

A CASE REPORT ON SUCCESSFUL PREGNANCY OUTCOME IN BICORNUATE UTERUS

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ABSTRACT

Introduction: Normal development of the female reproductive tract involves a series of complex processes characterized by the differentiation, migration, fusion, and subsequent canalization of the Müllerian system. Bicornuate uterus is a uterine anomaly resulting from incomplete fusion of the mullerian ducts during. It is characterised by two separate but communicating endometrial cavity and a single uterine cervix. Failed fusion may extend to cervix, resulting in a complete bicornuate uterus. It may be partial causing milder abnormality. A 27 years old patient, booked case, G2P1L1 with history of 9 months of amenorrhea came for safe confinement of pregnancy. Patient gives history of previous 1 cesarean section done 2 years ago. Indication for cesarean section was transverse lie. General physical examination was uneventful. On Per abdomen examination – correspond to term size, relaxed abdomen, cephalic presentation and FHS heard in left spinoumbilical region. USG shows a single live intrauterine fetus of 36 weeks 5 days of gestational age with moderate oligohydramnios of AFI 7cms with Cephalic presentation with approximate fetal weight – 2887gms and posteriorly located placenta with grade II maturity done. Elective caesarean section was done. **Conclusion:** Patients with uterine anomalies are at increased risk of adverse pregnancy outcome such as malpresentations, preterm premature rupture of membranes, preterm birth, abruptio placenta, pre eclampsia, IUGR. Early diagnosis and proper antenatal care is required to successfully manage a pregnancy with uterine anomaly.

KEYWORDS: Uterine anomalies, bicornuate uterus, malpresentation.

INTRODUCTION

Normal development of the female reproductive tract involves a series of complex processes characterized by the differentiation, migration, fusion, and subsequent canalization of the Müllerian system.^[1] Bicornuate uterus is a uterine anomaly resulting from incomplete fusion of the mullerian ducts during. It is characterised by two separate but communicating endometrial cavity and a single uterine cervix. Failed fusion may extend to cervix, resulting in a complete bicornuate uterus. It may be partial causing milder abnormality. Heinonan and colleagues (1982) reported a 28% abortion rate and 20% premature labour in women with a partial bicornuate uterus. Women with a complete bicornuate uterus had a 66% incidence of preterm delivery and a lower fetal survival rate. Women with bicornuate uterus can have reasonable success - approximately 60% in delivering a living child.^[2]

CASE REPORT

A booked case of 27 year old patient, G2P1L1 with history of 9 months of amenorrhea came for safe confinement of pregnancy on 11/05/2023. Patient was a known case of hypothyroidism since 2 year and is on tablet Thyronorm 75 mcg once a day in morning. Patient gave history of 1 previous cesarean section done 2 years ago and indication for cesarean section was a transverse lie in previous pregnancy. General physical examination and systemic examination was normal.

Per abdominal examination: Uterine height was corresponding to term period of gestation, relaxed, Cephalic presentation and fetal heart sound was heard on auscultation, 140 beats per minute, previous cesarean scar healed by primary intention. No scar tenderness noted.

NST – reactive, Per speculum – short vaginal septum and single cervix seen (figure -1).



Figure 1: P/S examination – shows longitudinal vaginal septum.

Per Vaginal examination- Os closed, uneffaced.

- ANC Profile –
- Hemoglobin – 11.9 g/dl
- Total count-7600 cells/mm³
- Platelet count-2.8 lakhs/mm³
- Blood group- B positive
- Urine routine –normal
- Serology – non reactive
- Random blood sugar – 89mg/dl
- Coagulation profile – normal
- Fasting Thyroid Profile –
- FT3 – 3.39 pmol/L
- FT4- 11.38 pmol/L
- TSH- 6.34 microIU/L
- USG shows a single live intrauterine fetus of 36 weeks 5 days of gestational age with moderate oligohydramnios of AFI 7cms with Cephalic presentation with approximate fetal weight – 2887gms and posteriorly located placenta with grade II maturity.

