

Advanced Abdominal Pregnancy: Anaesthetic Managements and Lessons Learned

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Introduction

Abdominal pregnancies are rare and account for less than 1% of ectopic pregnancies. They pose significant maternal and fetal risks but can have successful outcomes with early diagnosis and multidisciplinary management.

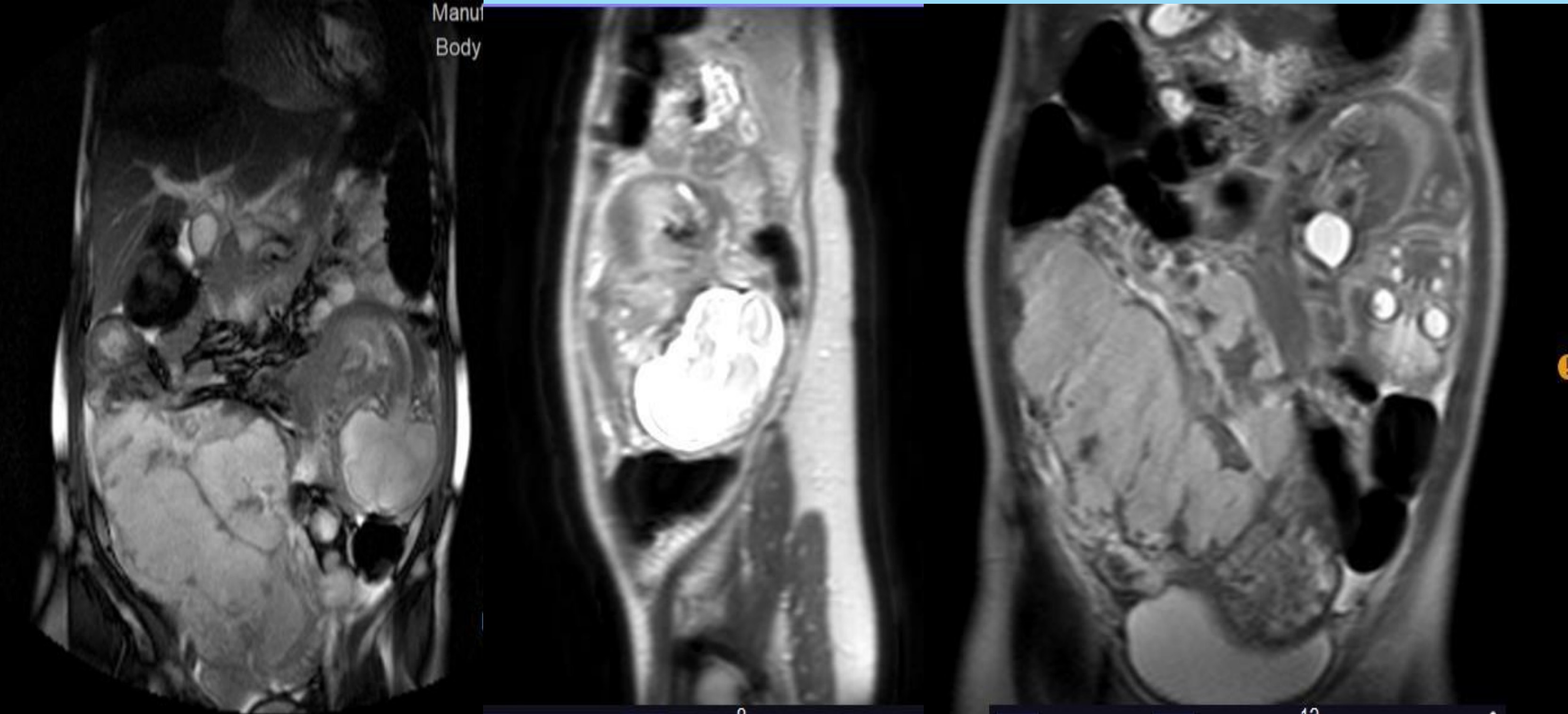


Figure 1 MRI showing intraabdominal pregnancy. Foetus seen at right iliac fossa.

