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Title: Unusual form of pulmonary sequestration – Make your diagnosis from abdominal ultrasound

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Body: Introduction: Bronchopulmonary sequestration is a rare congenital malformation of the lower respiratory tract consisting of non-functioning lung tissue that receives its blood supply from the systemic circulation. Aims and Objectives: To evaluate clinical and diagnostic aspects in a case diagnosed primarily by abdominal US. Methods: Evaluation was done by US, color doppler, MRI and Xray. Results: A 12 year old girl was admitted to US due to unspecific abdominal pain and a systolic auscultation. In US and CCDS a stenosis of aorta, renal arteries and mesenteric arteries could be excluded. A thick, aberrant arterial vessel was seen, running paravertebral up to the diaphragm (Fig.1). MR and MR-A showed an atypical artery running from the celiac axis to a sequestered lung tissue area and then communicate to lung veins. Discussion: Sequestrations are characterized by their location, connection to pulmonary or other structures, vascular supply, and association with other abnormalities. If the celiac axis is involved a bronchopulmonary-foregut malformation (BPFM) should be considered. Differential diagnosis, clinical consequences and therapeutic options will be discussed. Conclusions: In cases with aberrant vessels going up to the diaphragm a sequestration of the lung should be considered.

Fig.1: Abdominal Ultrasound (CCDS) and MR-Angiography showing an aberrant vessel from the celiac trunk to a lung sequester in the right lower lobe.