Video of the Issue

Extralobar pulmonary sequestration in the abdominal cavity: an ultrasound case report

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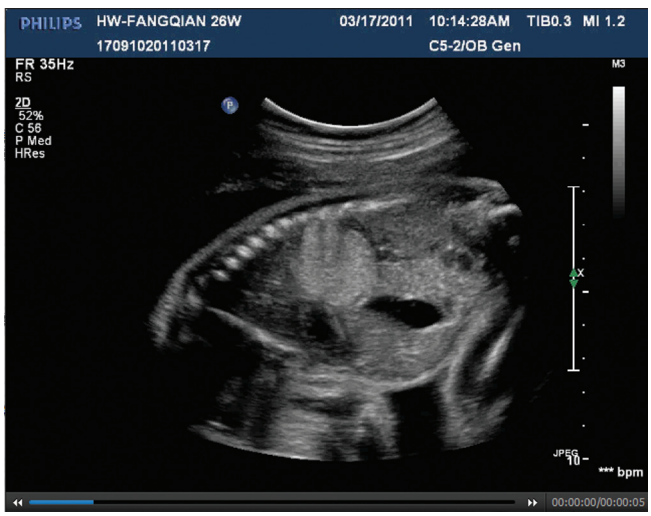
A 28-year-old woman, with unremarkable family history, presented to our unit at 26 weeks of her pregnancy (G1P0). Her ultrasound scan at 13 weeks was normal. Her previous laboratory tests did not show any abnormalities. Our ultrasound examination revealed following findings:

A homogeneously hyperechoic lesion below the left diaphragm were found on the left parasagittal view (*Figure 1A*, *Video 1*). This lesion had a round shape and located below the left ventricle of heart while above the left kidney. On the transverse view of upper abdomen, the lesion was right behind the stomach and parallel with the right kidney (*Figure 1B*). *Figure 1C* showed its feeding vascular pedicles branched off from the abdominal artery and pulsed wave Doppler showed low resistance (*Figure 1D*).

The woman was counseled regarding pulmonary sequestration and some rare retroperitoneal tumors as possible diagnoses and their possible outcomes. She chose to give up the fetus and underwent artificial abortion. Surgical removal was performed afterwards with her consent and the diagnosis of extralobar pulmonary sequestration in the abdominal cavity was finally confirmed.

Macroscopically the lesion was located under the left diaphragm and had a fishmeat-like color, spongy consistence, and the sections presented randomly distributed cystic areas. The external surface of the mass was smooth and covered by pleural tissue (*Figure 1E*). Microscopic examination of the lesion revealed that it was formed totally of normal lung tissue with normal bronchi and bronchioles surrounded by incomplete cartilaginous rings (*Figure 1F*).

Pulmonary sequestration (PS) is a rare congenital malformation of the lower respiratory tract. It consists of a nonfunctioning mass of normal lung tissue that lacks normal communication with the tracheobronchial tree, and that receives its arterial blood supply from the systemic circulation. Sequestrations are classified anatomically: (I) Intralobar sequestration (ILS) in which the lesion is located within a normal lobe and lacks its own visceral pleura; (II) Extralobar sequestration (ELS) in which the mass is located outside the normal lung and has its own visceral pleura (1,2). The PS is a rare anomaly which is lying mostly at the base of the left side of the thorax, but could be found on the right side and in the mediastinum at any level from the neck to below the diaphragm (3). The fetus we encountered is such an extremely rare case.



Video 1 Video clip of ultrasonography demonstrating the mass in real-time

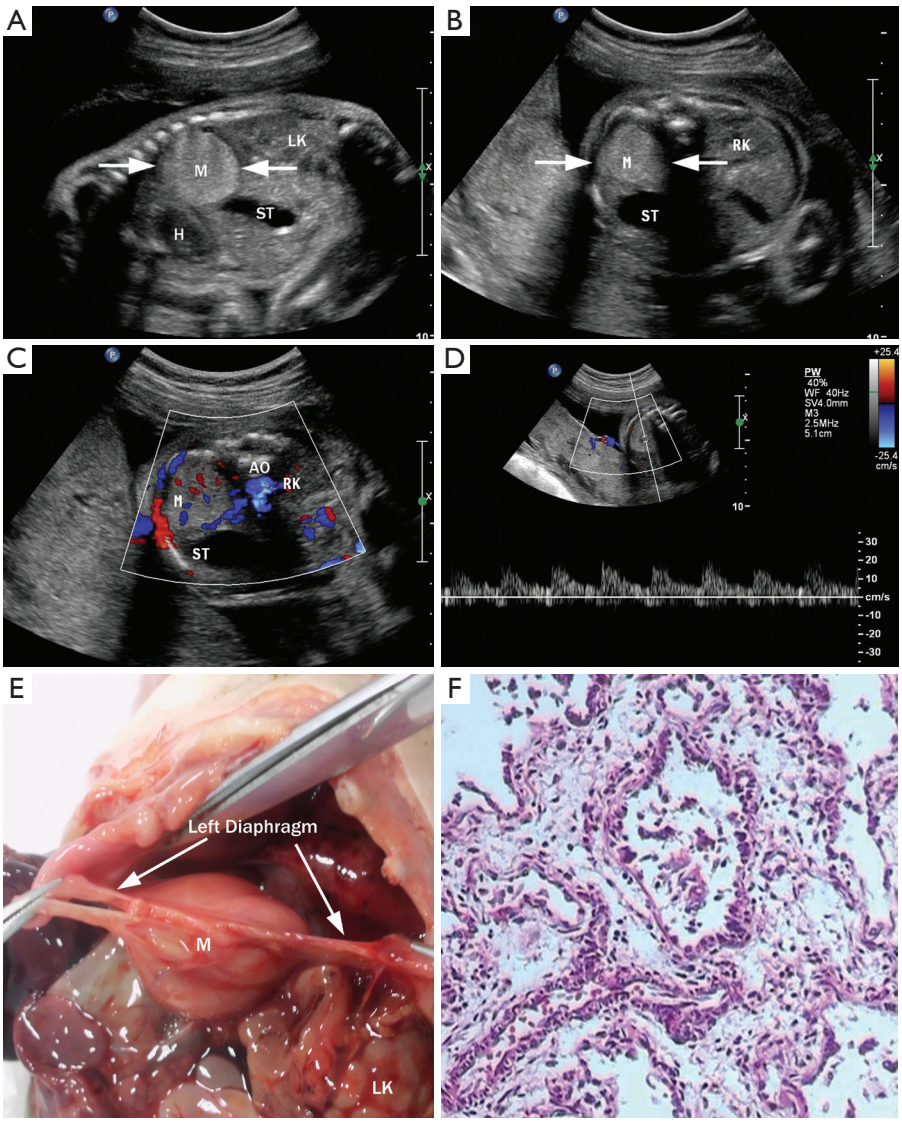


Figure 1 A. Parasagittal scan demonstrating the mass (M) in the abdominal cavity (arrow); B. Transverse scan of the upper abdomen demonstrating the mass (arrow). C. Color Doppler sonogram of the mass demonstrating its feeding vessels; D. Pulsed wave Doppler sonogram showing feeding vessels of low-resistance artery nature; E. Macroscopic inspection; F. Microscopic examination. H, heart; ST, stomach; LK, left kidney; RK, right kidney

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