Case Report

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Didelphys Uterus: A Case Report

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Abstract

Didelphys uterus or double uterus is one of the least common mullerian duct anomalies. It affects one to three in 3000 women worldwide. Uterus didelphys occurs due to Mullerian unification defects resulting in various abnormalities with the presence of 2 uteri, 2 cervices and often 2 vaginas. A high caesarean section rate of 51% has been reported in pregnancies with didelphys uterus. Reproductive outcome of women with this anomaly is better than that of women withunicornuate malformation due to better vascularity. Approximately 60% of women with uterus didelphys have successful full-term pregnancies. Renal anomaly scan be also associated with mullerian anomalies due to the common origin of mesonephric duct. The pregnancy outcome of women with uterus didelphys was comparatively good, but they still belong to a high-risk group. Women with uterine anomalies are more likely to experience adverse pregnancy outcomes.

Keywords: Caesarean delivery; Didelphys uterus; Fetalwell-being; Labor; Mullerian duct anomalies; Obstetric outcome.

Introduction

Mullerian duct anomalies are congenital defects of the female genital system that arise from abnormal embryological development of the mullerian ducts. Didelphys uterus or double uterus is a rare condition due to the failure of fusion of mullerian ducts. It affects one to three in 3000 women worldwide1. The female reproductive organs are largely derived from the two Paramesonephric or mullerian ducts in fetal life which give rise to the uterus, fallopian tubes, cervix, and the upper third of the vagina. Mullerian ducts of the two sides fuse from the caudal end to form the uterovaginal canal. The cranial ends remain unfused and form the fallopian tubes. If there is a failure of fusion of the mullerian ducts, various anomalies ensue, ranging from septate and bicornuate uteri to uterus didelphys. Uterus didelphys occurs due to mullerian unification defects resulting in various abnormalities with the presence of 2 uteri, 2 cervices and often 2 vaginas.

Patients are usually asymptomatic but the anomaly may be associated with dysmenorrhoea, dyspareunia, infertility, spontaneous abortion, preterm labor, fetal malpresentation, intrauterine growth restriction, Premature rupture of membranes, renal agenesis, decreased live births and caesarean delivery.[2] Reproductive outcome of women with this anomaly is better than that of women with unicornuate malformation due to better vascularity. Approximately 60% of women with uterus didelphys have successful full-term pregnancies.[3] A high caesarean section rate of 51%

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has been reported in pregnancies with didelphys uterus. Caesarean section is also recommended in this condition especially in association with breech presentation of the fetus.[4] We report a case of didelphys uterus complicated with oligohydramnios and fetalbradycardiawhich was taken up for emergency caesarean section.

Case Report

Mrs.X, primigravida at 36 weeks of gestationcame to the emergency department with complaints of spotting per vagina, associated with pain in abdomen. She was a booked patient, diagnosed initially as a case of bicornuate uterus in the first trimester of pregnancy with gestational diabetes mellitus on medical nutritional therapy.

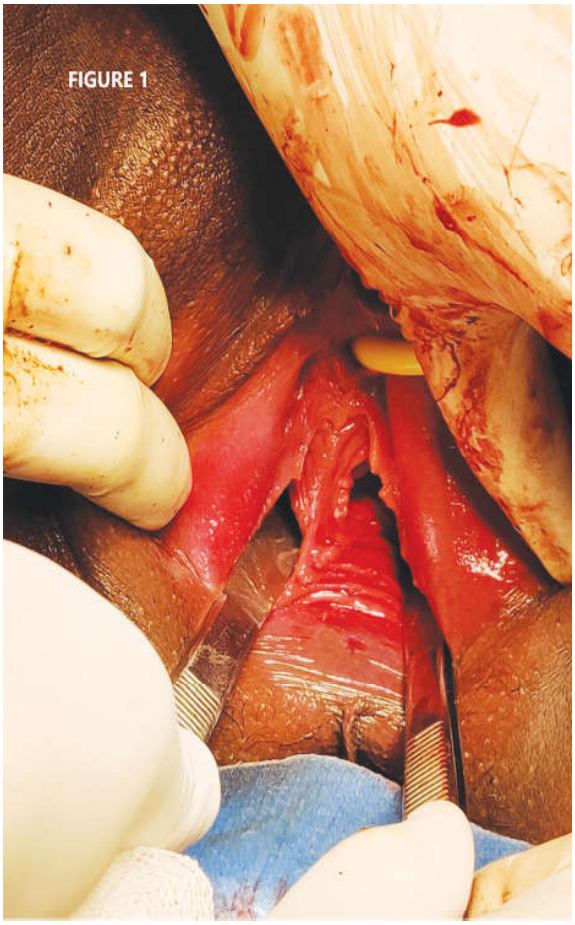

Fig. 1: Two vaginas with a thick non communicating longitudinal vaginal septum separating it.

Her ultrasonography of urinary tract was normal. She was advised admission for observation. Ultrasonography done at the time of admission showed AFI-6 cm, on per vaginal examination, two vaginas were seen and left os was 1 cm dilated. Patient was taken up for emergency caesarean section at 37 weeks for fetalbradycardia. Intraoperatively double uterus was noted with pregnancy in left sided uterus (Figure 2, Figure 3). Confirmation of initial per vaginal examination was done intraoperatively (Figure 1).

