VOLUME-7, ISSUE-5, MAY-2018 • PRINT ISSN No 2277 - 8160

Original Research Paper

Cardiology

ENDOBRONCHIAL HISTOPLASMOSIS RESEMBLING A MALIGNANCY - A RARE MIMIC

Dr.K.S.Saravana Krushna Raja Mch — Assistant Professor Department of Cardiothoracic Surgery, Rajiv Gandhi Govt. General Hospital & Madras Medical College, Chennai.

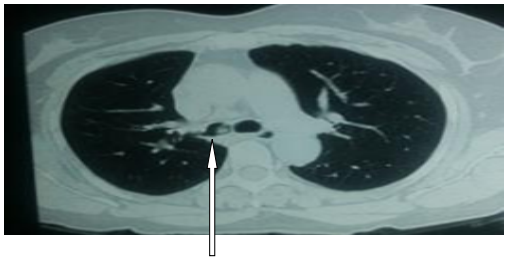
Dr.Jayagovarthanan Govindasamy Dayalu Mch — Assistant Professor Department of Cardiothoracic Surgery, Rajiv Gandhi Govt. General Hospital & Madras Medical College, Chennai.

ABSTRACT **OBJECTIVE:** Histoplasma capsulatum is a dimorphic fungus, generally presenting as influenza like pulmonary illness. We encountered with a Right main bronchus growth, mimicking malignancy.

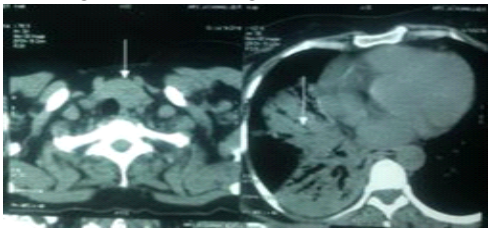
KEYWORDS : Endobronchial histoplasmosis, Bronchoscopy, Bronchoplasty.

MATERIAL AND METHODS:

A 45 year old lady, soil tiller by occupation , presented with Difficulty in breathing, Chest pain and Cough for the past 2 months. H/O Loss of weight +. She is a known diabetic. No H/O pulmonary tuberculosis. General examination was found to be normal. Respiratory system examination showed Right sided wheeze. CT chest reveals Soft tissue component partially occluding the lumen of right main bronchus with Right mid and lower lobe consolidation



Right main bronchus growth

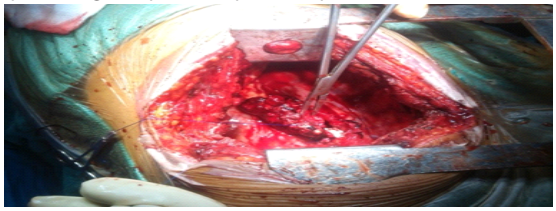


Bronchoscopy showed circumscribed mass attached to the Right main bronchus near the carina, completely occluding the lumen, easily bleeds on touch. Bronchoscopic biopsy was inconclusive.
Patient underwent Right posterolateral thoracotomy. Per operative findings were,

- Right upper lobe abscess
- Destroyed Right middle and lower lobe
- Hemorrhagic circumscribed mass attached to the right main bronchus near the carina.

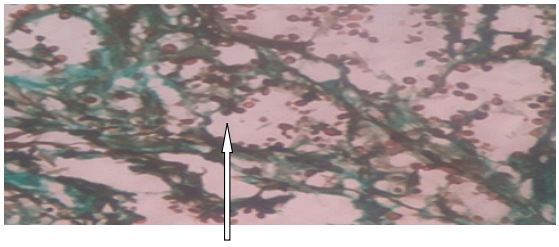
Surgical Procedure:

Right Pneumonectomy was done by excising the whole bronchial mass along with diseased bronchus in toto . Bronchial stump was stapled along with pleural flap cover. Specimen was sent for HPE.



RESULTS:

During the post operative period, Bronchopleural fistula was formed with wound infection on 6th POD. Biopsy report showed features suggestive of Histoplasma capsulatum.



Yeast like fungal spores

Pt was started on Intravenous Fluconazole and discharged on 30th POD with oral Fluconazole. Air leak was reduced gradually and ICD was removed. Pt was under regular follow up.

DISCUSSION:

Among the Endobronchial fungal infections, Histoplasmosis is the rarest entity that can mimic an endobronchial carcinoma[1]. Individuals are infected by inhalation of the aerosolized microconidia form of the fungus, presenting as a fixed obstructing endobronchial lesion associated with hemoptysis; the latter potentially necessitating surgical intervention[2]. Infection is mostly self-limited; only 1% of the affected individuals develop chronic disease. Residence in endemic areas, the organism load and depressed immune status positively correlate with severity of disease. if the patient is critically ill, intravenous Amphoterecin B (0.7–1.0 mg/kg/day) is considered. After stabilization of symptoms, the patient can be switched to oral itraconazole for up to 12 months[3]. Direct EB involvement may mimic malignancy. The most prominent finding of EB histoplasmosis in the literature review was hyperemic mucosa, bronchoesophageal fistulas and recurrent aspiration pneumonias[4]. Masses, mucosal hemorrhage and broncholiths were other EB findings. Surgical intervention should be considered for broncholiths embedded in the bronchial wall, granuloma-like appearances, bronchoesophageal fistulas, superior vena cava obstruction or severe airway stenosis[5]. Bronchoscopic descriptions of airway lesions include mass lesions, yellowish-white

or reddish polypoid lesions, plaques and ulcerative lesions[6]. Surgical approaches may be lobectomy, segmentectomy, pneumonectomy or closure of the bronchoesophageal fistula depending upon the presentations[7]. Only 11 cases were reported in literature till date. It is having relatively a good prognosis.

CONCLUSION:

Endobronchial Histolasmosis is a rare entity, which should also be considered as a cause in patients presenting with bronchial growth.

REFERENCES:

1. Bhagavan BS, Rao DR, Weinberg T. Histoplasmosis producing broncolithiasis. Arch Pathol 1971;91:577–9.
2. Shaffer JP, Barson W, Luquette M, et al. Massive hemoptysis as the presenting manifestatio n in a child with histoplasmosis. Pediatr Pulmonol 1997 ;24:57–60.
3. Dalys JS, Mark EJ: Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 14-2002. A 51-year-old woman with recurrent hemoptysis. N Engl J Med 2002;346:1475–1482.
4. Mangi AA, Gaissert HA, Wright CD, Allan JS, Wain JC, Grillo HC, Mathisen DJ: Benign broncho-esophageal fistula in the adult. Ann Thorac Surg 2002;73:911–915.
5. Manali ED, Saad CP, Krizmanich G, Mehta AC: Endobronchial findings of fibrosing mediastinistis. Respir Care 2003;48:1038– 1042.
6. Ross P, Magro CM, King MA: Endobronchial histoplasmosis: a masquerade of primary endobronchial neoplasia – a clinical study of four cases. Ann Thorac Surg 2004;78:277– Chandler FW, Watts JC: Fungal infections; in Dail DH, Hammer SP (eds): Pulmonary Pathology. New York, Springer, 1988, pp 189–257.281.
7. Wheat LJ, Conces D, Allen SD, Blue-Hnidy D, Loyd J: Pulmonary histoplasmosis syndromes: recognition, diagnosis, and management. Semin Respir Crit Care Med 2004; 25:129–144.

.
.