



## AN UNUSUAL CASE OF RECURRENT COUGH AND SPUTUM PRODUCTION.

## Respiratory Medicine

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## ABSTRACT

**Summary-** Lung Sequestration is a rare congenital malformation also called as accessory lung is a cystic/solid mass of non functioning primitive segmental lung tissue which doesn't communicate or has abnormal communication with the tracheobronchial tree and has anomalous systemic blood supply. Here we report a case of 21 year old non smoker hindu female presented to respiratory outpatient services with Recurrent Cough and Sputum production and occasional hemoptysis for last 4 months. There was no history of fever, weight loss, decreased appetite and breathlessness. She suffered from Pulmonary Tuberculosis twice in her life, treated with ATT and Improved. Her Chest X-Ray was showing persistent homogeneous opacity in Right Paracardiac region. HRCT Thorax showed a lesion in Right lower lobe with dual blood supply arising from descending aorta via 2 arteries arising from below the diaphragm. Findings are suggestive of Extra Lobar Lung Sequestration. This case report emphasises the fact that persistence of lower lung shadow in para cardiac region should arise suspicion of sequestration of lung and its aberrant blood supply should be confirmed by angiography so as to avoid profuse bleeding during surgical resection.

## KEYWORDS

Lung Sequestration, Pulmonary Tuberculosis, Angiography, HRCT Thorax.

## INTRODUCTION

Sequestration of lung is defined as functionless segment of lung parenchyma without connection or with abnormal connection to the tracheobronchial tree and has abnormal blood supply from systemic artery other than pulmonary artery.

Anatomically there are two forms of lung sequestration:

Intra-lobar lung sequestration

Extra-lobar lung sequestration, based on relationship of aberrant segmental lung tissue to the pleura.

Both forms are common on left side (90%) and have an abnormal blood supply majorly by aorta (70%)

## HISTORY

A 21 years non-smoker female presented in our OPD with recurrent Cough, sputum production and occasional hemoptysis for last 4 months.

There was no history of fever, weight loss, decreased appetite, and breathlessness.

H/O Pulmonary Tuberculosis 3 years and 1½ years back, for which she took ATT for 8 months and 12 months respectively with which she improved.

## Investigations

Blood investigations, ECG and Echocardiography were normal.

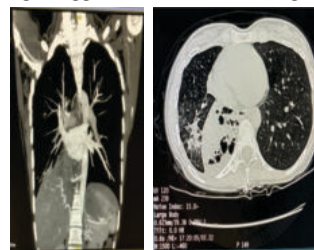
On physical examinations: Creptiations were present in Right Infra-scapular region.

Chest Radiography (figure-1) and High-resolution computed tomography (HRCT) were done and findings were seen and described as shown in figure-2 and 3.



**Figure 1 - X-ray Shows Homogeneous Opacity In Right Paracardiac Area.**

FIGURE 2,3- HRCT demonstrating lobulated heterogeneously enhancing abnormal lesion (8.4cm x 7.5cm x 9.0 cm) in right lower hemithorax extending superiorly to involve lower lobe of right lung and inferiorly indenting right hepatic lobe. Its arterial supply is from descending thoracic aorta via 2 arteries which are originating from below the diaphragm suggestive of Extra lobar lung sequestration.



**Figure 2-**

**Figure 3-**

## DISCUSSION

Sequestration of lung is usually diagnosed in childhood or adolescence.

Intra lobar sequestration is most commonly seen pattern (85% cases) in which the sequestered part of lung lies within the normal pulmonary visceral pleura.

Extra lobar sequestration (15% cases) where the abnormal segment of lung is completely separated from the normal lung tissue and enclosed in its own pleural investment.

In confirmed cases via MR Angiography/Arteriography/CT Thorax, Surgical Resection is treatment of choice in the form of Lobectomy/Segmentectomy/Pneumonectomy.

Post-operative complications observed most commonly are Hemothorax, Bronchial fistula, Empyema.

## COMPLICATIONS

This case report concluded that persistence of lower lung shadow in para cardiac region should arise suspicion of Sequestration of Lung and its aberrant blood supply should be confirmed by Angiography so as to avoid profuse bleeding during surgical resection.

Early diagnosis and Management of Lung sequestration is important because if its persistent will result in Recurrent Pulmonary Infections complicated by Superimposed Infections such as Tuberculosis, Non

Mycobacterial infections, Fungal Infections and Other complications such as Hemoptysis, Heart failure due to AV Shunt, Aneurysms.

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