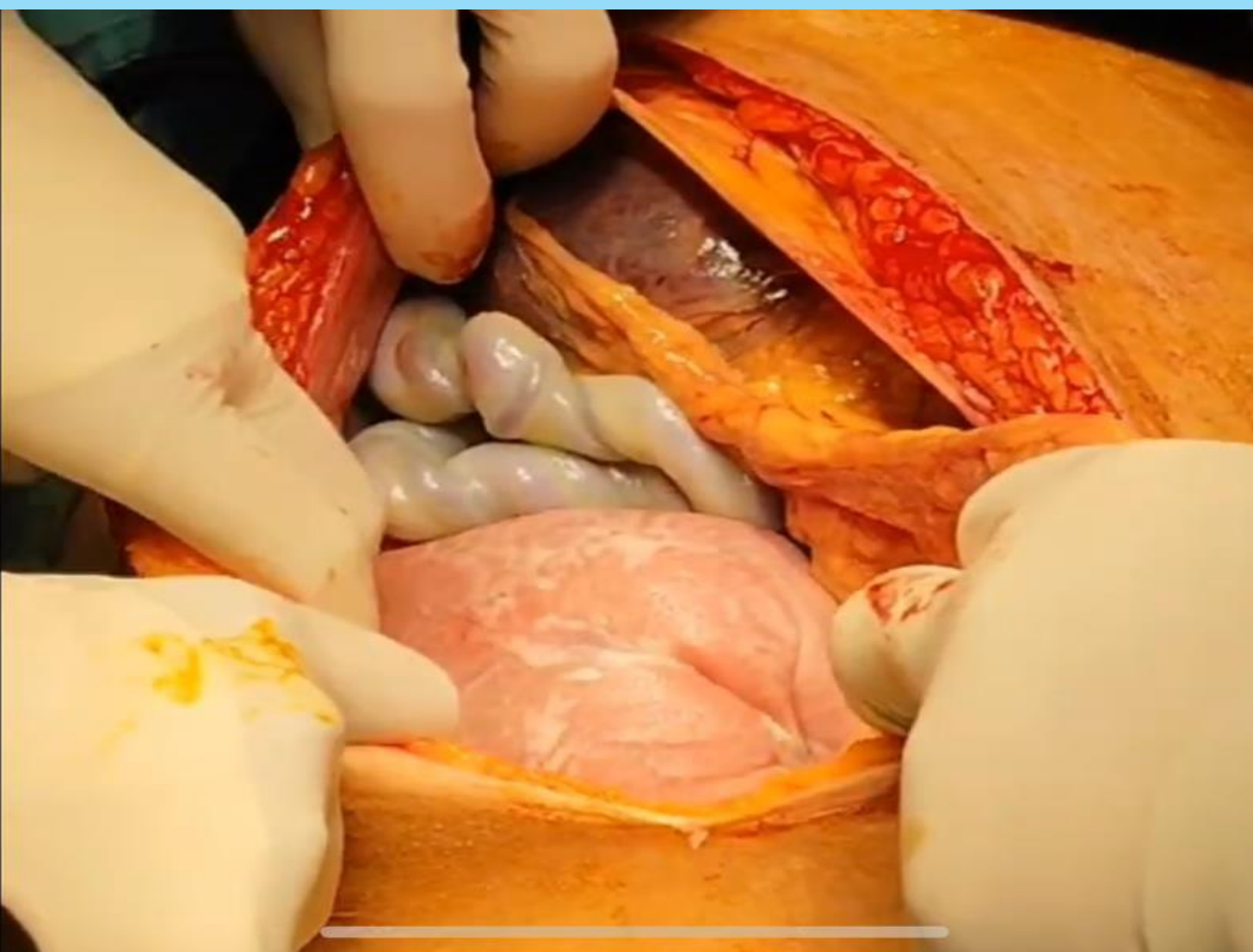


Figure 2 Foetus buttock and umbilical cord seen at left side of abdominal cavity.



Figure 3 Foetus intubated after delivery

Case Presentation

- This case report details a 33-year-old lady G5P2+3 at 29 weeks of gestation with an advanced abdominal pregnancy successfully delivered healthy fetus under general anaesthesia.
- Initial misdiagnosis (ovarian mass) by ultrasound abdomen led to delayed management.
- Referral to tertiary centre reveal fetus in situ after patient complaint of painful “fetal movement”
- Subsequent MRI and CT angiogram confirmed the diagnosis, revealing placental adherence to the uterine fundus with systemic arterial supply (arising from right internal iliac arteries, right uterine artery and right gonadal artery).
- A multidisciplinary team planned surgical delivery via midline laparotomy, preoperative ureteric stenting, and prophylactic balloon artery occlusion.
- Post-operative embolization of feeder vessel was performed by radiologist and placenta was left in situ.
- The patient was monitored in the critical care unit and discharged home well with regular placenta surveillance.

Anaesthetist concern and management

PREOPERATIVE - COMPLEX CASE WITH ALIVE FETAL (PLACENTA IMPLANTED TO UTERINE FUNDUS, FEEDER FROM SYSTEMIC CIRCULATION)	Early referral, counseling, and multidisciplinary team involvement -MATERNAL FETAL OBSTETRIC TEAM, ANAESTHESIOLOGIST, RADIOLOGIST, UROLOGY, GENERAL SURGERY, NEONATOLOGIST, HEMATOLOGIST.
INTRAOPERATIVE - POTENTIAL FOR MASSIVE BLEEDING, HAEMODYNAMIC INSTABILITY, HYSTERECTOMY, INJURY TO OTHER INTRAABDOMINAL ORGANS	General anaesthesia with invasive monitoring, blood product with procoagulants standby guided by point-of-care testing, IV Tranexamic acid, cell salvage, multimodal analgesia with regional block, oxytocin omitted.
POSTOPERATIVE - RISK OF PLACENTA SEPARATION, INFECTION, POST PARTUM DELAY RECOVERY	Observation in critical care, patient-controlled analgesia, prolonged antibiotics, continuous surveillance and possibility for another debulking surgery.

Discussion & Learning points

- Advance abdominal pregnancy is rare but very challenging for the anaesthetist
- Early referral for multidisciplinary discussion and planning of delivery method mainly depends on placenta implantation site.

References

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- Legesse, T. K., Ayana, B. A., & Issa, S. A. (2023, March). Surviving fetus from a full term abdominal pregnancy. *International Medical Case Reports Journal*, 16, 173–178.