Images in Emergency Medicine

Rare Cause of Syncope in a Gravid Female

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Case Presentation: A 33-year-old gravid female was brought to the emergency department after she collapsed in the street. Point-of-care ultrasound showed free fluid in the abdomen and confirmed an intrauterine pregnancy. Surgical teams were consulted, and cross-sectional imaging revealed a spontaneously ruptured splenic artery aneurysm (SAA). The patient was taken expeditiously to the operating room for splenic artery ligation and subsequent splenectomy.

Discussion: Ruptured SAA in pregnant patients is associated with significant mortality for both mother and fetus. Maintaining a high index of suspicion in the correct population is crucial to avoid diagnostic errors and provide definitive care with operative repair. [Clin Pract Cases Emerg Med. 2020;4(3):478–479.]

Keywords: splenic artery aneurysm; aneurysm rupture; pregnancy; syncope.

CASE PRESENTATION

A 33-year-old gravida 1 para 0 at 18 weeks gestational age presented to the emergency department for syncope. The patient had passed out while crossing the street and emergency medical services were activated. She reported severe abdominal pain after arrival and vitals showed a heart rate of 120 beats per minute and a blood pressure of 88/52 millimeters of mercury. Point-of-care ultrasound showed free fluid in the left upper quadrant and confirmed an intrauterine pregnancy with good cardiac activity. Obstetrics and general surgery teams were consulted. Following improvement of the patient’s vital signs with a crystalloid bolus, a computed tomography was performed, which revealed a spontaneously ruptured and previously undiagnosed 2.6-centimeter splenic artery aneurysm (SAA) (Images 1 and 2).

The patient was taken emergently to the operating room where surgeons evacuated six liters of blood that originated from her splenic artery rupture. Splenectomy was successful in stabilization; however, post-operatively no fetal heart rate was found and a dilation and evacuation was subsequently performed. The patient was discharged home on day 14.

DISCUSSION

The true incidence of SAA is unknown; however, estimates range from 0.02-10.4%. Of those diagnosed, ruptured aneurysm is only seen in 5% of cases, and it is...
Splenic artery aneurysms are usually asymptomatic until ruptured at which point they are associated with high mortality. Pregnant women are at increased risk. Images show ruptured aneurysm in conjunction with the developing fetus. These images are uncommon as such patients are often too unstable for advanced imaging. Understanding this deadly disease can improve emergency physicians’ ability to quickly make the diagnosis and initiate effective treatment.

REFERENCES