

PRE-ECLAMPSIA ASSOCIATED SPLENIC PSEUDOANEURYSM: A CASE REPORT

Authors: Saxena D, Odendaal J, Newnham-Hill A, Hillman

Objective: Pre-eclampsia is a common complication of pregnancy with rare complications including liver capsule rupture. Splenic pseudoaneurysms are a rare presentation of uncertain aetiology but associated with a diverse range of conditions including pancreatitis and trauma. Currently there are fewer than 200 previously reported cases worldwide. Here we present a case of splenic pseudoaneurysm in woman presenting with a history of pre-eclampsia and intra-uterine death at 36+2 weeks' gestation.

Case Report: A 31-year old parity 1 woman with a previously uncomplicated pregnancy presented at 36+2 weeks' gestation with raised blood pressure and significant abdominal pain. She had a raised urinary protein-creatinine ratio 216. A diagnosis of pre-eclampsia with suspected placental abruption was made. Ultrasound demonstrated intra-uterine death and medical induction commenced. Worsening of pain after vaginal delivery was investigated with a CT abdomen and angiography which demonstrated splenic vein thrombosis, splenic artery pseudoaneurysm and a subcapsular haematoma. Multidisciplinary team management was conservative with prophylactic enoxaparin.



Conclusion: We present a rare case of splenic artery pseudoaneurysm and venous thrombosis associated with pre-eclampsia and intra-uterine death. The case suggests the need to consider this rare complication in severe pre-eclampsia. It also highlights the complexity of management of pregnant women with visceral aneurysms.

Discussion: Although uncommon, detection of intraabdominal visceral aneurysms and pseudoaneurysms is on the rise with the increased use of cross-sectional imaging. Many remain asymptomatic until rupture. Splenic artery aneurysms in women of reproductive age have a tendency to rupture especially in the third trimester of pregnancy. Mortality rates outside of pregnancy are reported at 25% however during pregnancy are disproportionately higher with maternal and foetal mortality rate of 80% and 90% respectively. 80% of identified visceral aneurysm are pseudo aneurysm; studies suggest pseudoaneurysms are more likely to rupture than true aneurysms. The pathogenesis of pseudoaneurysms is unclear with suggestions of increased pressure and chronic pancreatitis as causes. This increased pressure may result from congestion secondary to pre-eclampsia although this link has not previously been reported. In non-pregnant women the recommendation is to treat via endovascular or open surgical options due to high possibility of rupture unless other complicating factors are identified however the management in pregnant women is less clear, requiring an individualised multidisciplinary approach. Close surveillance is required if conservative measures are taken.