

## TYPE II ANTERIOR RIGHT LATERAL PLACENTA PREVIA WITH ACCRETA: A COMPLEX OBSTETRIC CASE REPORT

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### Abstract

This case report documents the management of a 30-year-old pregnant woman at full term gestation who presented with intermittent abdominal pain radiating from her thighs to lower back, suggestive of labor pains. Her obstetric history included a previous cesarean section due to acute fetal distress. Clinical examination revealed scar tenderness, raising concerns of scar dehiscence. The patient was promptly taken for a cesarean section. Laboratory investigations, including CBC, urine reports, and blood grouping, were within normal limits. During the surgery, the lower uterine segment was incised, resulting in significant bleeding from the right side, indicating the presence of the placenta. A healthy female baby was delivered, and further exploration revealed an adherent placenta extending into the lower uterine segment, short of the internal os. A decision for a hysterectomy was made due to the placenta's failure to expel, even after uterotonic administration and manual removal attempts. The final diagnosis was Type II Anterior Right Lateral Placenta Previa with Accreta. The patient successfully underwent a hysterectomy, and both the mother and baby were discharged in good health on the fifth postoperative day. Follow-up on the ninth day revealed no postoperative complications. Histopathological examination confirmed placental villi infiltrating the myometrium of the lower uterine segment, indicative of placenta increta. This case highlights the importance of prompt clinical assessment and surgical intervention in cases of suspected scar dehiscence and placenta previa with accreta, ensuring favorable outcomes for both the mother and the baby. Early diagnosis and intervention are crucial in managing such complex obstetric situations, as demonstrated in this case.

## INTRODUCTION

Placenta previa, a condition where the placenta partially or completely covers the internal cervical os, occurs in approximately 0.5-1% of pregnancies and is a significant cause of antepartum hemorrhage and maternal morbidity.<sup>[1]</sup> When this condition is coupled with placenta accreta, where the placenta adheres abnormally to the uterine wall, it poses a substantial risk to both maternal and fetal well-being. Placenta accreta spectrum disorders have seen an alarming rise in incidence due to the increasing rates of cesarean sections, uterine surgeries, and advanced maternal age.<sup>[2,3]</sup>

Among the diverse types of placenta previa, Type II Anterior Right Lateral Placenta Previa, though rare, presents a unique set of challenges in management and delivery planning. The anterior location of the placenta, coupled with its lateral and right-sided position, often complicates prenatal diagnosis and necessitates meticulous planning for delivery to mitigate potential complications such as massive hemorrhage, uterine rupture, and maternal mortality.<sup>[4]</sup>

This case report presents a detailed analysis of a rare case of Type II Anterior Right Lateral Placenta Previa with Accreta, discussing the diagnostic challenges faced, the multidisciplinary approach adopted for management, and the ultimate delivery

outcome. Through this case, we aim to contribute valuable insights into the evolving strategies for the management of complex placenta previa cases, shedding light on the importance of early detection, comprehensive prenatal care, and the significance of a collaborative healthcare team.

In recent years, the medical community has made significant strides in understanding the pathophysiology of placenta previa and accreta spectrum disorders. Advances in imaging technologies, such as magnetic resonance imaging (MRI) and ultrasound, have enhanced the accuracy of antenatal diagnosis, enabling healthcare providers to identify these conditions early in pregnancy.<sup>[5]</sup> Additionally, there has been a growing emphasis on the importance of a multidisciplinary approach involving obstetricians, radiologists, anesthesiologists, and neonatologists, among others, to optimize patient outcomes.<sup>[6]</sup>

The complications associated with placenta previa and accreta are well-documented. Women with these conditions face an increased risk of postpartum hemorrhage, emergency hysterectomy, and maternal mortality.<sup>[2]</sup> Moreover, the neonatal outcomes are also compromised, with a higher incidence of preterm birth, low birth weight, and neonatal intensive care unit (NICU) admission.<sup>[3]</sup> Understanding the risk factors associated with these conditions is crucial for early identification and intervention. Previous cesarean sections, uterine surgeries, advanced maternal age, and placenta previa in a prior pregnancy are among the established risk factors for placenta accreta spectrum disorders.<sup>[3]</sup> As the incidence of these conditions continues to rise, it is imperative to explore novel therapeutic interventions and delivery strategies to optimize outcomes for both mothers and infants. The role of uterine artery embolization, prophylactic balloon occlusion of the internal iliac arteries, and planned cesarean hysterectomy in reducing blood loss and preserving fertility has been explored in recent research studies.<sup>[7]</sup> These interventions, coupled with meticulous surgical techniques and perioperative care, have the potential to mitigate the complications associated with placenta previa and accreta spectrum disorders.

