

## BICORNUATE UTERUS –A CASE REPORT

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### ABSTRACT

The incidence of the uterine malformations is estimated to be 3% to 5% in the general population. Abnormal fusion of the mesonephric duct (mullarian duct) during embryonic life results in a variety of congenital uterine malformations like septet uterus, unicornuate uterus, and bicornuate uterus.

In the present case the patient has history of 7 miscarriages. She is 34 years old. Married life is 11 years. Due to bad obstetric history, after thorough investigations, the cause for it is diagnosed as having bicornuate uterus. It was found by hysterosalpingography.

**Keywords:** Developmental anomaly, mesonephric duct (mullarian duct) Bicornuate Uterus, miscarriage.

### 1. Introduction:

Abnormal fusion of the mesonephric duct (mullarian duct) during embryonic life results in a variety of congenital uterine malformations. Uterine malformations are estimated 3% to 5%. Because of better availability of diagnostic modalities that is trans vaginal sonography, hysterosalpingography and Laparoscopy better detection of anomalies is possible. Reproductive outcomes can be improved with better treatment. 15% to 25% of women with uterine anomalies have problems with fertility and reproduction. They are increased incidence of miscarriage, poor fetal growth, malpresentations, and abnormal placental and ectopic pregnancies.

### 2. Case Report.

A 34 Year old lady anxious to conceive came to the Gynecology Department, Government General Hospital Guntur. Marital life is 11 years. She had history of 7 miscarriages. After 4<sup>th</sup> abortion she underwent thorough checkup. All blood test are normal including Thyroid profile. She is asthmatic. Her weight is 60 kg. No history of consanguineous marriage of parents. No family history of any abnormal pregnancies. Her mother antenatal period is uneventful. She is first child to her parents. Age at menarche 14 years. Menstrual history is uneventful. No history of diabetes and Hypertension. No Rh incompatibility. No history of Rubella infection.

Ultrasonography of abdomen and trans vaginal route was done. But, Doctor given the report as normal. Probably due to lack of experience. After that Hysterosalpingography was done by another Doctor in 2007. She was diagnosed as having bicornuate uterus. After that also she had 2 abortions at 3<sup>rd</sup> month. The 7<sup>th</sup> one is ectopic pregnancy. Finally she landed in rupture of ectopic pregnancy. For that surgery was done.

Now she is willing to have a child through surrogacy.

**Investigations:** The Ultrasonography and Hysterosalpingogram findings are

**Fig:1 . Ultrasonography showing two uterine cavities**



**Fig: 2.Hysterosalpingography showing Bicornuate uterus.**

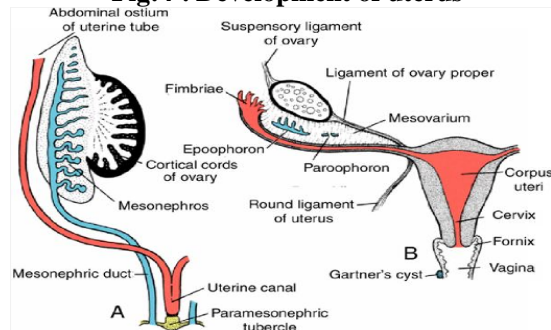


### 3. Discussion

Women with uterine anomalies have poorer reproductive outcomes and lower pregnancy rates compared with women who possess normal uterus. With introduction of MRI and 2D Ultrasonography increased rate of accurate diagnosis is now possible. Obstetrical complications such as preterm delivery and 1<sup>st</sup> trimester miscarriage are higher in women with abnormal uterus.

**Embryogenesis:** The uterus is developed from the fused caudal vertical parts of the paramesonephric ducts, and the site of angular junction becomes the cervix dome and forms the fundus of the uterus. The fusion between the ducts is incomplete at first, a septum persisting between the lumina. Later, the septum disappears so that a single cavity remains. The upper part of the cavity forms the lumen of the body and cervix of the uterus. The myometrium is formed from the surrounding mesenchyme.

**Fig:4-. Development of uterus**



Failure of the paramesonephric duct to fuse may cause a variety of uterine defects. They are

1. The uterus may be duplicated with two bodies and two cervices.
2. There may be a complete septum through the uterus, making two uterine cavities and two cervices.
3. There may be two separate uterine bodies with one cervix.
4. One paramesonephric duct may fail to develop, leaving one uterine tube and half of the body of the uterus.

**Obstetrical Impacts:** More than 50% of women with malformed uterus will stay completely asymptomatic.

**Obstetrics complications are,** Infertility, Early abortions, Ectopic pregnancies, Late abortions or premature birth, and IUGR

#### Management of uterine Malformations

**Before pregnancy:** The management of the uterine malformations before pregnancy comprises the surgical treatment if it is possible and necessary.

In the bicornuate uterus, hysteroplasty is theoretically possible in case of symptomatic malformation.

**Surgical Management:** It is important to rule out the other causes of abortion prior to embarking on any corrective surgery for anomalies. It is also important to make the correct diagnosis, because wrong surgery can culminate in poor outcome.

Strassman uteruloplasty operation with a transverse fundal incision for reunification of the uterine cavity certainly improves the obstetric outcome in women with bicornuate uterus, who have suffered earlier pregnancy losses. In conclusion women with uterine anomalies have poorer reproductive outcomes and lower pregnancy rates with all conceptions whether spontaneous or induced with assisted reproductive techniques, compared with women with normal uteri.

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