From misdiagnosis to multidisciplinary success: Conservative management of advanced abdominal pregnancy with placental in-situ retention

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ABSTRACT

Introduction: Advanced abdominal pregnancy is a rare and potentially life-threatening ectopic pregnancy, occurring in approximately 1:10,000 live births. Nonspecific symptoms often delay diagnosis, increasing maternal and fetal risks. This case, initially mistaken for an ovarian mass, highlights the role of advanced imaging, multidisciplinary planning, and conservative placental retention. **Case Description:** A 33-year-old G5P2+2 presented in early pregnancy with an adnexal mass (6.3 × 3.3 cm) and raised AFP, raising concerns about ovarian malignancy. Follow-up imaging showed resolution; however, at 27+5 weeks, she developed abdominal discomfort and reduced fetal movements. Ultrasound revealed a viable fetus in transverse lie with anhydramnios and placentomegaly, prompting referral to maternal-fetal medicine (MFM), which confirmed an intra-abdominal pregnancy with extrauterine placental implantation at the uterine fundus. MRI revealed placental vascularisation from the internal iliac and inferior mesenteric arteries. A multidisciplinary approach — including MFM specialists, interventional radiologists, neonatologists, and surgeons – guided preoperative bilateral uterine artery balloon catheter placement and elective laparotomy, delivering a live fetus (1070 g). Due to extensive vascularisation, in-situ placental retention followed by postoperative uterine artery embolisation was the safest strategy. Beta-hCG levels normalised by 11 weeks postpartum, with serial ultrasound confirming placental involution after 12 weeks. At ten months postpartum, the patient remained stable, with a reduced placenta in situ and no complications. **Discussion:** This case emphasises the need to recognise atypical abdominal pregnancy presentations and demonstrates that conservative placental management with interventional radiology can be life-saving. Multidisciplinary collaboration is essential for optimising maternal outcomes in rare ectopic pregnancies.