

Placenta Previa Accreta Meets Malformation: A Surgical Battle - A Case Report

Dr. Kadli Sanjay¹, Dr. Divya T K², Dr. Rajini Uday³

¹Postgraduate, Department of Obstetrics and Gynaecology, Sapthagiri Institute of Medical Sciences,
Sapthagiri NPS University, Bengaluru, Karnataka, India.

²HOD and Professor, Department of Obstetrics and Gynaecology, Sapthagiri Institute of Medical Sciences,
Sapthagiri NPS University, Bengaluru, Karnataka, India.

³Professor, Department of Obstetrics and Gynaecology, Sapthagiri Institute of Medical Sciences,
Sapthagiri NPS University, Bengaluru, Karnataka, India.

Corresponding Author: Dr. Kadli Sanjay

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ABSTRACT

Placenta accreta spectrum (PAS) is an important cause of severe obstetric haemorrhage and is commonly associated with placenta previa and previous caesarean delivery. The presence of a congenital uterine anomaly can make both diagnosis and surgery more difficult. We report the case of a 25-year-old gravida 3 para 1 living 1 abortion 1 woman with a previous caesarean delivery who presented at 32 weeks with per vaginal bleeding and decreased fetal movements. Fetal distress was noted. Ultrasound showed an anterior low-lying placenta with multiple placental lakes and minimal retroplacental haemorrhage. She was already known to have a bicornuate bicollis uterus with a thick vaginal septum. Emergency caesarean delivery was undertaken. At surgery, the pregnancy was found in the right uterine horn and the anterior placenta was close to the internal os and abnormally adherent to the myometrium. Placental separation was followed by heavy bleeding, and peripartum hysterectomy was required. Massive transfusion and inotropic support were needed, followed by intensive care admission. Inotropes were continued for 12 hours. The mother and neonate subsequently recovered well. Histopathology confirmed placenta accreta and a bicornuate

uterus. This case emphasizes the need to recognize PAS from the clinical risk factors and ultrasound findings and to avoid unnecessary attempts at placental separation. Such patients should be managed in a centre with appropriate surgical, anaesthetic, transfusion and critical-care facilities.

Keywords: *placenta accreta spectrum; placenta previa; bicornuate uterus; previous caesarean delivery; obstetric haemorrhage; peripartum hysterectomy; case report*

INTRODUCTION

Placenta accreta spectrum refers to abnormal adherence of the placenta to the uterine wall and includes placenta accreta, increta and percreta. The main clinical problem is failure of normal placental separation, which can lead to sudden and severe haemorrhage. Previous caesarean delivery is a well-established risk factor, particularly when placenta previa or a low-lying placenta is situated over the uterine scar. For this reason, identifying women at risk before delivery is important. When PAS is suspected, delivery in an experienced centre with multidisciplinary support and adequate blood products allows better preparation for possible major haemorrhage.

Ultrasonography is the main imaging method used for antenatal assessment of PAS.

Suspicious findings include multiple placental lacunae, thinning or loss of the retroplacental myometrial zone, an abnormal uterine serosa-bladder interface and increased vascularity on colour Doppler. However, these findings are not present in every case. A normal or equivocal scan does not by itself exclude PAS, so the ultrasound findings should always be interpreted together with the patient's clinical risk factors.

A congenital uterine anomaly can add another layer of difficulty to the assessment. A bicornuate uterus develops because of incomplete fusion of the Müllerian ducts and may be associated with cervical duplication and a vaginal septum. The horn containing the pregnancy, the position of the placenta and its relation to the cervix and lower uterine segment may therefore differ from the usual anatomy. In this case, the objective was to describe the diagnostic and operative difficulties encountered when PAS, low-lying anterior placentation, previous caesarean delivery and a bicornuate bicollis uterus occurred together.

LITERATURE REVIEW

Placenta previa or a low-lying placenta in a woman with a previous caesarean delivery should raise concern for PAS. Standard obstetric references stress the importance of identifying these high-risk pregnancies antenatally, performing a targeted ultrasound assessment and arranging delivery in a centre with experienced obstetric and anaesthetic teams, blood-bank support and critical-care facilities. Williams Obstetrics and Arias' Practical Guide to High-Risk Pregnancy also emphasize preparation for major haemorrhage. ACOG recommends caesarean hysterectomy with the placenta left in situ when PAS is suspected or confirmed, since attempts to remove an abnormally adherent placenta may result in severe haemorrhage. A congenital uterine anomaly can further complicate identification of the placenta and operative anatomy.

