



TERM PREGNANCY IN UTERUS DIDELPHYS IN A TERTIARY CARE CENTER – A CASE REPORT

Obstetrics & Gynaecology

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ABSTRACT

Didelphys uterus is the congenital defect of the female genital system that arises from abnormal embryological development of the mullerian duct (complete failure of fusion of mullerian duct). Amongst the various Mullerian duct anomalies, the didelphys uterus is least common. There is presence of two uterine cavities, two separate cervixes and often double or single septate vagina. The clinical significance lies in its poor reproductive performance in the form of – increased risk of pre-term labour, abnormal fetal presentation, intra-uterine growth restriction, low – birth weight babies <2.5kgs, and delivery by caesarean section. Her antenatal follow up done at local health centre and diagnosed as a case of didelphys uterus and attended in G&O ER due to term PROM. She had pregnancy in her left sided body of didelphys uterus and delivered by caesarean section. Pregnancy in didelphys uterus belongs to high-risk Obstetrics that need meticulous ante-natal care and guide.

KEYWORDS

Mullerian duct anomalies, Uterus didelphys, Dribbling,

INTRODUCTION:

Didelphys uterus is a reproductive tract anomaly representing a complete duplication of the uterus and cervix. A longitudinal vaginal septum is present in 75% of cases. It results from failure of lateral fusion of two para-mesonephric ducts. Normally fusion of two para-mesonephric duct and formation of vaginal canal are completed 6-22 weeks of intra uterine life [1-4].

The incidence of mullerian duct anomalies in general fertile population is 0.001-10 [5]. Septate uterus is the commonest uterine anomaly with incidence of 35%, followed by Bi-cornuate (25%), Arcuate (20%) and uterus didelphys (8%) being the least common.

In uterus didelphys, individual horns are fully developed. Each uterus has one fallopian tube and ovary. According to **American Fertility Society classification** of utero-vaginal anomalies, uterus didelphys belongs to class III. The cause of failure of fusion is not yet understood. The low incidence of didelphys uterus is reflected in literature due to paucity of data.

Women with didelphys uterus may be symptomatic or asymptomatic. Some may present with a dysmenorrhea or dyspareunia. The challenges lie in its obstetrical complications such as – spontaneous miscarriages, pre-term labour, cervical incompetence and malpresentations [6]. Didelphys uterus may be associated with some renal anomalies. Despite having these complications, our case is showing that, didelphys uterus can have normal pregnancy outcome.

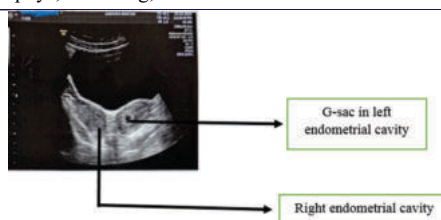
Case Report:

History: A 24 years old, primigravida referred from a remote Primary Health Centre, attended our ER at B.S.Medical College, Bankura, West Bengal on 13/10/2024 as a case of PIH with dribbling in a Rh negative having didelphys uterus. Her period of gestation was 39 weeks 03 days. She had followed up during ante-natal period in the Primary Health Centre and attended our hospital first time as an emergency basis. She had regular menstrual cycles and no history of dysmenorrhea and dyspareunia.

There was no significant past or family history. She took regular Iron, Folic acid and Calcium supplementations as per advised at local health centre.

Her USG scan (on 02/03/2024) revealed –

Uterus with two separate endometrial cavities seen measuring right side (7.1X2.7X2.4) cm and left side (8.1X3.4X2.8) cm. G-sac was seen in the left endometrial cavity. These features are suggestive of didelphys uterus. CRL was 3.1 mm corresponding to gestational age 05 weeks 06 days. A corpus luteal cyst measuring (2.7X2.3) cm was seen in the left ovary. Both the kidneys were normal size, shape, position, contour and echogenicity. Both the ureters were not visualised, hence not dilated.



Her USG scan (on 28/05/2024):

Didelphys uterus with fetus in the left hemi-uterus with gestational age 11 weeks 06 days.

Her USG Scan (03/10/2024):

Single, live, fetus with cephalic presentation, placenta - fundo anterior, liquor – average and gestational age is 34 weeks 05 days.

