



CASE SERIES ON OBSTETRICAL OUTCOMES IN UTERINE ANOMALIES

Obstetrics & Gynaecology

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ABSTRACT

Congenital uterine anomalies occur due to abnormal fusion of müllerian ducts during embryonic life. This is a case series of four patients who were admitted in obstetrics and gynaecology department of preethi multispeciality hospitals. This case series shows that uterine anomalies are associated with different obstetrical outcomes varying from totally uneventful antenatal or postnatal period to infertility, abortions or preterm labour. Prior diagnosis of uterine anomaly may help in improving obstetric outcome.

KEYWORDS

Congenital anomalies, Malpresentation, Preterm Labour

INTRODUCTION:

Müllerian duct anomalies are congenital defects of female genital system that arise from abnormal embryological development of müllerian ducts. These abnormalities include failure of development, fusion, canalization or resorption which normally occurs between 6 and 22 weeks in utero. Incidence of these anomalies in general population is 0.5 to 5%.

Many are asymptomatic and therefore unrecognized. Diagnosis is usually made with clinical presentations of infertility, miscarriages, premature birth, abnormal presentation or as incidental findings in sonography or intraoperative period. Renal anomalies coexist in 29% of müllerian duct anomalies.



Figure 3: ESARE/ESGE classification of uterine anomalies. Schematic representation (Class I) internal indentation >10% of the uterine wall folds, no and external contour straight or with indentation <10%, Class II internal indentation >10% of the uterine wall thickness, Class III: width of the fundal indentation at the midline >10% of the uterine wall thickness.

ESARE/ESGE classification Female genital tract anomalies	
Uterine anomaly	Cervical/vaginal anomaly
Main class	Sub-class
U1 Normal uterus	
U2 Dysmorphic uterus	U2.1 T-shaped U2.2 Bicornuate U2.3 Others
U3 Septate uterus	U3.1 Partial U3.2 Complete
U4 Bicornuate uterus	U4.1 Partial U4.2 Complete
U5 Hemi-uterus	U5.1 With rudimentary cavity (communicating or not from without cavity/has horn) U5.2 Without rudimentary cavity from without cavity/has horn
U6 Aplastic	U6.1 With rudimentary cavity (b- or unilateral horn) U6.2 Without rudimentary cavity (b- or unilateral horn)
U7 Unclassified malformations	
U	C V

Case 1

A 27 year old who was a case of primary infertility, came to hospital for infertility workup. As per history she attained menarche at 12 years, married for 3 yrs, regular cycles at 30 days interval lasting for 4 days. She was known case of PCOD since 2 years. On examinations her vitals are stable. Per abdominal examination was normal. On pervaginal examination two cervical openings were seen. Condition of patient explained to patient and attendants and Diagnostic hysteroscopy was done which revealed (U2C2 – ACC TO ESHRE) 2 cervical openings, complete septum with one ostia seen laterally in each cavity. Intraoperatively, uterus size was normal with mild dimpling on fundus, bilateral ovaries are normal and patent on chromoperturbation there was no spill on left side when dye was injected in right cervix indicating complete uterine septum.



Case 2

A 32 year old primigravida conceived by IVF known case of arcuate uterus with adenomyosis (outside hospital MRI) came at 60 days of amenorrhea with bleeding pervaginum for the past 6 hours. As per history she attained menarche at 14 yrs age and her previous menstrual cycles are regular at 28 days interval lasting for 3 days associated with mild dysmenorrhea. On examination she was afebrile with blood pressure of 120/70 in supine position in left upper limb, heart rate of 90 beats per minute, respiratory rate of 13/minute. On examination abdomen was soft and nontender. On pervaginal examination, cervical os was open, bleeding pervaginum with products of conception in cervix diagnosed as inevitable miscarriage. Condition of patient explained to patient and attendants and consent was taken for dilatation and curettage and products of conception sent for HPE. Intraoperative and postoperative period was uneventful.



