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## Case Report

### UTERINE DIDELPHYS WITH CERVICAL INCOMPETENCE

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#### ABSTRACT

Uterine didelphys represents a uterine malformation where the uterus is present as a paired organ. There is presence of double uterine bodies with two separate cervixes, and often a double or septate vagina as well. We report a case of single pregnancy in the right sided uterine body of a didelphic uterus with cervical incompetence. **Case report:** A 24 year G<sub>3</sub>A<sub>2</sub> with 14 weeks pregnancy came for routine antenatal check-up. On examination she had uterine didelphys with 2 cervixes & complete longitudinal vaginal septum. Ultrasonography showed didelphys uterus with pregnancy in right hemiuterus and cervical incompetence. Cervical encirclage was done (Mc Donalds). The patient had an uneventful antenatal period except for a persistent breech presentation. She was taken up for elective LSCS on at 39 weeks. An inverted T incision was given to deliver a 3Kg healthy male baby by breech extraction. Postoperative period remained an uneventful. **Discussion:** Mullerian anomaly rate is reported between 0.1-1% in general population with significantly higher rates associated with infertility and reproductive wastage.

**Keywords:** Uterine didelphys, Cervical incompetence

#### INTRODUCTION

A uterus didelphys is a type of Müllerian duct anomaly (class III) where there is complete duplication of uterine horns as well as duplication of the cervix, with no communication between them. The incidence is 1/3,000 women<sup>7</sup>. We report a case of single pregnancy in the right sided uterine body of a didelphic uterus with cervical incompetence.

#### CASE REPORT

A 24 year G<sub>3</sub>A<sub>2</sub> with 14 weeks pregnancy came for routine antenatal check-up. Prior had two

spontaneous mid trimester abortion. P/A examination revealed enlarged uterus of 14-16 weeks size, which was abnormally elongated, deviated towards the right. P/S examination revealed two cervical openings with complete vaginal septum. P/V examination revealed two cervixes and gravid cervix was with the short cervical length. There was a left sided mass attached to the gravid uterus. Ultrasonography showed Didelphys uterus with pregnancy in right hemiuterus. Cervical encirclage (Mc Donalds)

was done. The patient had an uneventful antenatal period except for a persistent breech presentation. Patient was admitted to the hospital at 37<sup>th</sup> week and was given head low position and strict bed rest under tocolytic cover. At 39 weeks she had



**Fig.1: Visual inspection of external genitalia- unremarkable.**

premature rupture of membranes for which she was taken up for emergency LSCS. An inverted T incision was given to deliver a 2.9 Kg healthy female baby by breech extraction. Postoperative period remained an uneventful.



**Fig.2: Local examination showing vaginal septum.**



**Fig.3: P/S showing 2 cervixes and vaginal septum.**



**Fig.4: Intra operative photo showing well developed left horn of uterus without pregnancy**

## DISCUSSION

Mullerian anomaly rate is reported between 0.1-1% in the general population with significantly higher rates associated with infertility and reproductive wastage<sup>2</sup>. It results from the failed distal fusion that occurs between the 12<sup>th</sup> and 16<sup>th</sup> week of pregnancy and is characterized by two symmetric, widely divergent uterine horns and two cervixes<sup>3</sup>. The processes during which the lower segments of the paired müllerian ducts fuse to form the uterus, cervix, and upper vagina is

termed lateral fusion<sup>7</sup>. Failure of fusion results in anomalies such as bicornuate or didelphys uterus. The chance of seeing a pregnancy to term is significantly reduced, down to only 20%, with every third pregnancy ending in abortion and over half of the pregnancy in premature deliveries. This is seen in our patient who had previous 2 midtrimester abortions. According to a study only 40% of pregnancies resulted in living children<sup>2</sup>. The volume of uterus in each duplicated segment

is reduced. American Fertility Society (AFS) Classification Scheme: Class III (didelphys uterus) results from the complete infusion of both müllerian ducts (see the image below). The individual horns are fully developed and almost normal in size. Two cervixes are inevitably present. A longitudinal or transverse vaginal septum may be noted as well. Since each horn is almost a fully developed uterus, patients have been known to carry pregnancies to full term.<sup>1</sup>

Rock and Adam modified the AFS classification, he included Class 3 which describes anomalies in a patent but often duplicated or partially duplicated reproductive tract and includes disorders of lateral fusion such as didelphys, unicornuate, bicornuate, and septate uteri (AFS classes II, III, IV, and V)<sup>4</sup>. It may present with Infertility & Miscarriage. Breech presentation was present in 43% and premature delivery are common in almost (21%)<sup>6</sup>. Associated unilateral hematocolpos and ipsilateral renal agenesis and vaginal septum is commonly seen. Multiple gestations with pregnancies occurring simultaneously in each uterine body are reported and a case of triplet pregnancy with twin fetuses on one side and a single fetus on the other side is also reported. Cesarean section was performed in 82% of patients reported by Heinonen<sup>6</sup>. Uterus didelphys, in certain studies, has also been found associated with higher rates of infertility, spontaneous abortion, intrauterine growth retardation, and postpartum haemorrhage.<sup>8</sup> A specific association of uterus didelphys, unilateral hematocolpos and ipsilateral renal agenesis has been described.

## CONCLUSION

Didelphic uterus is a very rare anomaly and it can lead to recurrent pregnancy loss due to decreased uterine volume and associated cervical incompetence. Spontaneous abortion rates range from 32%-52% and premature birth rates from 20%-45%. By adequate bed rest, tocolytics and

cervical encirclage, pregnancy in these patients can reach term.

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