ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

A RARE CASE OF PLACENTA ACCRETA SPECTRUM WITH PLACENTA PREVIA IN UTERUS DIDELPHYS

KEY WORDS: placenta accreta spectrum, placenta previa, uterus didelphys, obstetric hysterectomy

Dr. Shaikh Jasiya Sabin* Senior Resident, Department of Obstetrics and Gynaecology, GMCH, Chhatrapati Sambhajinagar Maharashtra, 431001, India. *Corresponding Author

Dr. Shrinivas Gadappa Professor and Head of Department, Department of Obstetrics and Gynaecology, GMCH, Chhatrapati SambhajiNagar Maharashtra, 431001. India

Dr. Anurag Sonawane Associate professor, Department of Obstetrics and Gynaecology, GMCH, Chhatrapati SambhajiNagar Maharashtra. India-431001

Dr. Shubhangi Dodyalkar Junior Resident, Department of Obstetrics and Gynaecology, GMCH, Chhatrapati Sambhajinagar Maharashtra, 431001. India

ABSTRACT

Placenta accreta spectrum is a spectrum of disorder ranging from abnormally adherent to deeply invasive placental tissue in the myometrium. The most important risk factor is reported to be placental previa. It is a potentially life threatening obstetric condition that requires a multidisciplinary approach. Uterus didelphys is a mullerian duct anomaly; it arises from complete non fusion of mullerian ducts that result in two entirely separate hemi uteri, two cervices and single or double vagina. The population prevalence is reported to be 0.3% to 3%.It is associated with obstetric complications that include miscarriage, preterm birth and malpresentation. The coexistence of PAS with uterus didelphys is extremely uncommon. Here we present a rare case of 22 year old G3P1LA1 34.5 weeks of gestation with previous LSCS diagnosed with placenta accreta spectrum with placenta previa. Patient was referred to our tertiary care center from district hospital Jalna in view of bleeding per vaginum. Patient was undiagnosed antenatally to have uterus didelphys, which was observed intraoperatively and managed with cesarean hysterectomy.

INTRODUCTION

Placenta accreta spectrum is pathologic adherence of the placenta to the myometrium; there is abnormal trophoblastic invasion of part or the entire placenta into the myometrium[1]. The incidence of PAS is increasing due to the increase in caesarean deliveries. The risk factors include previous cesarean section, placenta previa, and uterine surgeries like myomectomy or curettage, uterine anomalies, advanced maternal age, multiparity and use of assisted reproductive technology. Placenta previa is one of the major risk factor, PAS occurs in 3% of patients with placenta previa[1].

Uterus didelphys is a mullerian duct anomaly that arises from complete non fusion of mullerian ducts that result in two entirely separate hemi uteri, two cervices and single or double vagina. A longitudinal vaginal septum could be present ranging from thin to thick inelastic one. Uterus didelphys is one of the rarest, accounting for 10% of all Mullerian duct anomalies. Uterine anomalies are a risk factor for the development of abnormal placenta[2]. Occurrence of concomitant placenta accreta in uterus didelphys is extremely rare. We are presenting one such rare case here.

CASE REPORT

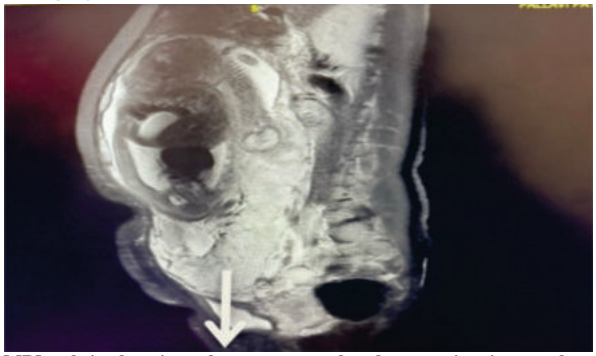
A 22 year old G3P1L1A1, 32 weeks of gestation with history of previous one LSCS, referred to our tertiary care center from district hospital Jalna in view of bleeding per vaginum. Antenatally, she was diagnosed as a case of placenta previa completely covering os. Patient had a history of previous LSCS done in view of placenta previa 5 yrs. back and one suction evacuation done for missed abortion 1 year back.

