The Case of the Silent Abdominal Mass and Elevated α FP in an Infant

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Abstract: A 9-month-old male is admitted to Children's Hospital Colorado after a right upper quadrant (RUQ) abdominal mass was noted during a well child visit. Parents voice no concerns other than mild constipation over the last few weeks, including no abdominal distention or pain, changes in appetite, fever, weight change, or easy bruising and bleeding. Physical exam is remarkable for a midline crossing, palpable RUQ mass extending from the right costal margin to just above the iliac crest. Lab results are within normal limits but is notable for an elevated Alpha fetoprotein (α FP). Imaging and pathology from surgical resection ultimately confirm the mass to be a mesenchymal hamartoma.

The differential diagnosis for an asymptomatic pediatric liver mass is broad and includes both benign and malignant etiologies. Common causes of hepatic masses in infants and toddlers include hepatoblastoma, hemangioma, and mesenchymal hamartoma, which is a relatively rare, benign cause. αFP , amongst other labs, are critical in the workup of a pediatric hepatic mass; however, αFP is not always indicative of malignancy as it can be elevated in benign processes and physiologically in young children. Imaging findings on ultrasound, CT, and MRI can help identify mesenchymal hamartomas; however, pathology is necessary to confirm the diagnosis.