MANAGEMENT

An elective lower segment caesarean section was done.

Intra operative findings

- Lower segment of the uterine was thinned out. Clear liquor. A live female child with a single loop of cord around the neck with vertex presentation weighing 2.878kg was extracted at 12:13 PM on 12/05/2023. By

exteriorizing the uterus, findings were right horn was bigger than left horn suggestive of bicornuate uterus (figure 2). No angle extension, No postpartum haemorrhage. Bilateral adnexa, fallopian tubes and ovaries were normal. Post operative vitals were stable. Placenta details – Two umbilical artery and 1 umbilical vein noted. All cotyledons and membranes were intact (figure – 3). Approximate weight – 500 gms. She had uneventful post operative period. She was discharged on the 7th post operative day.

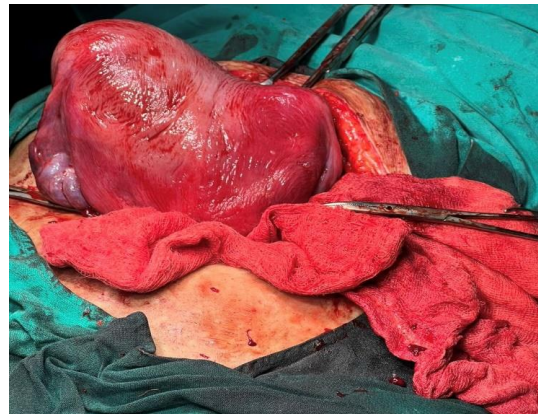


Figure 2: uterus with right horn bigger than left horn Suggestive of Bicornuate uterus.

DISCUSSION

The presence of congenital uterine anomalies represents a potential cause of infertility, recurrent pregnancy loss, preterm delivery, fetal malpresentation as well as small-for-gestational age infants, with greater effects being evident in women with more profound defects.^[3] The different types of Mullerian anomalies were individually associated with different obstetrics outcomes at varying severity degrees, with higher incidence of the worst outcomes in patients with more severe malformations.^[4] Various diagnostic modalities were used during post partum period to accurately diagnose uterine anomalies so that complications in future pregnancies can be avoided. According to TVS pelvis it was suggestive of partial septate uterus (figure – 3), 3D TVS suggested didelphys uterus, two cervix with vertical septum (figure - 4,5). To accurately diagnose the uterine anomaly during inter pregnancy interval an MRI pelvis was done. Findings were suggestive of two discrete uterine horns with fundal cleft, widened intercervical distance and communicating endometrial cavity in the lower uterine segment with septated cervix (figure -6,7). Oblique longitudinal asymmetric complete vaginal septum with dominant right vagina (figure - 8). Features in favour of bicornuate uterus with septated cervix and oblique longitudinal asymmetric complete vaginal septum.



Figure 3: TVS Ultrasound pelvis – shows uterus normal in size, with septum extending upto mid uterine cavity - ? Partial septate uterus.

