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A Case of Pregnancy with Didelphys Uterus

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Abstract: ***Mullerian Duct anomalies [MDA] are congenital defects of female genital system that arise from abnormal embryological development of Mullerian ducts. A didelphys uterus, also known as "double uterus", is one of the least common amongst MDAs.Uterine didelphys is a rare form of congenital anomaly of the mullerian ducts. The clinical significance of this anomaly of the female reproductive tract is associated with various reproductive issues: increased risk of preterm birth before 37 weeks gestation, abnormal fetal presentation, delivery by caesarean section, intrauterine fetal growth restriction, low birth weight less than 2500g and perinatal mortality.We share our experience of a rare case of full term pregnancy with didelphys uterus and its diagnostic and management challenges.***

Keywords: Mullerian duct anomalies, didelphys uterus, pregnancy, outcome

1. Introduction

MDA include failure of development, fusion, canalization, or reabsorption, which normally occur between 6-22 weeks in utero. Septate uterus is the commonest uterine anomaly with a mean incidence 35%, followed by bicornuate 25% and arcuate uterus 20%[4].Uterine didelphys is a rare form of congenital anomaly of the mullerian ducts. The clinical significance of this anomaly of the female reproductive tract is associated with various reproductive issues: increased risk of preterm birth before 37 weeks gestation, abnormal fetal presentation, delivery by caesarean section, intrauterine fetal growth restriction, low birth weight less than 2500g and perinatal mortality.

Complete/partial failure-unicornuate uterus without a rudimentary horn.	Failure of duct to canalize – unicornuate uterus with a rudimentary horn without proper cavities.
Incomplete fusion – bicornuate / didelphys uterus	Incomplete reabsorption of uterine septum – septate / arcuate uterus

Classification solely on abnormal development-

Most recent classification is–Buttramjr and Gibbsons (1979). A didelphys uterus is complete failure of mullerian duct to fuse leading to separate uterine cavities with two cervixes. A longitudinal vaginal septum is also present that may range from thin and easily displaced to thick and inelastic.Because MDA develop in association with wollfian ducts, abnormalities of the kidneys may be found in conjunction with uterine anomalies[1, 2].

2. Case

A 24 year old primigravida with 38wks2days pregnancy came with pain abdomen. Pelvic USG showed didelphys uterus with pregnancy in left horn with breech presentation.Patient had uncomplicated prenatal care. On arrival BP-120/80mmhg p-80/min.On L/E-thick non-communicating vaginal septum was present.

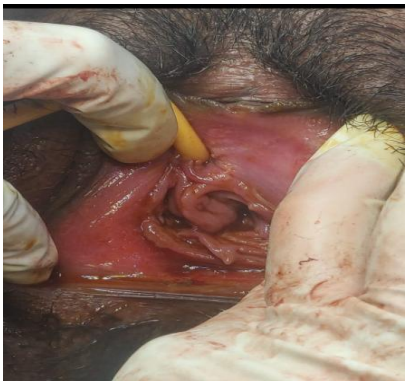

Figure 1: Non communicating vaginal septum

G/E-P/A-Term size, Breech FHS localized on left spinoumbilical line, P/V-os1f (l) cx soft m+ vertex -3 pelvis-adequate, uterine contractions negative.Patient planned for LSCS o/a/o primigravida breech. Patient underwent LSCS under Spinal Anasthesia, baby boy 2600gextracted out as breech.Third stage of labor was uneventful. Uterus was didelphys with respective ovaries and fallopian tubes.

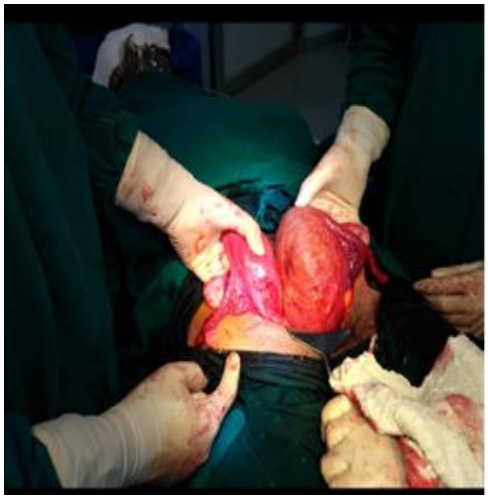

Figure 2: Didelphys uterus- fetus was in the left uterine cavity, no pregnancy in right uterine cavity.

3. Discussion

Most women with a didelphys uterus are asymptomatic, but may present with dyspareunia or dysmenorrhea in the presence of thick, obstructing vaginal septum which can lead to hematocolpos/ hematometrocolpos and present as chronic abdominal pain. There is increased risk of spontaneous abortion, fetal growth retardation and prematurity with an estimated <45%chance of carrying a pregnancy to term in comparison to normal uterus, which is similar to that of unicornuate uterus .this indicates poor reproductive performance, but still not as poor as a septate /bicornuate uterus which are more common among MDA[1, 2, 5, 6].Study done by Raga et al on 3181 patients demonstrated poor reproductive performance in women with didelphys uteri with a higher rate of preterm delivery, spontaneous abortion and lowest chance of having a term delivery[3].Grimbizis et al demonstrated incidence of mullerian duct anomalies in infertile patients (3.4%) similar to that of general population and /or fertile women which they concluded MDA's may not have negative impact on fertility[4]. Zhang et al in china demonstrated that women with didelphys uterus more frequently required infertility treatment than with other anomalies to conceive[10].

4. Conclusion

A didelphys uterus is very rare MDA with varying reproductive and gestational outcomes in comparison to other more common abnormalities. There is insufficient data on surgical (metroplasty), so not indicated, but excision of vaginal septum may be required if woman is symptomatic.
Didelphys uterus is not an indication for caesarean delivery unless vaginal septum is thick and inelastic resulting in vaginal dystocia[13, 14]. Cervical incompetence has not been shown in conjunction with didelphys uterus[2.5.12].Renal anomalies should be investigated to rule out Herlyn – Wernerwunderlich (HWW) syndrome which is a triad of didephysuterus, obstructedhemivagina and ipsilateral renal agenesis[11].

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