Case 3

A 31 year old booked case G2P1L1 previous LSCS came to our hospital at 38 weeks gestation ,perceiving fetal movements well,no complaints of bleeding or leaking pervaginum.she had regular cycles at 25 days interval lasting for 3 days her past history showed uneventful antenatal period with intrapartum delayed active phase of labour with emergency LSCS .she is afebrile with bloodpressure of 110/80mmhg with heart rate of 75bpm.on examination,fundal height was corresponding to gestationwith cephalic presentation with relaxed uterus with fetal heart rate of 145-150bpm.on pervaginal examination,os was closed,uneffaced,posterior with no leaking or bleeding. condition of patient explained to patient and attendants and consent was taken for caesarean section.A male baby of weight 2.7kg delivered by vertex .Baby cried immediately.After removal of placenta ,when uterus was examined which was found to be unicornuate with rudimentary horn on left sidewhich on clinical examination during surgery found to be non communicating with normal and healthy bilateral tubes and ovaries.her intraoperative and postoperative period was uneventful.



Closure of Unicornuate uterus
after delivery of fetus

Case4

A 19 year old booked G2P1LOD1 34 weeks of pregnancy with previous normal vaginal delivery presented to our hospital with complaints of mild abdominal pain and leaking pervaginum since 5 hrs diagnosed as PPROMand admitted.she was perceiving fetal movements well.As pwer history she attained menarche at 13 yrs age ,her past cycles were regular at 31 days interval lasting for 5 days with mild dysmenorrhea.Her past obstetric history revealed uncomplicated antenatal period with prolonged second stage of delivery and baby died after 6 hours of birth due to asphyxia neonatarum and it was instrumental delivery.on examination,she was afebrile with bloodpressure of 120/80mmhg ,heart rate of 78bpm.she had ultrasound report showing bicornuate uterus with gravid right horn.On examination, fundal height corresponding to period of amenorrhea,with intermittent uterine contractions at 2minutes interval lasting for 20 seconds having fetal heart rate of 145-150bpm.on pervaginal examination, cervical os was 1 finger,2.5cms length, uneffaced, posterior vertex -3,leaking present ,liquor clear bleeding. condition of patient explained to patient and attendants and consent was taken for emergency caesarean section. A male baby of weight 2.1kg delivered by vertex .Baby cried immediately. After removal of placenta ,when uterus was examined ,it was bicornuate uterus with gravid right horn and left side horn. her intraoperative and postoperative period was normal.

**RESULTS**

malformation	gravida	Diagnosed by	outcome
Arcuate uterus	primi	MRI	misscarriage
Complete septum	nulligravida	Diagnostic hysteroscopy	infertility
unicornuate	G2P1L1	intraoperative	Live baby
bicornuate	G2P1D1	USG	LIVE BABY

DISCUSSION

canalization defects, septate and subseptate uteri, appear to have the poorest reproductive performance; in addition to having a reduced conception rate, they are at increased risk of first-trimester miscarriage, preterm birth and fetal malpresentation at delivery [7]they can be treatment by septal resection using thulium laser .

Unification defects bicornuate, unicornuate and didelphic uterus, do not appear to reduce fertility but are associated with aberrant outcomes throughout the course of pregnancy. The exact effects are, how- ever, dependent on the type of anomaly.

Bicornuate and unicornuate uteri have an increased risk of miscarriage, preterm birth and fetal malpresentation while women with uterus didelphys seem to have only a modestly increased risk of preterm labor

CONCLUSION

In present case series,authors observed that uterine malformations are associated with infertility,pregnancy loss,preterm labour.hence it can be concluded that uterine anomalies can be predisposing factors for these obstetrical outcomes.Hence early diagnosis of uterine malformation can decrease obstetrical complications and improve obstetrical outcome.

Compliance With Ethical Standards :**Conflict Of Interest:**

The authors declare that he has no conflict of interest.

Informed Consent: informed consent was taken from the patients.

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