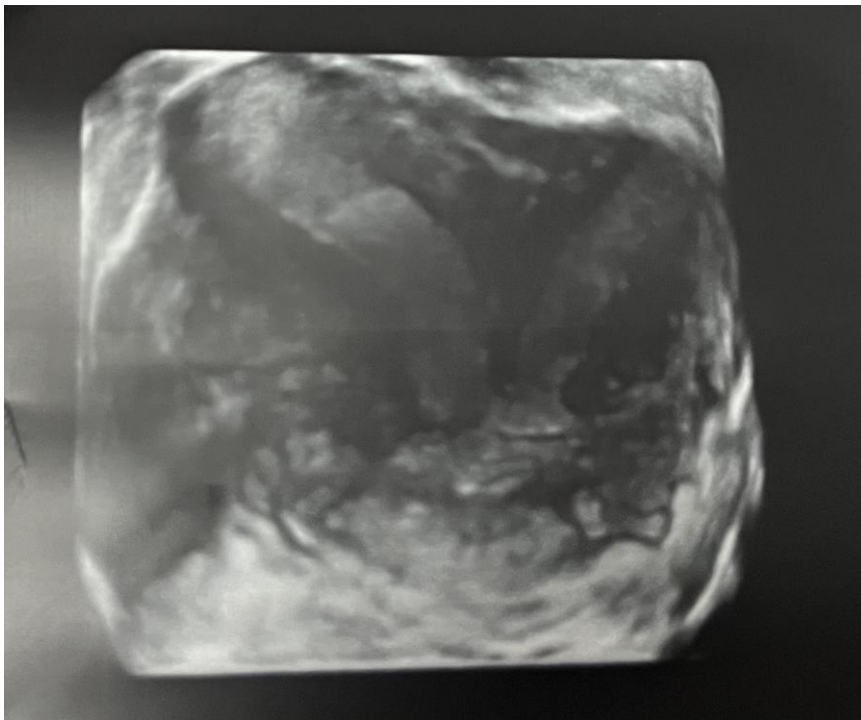


Figure 4: 3 D TVS scan shows didelphys uterus.



Figure 5: 3D TVS scan showing two cervix with a vertical septum.

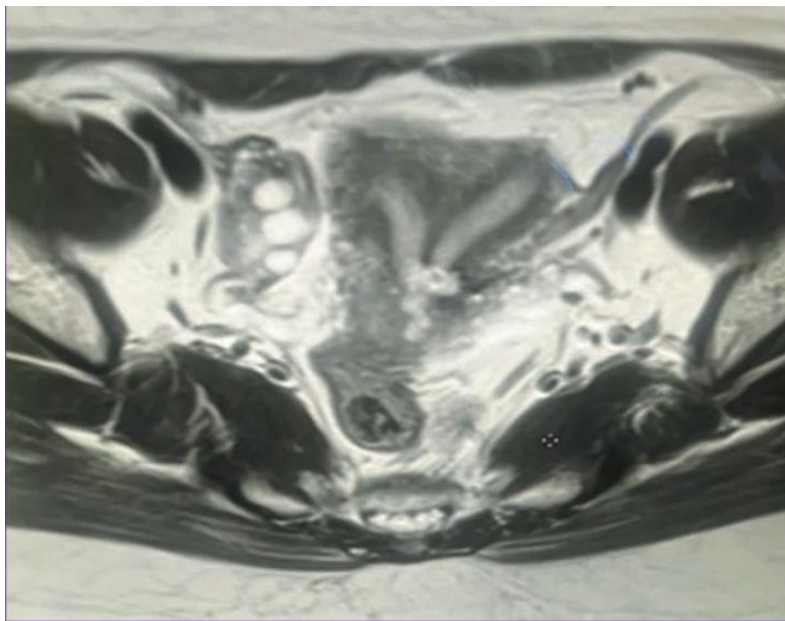


Figure 6: MRI Pelvis shows two discrete uterine horn with fundal cleft, widened inter cornual distance and communicating endometrial cavity in lower uterine segment.

