

Hepatic Mesenchymal Hamartoma

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07/10/2009

History

Toddler with palpable right upper quadrant mass.

Diagnosis

Mesenchymal Hamartoma of the Liver

Additional Clinical

Normal alphafetoprotein level.

Discussion

Mesenchymal hamartoma is characterized by uncoordinated proliferation of primitive mesenchyme in the periportal tracts and may be related to a developmental anomaly of the ductal plate, bile duct obstruction, hepatic lobe ischemia or degeneration, or lymphatic duct obstruction. Mesenchymal hamartoma is generally regarded as a benign lesion with no malignant potential but has features similar to embryonal sarcoma. Most commonly lesions are discovered in children younger than 2 years of age; there is a slight male predominance with no known racial predilection. The most common presentation is painless abdominal distention. There is no specific laboratory marker for mesenchymal hamartoma. Serum AFP levels are typically normal. Cytogenetic analysis has demonstrated balanced translocations at 19q13.4 and aneuploidy which suggest a true neoplastic etiology.

At sonography, the cystic portions of the mass are anechoic or nearly anechoic with thin or thick echogenic septa. The solid portions appear echogenic. Portions with very small cysts may appear completely solid at US. Low-level echoes may be seen within the fluid, presumably reflecting gelatinous contents. Color Doppler imaging shows relatively little blood flow, which is limited to solid portions and septa. At CT, mesenchymal hamartoma appears as a complex cystic mass. The stromal components are hypodense to surrounding liver. The septa and solid elements typically enhance. Hemorrhage within the lesion is unusual.

Findings

US-Solid and cystic hepatic mass; the solid component is hypervascular on Doppler.

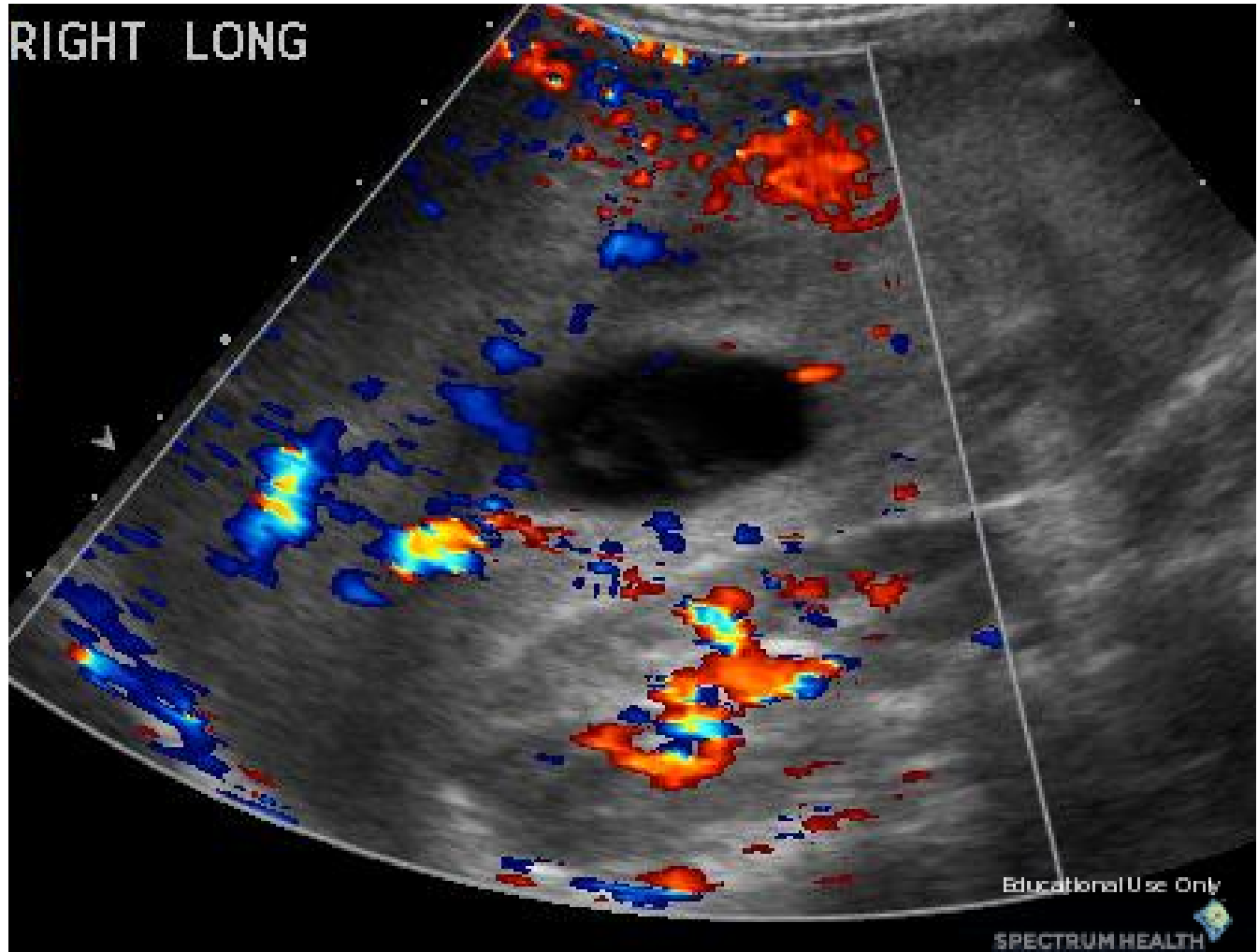
CT-Mixed density mass arising from the right lobe of the liver.

