Overlapping features between miscarriage of a low-lying gestational sac and cervical ectopic pregnancy.

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Background

Early pregnancy ultrasound must satisfy criteria to make a safe diagnosis of miscarriage(1).

The differential diagnosis of low-lying gestational sac includes cervical stage of miscarriage, morbidly adherent placenta, cervical or caesarean scar ectopic pregnancy(2).

Misdiagnosis can lead to significant maternal morbidity.

Case Presentation

We describe a pregnancy in a 36-year-old primiparous woman where ultrasound findings of a low-lying gestation sac satisfied criteria for miscarriage however dilatation and curettage of pregnancy products resulted in brisk cervical bleeding.

Ultrasound at 7 weeks showed an intra-uterine pregnancy of uncertain viability.

Repeat scan after 11 days confirmed miscarriage based on an absence of interval progression between scans and no embryonic heart-beat.

The collapsed gestational sac (GS) was seen at the level of the internal os with decidual reaction and peri-trophoblastic blood flow. Inferior to the sac, minimally vascular trophoblastic appearing tissue was beginning to distend the upper cervical canal: the sliding sign was positive for the GS and negative for the upper cervical contents. Cervical stroma was clearly seen circumferential to the distending tissue.

The patient underwent dilatation and curettage of the uterus complicated by 2L haemorrhage requiring blood transfusion, medical and surgical management with intra-cavitary placement of a Foley catheter.

Histopathology confirmed pregnancy tissue with disruption of cervical epithelium but no true invasion.

For next pregnancy, the woman was counselled to have an early dating ultrasound, and if sac implanted low, to seek specialist review.

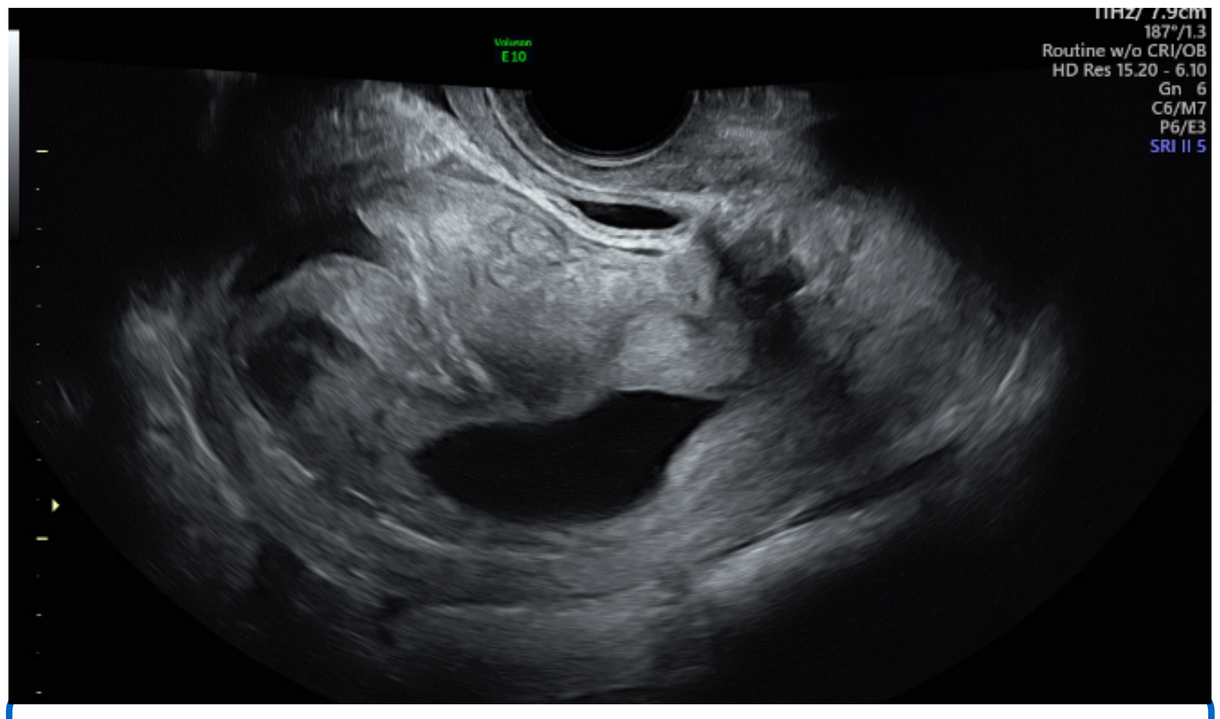

Figure 1: Longitudinal view of the uterus demonstrating the lowly implanted gestational sac with extra-membranous haemorrhage superiorly