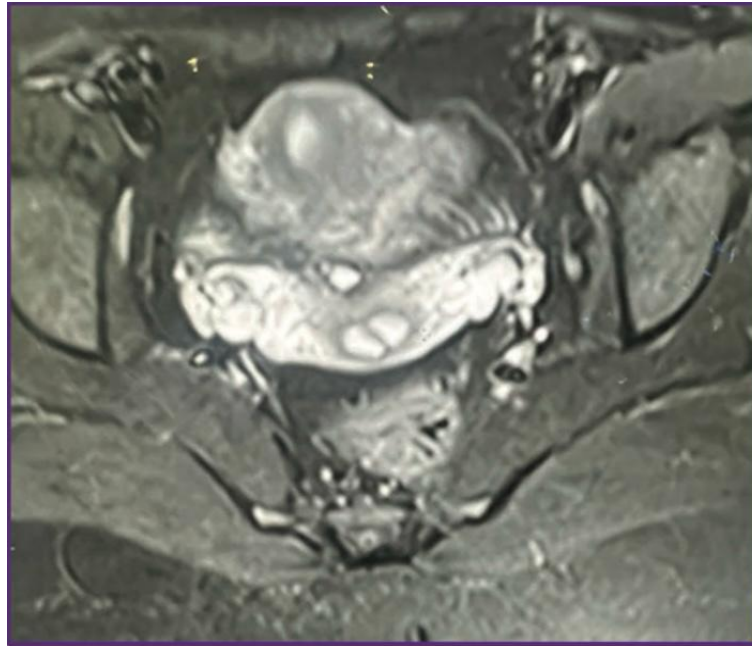


Figure 7: MRI Pelvis shows – septated cervix.

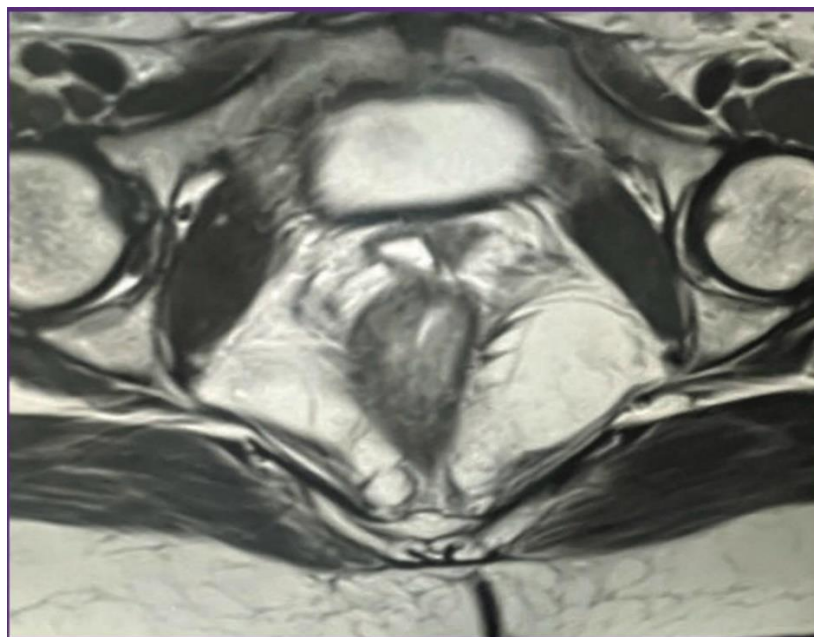


Figure 8: MRI Pelvis shows oblique longitudinal asymmetric complete vaginal septum with dominant right vagina.

CONCLUSION

Patients with uterine anomalies are at increased risk of adverse pregnancy outcome such as malpresentations, preterm premature rupture of membranes, preterm birth, abruption placenta, pre eclampsia, IUGR, increased caesarean delivery, recurrent pregnancy loss, SGA and low birth weight infants. Early diagnosis and proper antenatal care is required to successfully manage a pregnancy with uterine anomaly. The accurate interpregnancy diagnosis of uterine anomalies can be achieved by 3D ultrasound, hysterosalpingogram and MRI. These methods are capable of accurately

identifying uterine anomalies and classifying them to appropriate subtypes.

Conflict of interest

The Authors declare that they have no conflict of interest.

REFERENCES

1. Amesse LS, Pfaff-Amesse T. Congenital anomalies of the reproductive tract. In *Clinical Reproductive Medicine and Surgery* (1st edn) T Falcone, WW Hurd (eds). Mosby: New York, NY, 2007; 171–190.
2. Williams textbook of obstetrics 25th edition.

3. Chan YY, Jayaprakasan K, Zamora J, Thornton JG, Raine-Fenning N, Coomarasamy A. The prevalence of congenital uterine anomalies in unselected and high-risk populations: a systematic review. *Human Reproduction Update*, 2011; 17: 761-771.
4. Lin PC, Bhatnagar KP, Nettleton GS, Nakajima ST. Female genital anomalies affecting reproduction. *Fertility and Sterility*, 2002; 78: 899-915.