

BICORNUATE UTERUS –A CASE REPORT

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This article is available online at www.ss-journals.com

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 bicoruate 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 through 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 4th 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 3rd month. The 7th 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

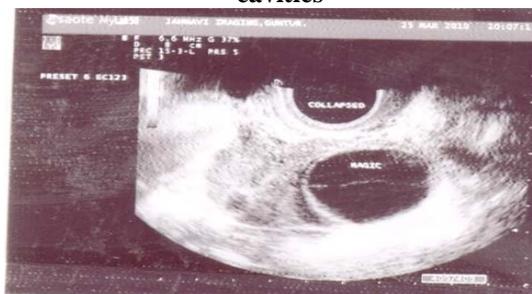


Fig: 2.Hysterosalpingography showing Bicornuate uterus.

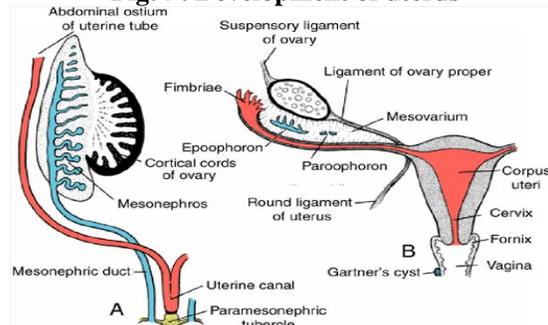


3. Discussion

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 1st 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 cervixes.
2. There may be a complete septum through the uterus, making two uterine cavities and two cervixes.
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.

References

1. Ahmad FK, Sherman SJ, Hagglund KH. Twin gestation in a woman with a uterus didelphys. A case report. *J Report Med* 2000; 45:357-9.
2. Robert N. Troiano, American Fertility Society classification of mullerian anomalies. *Fertile Steril* 1988; 49: 952.
3. Arora M, Gupta N, Neelam, Jindal S. Unique case of successful twin pregnancy after spontaneous conception in a patient with uterus bicornis unicollis. *Arch Gynecology Obstetric* 2007; 276:193-5.
4. Nasrin Moghadami-Tabrizi, MD et al; Bicornuate-septate uterus: a new congenital uterine anomaly. *Medical Journal of the Islamic Republic of Iran*. Vol.22, No.2, August 2008. pp. 98-100.
5. Green LK, Harris RE. Uterine anomalies. Frequency of diagnosis and associated obstetric complications. *Obstetric Gynecology* 1976; 47:427-9.
6. Harger JH, Archer DF, Marchese SG, Muracca-Clemens M, Garver KL. Etiology of recurrent pregnancy losses and outcome of subsequent pregnancies. *Obstetric Gynecology* 1983; 62:574-81.
7. Padubidri, Padubidri Vg. Howkins and abourne *Shaw's Text book of Gynaecology*. 14th edition. Elsevier India, 2008; ISBN: 918-81-312-1131-page.No:81-88.
8. Snell, MD .PhD. Lippincott Williams and Wilkins *Clinical anatomy by regions by Richard S*. 8th edition. 2007: Page no 371.
9. F. Gary Cunningham, Norman F. Gant, Kenneth J. Leveno, Larry C. Gilstrap, John C. Hauth, Katharine D. Wenstrom, Claudia L. Werner, Susan M. Cox *Text book of Willians Obstetrics*, McGraw-Hill Companies, 21st Edition, 2005: 916-918.