Upon admission comprehensive history was obtained and thorough physical examination carried out. Ultrasound was done which was suggestive of placenta previa completely covering internal os with ??? Placenta accreta. To obtain additional details and to confirm the extent of placenta invasion MRI was done, which reported," posterior placenta previa with mild thinning of myometrium involving right lateral border of placenta at its posterior aspect suggestive of placenta increta."

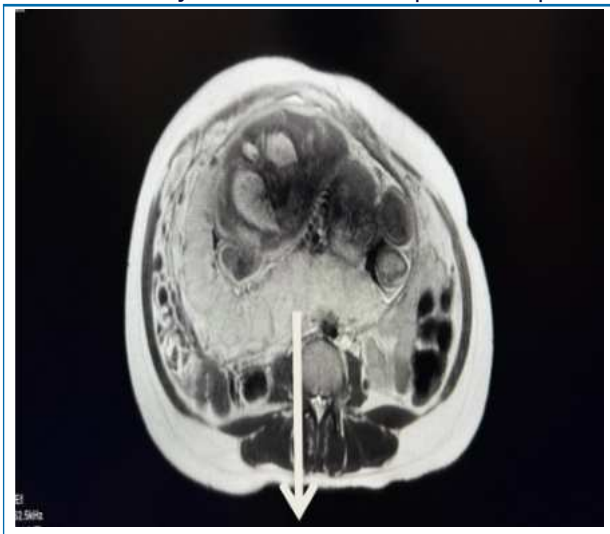
Patient had no active bleeding, so was managed conservatively. Prophylactic corticosteroids were given for fetal lung maturation. Hemoglobin built up with one pint PCV transfusion. After a multidisciplinary case discussion, patient was planned for elective Caesarean hysterectomy at 34 weeks of gestation. Management done as per the protocol followed in our institute. Adequate blood and blood products reserved.

Intraoperatively dense adhesions were present between the omentum and uterus. Neovascularization noted on anterior wall of uterus. Baby delivered by classical upper segment uterine incision. Placenta was adhered to the posterior wall of uterus hence the lifesaving procedure of obstetric hysterectomy was performed. During the procedure it was observed that it was a uterus didelphys with one horn pregnant with placenta previa and placenta increta and other non-pregnant horn. Hysterectomy was completed by removing both the horns. Intraoperatively 4 FFP, 4 RDP and 2 PCV were transfused. Patient was shifted to ICU and strictly monitored. She was vitally stable throughout her stay in ICU so eventually shifted to ward in a stable condition. Patient was discharged on day 11, uneventfully.

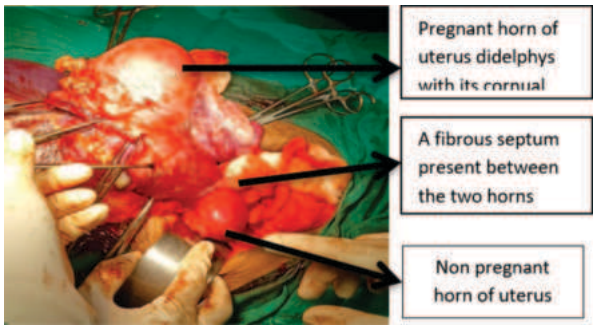
IMAGES



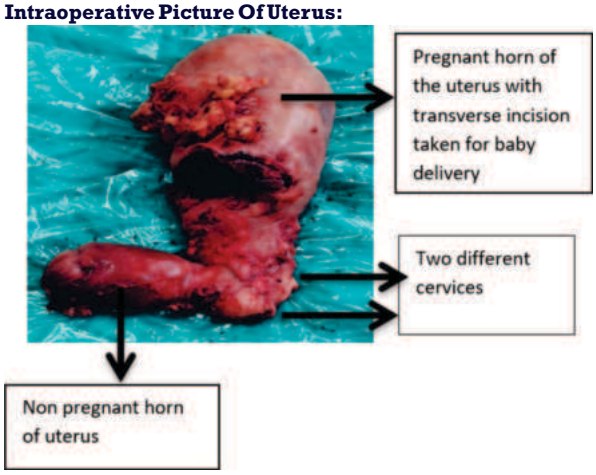
MRI pelvis showing placenta completely covering internal os [placenta previa]



MRI pelvis showing mild thinning myometrium involving right lateral border of placenta in posterior aspect Suggestive of placenta increta.



