

A study of obstetrics outcome in cases of uterine anomalies

Prachi Koranne¹, Mrunali Zele^{2*}, Aparna Wahane³

¹Assistant Professor, ²PG Resident, ³Professor and HOD, Department of OBGY, Government Medical Collage, Akola, Maharashtra, INDIA.
Email: mrunali4692.mz@gmail.com

Abstract

Background: As a tertiary care center, there are many patients referred with uterine anomalies for safe confinement. **Aims and Objectives:** 1.To study of mode of delivery in cases of uterine anomalies 2.To study different pregnancy outcomes such as malpresentation, pre-term delivery, increased cesarean section rate, miscarriage in uterine anomalies. **Material and Methods:** It is an observational study done on patients with uterine anomalies who came to tertiary center over the period of one year. **Results:** In our study, it was observed that Bicornuate uterus is the most common anomaly. Bicornuate anomaly is associated with higher rates of rupture in 2nd trimester. Septate uterus has higher rates of miscarriages. Increased cesarean section rate in women with uterine anomalies is due to fetal malpresentations. **Key Words:** Uterine anomaly, malpresentations, preterm delivery, caesarean delivery

*Address for Correspondence:

Dr. Mrunali Zele, PG Resident, Department of OBGY, Government Medical Collage, Akola, Maharashtra, INDIA.

Email: mrunali4692.mz@gmail.com

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4. Defective canalization

Classification by American fertility society separates each anomaly into groups in accordance with their similar clinical features, prognosis for obstetrics outcome and treatment.

Females can present in their reproductive age group with variety of complaints. She can present during adolescence with primary amenorrhea with hematocolpos or hematometra due to imperforate hymen or transverse vaginal septum. In reproductive age group she can present with abortions, uterine horn rupture, preterm labour. Many of the minor anomalies can even go unrecognized.

INTRODUCTION

Normal development of female genital tract fails to occur because of defective formation, fusion or resorption of mullerian ducts. The exact prevalence of uterine anomalies is impossible to estimate. Some minor anomalies like arcuate uterus may not be diagnosed as these do not present with difficult deliveries and they might be accidentally diagnosed during cesarian section. Each uterine anomaly is distinctive. Four principal deformities arise from defective mullerian duct embryological steps are as follows¹

1. Agenesis of both ducts either focally or along the entire duct length
2. Unilateral maturation of one mullerian duct with incomplete or absent development of the opposite site.
3. Absent or faulty midline fusion of the ducts

MATERIALS AND METHODS

It is an observational study, done on patients who came to our tertiary center with uterine anomalies. Our study includes all the pregnant women with uterine anomalies who came to our tertiary center from march 2018 to march 2019.

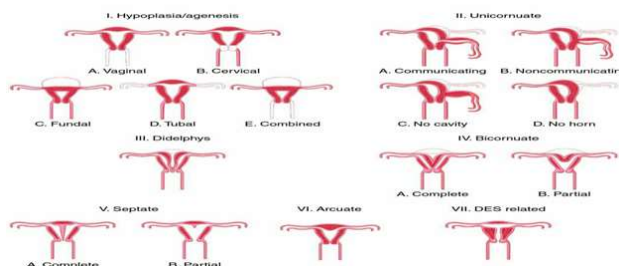
Inclusion criteria

- A patient with previously known uterine anomaly
- A patient with ultrasound report in this pregnancy with uterine anomaly
- A patient who was accidentally discovered uterine anomaly during LSCS

In our study, we tried to find the relationship between congenital uterine anomalies and their obstetrics outcome

like malpresentation, Preterm deliveries, abortions and caesarean sections. A detailed record of all delivery notes or abortion was noted. All complications and interventions noted. The gestational age of the women

was calculated using her menstrual period if she was very sure of her dates. If she was unsure of her dates then it was calculated from her available ultrasound report.



OBSERVATIONS

In a one year, we observed total 30 women with diagnosed uterine anomalies. It consists of 13 women with bicornuate uterus, 9 women with septate uterus, 6 women with unicornuate uterus and 2 women with uterine didelphys.

