

Pregnancy in Uterus Didelphys Delivered By Caesarean Section: Case Report and Review of Literature

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Abstract: *Uterus didelphys represents a uterine malformation where the uterus is present as paired organ. There is presence of double uterine bodies with two separate cervixes and often a double or septate vagina. Women with congenital malformations of uterus usually have higher incidence of complications during pregnancy and delivery. We report the case in our institute of a pregnancy in the right sided body of a didelphys uterus delivered by caesarean section.*

Keywords: Uterine didelphys, Caesarean section

1. Introduction

Mullerian duct anomalies are congenital anomalies of the female genital tract resulting from non development or non fusion of the mullerian ducts. Duplication of the uterus results from lack of fusion of paramesonephric ducts in a local area or throughout their normal line of fusion. In uterus didelphys, individual horns are fully developed, normal in size with two cervixes present. Each uterus have one fallopian tube. Some patients are asymptomatic while some patients suffer with primary infertility. In some patients, normal pregnancy can occur but obstretrical complications such as spontaneous abortion, still birth, preterm birth are frequent.

2. Case Report

A 21 Years primigravida married for one year presented at 38 weeks of gestation with breech presentation to labour room with complaint of labour pains. She had regular antenatal checkups in a private clinic and was diagnosed to be having persistent breech presentation and was advised to undergo caesarean section in view of primi with persistent breech. As she could not afford for it, she came to Government General Hospital, Guntur. This was her first visit to our institute.

On General Examination: Patient is not anemic, pulse rate 78/min, BP 110/80mm of Hg in left arm supine position. CVS & RS-normal.

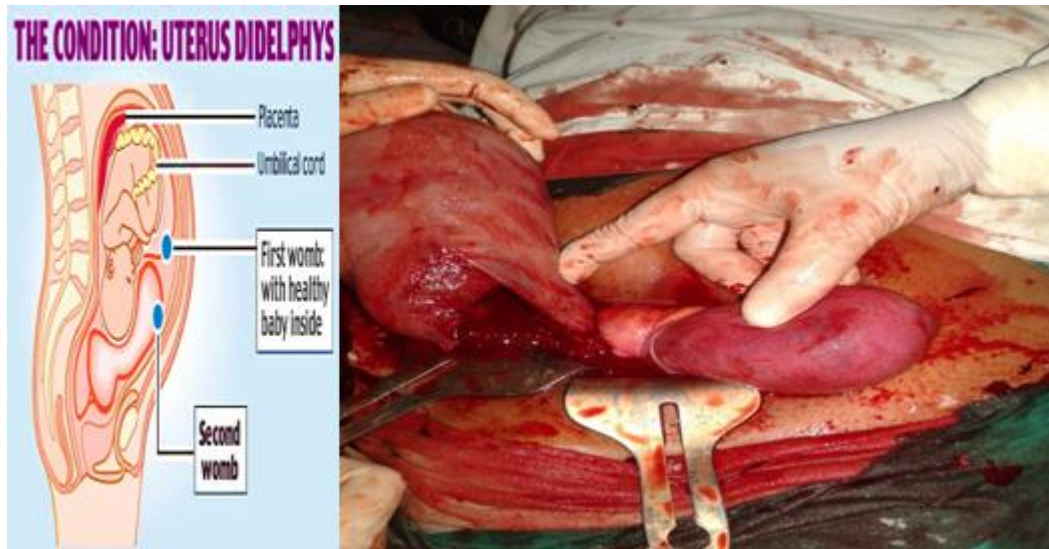
Per Abdomen Examination: Uterus 38weeks of gestational age, breech presentation, Rt. Sacro anterior, fetal heart rate-146bpm, uterus contractions are 1 in 10 min & each contraction lasting for 10 -15 sec.

On Per Vaginal Examination: longitudinal vaginal septum present, two cervixes felt. Right side cervix 70% effaced, 1.0 cm dilated. Left side cervix is uneffaced, os closed. She had an Ultrasound scan report done on the same day showing breech presentation with oligamnios (AFI -5). Scan had not mentioned uterus didelphys.

Case was posted for caesarean section in view of breech presentation with vaginal septum under spinal anaesthesia, abdomen opened by Pfannensteil incision.

