CASE REPORT OPEN ACCESS

Complete Placenta Previa In Uterus Didelphys With Previous Cesarean Delivery: A Case Report

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ABSTRACT

Uterus didelphys is a rare Müllerian duct anomaly that may remain undiagnosed until pregnancy or delivery. Its coexistence with placenta previa is extremely unusual and poses diagnostic as well as surgical challenges. We report a 28-year-old gravida 2, para 1, woman with a previous cesarean section who presented for an elective cesarean section due to placenta previa. Antenatal ultrasound did not reveal any uterine anomaly. However, intraoperatively, two separate uteri with endometrial cavities, and cervices were found. This case emphasizes the importance of recognizing uterine anomalies in patients with atypical intraoperative findings to ensure safe management and counseling.

Key words Uterus didelphys, Placenta previa, Cesarean section, Antenatal, Mullerian duct anomalies.

INTRODUCTION:

Uterus didelphys is an infrequent anomaly of the Müllerian duct arising from complete non-fusion of the paired structures. In uterine didelphys two uteri, two cervices, and a single or double vagina are present.[1] During embryogenesis, the bilateral Müllerian ducts are fused caudally and medially and together they form the uterus, cervix, and upper vagina. The complete non-fusion gives rise to the uterine didelphys.[2,3]

The frequency of cesarean section in women with uterus didelphys is as high as 82%.[4] In women with uterus didelphys during pregnancy number of obstetric issues might occur. Placenta previa which is defined as partial or complete implantation of the placenta in the lower uterine segment, is most frequently noticed in the late second or third trimester. It is frequently associated with antepartum hemorrhage. The prevalence of placenta previa varies from 0.26% to 2% of all pregnancies, being higher in some regions.[5] The incidence of uterus didelphys with placenta previa is low.

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The presence of uterus didelphys often goes unnoticed. Many a times, it is an incidental finding such as presence of a longitudinal vaginal septum or duplicate cervices on pelvic examination. The co-occurrence of uterus didelphys with complete placenta previa in a scarred uterus is exceedingly rare. In this report a woman with similar conditions is reported so as to sensitize obstetricians about this rare anomaly.

CASE REPORT:

A 28-year-old female, gravida 2 para 1, with a history of previous cesarean section, presented for routine antenatal follow-up. She first reported at 21-weeks of gestation with hemoglobin of 10.5 gm/dl. The first ultrasound at 21±1 week revealed an anterior low-lying placenta partially covering internal os. The next ultrasound done at 28±1 week revealed again an anterior low-lying placenta covering internal os. A follow-up scan at 37-weeks confirmed placenta previa completely covering internal os. The Doppler ultrasound further characterized it as placenta previa type-IV, with no evidence of morbidly adherent placenta. An elective cesarean section was planned. Due to the presence of placenta previa type-IV, per vaginal examination was deliberately withheld before surgery to avoid the risk of precipitating hemorrhage.

During surgery, a transverse lower-segment incision was made, and a live male baby with weight 3-kg was delivered by cephalic presentation. The placenta and membranes were expelled completely, hemostasis was secured with an estimated blood loss of 400 ml. Intraoperatively, the uterus appeared

