

Images in Clinical Medicine

Acute abdomen during pregnancy

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A 32-year-old woman at 32 weeks' gestation presented to the emergency department with an out-of-hospital cardiac arrest after sudden abdominal pain followed by loss of consciousness at home. Bedside ultrasound revealed massive ascites and no fetal heart beat.

Computed tomography of the abdomen showed a ruptured aneurysm in the spleen with hemoperitoneum (Figs. 1 and 2), which was successfully managed by emergency transcatheter arterial embolization. The patient died 10 days later due to multiple organ failure.

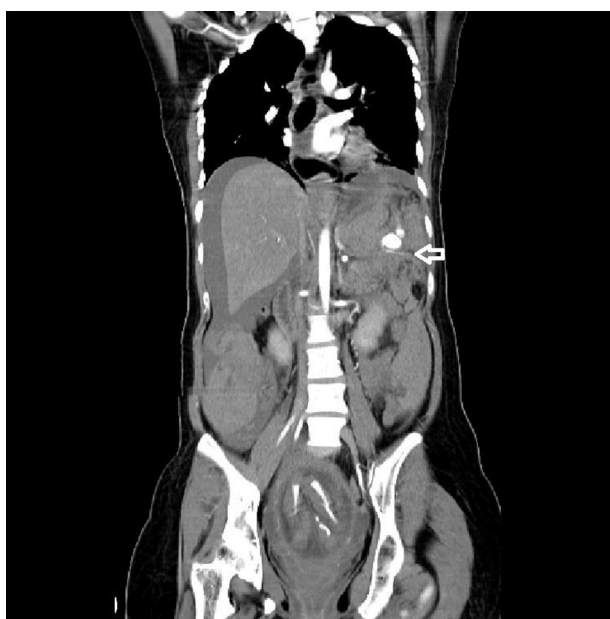


Fig. 1. Computed tomography of the abdomen with contrast medium showed a 1.6 cm × 1.5 cm aneurysm at the distal splenic artery with contrast extravasation, favoring a diagnosis of ruptured splenic aneurysm with active bleeding and hemoperitoneum (bold arrow).



Fig. 2. Volume-rendered three-dimensional images on computed tomography clearly demonstrated a ruptured splenic aneurysm (arrow).

Conflict of interest: none.

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Splenic artery aneurysm (SAA) is the most common variant of splanchnic artery aneurysm, second in frequency to aortic and iliac artery aneurysms [1], with a prevalence rate of 0.04–0.1% at biopsy [2]. Ruptured SAA during pregnancy can be ominous to both the mother and fetus. The mortality rate for pregnant women is high (up to 75%) and the fetal mortality rate is even higher, approaching 95% if there is a delay in diagnosis [3].

Factors attributed to formation of SAA include diabetes, portal hypertension, multiparity, angiodysplasia, atherosclerosis, intracranial aneurysm, α -1-antitrypsin deficiency, and infective factors [4]. Bedside ultrasonography is preferable in pregnancy because it is noninvasive, and there is no radiation exposure. SAAs larger than 2 cm in diameter carry a high risk of rupture in pregnant women [5] and

should be treated with either transcatheter embolization or open ligation/resection.

References

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