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# Spontaneous rupture of splenic artery aneurysm in pregnancy - Case report

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## Background

Visceral artery aneurysm rupture in pregnancy is a rare but serious event. Amongst them, splenic artery aneurysms (SAA) are the most common. This is a catastrophic event with high maternal and fetal mortality rate of 75% and 95% respectively.[1] Most SAA are silent, however, is strongly associated with younger women and up to 95% are found following a rupture during pregnancy. [2]

## Case Presentation

We present a case of a 29-year-old G6P5 k38+5, with 1 previous caesarean section(CS) and 3 successful VBAC, admitted to the ward for early labour. Her obstetrics history included cholestasis of pregnancy with deranged liver function and previous pre-eclampsia.

She reported severe abdominal pain during routine observations and was noted to have fetal bradycardia, maternal tachycardia and hypotension; hence a category A CS was performed. Intraoperatively, she had over 3 litres hemoperitoneum of unclear source, with an intact CS scar and no uterine rupture or abruption.

An intraoperative general surgery opinion was requested, and the incision was extended to umbilicus to access the upper abdomen. A small ooze from splenic hilum was noted and flow seal was applied which achieved haemostasis.

The patient was admitted to ICU, while the neonate was intubated and stabilised in NICU. Postoperatively, CT angiogram diagnosed 2 incidental SAA measuring 17- and 10-mm. Coil embolization was subsequently performed by the vascular surgeons.

## Discussion

The diagnosis of ruptured SAA must be considered in pregnant women with acute abdominal pain and hemodynamic instability. The diagnosis is difficult as it mimics various obstetric emergencies; hence, it is often misdiagnosed as uterine rupture, placental abruption, or amniotic fluid embolism amongst others.[3,4]

Ultrasound with pulsed doppler is the preferred method of diagnosis. Although radiological screening is not recommended given the low prevalence; however, screening women with multiple risks including asymptomatic SAA, and pregnant female with liver disease may be considered.[5] Prompt recognition and early interventions by a multidisciplinary surgical team is crucial for maternal and fetal survival.

## References

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