SYSTEMIC ARTERIAL SUPPLY TO A CONGENITAL PULMONARY AIRWAY MALFORMATION: IMAGING OF A RARE HYBRID BPS/CPAM LESION

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Bronchopulmonary Sequestration (BPS) is characterized by the presence of nonfunctioning lung parenchyma, that lacks communication with the tracheobronchial tree and receives its arterial blood supply from the systemic circulation. Congenital Pulmonary Airway Malformation (CPAM) presents as cyst or adenomatoid pulmonary lesions of variable size. Hybrid lesions exhibiting histological characteristics of CPAM and a systemic arterial supply have been reported, reflecting similar embryological origins of these lesions. Fetal lung lesions are easily detected by routine mid-gestational ultrasound at 18 – 20 weeks gestation. Depending on the size and location of the lesion, additional testing may be recommended.

A 10-year-old male was followed since prenatal diagnosis for an inferior right lung lobe cystic lesion. The patient remained asymptomatic during follow-up. Computed tomography angiography demonstrated a feeding artery arising from the descending thoracic aorta supplying a large lobulated cystic mass in the right lower lobe, which was diagnostic for a hybrid lesion. A right inferior lobectomy was performed with an uneventful post-operative recovery.