Two cervices, two vaginas with a thick non communicating longitudinal vaginal septum separating it with lochia draining fromthe left os was seen.

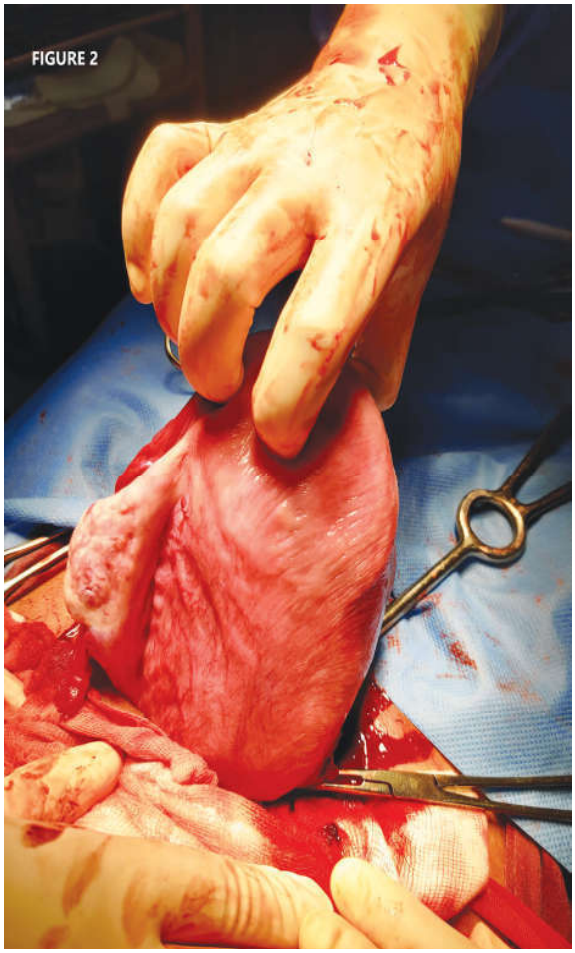

Fig. 2: Image showing left sideduterus with left sided fallopian tube and ovary.

A live male baby with fetal weight of 1900 grams was delivered. Baby got admitted in NICU in view of hypoglycaemia and got discharged after 7 days. On post operative day 2 she expelled a fleshy mass through the right sided vagina, appeared asdecidual cast which was later confirmed by histopathological report. Rest of the post-operative days were uneventful.

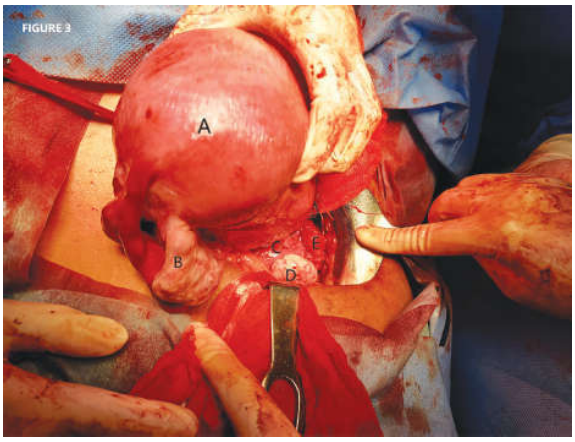

Fig. 3: Image showing left sideduterus (A) with left fallopian tube and ovary(B) and right sideduterus(C) with right ovary(D) and fallopian tube(E).

Discussion

Didelphys uterus is a rare mullerian duct anomaly which affects 0.03-0.1% of women in the fertile age group.[1] Patients with mullerian anomalies can be asymptomatic or can present with primary infertility or hematometra. Fertility is not reduced in unification defects but they can be associated with miscarriage and preterm delivery.[5] Fusion of the paired mullerian ducts should occur between the seventh and ninth weeks of gestation. Renal anomalies can be also associated with mullerian anomalies due to the common origin of mesonephric duct.

A metanalysis of comparative study conducted by Christos A Venetis[6] observed the probability of having spontaneous first and second trimester abortions were not significantly different compared to women with no congenital anomalies; whereas preterm delivery, birth weight less than 2500 grams, intrauterine growth restrictionand malpresentations at delivery were more common in women with didelphys uterus.

Pregnancy in women with congenital uterine anomalies can be associated with complications both in pregnancy and during labor.[5] The assessment and diagnosis of uterine anomaly needs techniques such as three-dimensional ultra-sound which has the capacity to generate accurate image of the endometrial cavity and the external contour of the uterus. The main reason for performing caesarean section in a patient with uterine didelphys is the malpresentation or dystocia as a result of the obstruction of the pelvic entrance by the non-pregnant uterine cavity.[7]

Conclusion

Congenital mullerian anomalies are challenging case scenarios for obstetricians and gynecologists in terms of diagnosis and resolution of reproductive problems. The pregnancy outcome of women with uterus didelphys were comparatively good, but they still belong to a high-risk group. Women with uterine anomalies are more likely to experience adverse pregnancy outcomes. Uterus didelphys is not an indication for caesarean section but meticulous antenatal and labor care should be done for better outcome.

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