MATERIALS & METHODS

This case involved a 25-year-old gravida 3 para 1 living 1 abortion 1 woman with a previous caesarean delivery. She presented at 32 weeks with per vaginal bleeding and decreased fetal movements, and fetal distress was identified. Ultrasound showed an anterior low-lying placenta with multiple placental lakes and minimal retroplacental haemorrhage. She had a known bicornuate bicollis uterus with a thick vaginal septum. An emergency caesarean section was performed. Intraoperatively, the uterus was confirmed to be bicornuate, with the pregnancy in the right horn. The anterior placenta was close to the internal os and appeared abnormally adherent to the myometrium. Attempts to separate the placenta resulted in significant haemorrhage, and peripartum hysterectomy was carried out for definitive control. Massive transfusion was required, followed by postoperative inotropic support and ICU admission. Inotropes were continued for 12 hours. The mother and neonate recovered well. Histopathological examination confirmed placenta accreta and a bicornuate uterus.

RESULT

The important findings in this case were antepartum bleeding and decreased fetal movements at 32 weeks, fetal distress, an anterior low-lying placenta with multiple placental lakes, and a known bicornuate bicollis uterus with a thick vaginal septum. The pregnancy was located in the right uterine horn, while the anterior placenta extended close to the internal os and was abnormally adherent to the myometrium. Placental separation was followed by significant haemorrhage. Peripartum hysterectomy was therefore required, with massive transfusion, postoperative inotropic support and ICU admission. Inotropes were required for 12 hours. Histopathology confirmed placenta accreta and a bicornuate uterus, and both mother and neonate recovered well.

RELEVANCE OF THE CASE TO INTERNATIONAL PRACTICE

This case has a few practical lessons. A previous caesarean delivery combined with placenta previa or a low-lying anterior placenta should prompt careful assessment for PAS. A known Müllerian anomaly should also be clearly communicated to the obstetric, anaesthetic and surgical teams because the uterine configuration may alter the position of the pregnancy, placenta and cervix and can make operative orientation more difficult. When PAS is suspected, major haemorrhage should be anticipated from the outset. Senior obstetric and anaesthetic support, blood and blood components, neonatal care and access to intensive care should be available. The operative approach should be based on the placental location and the mother's condition,

with unnecessary manipulation of the placenta avoided whenever possible.

CLINICAL IMPLICATIONS

The mother and neonate recovered after definitive surgical treatment. The patient required ICU care because of the major haemorrhage and needed massive transfusion and inotropic support; inotropes were continued for 12 hours. Severe haemorrhage in PAS may be followed by hypovolaemia, coagulopathy and organ dysfunction even after the bleeding has been controlled. Details such as the exact duration of ICU stay, postoperative haemoglobin and coagulation results, total hospital stay and complete neonatal outcome should be taken from the original medical record if they are available. They should not be estimated from the information currently provided.

FIGURES



Figure 1. Antenatal ultrasonographic image from the case.



Figure 2. Intraoperative appearance from the case.



Figure 3. Gross specimen from the case.

