

A Case of Pneumothorax of the Rare Azygous Lobe of the Right Lung

Dr. K. Arun Vishnu¹, Dr. Athul C. Angaj², Dr. Priya Pankaj³

¹Postgraduate, Department of Respiratory Medicine, Jawaharlal Nehru Main Hospital and Research Institute, Bhilai, Chhattisgarh, India

²Postgraduate, Department of Respiratory Medicine, Jawaharlal Nehru Main Hospital and Research Institute, Bhilai, Chhattisgarh, India

³Postgraduate, Department of Anesthesia, Jawaharlal Nehru Main Hospital and Research Institute, Bhilai, Chhattisgarh, India

Abstract: *The azygous lobe is a rare anatomical variant that is usually found in the right lung. It is not a true separate lobe. It occurs due to failure of migration of posterior cardinal vein during embryological development. It is very important to have a good understanding of this variant as it can mimic certain condition like bullae, abscess or lung mass. It is also important in preparing for surgical procedures. Prevalence varies from 0.4% in chest radiograph to 1.2% on a high resolution computed tomography (hrct). It is typically located in apico medial portion of the right lung. Any pathology is very rare in this lobe of the lung. We are presenting a case of pneumothorax in the azygous lobe of right lung.*

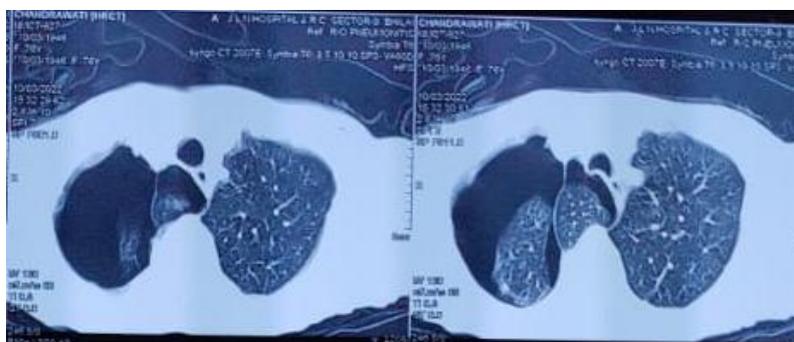
Keywords: Azygous Lobe, Pneumothorax

1. Case Report

A 74 year old female who is a known case of chronic obstructive pulmonary disease came with complaints of sudden onset of difficulty in breathing and cough. On examination, she was found to be tachypnic with absent breath sounds on the right side. Use of accessory muscles was also noted.

Chest radiograph revealed right sided pneumothorax. Emergency inter costal drainage tube was inserted after which the patient improved symptomatically. Rest of the hospital stay was uneventful.

Incidental finding on a hrct thorax showed a azygous lobe on the right upper region with pneumothorax involving the same. Follow up ct showed resolution of pneumothorax.



Chest Xray and CT Scan Showing Pneumothorax within the Azygous and Right Upper Lobe



CT showing resolution of pneumothorax with azygous lobe

2. Discussion

Azygous lobe is usually an incidental finding in general population. In a chest radiograph, a fissure is visible as a fine convex line and its upper portion has a triangular shape due to extra pleural areolar tissue and lower portion has tear shaped shadow due to azygous vein. Cases of spontaneous pneumothorax has been reported in patients with azygous lobe. Three types of azygos fissure have been described. Type a is a more or less horizontal fissure which cuts the lateral portion of the lung between the apex and a point located 2 cm above. Type b is a vertical fissure dividing the apex into two lateral halves. Type c is a vertical fissure which starts from the mediastinal aspect of the lung and cuts off a small portion of the upper lobe which is fixed above the root of the lung.

3. Conclusion

- 1) Even though an unusual presentation, clinicians should be aware of such an entity so that misdiagnoses and/or unnecessary interventions can be avoided
- 2) Helpful for surgeons to plan thoracic surgeries accordingly
- 3) Only few cases of pneumothorax involving the azygous lobe have been reported, so detailed radiological evaluation should be done in a case of pneumothorax

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