Anaesthetic considerations in rudimentary horn twin pregnancy with placenta accreta.

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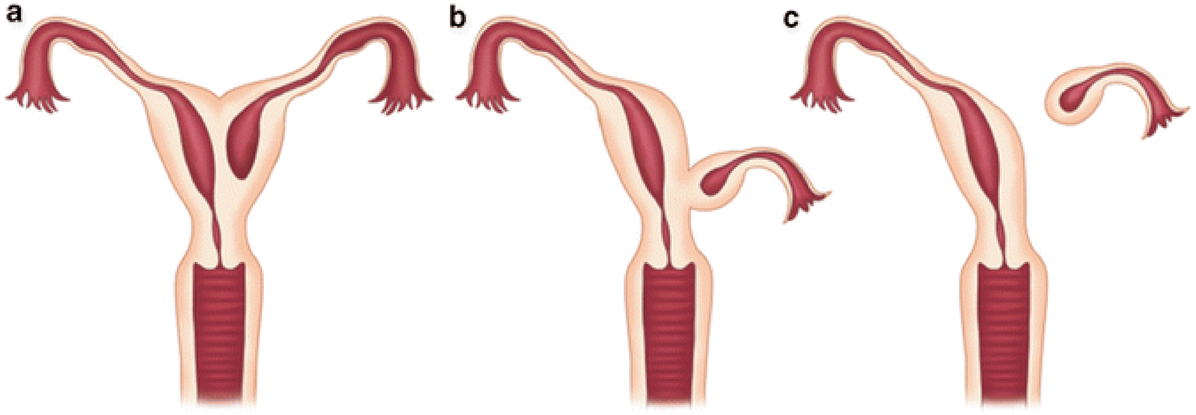
Pregnancy in a non-communicating rudimentary uterine horn combined with placenta accreta is a very rare, life-threatening condition (approximately 11.9% with prevalence of accreta in such cases).[1-2] We present a case of a twin pregnancy that highlights the complex surgical and anaesthetic challenges that can arise.



Rudimentary Horn Pregnancy

Rudimentary horn pregnancy (RHP)with accreta arises due to the rudimentary horn failing to develop properly, making it less elastic and thinner, which causes the placenta to invade the muscle wall (accreta/percreta) to seek blood supply.

While RHP is rare, rupture often occurs between 10–20 weeks, and the presence of placenta accreta increases the severity of haemorrhage. It is critical that it is diagnosed within the first-trimester to prevent rupture.

Upon diagnosis, immediate surgical excision of the rudimentary horn is required to prevent catastrophic bleeding.

Case History

51 year old woman

Presenting complaint:

- dull right upper quadrant pain

History of Presenting complaint:

- 20 weeks gestation

Surgical History:

- Caesarean Section
- Laparoscopic ectopic pregnancy management
- Open Myomectomy

Past Medical History:

- Type 2 Diabetes Mellitus
- Chronic Hypertension
- Chronic anaemia

An MRI scan identified a DCDA pregnancy with Twin A noted to be intrauterine and Twin B located within the rudimentary horn of a unicornuate uterus, with evidence of placenta accreta.

MDT Discussion & Plan

- Selective reduction of Twin B with fetocide to allow devascularisation within the rudimentary horn
- Planned elective LSCS at 32-34 weeks with Combined Spinal Epidural with the use of a Resuscitative endovascular balloon occlusion of the aorta (REBOA) and the support of interventional radiology.

Patient underwent successful fetocide of twin B

Patient monitored post procedure

Worsening abdominal pain with signs of intra-abdominal bleeding and hypovolaemic shock

Emergency midline laparotomy under general anaesthesia,

- 2.7L intraperitoneal blood loss from a placenta accreta requiring rudimentary horn excision and omentectomy and delivery of Twin A.

Key learning points

The anaesthetic implications of RHP with accreta with a viable intrauterine pregnancy include awareness of the complications that may arise due to potential risk of horn rupture, major haemorrhage and infection.

Management of these cases in a tertiary centre with a specialist MDT is key.

It is essential to be prepared for major haemorrhage and for critical care post operatively.

References:

1. Oral B et al. Placenta Accreta associated with a ruptured pregnant rudimentary uterine horn: case report and review of the literature. Archives of Gynecology and Obstetrics 2001; 265(2):100-2.
2. Henriet E et al. Pregnant Noncommunicating Rudimentary Uterine Horn with Placenta Percreta. Journal of the society of laparoscopic and robotic surgeons 2008; 12: 101-103.