This case report presents a detailed analysis of a rare case of Type II Anterior Right Lateral Placenta Previa with Accreta, discussing the diagnostic challenges faced, the multidisciplinary approach adopted for management, and the ultimate delivery outcome. Through this case, we aim to contribute valuable insights into the evolving strategies for the management of complex placenta previa cases, shedding light on the importance of early detection, comprehensive prenatal care, and the significance of a collaborative healthcare team.

## CASE REPORT

**Brief History:** A 30 year old pregnant lady with an obstetric score of G2P1L1A0 presented to the

Obstetrics Emergency OPD at full term gestation with a chief complaint of intermittent pain in the abdomen, radiating from thighs to lower back, since 1 day, suggestive of labor pains. She had a previous history of cesarean section delivery for acute fetal distress and passing of meconium. During her entire antenatal period, she had no history of bleeding per vaginum.

**Clinical Examination:** After admission, on clinical examination, scar tenderness was elicited.

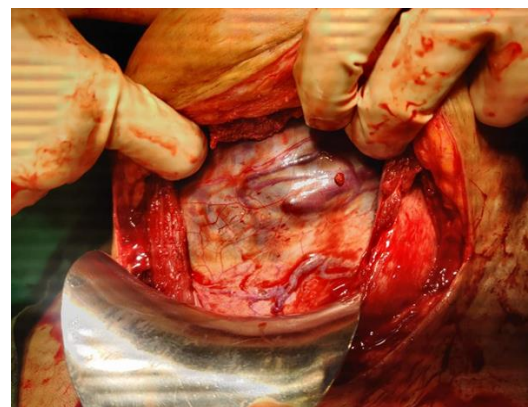
**Differential Diagnosis:** With a probable diagnosis of scar dehiscence, the patient was taken for a cesarean section.

**Lab Investigations:** Lab investigations such as CBC, urine reports, blood grouping were normal and aided in evaluation of the situation.

**Management and Intervention:** On opening the abdomen, there were many big vessels traversing across the lower uterine segment. When the lower uterine segment was incised, marked profuse bleeding occurred on the right side, suggesting that the placenta had been encountered. Through cutting of the placenta on the right side, a healthy female baby (weighing 2.7 kgs) was delivered, who cried soon after birth. Further uterine exploration was initiated in anticipation of discovering the placental extent. The placenta occupied the right lateral part of the uterine wall and was extending in the lower uterine segment, short of internal os. Left half of the uterine incision revealed a papery thin lower uterine segment that had almost retracted behind the urinary bladder, justifying the scar dehiscence diagnosis.



**Figure 1: Placental placement on abdominal incision**



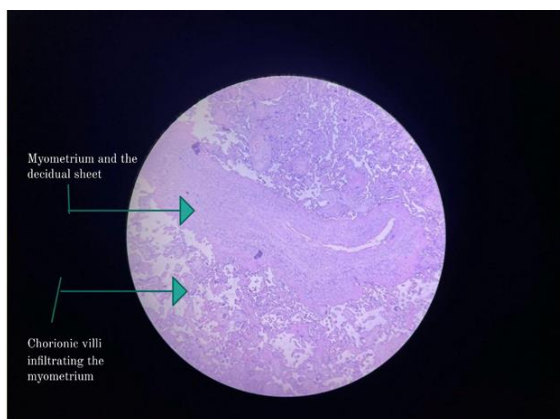
**Figure 2: Big vessels traversing through lower uterine segment.**

Following the delivery of the baby, placenta failed to expel out of the uterus within the stipulated time, even after administering uterotonics and trying a manual removal. Major part of the adherent placenta remained inside the uterus, while only some parts got separated, which was accompanied with profuse bleeding. In view of the continuous bleeding and adherent placenta, an urgent decision for a hysterectomy was made on the OT table. The same has been shown in [Figure 1 and 2].