All her routine blood investigations done during her ante-natal period were checked and seen within normal limit. Her blood group is B negative.

General Examinations:

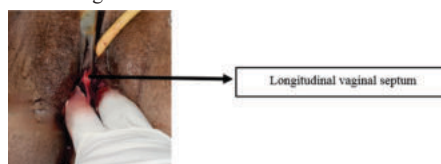
She was conscious, alert, co-operative. Her pulse rate was 78 bpm, BP-150/80 mm-hg. Her cardio-vascular and respiratory systems were within normal limit.

Per Abdominal Examination:

Gravid uterus with 32 weeks size, longitudinal lie with cephalic presentation. Fetal heart rate – 142 bpm. There was mild uterine contraction.

Per Speculum Examination:

- Revealed a longitudinal vaginal septum separating the vagina.
- Frank dribbling of amniotic fluid which was meconium stained.



Per Vaginal Examination:

A longitudinal vaginal septum separating the cervix into two. Both the cervixes were closed, posteriorly directed and uneffaced. High up station, frank dribbling which was thin meconium stained.

Monitoring At Labour Room:

All her routine blood and urine investigations were sent and found normal. Her bed-side USG done and showed single live fetus in cephalic presentation, placenta- fundo anterior, liquor- less than

average and echogenic with gestational age 36 weeks 01 day. Uterine anomaly could not be detected at that time during USG scan.

Delivery Decision:

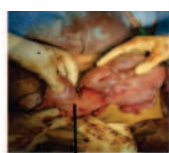
She was posted for caesarean section that day in view of Rh negative primigravida having didelphys uterus with mild pre-eclampsia with FGR and meconium-stained liquor with uneffaced cervix.

Intra-Operative Findings:

Under spinal anaesthesia abdomen was opened by pfannenstiel incision. Lower segment transverse incision was given in gravid uterus and the baby was delivered as cephalic presentation. After opening of the abdominal cavity, we observed that one gravid uterus was on the left side and another non gravid uterus of about 6 to 8 weeks size was lying on the right side of pelvis just posterior to the gravid uterus. Placenta was delivered by controlled cord traction. The uterus was exteriorised. One fallopian tube and one ovary were attached to each hemi uterus. The two hemi uteri are separated by a loose fold of peritoneum. Uterine wound was repaired in two layers. The gravid uterus became intermittently atonic so modified B-lynch compression suture applied. Abdomen was closed in layers. She had an uneventful intraoperative and post operative period. The mother and baby were discharged on 7th post operative day.



B-lynch
compression suture



Loose fold of peritoneum
between two hemi-uteri

DISCUSSION:

The incidence of singleton pregnancy in didelphys uterus is 1:3000. It is the result of complete non fusion of two paramesonephric ducts. Detection of uterine anomalies in early pregnancy is of great importance. 3D ultrasound offers 100% specificity and MRI is the most sensitive imaging modality in diagnosing uterine anomalies [7]. It was possible to detect our case as uterus didelphys by early ultrasound scan.

In case of Singleton pregnancy in uterus didelphys literature shows that the right hemi uterus having pregnancy predominantly than in the left. In the present case we are reporting **a single successful pregnancy in the left hemi uterus which is very rare.**

The rate of pre term delivery was increased in women with didelphys uterus in comparison to other known studies on septate and bicornuate uteri [2]. Similar result has been reported by Raga et al [3]. Grimbizis et al also found that the rate of term delivery for a didelphys uterus was significantly lower than normal uterus [8]. **In our case, she was delivered by caesarean section at 39 weeks 3 days of gestational age - that is also rare.** A didelphys uterus has been shown in many case reports to occur as a part of syndrome called OHVIRA (Obstructed Hemi-vagina and Ipsilateral Renal Agenesis) [9]. **In our case there was no associated renal agenesis.**

CONCLUSION:

Didelphys uterus seems to be associated with an impaired pregnancy outcome mainly the preterm births. In our case the mother had a single successful pregnancy at term and gave birth to a girl baby weighing 2.24kgs by caesarean section. This scenario is rare one. Conclusively we can state that didelphys uterus belongs to high-risk pregnancy that needs a meticulous antenatal care and appropriate delivery decision to provide that best possible pregnancy outcome.

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