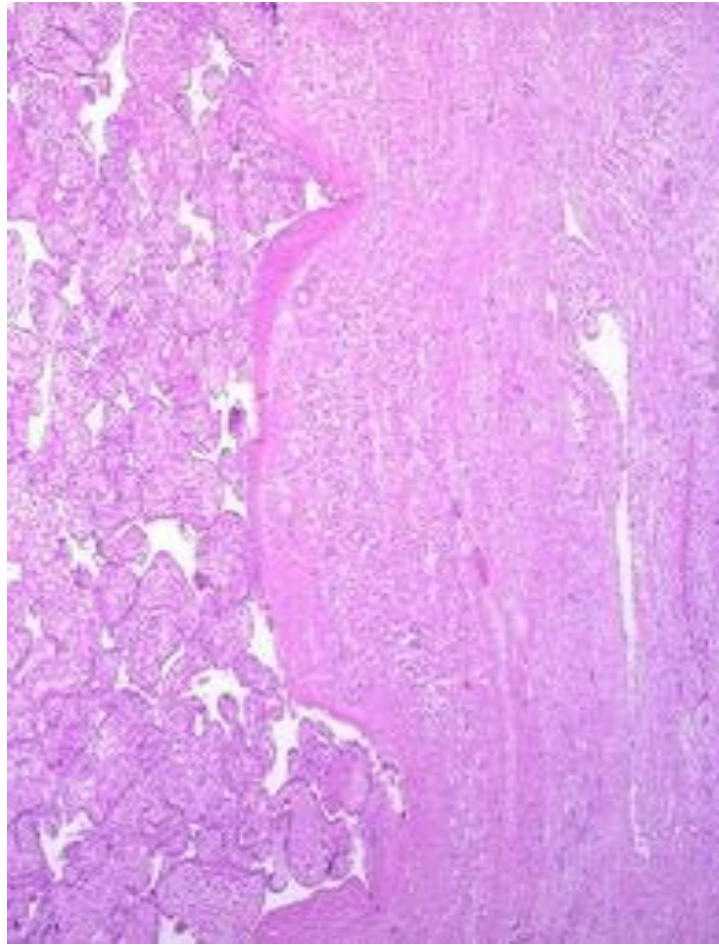


Figure 4. Histopathological image from the case.

DISCUSSION

The combination of PAS, low-lying anterior placentation, a previous caesarean scar and a bicornuate bicollis uterus made this case particularly challenging. The immediate danger in PAS is severe haemorrhage from the abnormally adherent placenta and the highly vascular placental bed. Previous caesarean delivery is an important risk factor, and the risk is higher when a placenta previa or low-lying placenta overlies the scar.

The ultrasound findings in this patient were important. Multiple placental lacunae are recognized features associated with PAS, and a low-lying placenta in a woman with a previous caesarean delivery should increase clinical suspicion. At the same time, ultrasound findings can vary between examinations and between observers. The absence of typical signs should therefore not be used to rule out PAS. Clinical risk assessment remains an important part of the diagnosis.

The bicornuate uterus made the operative anatomy less straightforward. The pregnancy was situated in the right horn, with the placenta on the anterior wall and close to the internal os. This altered uterine configuration had to be taken into account during the caesarean delivery and subsequent management of the abnormally adherent placenta. Recognizing the uterine anomaly before or during surgery is important because it can affect the surgeon's orientation and the relationship between the placenta, cervix and lower uterine segment.

The main surgical lesson is to avoid unnecessary placental separation when PAS is suspected. Current guidance generally recommends caesarean hysterectomy with the placenta left in situ for confirmed PAS because attempts at removal can cause sudden, severe haemorrhage. In an emergency situation where PAS is discovered unexpectedly, the approach has to be adapted to the mother's condition, the

expertise available and the resources of the centre. In this patient, significant bleeding occurred after placental separation and peripartum hysterectomy was necessary. The need for massive transfusion, inotropes and ICU care also shows that management does not end with surgery; rapid haemorrhage resuscitation and postoperative critical care are equally important.

The recommendations in Arias' Practical Guide to High-Risk Pregnancy and Williams Obstetrics are applicable to this case. Women at risk of PAS should be identified antenatally whenever possible, and delivery should be planned according to the maternal and fetal risks. The possibility of major haemorrhage and hysterectomy should be discussed and the required resources arranged in advance. In the present case, the emergency presentation left little time for such preparation, although the major risk factors were already present.

Some clinical details were not available in the supplied case record. These include complete antenatal laboratory results, detailed colour-Doppler findings, MRI findings, quantified blood loss, exact transfusion volumes, neonatal birth weight and Apgar scores, duration of ICU stay and long-term follow-up. These data should be obtained from the original medical record before final submission rather than estimated.

CONCLUSION

PAS associated with a low-lying anterior placenta, previous caesarean delivery and a bicornuate bicollis uterus can present a major obstetric and surgical challenge. In this case, the clinical risk factors and ultrasound findings supported the suspicion of PAS, while the abnormal uterine anatomy added difficulty to operative orientation. Once significant haemorrhage occurred, peripartum hysterectomy provided definitive control. The case underlines the importance of anticipating major haemorrhage and ensuring access to experienced obstetric and anaesthetic teams, blood products and critical care. When placenta previa or a low-lying

placenta occurs over a previous uterine scar, abnormal placental adherence should be considered, with particular attention to the uterine anatomy.

Limitations

This report is limited by the information available in the supplied clinical summary. Detailed ultrasound Doppler parameters, MRI findings, exact estimated blood loss, transfusion quantities, laboratory trends, neonatal birth weight and Apgar scores, and long-term follow-up were not provided. These variables should be retrieved from the original medical record and added if available.

Declaration by Authors

Ethical Approval: Not required for this case report; written informed consent was obtained from the patient for publication of clinical details and images.

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Patient's consent: Written informed consent was obtained from the patient for publication of this case report and any accompanying images. Patient confidentiality has been maintained throughout.

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