

## HHS PUDIIC ACCESS

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## Peripartum patient with epigastric pain

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A 44-year-old female, gravida 2, para 1, abortus 1, presented to the emergency department with epigastric pain, vomiting and nosebleed at 36 weeks gestation. She had right upper quadrant tenderness and was hypertensive at 138/90 mmHg. Laboratory studies demonstrated decreased platelets of 122 k/mcL, Hb of 11.2 g/dL and RBC of 3.48 M/mcL, elevated AST of 371 U/L and ALT of 522 U/L, and proteinuria of 13 mg/dL.

Ultrasound showed a mass-like lesion in the right hepatic lobe (Fig 1). Emergency caesarean section was performed for hemolysis, elevated liver enzymes and low platelets syndrome (HELPP syndrome) with delivery of a healthy neonate. Intravenous magnesium sulfate initiated, with normalization of blood pressure and liver enzymes, Postpartum MRI liver (Fig 2) demonstrated a 9.0 cm right hepatic lobe ill-defined, heterogeneous lesion. Repeat MRI at 50 days demonstrated almost complete resolution of the liver lesion (Fig 3).

## DIAGNOSIS

Peripartum intrahepatic laceration HELPP syndrome. HELLP syndrome is a complication of pregnancy (1). A rare life-threatening complication is hepatic laceration (2). It can be suspected when the right upper quadrant is tender due to hepatic capsular distention. Imaging can help to diagnose liver hemorrhage (3). Liver laceration can be diagnosed with ultrasound, CT, or MR; however, CT is faster, readily available, and may assess for intraperitoneal blood if there is capsular rupture. Treatment includes delivery for pregnancies 34

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weeks. If <34 weeks, fetal lung development needs to be evaluated before delivery. Medical treatment includes corticosteroids, magnesium sulfate, and antihypertensives (4).

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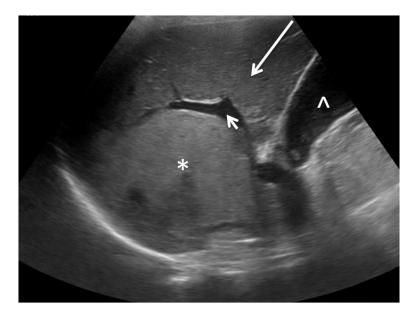
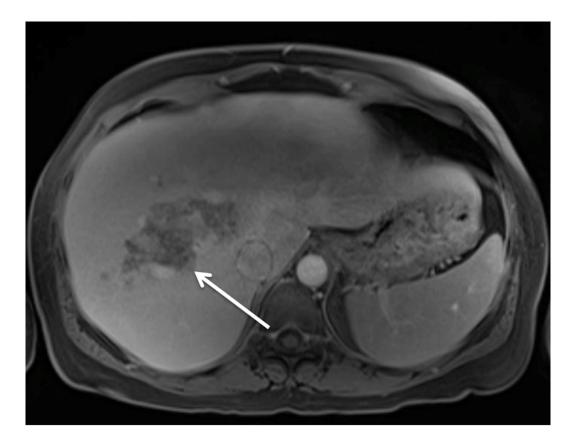
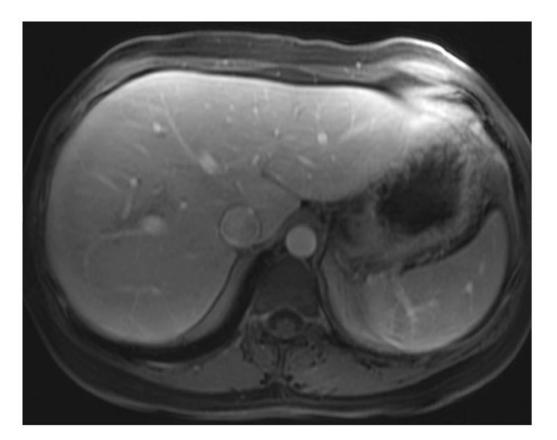


Fig 1. Longitudinal ultrasound image through the liver demonstrating landmarks including the diaphragm (bright line lower left of image), portal vein (short arrow) and stomach ( $^{\land}$ ) as well as a heterogeneous right hepatic lobe mass measuring  $8.9 \times 7.7$  cm ( $^{*}$ ), with the right lobe of liver (long arrow) being homogeneous in echotexture.



**Fig 2.**Fig 2 Left Panel. MRI showing a 9.0 cm heterogeneous liver lesion without significant enhancement.



**Fig 3.**Fig 2 Right Panel. MRI showing almost complete resolution of the heterogeneous liver lesion.