

EP15.43 Prenatal ultrasound diagnosis of extralobar pulmonary sequestration with aberrant hepatic arterial supply and postnatal confirmation: a case report

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Introduction

Extralobar pulmonary sequestration is a rare congenital anomaly characterized by non functional lung tissue without communication with the tracheobronchial tree and supplied by an aberrant systemic artery, most commonly arising from the descending aorta. Rare variants may originate from other systemic vessels, including the hepatic artery.

Case Report

We report the case of a 30-year-old pregnant woman with detection of a fetal thoracic mass during routine fetal ultrasound at 19 weeks of gestation which demonstrated a homogeneous echogenic lesion measuring 5.9×3.6 cm located in the posterior segment of the left lower pulmonary lobe. Doppler evaluation suggested systemic arterial supply, initially presumed to arise from the descending aorta. The calculated congenital pulmonary airway malformation volume ratio (CVR) was 2.4, indicating increased risk of fetal complications.

Antenatal corticosteroids with betamethasone were therefore administered at 28 weeks of gestation. Serial prenatal imaging showed progressive reduction in lesion size.

Delivery occurred at 39 weeks. Postnatal computed tomography confirmed the thoracic lesion and demonstrated systemic arterial supply originating from the hepatic artery. Histopathological examination confirmed the diagnosis.

Conclusion

This case underlines the relevance of identifying atypical vascular supply, including hepatic arterial origin, in congenital pulmonary sequestration and highlights the role of prenatal surveillance in optimizing perinatal management.