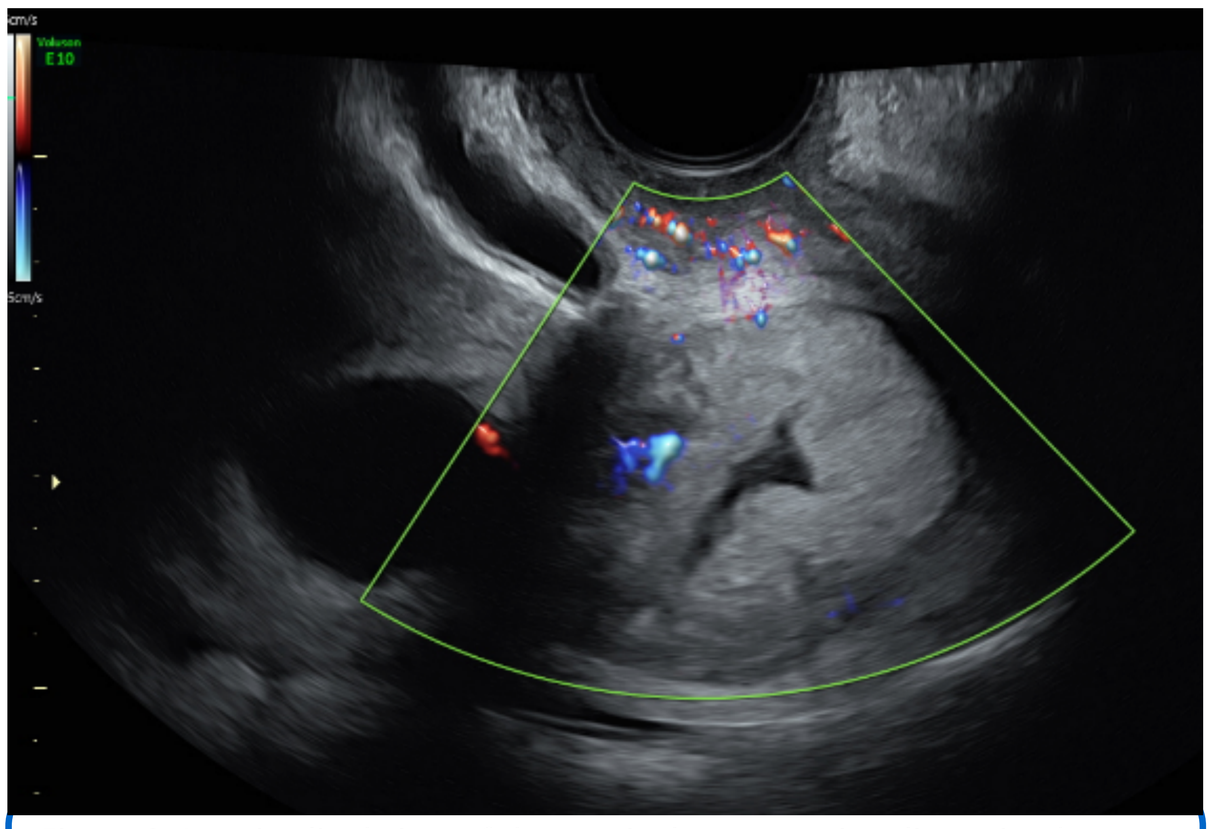

Figure 2: Longitudinal view of the cervix demonstrating distention by trophoblastic tissue with the cervical stromal margins clearly visible peripherally indicating the tissue is within the cervical canal and not intercepting into the cervical stroma

Discussion & Conclusion

This case of a low-lying gestation sac miscarriage with high-risk features of trophoblastic extension into the cervical canal in a primiparous woman highlights complications that can arise despite accurate ultrasound characterisation.

Our patient most likely had a pregnancy which implanted very low in the uterine cavity, then had trophoblastic extension rather than invasion into the cervical canal. The split sliding sign above and below the level of the internal os was most striking and raised the suspicion of an ectopic pregnancy.

We suggest maintaining a high index of suspicion and excluding differential diagnoses of ectopic pregnancy. These cases should be recommended for surgical management due to the high risk of bleeding and morbidity (3).

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