Reference

Siddiqui MA, McKenna BJ. Hepatic Mesenchymal Hamartoma: A Short Review. Arch Pathol Lab Med (2006); 130(10):1567-1569.

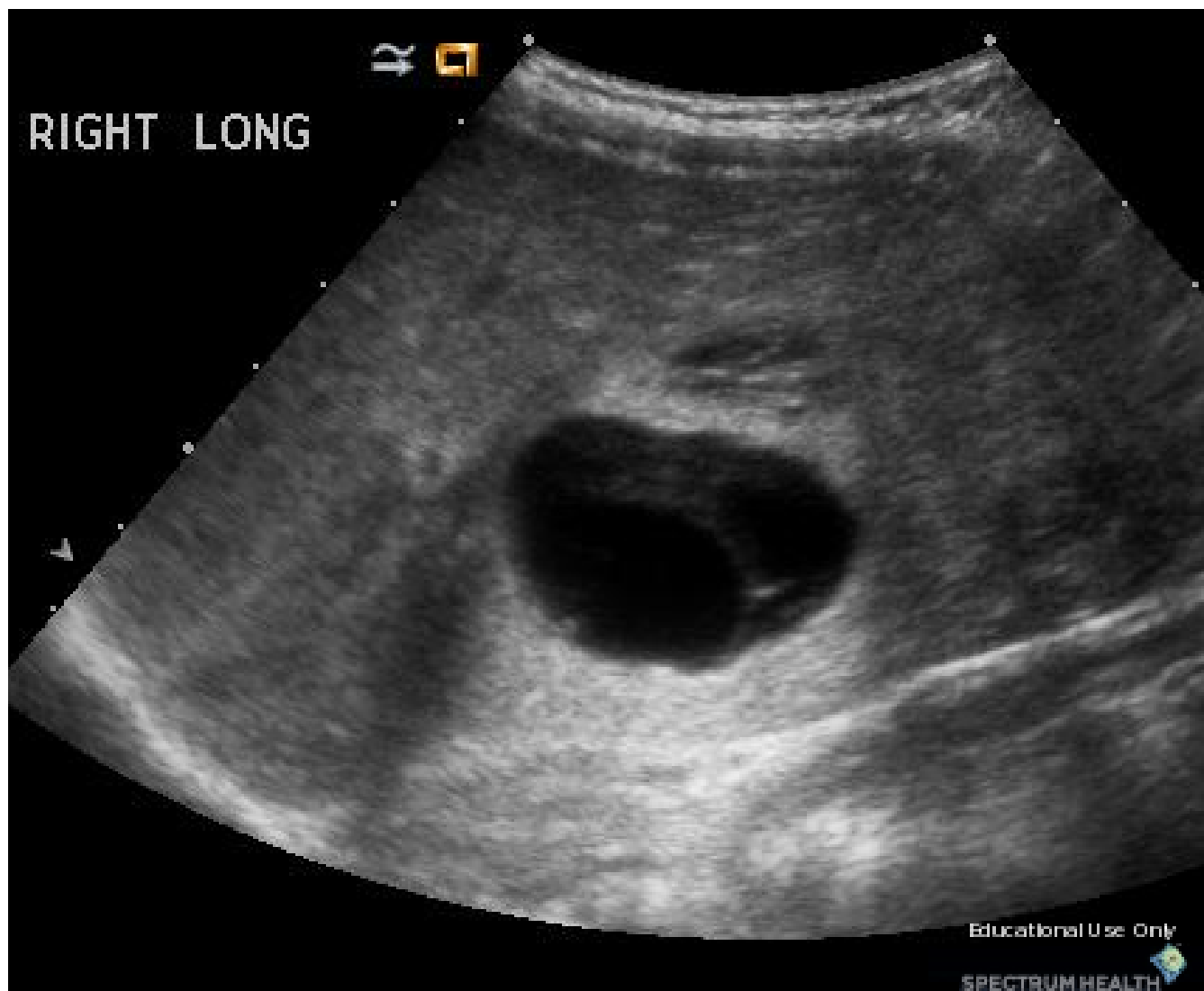
Chung EM, Cube R, Lewis RB, Conran RM. Pediatric Liver Masses: Radiologic-Pathologic Correlation Part 1. Benign Tumors. Radiographics (2010); 30:801-826.

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