Allergic Bronchopulmonary Aspergillosis Presenting With Lung Mass-Report of Six Cases

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Background

Allergic bronchopulmonary aspergillosis (ABPA) is a disorder caused by hypersensitivity to *Aspergillus* antigens. Patients with ABPA can have diverse radiological manifestations; however ABPA presenting as a lung masses is a rare presentation. So far, to our knowledge only 10 cases have been reported in literature. Here we report 6 patients of ABPA who presented with lung mass leading to lung cancer as a differential diagnosis.

Objective:

To study the clinical, radiological characteristics and outcome of patients of ABPA presented with a lung mass mimicking lung cancer.

Methods:

Medical records of 6 patients of ABPA presenting with lung mass at Aga Khan University hospital (AKUH), Karachi-Pakistan were reviewed. Diagnosis of ABPA in all cases was made using the Rosenberg criteria. Complete resolution of mass after steroid therapy was also used as an adjunct to diagnosis.

Results:

Patient	Age / Sex	History of Asthma	Chest pain	Hemoptysis	Location of opacity	Bronchoscopy findings	Work up for ABPA	Clinical course
1	48/M	Yes	+ve	-ve	Lt. upper lobe	LLL stenosis and mucus plugging	IgE: >2000 TEC: 2300/μL AST:+ve	Resolution with Prednisolone
2	32/F	No	+ve	-ve	Rt. upper lobe	CT guided Biopsy (Non specific)	IgE: 2326 TEC: 1800/μL AST::+ve	Thoracotomy & resection
3	23/M	Yes	+ve	+ve	Lt. upper lobe	Not done	IgE: 2880 TEC: 300/μL AST:+ve	Resolution with Prednisolone
4	30/M	Yes	+ve	-ve	Rt. upper lobe	Not done	IgE: >3000 TEC: 1300/μL AST:+ve	Resolution with Prednisolone
5	50/M	Yes	+ve	+ve	Rt. upper lobe	Mucus plugging right upper lobe	IgE: >2000 TEC: 200/μL AST:+ve	Resolution with Prednisolone
6	26/M	No	+ve	+ve	Rt. Upper lobe	Not done	IgE: >2000 TEC: 800/μL AST:+ve	Resolution with Prednisolone

AST: *Aspergillus* skin test; TEC: total eosinophil count/μL

Conclusion:

ABPA can present as pulmonary mass lesions and must be considered in the differential diagnosis of mass like lesions in lung, particularly in a patient with a history of asthma. Good clinical history, peripheral eosinophilia and raised IgE levels can help in narrowing the differential diagnosis. Treatment with glucocorticoids is associated with excellent outcomes.

Patient:1

Patient:2

Patient:3 Before Steroids After steroid

Patient :6

Patient: 4 Before Steroids

After steroid