushings often non - diagnostic, but forceps biopsy is usually successful in providing a suitable specimen. The lesions are usually completely removable bronchoscopically, but sometimes bronchotomy, sleeve dissection or lobectomy may be required.

Except hamartomas and carcinoid tumours, all the benign tumours of lung are very rarely reported in literature. Pulmonary fibroma (also known as fibrous polyp or fibrous tumour) may be parenchymal, endobronchial or pleural. But they are also rarely found in the retroperitoneum, mediastinum, lesser omentum. Pulmonary parenchymal fibroma is more common in men than in women. They are usually asymptomatic and detected on routine chest X - ray as a lung mass and diagnosis is obtained by histopathological examination of the resected lung mass.

Pleural fibroma, also known as benign fibrous mesothelioma appears as firm, encapsulated, and lobulated mass with a characteristic whorled appearance. 70 % of them arise from visceral pleura and the remaining 30 % from parietal pleura. They are unrelated to previous asbestos exposure. They appear radiologically as solitary sharply defined, discrete masses at the periphery of the lung.

Endobronchial fibroma generally presents with obstructive pneumonia or atelectasis. It rarely presents with haemoptysis, as has occurred in our case. Macroscopically, lesions are well circumscribed with size varying from 1 - 8 cm. Microscopically, they consist of spindle - shaped fibroblast like cells embedded in a variable amount of collagen. Nuclear atypia is minimal and mitotic figures are sparse or absent. They are readily detachable from bronchial
wall during bronchoscopic removal with forceps. They can also be treated with Nd: YAG laser through bronchoscopy or by lobectomy. They generally do not recur, if removal is complete. In our case, the endobronchial fibroma was removed bronchoscopically and there was no recurrence in 12 months follow up.

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