

## Pulmonary Artery Sling: A Rare Cause Of Recurrent Aspiration Pneumonia

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### Introduction (or Basis or Objectives):

Pulmonary artery sling (PAS), known as anomalous left pulmonary artery originating from right pulmonary artery, is a vascular anomaly in which the left pulmonary artery arises aberrantly from the proximal part of the right pulmonary artery and courses posterior to the trachea to reach the left hilum. We report an intriguing case who was presented for recurrent aspiration pneumonia caused by pulmonary arterial sling, and diagnosed by computed tomographic angiography.

### Methods:

14 months old girl firstly admitted to emergency room with dyspnea when she was 6 months old. Inadequate ventilation was noticed in chest X-ray. Because of the infiltration in right paracardiac pulmoner region on X-ray, bronchoscopy was performed and solid food remnants were removed from her right bronchus, but the left main bronchus couldn't be accessed. CT was planned but informed consent couldn't be taken from the parents. But recurrent pattern of the dyspnea, respiratory distress attacks and chronic cough, stridor, feeding intolerance lead them to emergency room and CT scan was done: Left pulmonary artery was originating from right pulmonary artery (Fig1a), Lumen of left bronchus was obliterated due to compression and pulmonary artery calibration was decreased at this level (Diagnosis was PAS). After the diagnosis echocardiographic examination performed; Left Pulmonary artery was originating from right pulmonary artery, and there was no pressure gradient over pulmoner artery in high parasternal views. The surgical correction (left pulmonary artery was excised and anastomosed to the main pulmonary artery) was done one week after the diagnosis. After surgery the patients' respiratory problems and feeding intolerance were all recovered. Postoperative echocardiographic and tomographic examinations were in normal ranges (Fig1b).

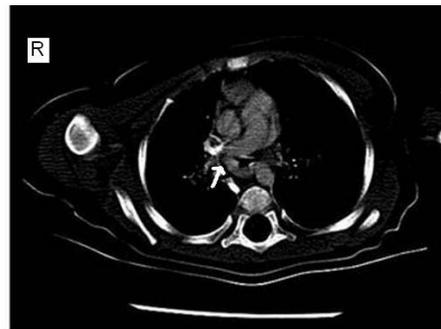


Fig1A: Preoperative image: Left pulmonary artery originating from right pulmonary artery



Fig 1B: Image after corrective surgery: left pulmonary artery originating from main pulmonary artery

**Conclusions:** Infants with recurrent respiratory symptoms, such as chronic cough, stridor and wheezing, should be examined carefully and vascular rings and slings must be taken into consideration for differential diagnosis. PAS is a rare vascular anomaly which results in respiratory problems. Early surgical management of symptomatic patients is an effective way to treating PAS and relieving the symptoms. By this case, we want to emphasize a rare congenital anomaly, which results recurrent pulmonary problems.