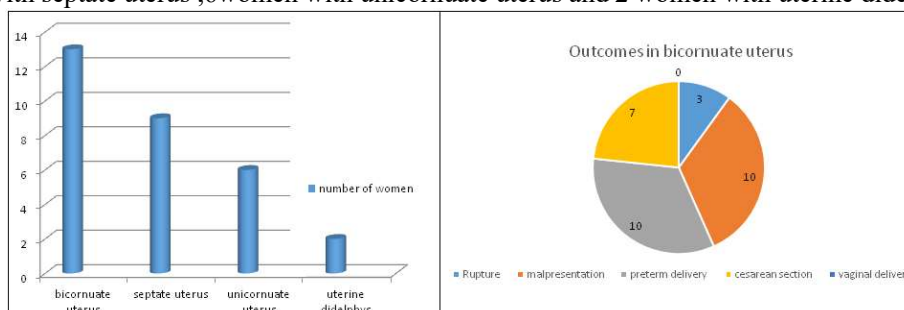


Figure 1 Figure 2

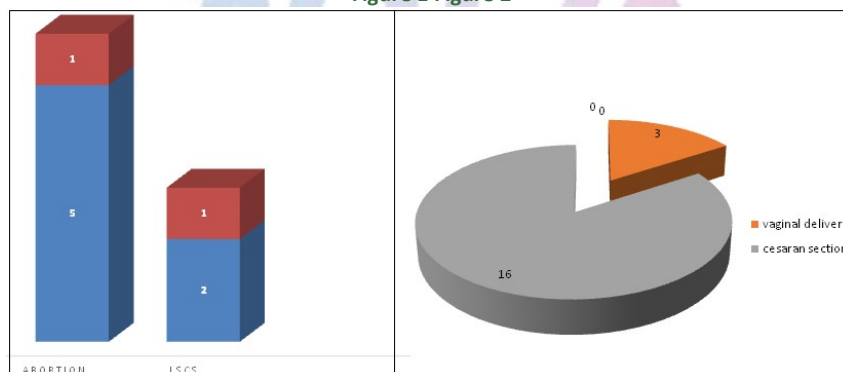


Figure 3: Outcomes in septate uterus Figure 4: Mode of delivery according to type of uterine anomalies

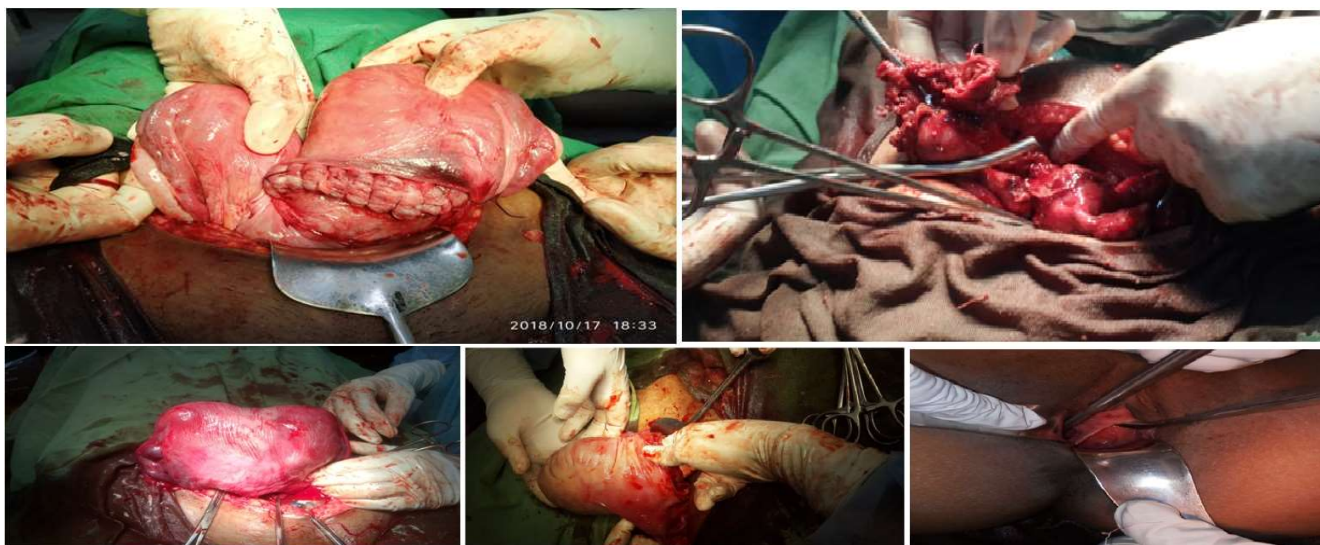
In Figure 1, In 13 cases of bicornuate uterus, we observed 10 cases of malpresentation and they all had preterm deliveries. 3 women with bicornuate uterus had rupture.

In Figure 2, Out of 9 cases of septate uterus, 6 cases were of first trimester spontaneous abortions and 3 women were having malpresentations like breech presentation and transverse lie. These women underwent cesarean section.

Figure 3, In 6 cases of pregnancies with unicornuate uterine anomalies, all have malpresentation and they delivered pre-term. We observed 2 cases of uterine didelphys, they had first trimester abortion. Out of 30 cases of uterine anomalies 16 women underwent caesarean sections because of fetal malpresentations. 3 women had vaginal deliveries.

Table 1

Type of anomalies	Malpresentation	Cesarean delivery	Vaginal Delivery	Abortions
Bicornuate (n=13)	10	7	3	0
Septate (n=9)	3	3	0	6
Unicornuate (n=6)	6	6	0	0
Didelphys (n=2)	0	0	0	2
Total		16	3	8



DISCUSSION

In our study we concluded those women who came to our tertiary center with congenital anomalies which were found during caesarean section done for fetal malpresentations and few women came with documented sonographic report with diagnosis of uterine anomalies. Our results show that bicornuate uterine anomaly is the commonly encountered anomaly at our tertiary center. This anomaly has two hemiuteri, in which central myometrium runs either partially or completely to the cervix. A complete bicornuate uterus may extend to the internal cervical os and have a single cervix or may extend upto external cervical os and have two cervixes. Out of 13 women of bicornuate uterus 7 cases underwent caesarean section due to malpresentation and 3 women had preterm vaginal delivery. In one study of Ludmir *et al*⁴ it was found that pregnancy beyond 25 weeks has better results, but these are associated with high frequency of malpresentation and cesarean delivery. In 1 woman, G3P2L2 with previous 2 LSCS, both horns were patent and she conceived in alternate horns in each pregnancy. Indications for caesarean section were fetal malpresentations and it was preterm delivery each time.