**Final Diagnosis:** Type II Anterior Right Lateral Placenta Previa with Accreta was declared as the final diagnosis.

**Outcomes:** Following a successful hysterectomy (with due consent of the patient) the mother and the baby were discharged healthy, on the fifth postoperative day. A subsequent follow up review on the ninth day showed no postoperative complications in the patient and the child was healthy.

**Histopathological Diagnosis:** The specimen was sent for histopathological examination that revealed placental villi infiltrating into the myometrium of the lower uterine segment, suggestive of placenta increta in the lower uterine segment. [14,15] Figure 3 depicts the histopathological findings seen under a microscope.



**Figure 3: Histopathological findings seen under a microscope.**

## DISCUSSION

The complexity of Type II Anterior Right Lateral Placenta Previa with Accreta necessitates a comprehensive understanding of risk factors, advanced diagnostic modalities, and innovative management approaches. Recent research has significantly contributed to refining the strategies employed in such cases.

Recent studies have highlighted the pivotal role of prenatal imaging techniques, such as three-dimensional ultrasound and MRI, in accurate diagnosis and classification of placenta previa and accreta spectrum disorders.<sup>[8,9]</sup> Three-dimensional ultrasound provides detailed images of placental attachment, aiding in precise localization and depth assessment of the placental invasion, thus guiding clinical decisions.<sup>[8]</sup> MRI, with its superior soft tissue

contrast, offers a comprehensive view of placental invasion depth and its relationship with adjacent structures, enabling clinicians to plan surgical approaches effectively.<sup>[9]</sup>

In addition to advanced imaging, exploring novel therapeutic interventions has become crucial. The use of intraoperative cell salvage systems has gained prominence in minimizing blood loss during cesarean hysterectomy, thereby reducing the need for allogeneic transfusion and associated complications.<sup>[10]</sup> Additionally, the application of uterine tamponade devices, such as the Bakri balloon, has shown promise in controlling postpartum hemorrhage in cases of placenta previa and accreta.<sup>[11]</sup> These interventions represent significant advancements in managing obstetric hemorrhage and improving maternal outcomes.

The importance of personalized antenatal care and risk stratification cannot be overstated. Recent research emphasizes the significance of a detailed obstetric history, including the number of prior cesarean sections, in predicting the likelihood of placenta accreta spectrum disorders.<sup>[12]</sup> This information allows healthcare providers to identify high-risk patients early, enabling tailored antenatal surveillance and timely intervention.

Moreover, the development of standardized protocols for managing placenta accreta spectrum disorders has significantly enhanced patient care. Multidisciplinary team training and simulation exercises have proven effective in improving communication and coordination among team members during high-risk deliveries, ensuring a seamless and efficient response to obstetric emergencies.<sup>[13]</sup> Standardized protocols also facilitate the implementation of evidence-based practices, promoting consistency in care delivery across healthcare institutions.

Advancements in perioperative care have further contributed to improved outcomes in patients with placenta previa and accreta. Enhanced recovery after surgery (ERAS) protocols, designed to optimize perioperative factors, including nutrition, pain management, and mobility, have been shown to reduce the length of hospital stay and accelerate postoperative recovery, thereby enhancing the overall patient experience.<sup>[14]</sup> Implementing ERAS protocols in obstetric practice offers a promising avenue for improving maternal recovery and satisfaction following complex surgeries associated with placenta previa and accreta spectrum disorders.

## CONCLUSION

This case report contributes valuable insights into the management of Type II Anterior Right Lateral Placenta Previa with Accreta, emphasizing the importance of prompt diagnosis and timely intervention. The case underscores the significance of close monitoring and the need for comprehensive understanding among healthcare providers to ensure favorable outcomes in such complex obstetric

scenarios. Continued research and sharing of such cases are essential for enhancing the medical community's knowledge and refining clinical practices in managing rare obstetric complications.

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