

Uncommon cause of non massive haemoptysis in middle age man, Kirkuk, Iraq**Dr. Nadim Haddad¹, Dr Ayad Mohammed Noumann², Dr Suhaila Shamse-Elden Tahir³**¹Thoracic & vascular surgeon , College of Medicine, Kirkuk University, Iraq²FICMS, Kirkuk General Hospital, Iraq³Directory of Health. Kirkuk, Iraq***Corresponding author**

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Abstract: Haemoptysis is classified as massive and non massive according to amount of blood expectorated. Mycetoma at the site of old fibrotic tuberculous lesion was detected by CT in the current case. A middle aged man was diagnosed as mycetoma of left upper lobe and was managed surgically by lobectomy. Suspicion of aspergilliosis in old TB patients should be thought if patients presented with haemoptysis after cure.**Keywords:** Haemoptysis, mycetoma.

INTRODUCTION

Haemoptysis is the expectoration of gross blood or blood -streaked sputum. It is classified as massive when it is between 100-600 ml , and non massive when it is less than 100 ml[1,2].

The most common causes of massive haemoptysis are: bronchiectasis, tuberculosis, mycetomas, necrotizing pneumonia and bronchogenic carcinoma [3].

Mycetoma is a unique neglected tropical disease, it is a chronic morbid inflammatory condition caused by certain fungi [4]. Mycetoma has been classified according to their site small lesion (<5 cm), moderate lesion (5-10) and massive lesion (>10 cm) [5].

The first man who described mycetoma in madura district of south India was John Grill, an English physician, in 1842, hence it has been termed (Madura Foot), while Gohn Gogfrey a surgeon working in India was the first to describe the disease as (Morbus Tuberculosis Pedis) I.e (Disease of Tuberculosis of Foot) in the medical literature(1846). George Didie in (1862) has named the disease (mycetoma) as he described fungal aetiology [1].

THE CASE:

A 54 years old male patient, unemployed by occupation presented with recurrent episodes of small

amount of haemoptysis for the period of 2 weeks episodes of non massive haemoptysis. The patient had past history of smear positive pulmonary tuberculosis before 2 years, for which full course of anti -T.B was advised for 6 months according to directly observed therapy short course (DOTS) program (2RHZE,4RH). After completion of treatment he was declared to be cured of tuberculosis. He had also family history of TB (his mother) who had been treated for pulmonary tuberculosis before 45 years.

Although the patient was diabetic, but he had average built, good nutrition and controlled blood sugar with no indicator of organ damage.

The relevant biochemical and haematological tests were within normal range. His chest roentgenogram showed multiple calcified spots in the left upper zone consistent with old tuberculosis, while the right side showed multiple radiolucent shadows in favour of chronic infection.

The diagnosis of mycetoma was confirmed by computed Tomography which revealed a 16 by 16 mm thin walled cavity in the apical segment of the left lobe with a soft tissue density content suggesting mycetoma , cavity with adjacent fibrosis, calcifications and mobile nodule in the same segment within the cavity, as demonstrated by figure 1 and 2.

