

Case of Uterine Pseudoaneurysm in pregnancy presenting with a hemoperitoneum: Sentinel case and a case of a subsequent pregnancy

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Background

Uterine artery pseudoaneurysm in pregnancy is a dangerous condition as rupture can be catastrophic due to the large volume of uterine blood flow. This diagnosis should be considered in the setting of sudden onset abdominal pain. If left untreated may results in catastrophic bleeding and may progress to maternal and fetal death

Case 1

36 year old women at 18 weeks gestation presented to a tertiary hospital from rural hospital with lower abdominal pain, tachycardia and hypotension with a Hb drop from 115 to 70g/L. An explorative laparoscopy demonstrated a 2.2L hemoperitoneum with normal ovaries and uterus. Nil clear source of bleeding was identified. CT angiography demonstrated an irregular, multilobulated focal aneurysmal dilation of right uterine artery. No definitive contrast extravasation or venous pooling suggestive of arterial bleeding and moderate volume surrounding isodense fluid suggestive of haematoma was noted.

Patient was managed conservatively in ICU requiring seven units of packed red cells and five units of cryoprecipitate, however, persistent tachycardia and transfusion dependant haemoglobin resulted in a repeat angiography resulting in coiling of the right uterine artery (Figure 1)

Once stabilised ultrasound surveillance was performed which identified a live ongoing pregnancy. Left uterine artery appeared normal. Right uterine artery had reduced flow, PI and increased diastolic flow and increased blood flow in uterine collaterals. Fortnightly growth ultrasounds were arranged demonstrating normal fetal growth. Normal maternal echocardiogram and genetics review demonstrated nil causative pathogenic variants identified in an aortopathy panel.

An uncomplicated elective caesarean section at 39 weeks was performed with live female infant weighing 3290g with EBL 900mL. A post partum CT angiogram demonstrated a stable pseudoaneurysm 5 x5 mm enhancing outpouching suggestive of a small residual aneurysm with nil extravasation.

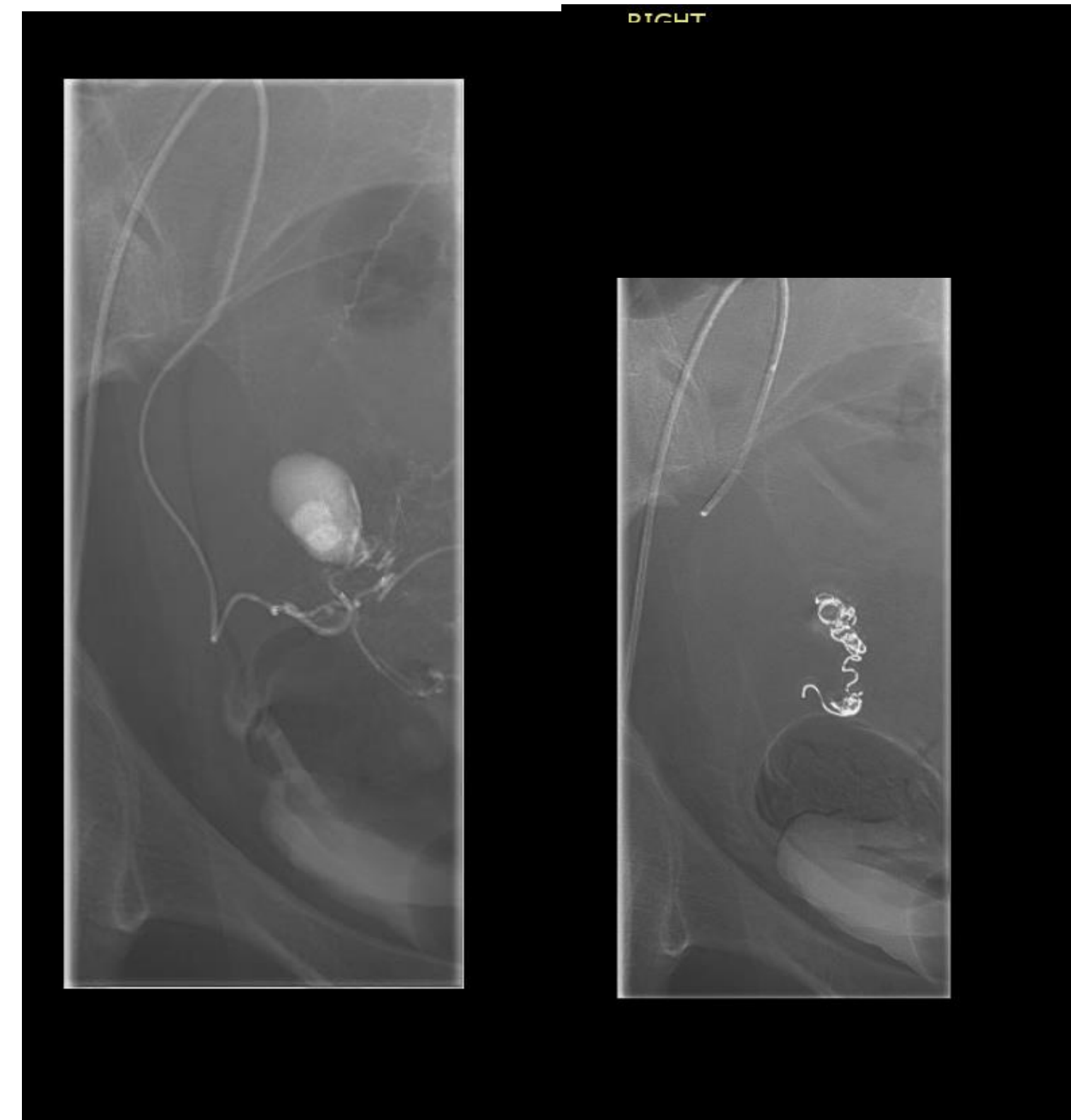


Figure 1 – Pre and post angiography demonstrating coiling of right pseudoaneurysm

Case 2

Despite a recommended plan of a repeat CT angiogram at approximately 12 months post partum to reassess the uterine arterial structure, patient was found to be pregnant. After counselling, patient opted to continue conservative treatment with serial fetal growth scans. Ultrasounds have demonstrated persistent reduced flow through the right uterine artery with normal fetal growth. An elective repeat caesarean section was performed at 39 weeks with a live male infant weighing 3685g with 300mL EBL.