



Placental Abruption and Hysterectomy In A 59-Year-Old Primigravida With IVF Twin Pregnancy

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INTRODUCTION

Pregnancy in women over the age of 55 is exceedingly rare and poses major clinical challenges. With increasing access to assisted reproductive technologies (ART), more postmenopausal women are conceiving, often with donor oocytes. These pregnancies carry significantly increased maternal and fetal risk, especially when complicated by multiple gestation, prior uterine surgery, or chronic medical conditions such as hypertension¹.

This case highlights the obstetric and surgical management of a high-risk twin pregnancy in a 59-year-old woman, culminating in cesarean delivery complicated by abnormal placentation, subtotal hysterectomy, and a postoperative intra-abdominal haemorrhage requiring re-laparotomy.

BACKGROUND

The number of women seeking fertility treatment later in life has grown, particularly with the availability of donor gametes and fertility tourism. However, pregnancy in postmenopausal women over 55 is associated with a significantly increased risk of maternal morbidity, including hypertensive disorders, abnormal placentation, preterm birth, and peripartum hysterectomy²³.

Twin pregnancies conceived via ART are known to increase the risk of preterm premature rupture of membranes (PPROM), fetal compromise, and postpartum haemorrhage⁴. Furthermore, prior uterine surgery such as myomectomy increases the likelihood of placenta accreta spectrum (PAS) disorders⁴. This case offers insight into the compounded risks faced by older women with multifetal gestations and underscores the need for thorough antenatal planning and surgical preparedness.

CASE REPORT

A 59-year-old woman, gravida 2 para 0+1, conceived dichorionic diamniotic (DCDA) twins via IVF using donor oocytes and sperm overseas. Her background included chronic hypertension, previous abdominal myomectomy, and bilateral cataracts with significant visual impairment. She was booked for consultant-led antenatal care in a tertiary unit due to her high-risk profile.

At 25+1 weeks' gestation, she presented with spontaneous rupture of membranes. She was managed conservatively with antenatal corticosteroids for fetal lung maturation and magnesium sulphate for neuroprotection⁵.

Serological screening identified previously unrecognised Allo-anti-C antibodies, complicating transfusion planning. In-utero transfer was considered but unavailable due to capacity limitations. Within 12 hours of admission, a pathological cardiotocograph (CTG) indicated fetal distress, and an emergency caesarean section was performed.

Intraoperatively, placental abruption was evident following delivery of the second twin. Surgical challenges included dense adhesions from prior myomectomy, an inadvertent bladder injury, and suspected placenta accreta. Despite uterotonic agents, uterine atony persisted, necessitating a subtotal hysterectomy. Estimated blood loss was 4.1 litres, and the massive transfusion protocol was activated. The patient was transferred to the intensive care unit (ICU) postoperatively.

While in critical care, the patient became hemodynamically unstable with abdominal distension. A bedside ultrasound and clinical findings confirmed ongoing intra-abdominal haemorrhage. She underwent emergency re-laparotomy in ICU, where bleeding from the pelvic vault was surgically controlled.

Subsequent investigations revealed mesenteric venous thrombosis, managed with anticoagulation and thrombolysis under haematology guidance⁶. The neonates were admitted to a tertiary neonatal intensive care unit and later discharged in stable condition. The mother recovered slowly but steadily and was discharged home on postoperative day 14.

DISCUSSION

This case demonstrates how advanced maternal age, ART, prior uterine surgery, and multifetal gestation can intersect to create a cascade of serious obstetric complications. Pregnancies achieved through IVF in older women are more likely to be complicated by abnormal placentation, including placenta accreta, increta, or percreta⁷⁴. The patient's history of open myomectomy placed her at increased risk of pelvic adhesions and PAS. Moreover, IVF itself is a recognised independent risk factor for abnormal placentation, even in women without surgical uterine histories⁸.

The development of uterine atony and the need for subtotal hysterectomy reflects the reduced contractile capacity of the ageing uterus and underscores the need for preoperative preparedness, including availability of blood products and surgical expertise⁹. Delayed identification of alloantibodies led to significant transfusion delays. This highlights the necessity of early and comprehensive antenatal blood group screening, especially in patients with international IVF histories or incomplete records¹⁰. Postoperative mesenteric venous thrombosis, although rare, should be considered in postpartum women presenting with abdominal pain and signs of systemic instability, especially in the context of major surgery, immobility, and underlying risk factors⁶. Finally, the unavailability of in-utero transfer during this emergency situation reflects current gaps in perinatal care coordination. Expansion of neonatal cot availability and real-time transfer systems is needed to ensure optimal outcomes for vulnerable pregnancies.

CONCLUSION

Pregnancy in postmenopausal women through ART carries significant risks. This case illustrates how prior uterine surgery, advanced maternal age, and multifetal gestation can converge to cause life-threatening complications. The occurrence of placental abruption, suspected placenta accreta, and massive haemorrhage necessitated complex surgical intervention including subtotal hysterectomy and re-laparotomy.

Comprehensive antenatal risk assessment, early detection of serological antibodies, contingency planning for massive obstetric haemorrhage, and access to critical care support are essential. Thromboembolic complications must be anticipated and proactively managed.

As more women seek conception later in life, this case underscores the importance of ethical counselling, anticipatory care, and system-level preparedness to ensure safe maternal and neonatal outcomes.

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