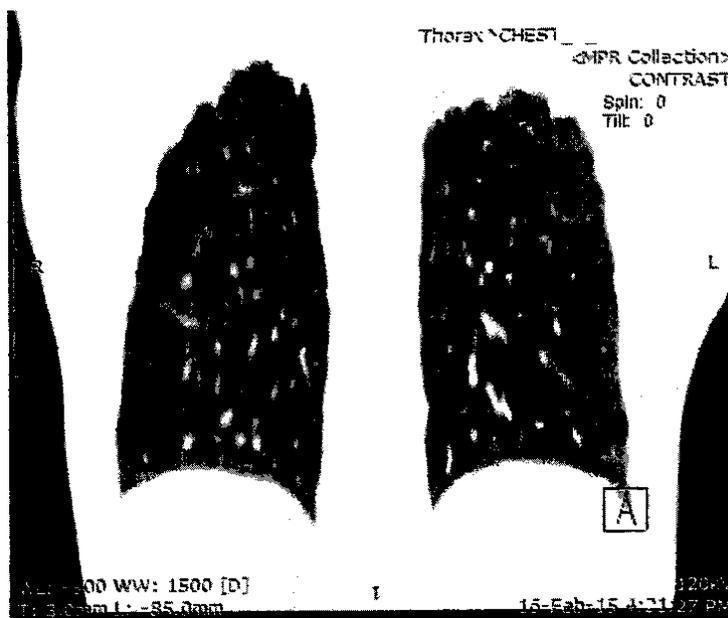


Fig-1: Left upper lobe lesion

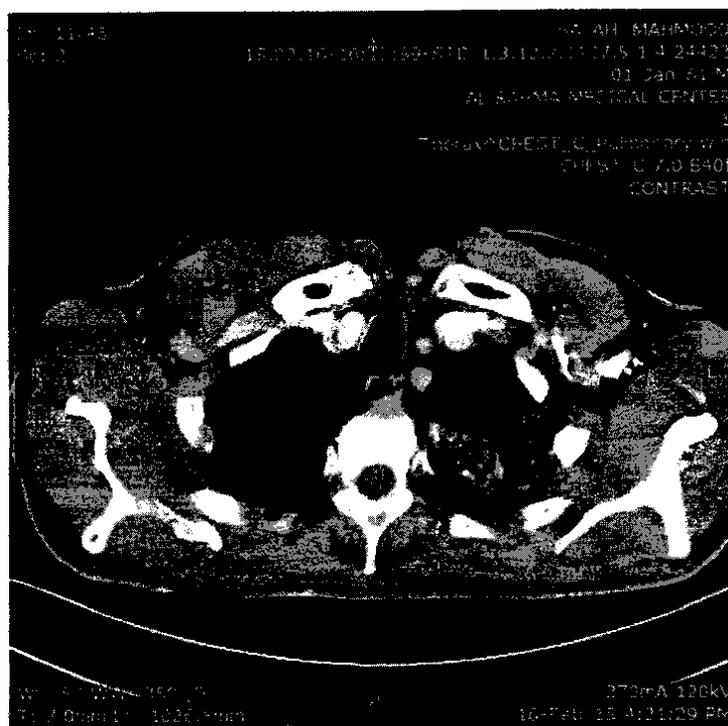


Fig-2: Mycetoma (Aspergilla ball)

Pre operative direct sputum smear was negative for TB and Asperigellosis and culture for Asperigellus was negative

Left upper lobectomy was performed for the patient following (surgeon decision) the first author. Post operative histopathology showed non-specific infective process with micro abscess formation bronchial wash cytology revealed picture conclusive for an abscess.

A written informed consent was obtained from the patient for publication of this case report and accompanying images.

DISCUSSION

Old cavity lung lesions may be colonized with *Candida*, *mucors*, *Aspergillus*, or other micro-organism resulting in formation of fungal ball [6,7].

Regarding the case under study ,few points were in favour of suspicion of fungal infections ,the first being an old cured smear positive pulmonary TB

case with strong family history of the disease and unfavorable outcome for one of his parents with pulmonary TB. Fungal ball may be manifested either as an accidental finding in chest x-ray or as a case of haemoptysis [8].

In the current case the patient presented with recurrent non-massive haemoptysis. Radiologically, fungal ball or asperigelloma or mycetoma may be revealed as separated ball or irregular sponge like network. The presenting case had multiple small balls and nodules detected by CT are consistent with mycetoma. Therapeutic approaches in cases of pulmonary fungal disease vary with the extent of the disease and clinical status of the patient.

The treatment of choice is surgical resection in combination with anti fungal therapy [9]. The reported case was managed surgically with left upper lobe resection with complete disappearance of haemoptysis. He has been followed up for 6 months with good health and favorable outcome.

REFERENCES

1. Luciano Polorell; History of medical mycology, Luciano. Available online at www.isham.org
2. Renee J, Sander F; Massive haemoptysis, Hospital physician, 2006; pp 37-43.
3. Sakr L, Dutau H; Massive hemoptysis: an update on the role of bronchoscopy in diagnosis and management. *Respiration*. 2010;80(1):38-58.
4. Fahal AH; Mycetoma: a thorn in the flesh. *Transactions of the Royal Society of Tropical Medicine and Hygiene*. 2004;98(1):3-11.
5. Singhal S; Pulmonary mycetoma. *Lung India: official organ of Indian Chest Society*. 2012 Jan;29(1):81.
6. Goel MK, Mussa AY, Banavaliker JN, Sharma DC, Dikshit S; An uncommon case of multiple pulmonary aspergillomas. *Indian Journal Of Tuberculosis*. 1997;44:141-4.
7. Lahiri TK, Agarwal D, Sagar Reddy GE, Upadhyaya DN; Fungal ball presentation of mucormycosis of the lung. *Antiseptic*. 2001;98:94-6.
8. Sakarya ME, Özbay B, Yalcinkaya İ, Arslan H, Uzun K, Poyraz N; Aspergillomas in the lung cavities. *Eastern Journal of Medicine*. 1998;3(1):7-9.
9. Pratap H, Dewan RK, Singh L, Gill S, Vaddadi S; Surgical treatment of pulmonary aspergilloma: a series of 72 cases. *Indian Journal Of Chest Diseases And Allied Sciences*. 2007;49(1):23.