Lung Aplasia with Pulmonary Artery Sling Like Anomaly

Akciğer Yokluğu ile Birlikte Pulmoner Arterin Sling Benzeri Anomalisi

Lung Aplasia

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A 1-year-old girl was admitted to our hospital with the complaints of dyspnea on effort, cough and sputum. Physical examination by auscultation revealed no breathing sound on the right hemithorax. Posteroanterior (PA) chest X-ray showed compensatory hyperinflation of the left lung, mediastinal shifting to the right and total absence of the right lung and the left hemithorax was normal. Complete blood count and biochemical analysis were completely normal. Her oxygen saturation on room air was 95%. Transthoracic echocardiography reavealed normal cardiac anatomy except right pulmonary artery. Neither lung parenchyma nor pulmonary vascular structures could be visualized at the right side on the thorax by 3D reconstruction of computed tomography (CT) examination (Figure 1,2), and the left lung and mediastinal structures were found to be shifted to the right. Additionally main pulmonary artery gives rise only to left pulmonary artery and the left pulmonary artery courses the right side of the trachea and goes to left lung hilus. In fiberoptic bronchoscopy, the right main bronchus was shown to ended immediately as a bronchial stump. This anomaly seems like pulmonary artery sling but in CT and bronchoscopy left bronchus had not any obstruction at its course to left lung hilus and also left pulmonary artery had not any obstruction at angio CT study. So we called this anomaly sling like and did not plan any surgical intervention. The patient discarded asymptomatically after recovery of lower respiratory tract infection.

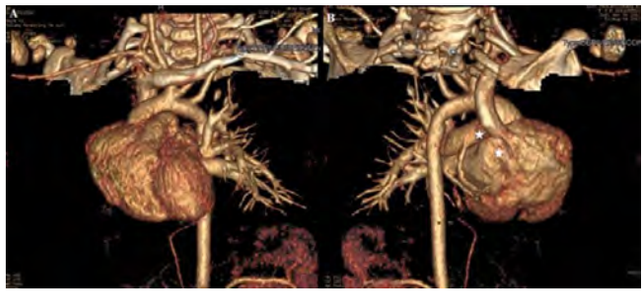


Figure 1. Anterior (A) and posterior (B) view of pulmonary vascular structures. 3D reconstruction of CT angiography show absence of pulmonary artery and veins on the right side (asteriks).

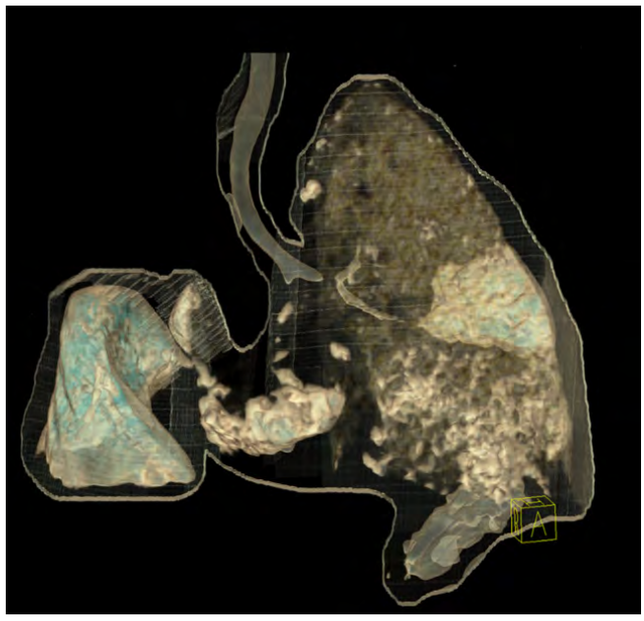


Figure 2. 3D reconstruction of CT image shows the left lung having a normal volume. On the contrary, the right lung is not seen with the existing right bronchus having blind-ended branches.

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