3. Per Operative Findings

Lower segment caesarean section was done. Baby presented as flexed breech and was delivered by breech extraction. An alive female baby of weight 2.8kg with APGAR 8-10 was delivered. After delivery of the placenta, when uterus was exteriorized, an another non-gravid uterus was found on left side. It was diagnosed to be a case of uterus didelphys. Fetus was delivered from the right uterus. Each uterus had one fallopian tube & ovary. Both ovaries & tubes appeared to be healthy. Both uteri had separate cervixes opening into separate vaginas.



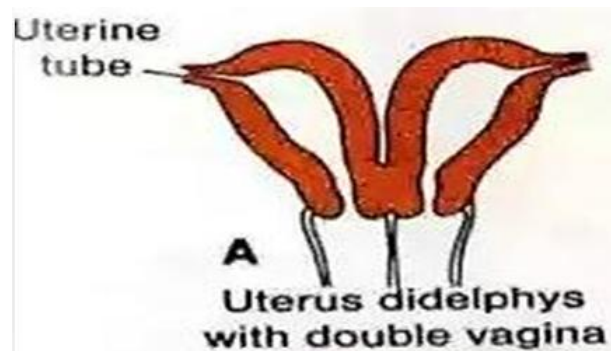
Her postoperative recovery was uneventful. Dressing was done on 3rd post operative day. Skin stitches were removed on 6th postoperative day and she was discharged on 7th post operative day.

4. Discussion

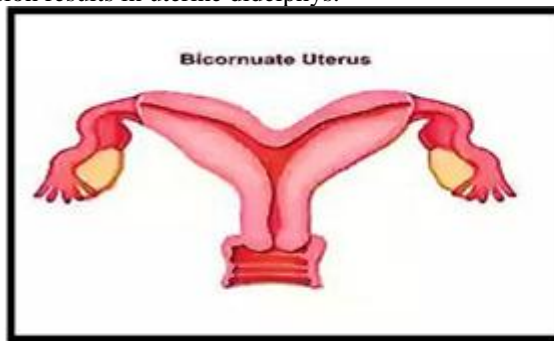
Mullerian anomalies prevalence is exactly unknown. But recent study shows it is 0.1 to 10%. Incidence of singleton pregnancy in uterine didelphys is 1 in 3000, incidence of twin gestations is 1 in 5 million, incidence of triplets in uterine didelphys is 1 in 25 million.

Embryology: Failure of the fusion of two paramesonephric ducts.

1) Complete non fusion results in uterine didelphys.



2) Partial fusion of mullerian ducts result in bicornuate and septate uterus.



Bicornuate Uterus



Septate Uterus

5. Diagnosis

A pelvic examination will typically reveal a double vagina and a double cervix. Investigations are usually prompted on the basis of such findings as well as when reproductive problems are encountered.

Helpful techniques to investigate the uterine structure are:

1) Transvaginal ultrasonography and sonohysterography

2) Hysterosalpingography,
 3) MRI, and hysteroscopy.

More recently 3-D ultrasonography has been advocated as an excellent non-invasive method to evaluate uterine malformations, it accurately analyses uterine structure, contour of fundus, muscular thickness and septum length. It is best performed during secretory phase of menstrual cycle.



Normal uterus



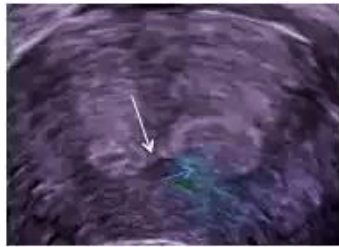
Heart shaped (arcuate) uterus



Septate uterus



Double uterus



Intra-uterine adhesions (arrow)



Intra-uterine adhesions on 3D scan (arrow)



Severe intra-uterine adhesions blocking menstrual flow

Affected women are most often asymptomatic. Frank breech is most frequent abnormal presentation in uterine didelphys. Management in Patients with a double uterus may need special attention during pregnancy, as premature birth and malpresentations are common. Caesarean section was performed in 82% of patients with uterine didelphys. Other complications of pregnancy are cervical incompetence, PPH, uterine rupture.

As far as mode of delivery in patients with uterus didelphys, opinion is divided into normal vaginal delivery or elective cesarean section. Vaginal delivery has been accomplished merely by excision of vaginal septum. Because of high incidence of abnormal presentations and cervical incompetence, most of the people prefer to cesarean section.

6. Conclusion

Prevalence of congenital anomalies of uterus though less, are presenting in clinical practice. In malformed uterus, complications are increased. Cesarean section in uterus didelphys achieves favourable outcome by reducing complications.

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