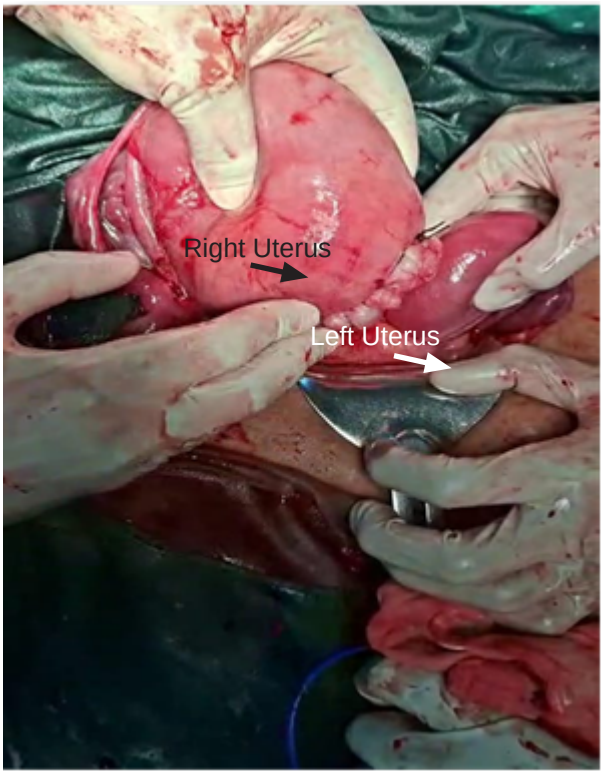

Fig I: Uterus Didelphys after cesarean section, shows both uteruses in between

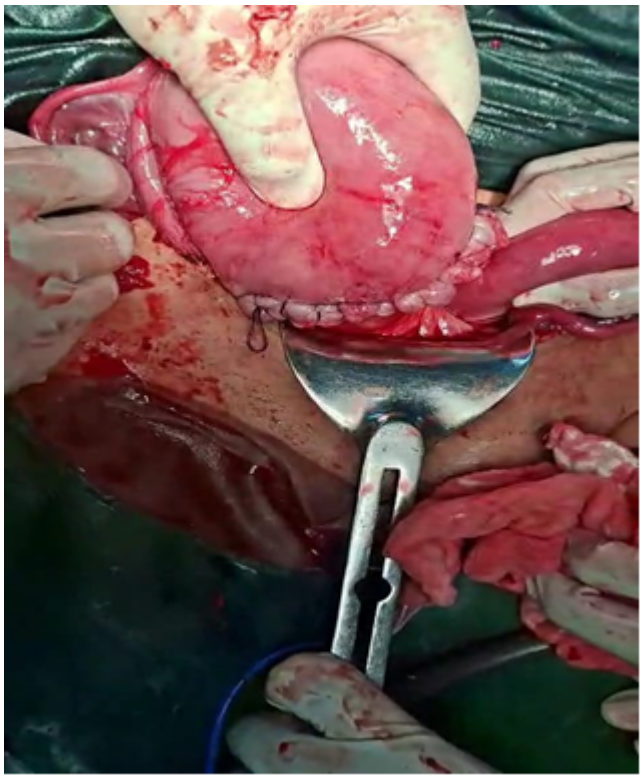

Fig II: On right side of uterus unilateral ovary and fallopian tube are found and on left side uterus with unilateral fallopian tube and ovary are present.

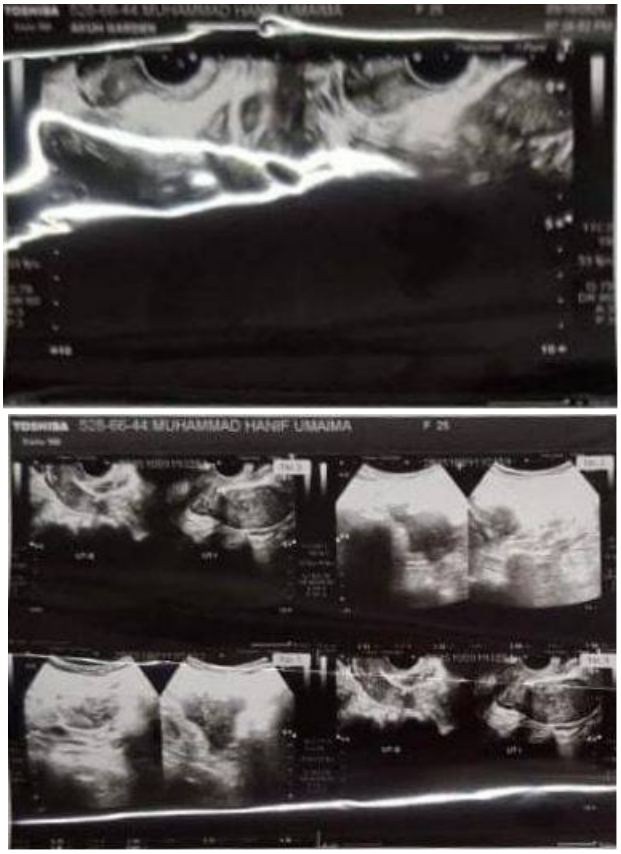

Fig:III: Post-partum transvaginal scan showing both uteris and cervices

oblong, with adnexal structures (ovary, fallopian tube, broad ligament) present only on the right side. A smaller uterus with its own adnexa was identified on the left side, consistent with a duplicated uterine structure. Following completion of the procedure, a per-vaginal examination revealed two vaginae, each with its own cervix leading to separate uterine cavities, confirming uterus didelphys (Fig-I and II). The postoperative course was uneventful, and further imaging studies were planned to delineate the anomaly.

After two months, the patient underwent a transvaginal ultrasound that demonstrated two separate uterine cavities, endometria, and cervices, consistent with uterus didelphys. Uterus I measured 9.2 × 4.3× 3.5 cms, with an endometrial thickness of 0.78 cms, while Uterus II measured 5.8 × 2.2 × 2.8 cms, with an endometrial thickness of 0.37 cms. Both ovaries appeared normal in size and morphology, with no adnexal masses or free fluid noted in the cul-de-sac. The urinary bladder was also normal. (Fig. III). A clinical correlation with MRI pelvis was advised to exclude the possibility of an accessory or ectopic ovary.

DISCUSSION:

Uterus didelphys, which is a rare anomaly, is difficult to diagnose and obstetrical challenges are huge as reported in this study. Many issues may be faced like increased risk of malpresentation, preterm labor and miscarriage. In our case, the patient had complete placenta previa (type IV) localized in the right-sided uterus. It was interesting to note that the anomaly remained undiagnosed during her previous cesarean section. This emphasizes the potential for such anomalies to go unrecognized without a deliberate appraisal during surgical procedures. Though many individuals with uterus didelphys are asymptomatic just like in our case but there may be other symptoms like dyspareunia. Incidental perineal examination may reveal a vaginal septum. In addition, hematometra and hematocolpos may occur.

Diagnostic imaging is essential for detecting Mullerian duct anomalies and magnetic resonance imaging and ultrasound are helpful modalities.[6] An important clinical fining that was not picked in our patient during the gestation was vaginal anomaly. The vaginal examination was not done because of the fear of hemorrhage due to the presence of placenta previa which is a contraindication because of the risk of inducing bleeding. The diagnosis of uterus didelphys was therefore made intraoperatively based on direct visual identification of two separate uterine bodies with adnexal structures.

This case also highlights the clinical importance of detailed pelvic assessment during all abdominal and pelvic gynecological surgeries. Failure to recognize such anomalies can result in misdiagnosis and mismanagement in subsequent pregnancies. Surgical awareness of uterine anomalies during cesarean sections, particularly when the anatomy appears anomalous, is essential.

CONCLUSION:

Uterus didelphys may remain undiagnosed until delivery. In patients with placenta previa, antenatal diagnosis can be challenging. This anomaly was detected incidentally during cesarean section as placenta previa masked the condition until the surgery was done. Awareness of such anomalies is crucial to anticipate surgical challenges, plan management and counselling patients appropriately.

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