Intraoperative Picture Of Uterus:



Postoperative Specimen Of Uterus:

DISCUSSION

The concurrence of placenta increta and placenta previa in a patient with uterus didelphys presents a unique and complex scenario. Uterus didelphys, a mullerian duct anomaly has been associated with adverse obstetric outcome including abnormal placentation. Uterine anomalies may increase a patient's risk of abnormal placentation[3].

The association between uterine anomalies and abnormal placentation has been documented in medical literature. A retrospective cohort study done by S. Anderson et al examining singleton pregnancies in women with uterine anomalies found that cases of placenta previa and vasa previa occurred exclusively in women with unicornuate and didelphys uteri, with a prevalence of 14.0% compared to 0% in other groups (p=0.003). Notably, three out of five pregnancies complicated by placenta previa required hysterectomy due to placenta accreta, underscoring the heightened risk of invasive placentation in this population[4].

Additionally, a case report detailed a 35-year-old woman with uterine didelphys who presented at 18 weeks of gestation with abdominal pain and hemoperitoneum. Intraoperative findings revealed uterine didelphys with placenta percreta, necessitating a supracervical hemihysterectomy to control hemorrhage. This case highlights the potential for early gestational presentation and severe complications associated with abnormal placentation in the context of uterine anomalies[5].

The unique aspects of this case include the presence of uterus didelphys which was missed antenatally on USG and MRI. Successfully managed by cesarean hysterectomy and patient discharged in stable condition.

The American College of Obstetricians and Gynecologists (ACOG) has recommended delivery of PAS between 34 0/7 and 35 6/7 weeks of gestation via cesarean hysterectomy to optimize neonatal maturity and minimize the risk of maternal bleeding. Over the years cesarean hysterectomy has been the management of choice[1].

The coexistence of uterus didelphys, placenta previa, and placenta accreta significantly elevates the risk of obstetric hemorrhage, posing substantial challenges in management. Prenatal identification of these conditions is crucial for planning and optimizing outcomes. Ultrasonography and magnetic resonance imaging (MRI) are valuable tools for diagnosing placental implantation abnormalities and uterine anomalies. In cases where conservative measures fail to control hemorrhage, prompt surgical intervention, including hysterectomy, maybe necessary to ensure maternal safety.

CONCLUSION

This case emphasizes the significant clinical challenges presented by the co-occurrence of placenta accreta, placenta previa, and uterus didelphys. Early recognition of these anomalies through advanced imaging techniques is critical for risk assessment and individualized management planning. Timely intervention is necessary to mitigate the risk of severe maternal morbidity, including hemorrhage and the potential need for hysterectomy.

Given the rarity of this combination, further studies are essential to deepen our understanding of the underlying pathophysiological mechanisms and to refine management strategies for high-risk pregnancies involving uterine anomalies.

REFERENCES:

[1] American College of Obstetricians and Gynecologists; Society for Maternal-Fetal Medicine. Obstetric Care Consensus No. 7: Placenta Accreta Spectrum. Obstet Gynecol. 2018 Dec;132(6):e259-e275. doi: 10.1097/AOG.0000000000002983. PMID: 30461695.

[2] Rezai S, Bisram P, Lora Alcantara I, Upadhyay R, Lara C, Elmadjian M. Didelphys Uterus: A Case Report and Review of the Literature. Case Rep Obstet Gynecol. 2015;2015:865821. doi: 10.1155/2015/865821. Epub 2015 Sep 7. PMID: 26435865; PMCID: PMC4576003.

[3] Slate M, Shell C. Uterine septum as a risk factor for placenta accreta in primigravid woman. J Case Rep Images Obstet Gynecol 2019;5:100055Z08MS2019

[4] Patients with uterine anomalies may have increased risk of placenta accreta Anderson, S. et al. Fertility and Sterility, Volume 100, Issue 3, S379

[5] Tu□ta□ Haberal E, Çekmez Y, Ulu □, Divlek R, Göçmen A. Placenta percreta with concomitant uterine didelphys at 18 weeks of pregnancy: a case report and review of the literature. J Matern Fetal Neonatal Med. 2016 Nov;29(21):3445-8. doi: 10.3109/14767058.2015.1130819. Epub 2016 Jan 14. PMID: 26653847.