3 were preterm vaginal deliveries with breech presentation. One of the case delivered preterm vaginally with breech presentation and referred to our center with retained placenta. We did ultrasonography and it was found that placental bits were attached to the fundus of right horn of the bicornuate uterus. Patient developed sepsis but with higher antibiotics, condition improved. Hysteroscopic removal of retained placenta carried out. Rupture uterus is a life threatening obstetric problem. Rupture in primigravida generally occurred in congenitally malformed uterus. Most commonly rupture occurred in rudimentary horn because of inability of

malformed uterus to expand as a normal uterus. In our study it is observed that rupture is more common with bicornuate uterine anomaly. 3 cases of uterine rupture are reported. One of the case was of Primigravida with 18 weeks of pregnancy came with USG. USG reports suggested Bicornuate uterus with left cornu showing intrauterine fetal death. Small echogenic mass is seen along anterior uterine wall separate from foetus and placenta? co-existent mole?? succinuturate lobe of placenta. On examination, Uterine contour cannot be felt per abdominally. On emergency USG there was presence of hemoperitoneum. Decision for hysterotomy taken in view of intrauterine fetal death and hemoperitoneum. On exploration, hemoperitoneum of about 200 ml present. IUD delivered out from the abdominal cavity. There is evidence of omental adhesions over uterus. Bicornuate uterus with rupture of left horn, no communication with cervix noted of left horn i.e. rudimentary left horn. Left rudimentary ruptured horn resected. In second case, Primigravida with 24 weeks of pregnancy came to emergency duty with complaints of pain in abdomen and USG suggestive of rupture of the pregnant horn. On emergency exploration, male fetus of 24 weeks along with placenta and membranes removed from abdominal cavity and the ruptured horn resected out. Other nonpregnant communicating patent horn preserved.

In cases of septate uterus, 6 women have abortions. 3 women had delivered preterm, had malpresentations and underwent caesarean sections for malpresentations. In this anomaly, there is persistence of complete or partial longitudinal uterine septum due to resorption defect. This uterine anomaly is associated with increased incidence of adverse obstetrical outcomes such as abortions, malpresentation and preterm deliveries. In study of Kupesic⁶, it was found that abortions and late

complications are seen more in vascularized septum and thickness of the septum has no effect on obstetric complication.

Of unicornuate uterus, all 6 women had preterm caesarean deliveries for fetal malpresentations. With this abnormality, rudimentary horn may be absent and if present it may or may not communicating with dominant horn or may or may not contain endometrial lined cavity. Lesser cavity size prevents correct rotation of the fetus to cephalic presentation, diminished muscle mass of the hemiuterus, altered blood flow which is caused by an absent or abnormal uterine or ovarian artery and cervical incompetence are responsible for reproductive complications including pre-term delivery, malpresentations.

We observed 2 cases of Uterus didelphys at our center. Both cases came with first trimester bleeding per vaginally and had abortions. This mullerian anomaly arises from a complete lack of fusion that results in two entirely separate horns, cervixes and two vaginas. These anomalies are suspected on pelvic examination by identification of a longitudinal vaginal septum and two cervixes. Most women have a double vagina and a longitudinal vaginal septum.

CONCLUSION

The conclusion of our study is that women with congenital uterine anomalies have significantly higher

rates of malpresentations, cesarean deliveries and pre-term deliveries, abortions. With bicornuate uterus, there are higher incidences of rupture of uterus are seen. Septate uterine anomaly is associated with more rates of abortions.

REFERENCES

1. The American Fertility Society classification of adnexal adhesions, Mullerian anomalies and intra uterine adhesions
2. Buttram VC Jr, Gibbons WE. Mullerian anomalies:A proposed classification.
3. Raga F, Bauset C, Remohi J, Bonilla-Musoles F, Simon C, Pellicer A. Reproductive impact of congenital Mullerian anomalies.
4. Ludmir J, Samuels P, Brooks S, Mennuti MT. Pregnancy outcome of patients with uncorrected uterine anomalies managed in a high risk obstetric setting.
5. Akar ME, Bayar D, Yildiz S, Ozel M, Yilmaz Z. Reproductive outcome of women with unicornuate uterus.
6. Kupesic S. clinical implications of sonographic detection of uterine anomalies for reproductive outcome
7. Congenital uterine anomalies and adverse pregnancy outcomes: Meiling Hua, Anthony O, Odibo, Ryan E. Longman, George A. Macones, Kimberly A. Roehl: ACOG journal
8. Pregnancy outcome in uterine anomalies: R Nagarathnamma, Thingujam James, Nagendra Prasad
9. Williams obstetrics: congenital genitourinary abnormalities: chapter 3.

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