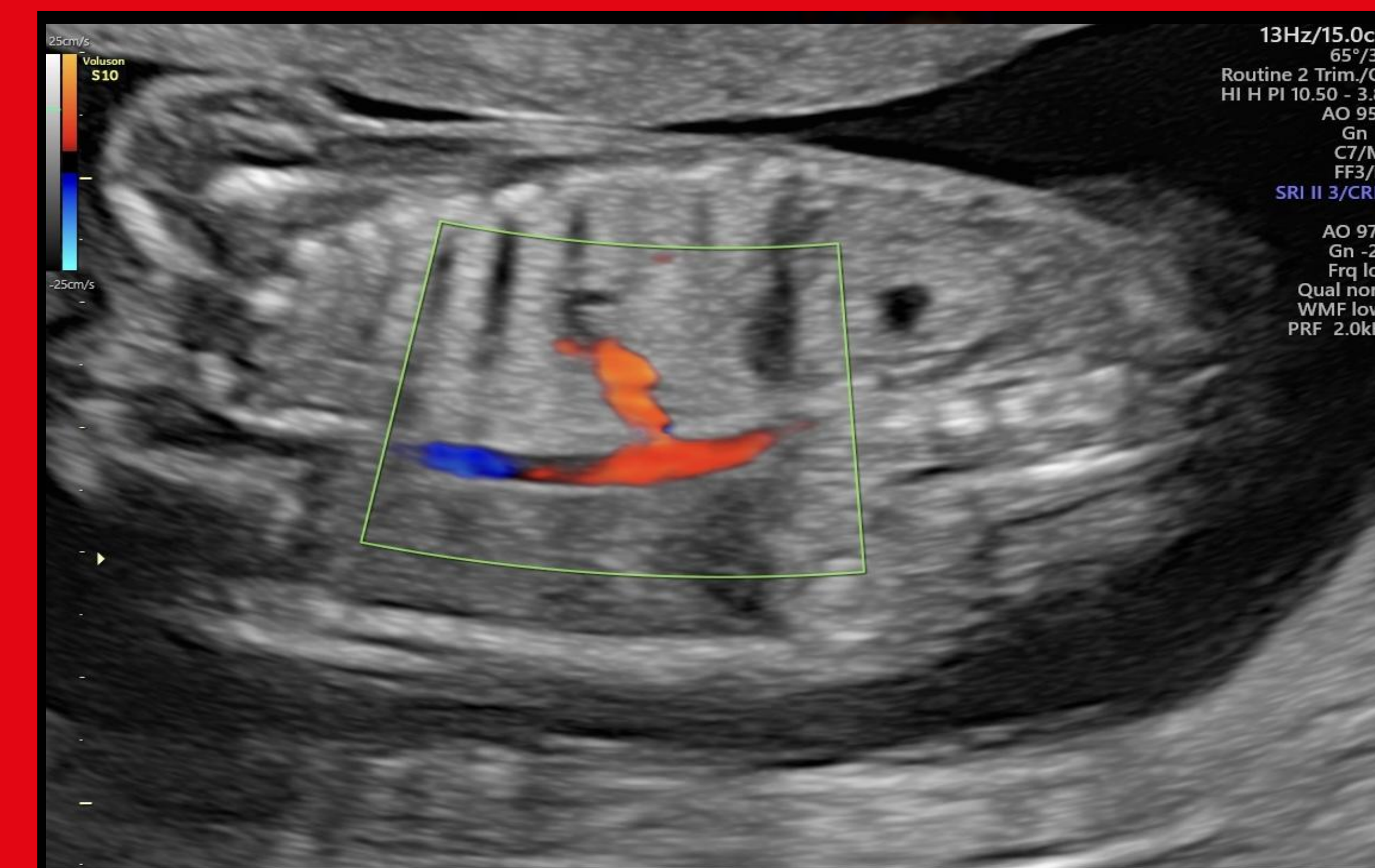


Figure 1. Prenatal Doppler showing systemic feeding vessel in bronchopulmonary sequestration..

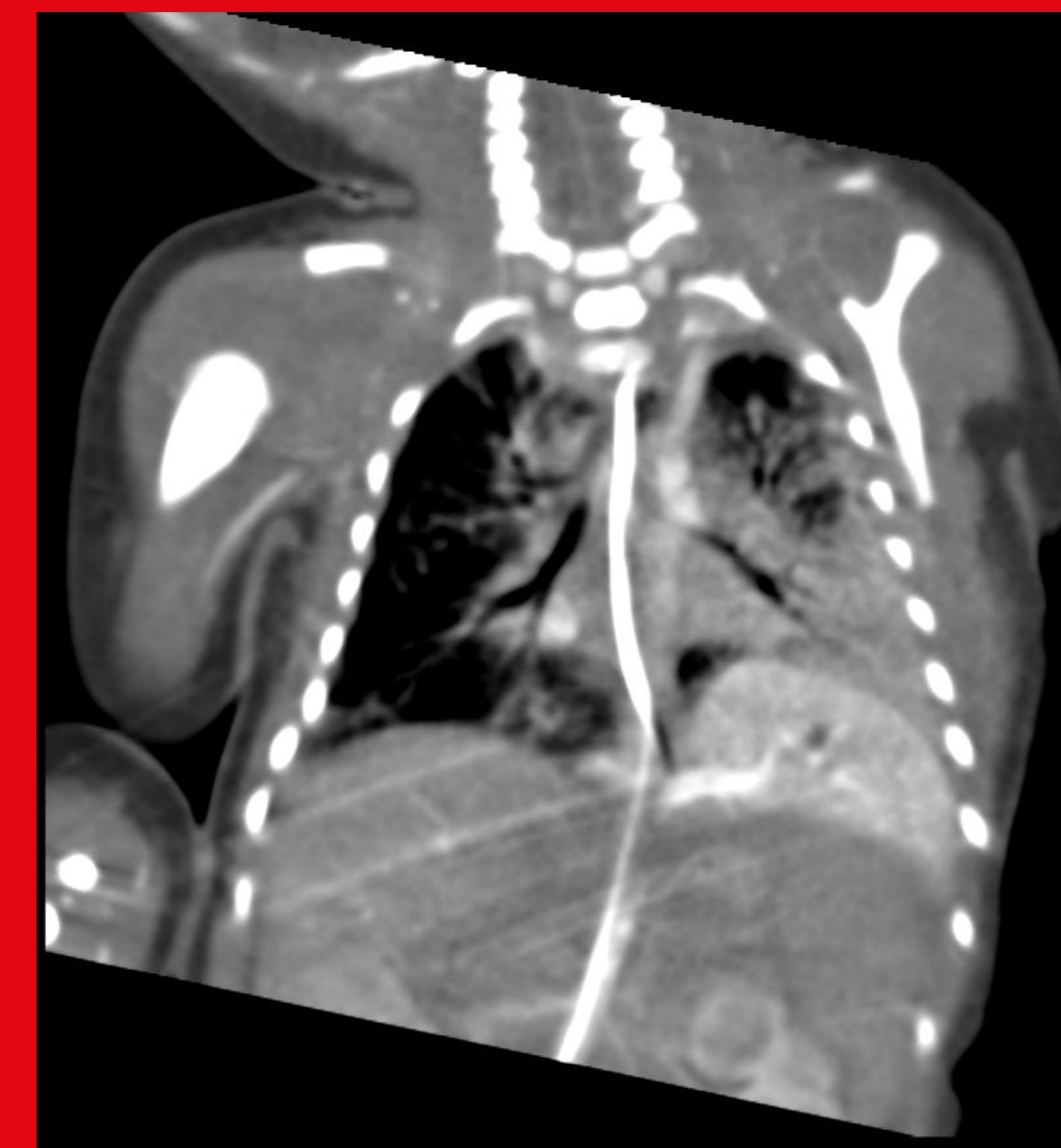


Figure 2. Postnatal CT confirmed the thoracic lesion and demonstrated systemic arterial supply arising from the hepatic artery.