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Case Report

Uterus didelphys with unilateral vaginal obstruction having single pregnancy in her right horn : A case report

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Abstract

Fusion of the two Mullerian ducts and establishment of vaginal canal are completed between 10th and 17th week of intra-uterine development. Sometimes, the Mullerian ducts don't join completely. Several degrees of duplication of uterus are possible ranging from a complete duplication of uterus, cervix and vaginal canal. Instead, each one develops into a separate cavity. Some women with double uterus also have a duplicate or divided vagina. Uterus didelphys is rare and sometimes not diagnosed. It occurs in 0.1% - 0.5% healthy fertile population. Pregnancy in such a uterus causes various complications like spontaneous abortions, preterm labour, abnormal presentation and increased incidence of caesarean delivery. A 20 year old lady was admitted on 15th May 2012 in our hospital with full term pregnancy in labour. A live term female baby of weight 2,500gms was extracted out of the right uterus by LSCS. On left side, there was non-pregnant uterus which was lying posterior to pregnant uterus.

Key words: Lower segment cesarean, obstructed labour, Uterus didelphys, vaginal septum section.

Introduction

The human uterus is of Paramesonephric in origin. Any degree of failure of fusion of mullerian ducts or subsequent failure of resorbtion of tissue results in spectrum of clinical manifestations. Uterus didelphys is a condition of lateral fusion defect causing two hemi uteri and cervices. It constitutes approximately 5% of the mullerian duct anomalies. According to American Fertility society classification of uterovaginal anomalies, uterus didelphys belongs to class III B.1.a. It is a lateral fusion defect of the mullerian ducts with symmetrical unobstructed didelephic uterus having complete longitudinal vaginal septum. It is a rare uterine anomaly and according to one estimate, it occurs in 0.1% - 0.5% healthy fertile population [(1)]. Of all the uterine anomalies, didelphic uterus is associated with successful pregnancy. Uterine didelphys is associated with developmental urinary tract abnormalities about 20 – 30% [(2)].The most common problem with uterine didelphys is cervical incompetence [(3)].

Case History

A 20yr old pregnant woman, with full term pregnancy and labour pains referred from a local peripheral health centre for safe confinement was admitted**.** She was referred from a local peripheral health centre for safe confinement. On examination, uterus was 34 weeks size with vertex presentation. Uterus was irritable and fetal heart rate was 140bpm, regular. On speculum examination thick longitudinal vaginal septum was present. On vaginal examination, right side cervical OS was 30% effaced and 2 cms dilated with intact membranes. Left side cervix was uneffaced and OS closed. She was advised Emergency LSCS. Her hemoglobin concentration was 12.2g/dl and blood group was O positive. She had blood pressure of 130/80 mm of Hg. Her urine sample showed absence of albumin and sugar.

Abdomen was opened by Pfannensteil incision in layers and two horns of uterus was seen with pregnancy in the right horn. On the left side was a non-pregnant uterus, which was lying posterior to the pregnant uterus. A live term female baby was extracted by vertex on 15th May 2012 at 11.25 pm

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weighing 2,500 gms by LSCS. Baby cried immediately after birth. Apgar score was 1- 7/10 & 5- 9/10. Placenta with membranes was extracted in toto, no postpartum hemorrhage. Uterus was closed in two layers. After closing the right uterus, left uterus was of normal size with well-developed fallopian tube and ovary. There was no communication between two horns. Patient had an uneventful post-operative period. Both mother and baby were discharged on 23rd May 2012.

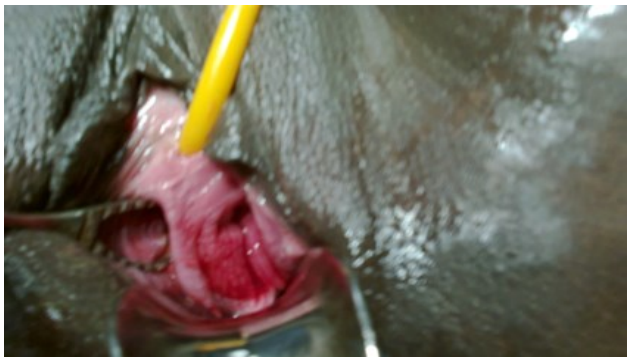

Fig:1 – Speculum examination showing thick longitudinal vaginal septum

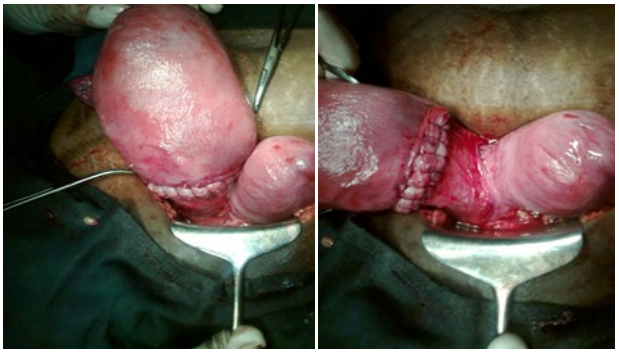

Fig:2- Intra-operative finding of the gravid & the non-gravid uterus

Discussion

Mullerian anomaly rate is reported between 0.1 – 1% in general population with significant higher rates associated with infertility and pregnancy wastage. These mullerian duct anomalies are clinically more important because they are associated with impaired infertility, menstrual disturbances and obstetrical complications like obstructed labour. They are also associated with endometriosis and obstructed uterine drainage which may occur in patients with uterus didelphys and unicornuate uterus. In case of single pregnancy in uterus didelphys, literature shows the right uterus having pregnancy predominantly[2]. In uterus didelphys, non-pregnant uterine horn is also subjected to some hormone influences as the pregnant horn[4]. It remains as a pelvic organ posterior and hampers the delivery of the baby.

Vertical septum extending into the upper vagina can be identified in up to 75% of the patients by MR Imaging[5]. An important point is that, in all of the patients with obstructed uterus didelphys, renal agenesis was located on the same side as the obstruction. It is worth mentioning that in cases of unicornuate uteri, the renal anomalies that may be associated are also always ipsilateral to the rudimentary or absent horn[6]. This type of anomaly is routinely diagnosed on pelvic examination, USG or HSG, with two separate uteri and widely divergent apices, two separate cervices and upper vaginal longitudinal septum. Spontaneous abortion rates are reported to range from 32 – 52%; preterm labour from 20 – 45 % and fetal survival rates from 41 – 64%. Only patients who have symptoms like dyspareunia, recurrent pregnancy loss can be surgically managed by Strassmann's metroplasty[7]. According to Jones & Jones, 1/3rd of patients with double uterus had reproductive problems. The septum should be removed when the patient is not pregnant unless there is a contraindication as there is risk of injuring the urethra, bladder or the rectum.

Conclusion

Interestingly, in our present case report, this woman had single pregnancy in the right uterus and gave birth to a baby by cesarean section. However, the mother of the present case did not have history of abortion or premature birth, but she had pain before or during her menstrual cycles.

Conclusively, we also state that patient with uterus didelphys belong to high risk group and deserve a particular prenatal care. Therefore it is of great importance for the clinician to detect these abnormalities of the reproductive tract in early stage by USG. It is now convenient to draw the attention of practicing obstetricians towards a mistake frequently made during routine examination in the course of labour; that is to examine the wrong cervix for dilatation when ignorant about such abnormality.

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