

## Cor Pulmonale due to Trapped Lung A Case Report

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### Introduction:

Cor pulmonale is a condition that arises from various etiologies. In patients with persistent heart failure, further investigation may be warranted. Case Presentation: A 37-year-old woman presenting with two-month history of exertional dyspnea, easy fatigability, orthopnea and cough, was initially managed as a case of heart failure and discharged with minimal improvement. She then sought consultation at our institution for second opinion. Work-up done showed hypercarbia and hypoxemia on arterial blood gas (ABG), with ECG and 2D-echocardiogram findings of right atrial and ventricular enlargement; akinesia in the mid-apical free wall; moderate pulmonary hypertension; increased pulmonary vascular resistance and PCWP suggestive of pulmonary vascular disease. She was given oxygen support and started on Bosentan with some improvement. Coronary angiography revealed normal coronary arteries. Pulmonary angiography and hemodynamic studies were then requested, showing no filling defect and presence of calcified pleural plaque. Impulse oscillometry showed findings consistent with COPD. High resolution computed tomography (HRCT) showed findings which may relate to chronic pulmonary thromboembolism. She was started on low-molecular-weight-heparin. Further work-ups for infectious process and connective tissue disease were negative. Open decortication was done with intraoperative findings of trapped lung and dense fibrous adhesions with calcifications. Biopsy confirmed negative for TB and malignancy. Post-operatively, she was transferred to ICU with ventilatory support. She had clinical improvement in the succeeding days.

### Discussion:

Trapped lung is characterized by inability of the lung to expand due to a restricting fibrous visceral pleural peel. History may reveal chemical exposure, or tuberculosis and pleural effusion. Diagnosis is made from radiologic findings correlated with a history of predisposing cause. Our patient presented with shortness of breath; she has history of tuberculosis and recurrent pleural effusion. Imaging showed pleural thickening with calcifications. Surgical decortication is the only available treatment for fibrothorax.