

A RARE CASE OF UTERUS **BICORNIS BICOLLIS** WITH VAGINAL DELIVERY IN ONE HORN AND **CAESAREAN** SECTION IN OTHER HORN

Abstract

Uterus **bicornis bicollis**, also known as a duplicated uterus **with one vagina**, is an embryological abnormality resulting from complete failure of fusion of the Mullerian ducts. We present the case of a young woman who had uterus didelphys with 8 months pregnancy, one in each horn. She was an unbooked case and the diagnosis of uterine didelphys was made Intra-operatively only. On admission abdomen was abnormally distended with a central slit like depression, on per speculum examination cervix was fully dilated and vertex was at +1 station. First baby delivered vaginally immediately after admission and the second baby was delivered by caesarean section due to confusion in the diagnosis and abnormal progress of labour. Patient was shifted to OT where on laparotomy a confirmed diagnosis of uterus didelphys was made.

Keywords - Uterus **bicornis bicollis**, Uterus **didelphys**, Mullerian ducts, Twin pregnancy.

Introduction

Uterus **bicornis bicollis**, also known as a duplicated uterus **with one vagina**, is an embryological abnormality that results from the failure of fusion of **most of the two** Mullerian ducts, causing abnormal uterine development. The occurrence of uterus **bicornis bicollis** is very rare in the general population and often predisposes women to a variety of gynaecological problems. **On the other hand, uterus didelphys is double uterus with double vagina resulting from complete failure fusion of Mullerian ducts (1).**

It can result in obstetrical complications, such as spontaneous abortion, preterm labour, cervical incompetence, and malpresentation. Uterus **bicornis bicollis or didelphys** is associated with developmental urinary tract abnormalities. Pregnancy in a uterus didelphys is an uncommon occurrence with about 400 cases published. The incidence varies from 1 in 1,500 to 1 in 1,42,000 pregnancies worldwide. The reported incidence of twins in patients with uterus didelphys is 1 in 12 as opposed to the overall incidence of 1 in 80.

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Case report

A 24 yrs old unregistered second gravida with history of eight months amenorrhoea, reported to emergency with complaint of labour pain with a diagnosis of twin pregnancy. She had regular menstrual periods with no significant past or family history.

Her vital parameters were normal. Her previous delivery was through vaginal route at around 30 weeks gestation as per the patient due to preterm labour pains, her child is 5 years old with no developmental problems. However, no records were available with the patient. On per abdomen examination, uterus was 34 weeks size. Uterine contour at fundus suggested the presence of bicornuate uterus. Multiple fetal parts were felt. Both babies were in cephalic presentation with normal fetal heart rate. Patient had only one **obstetric ultrasonography** report which revealed twin pregnancy with 24wks +2days gestation in cephalic presentation with normal cardiac activity dating back to 10 weeks before. Amniotic fluid index was 11cms. Placenta was diamniotic and dichorionic and was situated at the fundus. No uterine anomaly could be detected at that time. Patient presented to us in emergency hours with labour pain. On admission abdomen was abnormally distended with a central slit like depression, cervix was fully dilated and vertex was at +1 station. Patient was immediately shifted to labor room and a preterm baby was delivered just 5 minutes after admission. The baby cried spontaneously immediately after birth and the Apgar score was 7, 9, 9. Lie of the second baby was noted and ARM was done but cervical dilatation was just 5 cm, and something else apart from this could be felt on the right side, consistency and shape similar to cervix, these two findings that is, cervical dilatation of 5cm from a previous finding of full dilatation and cervix like structure on the right side prompted us to do a per speculum examination of the patient again which shoed two cervices and on the basis of P/A findings a provisional diagnosis of uterus **bicornis bicollis** was made.

However, only single vaginal outlet was found, there was no septa in the vagina. Labour was accelerated but there was no progress even after 2 hrs and the FHR patterns became non-reassuring so emergency LSCS was decided and patient was shifted to **obstetric theatre (OT)** where on laparotomy a confirmed diagnosis of uterus **bicornis bicollis** was made. On opening the abdomen, two completely separate horns of uterus were seen with one tube and ovary attached to each horn. The 2nd twin baby with cephalic presentation was in left horn; baby was delivered from the left horn by incision on lower segment. The baby did not cry spontaneously, however **cried** after 1 minute and the baby was shifted to nursery and on 4th day baby was

discharged. Patient had uneventful post operative period. Both mother and babies were discharged 7 days later. Post-operative MRI was done 6 weeks later which confirmed the diagnosis of uterus **bicornis bicollis** with two cervixes and one vagina.

Discussion

Congenital defects of the reproductive tract can be a cause of increased morbidity during labor. There are associated with premature labour, abnormal presentations with dystocia, and the increased necessity of cesarean section. Combined with multiple gestations, they are at very high-risk for a variety of consequences. Neonatal complications in twins include low Apgar scores, small-for-date infants, hyaline membrane disease, and an increased incidence of mortality and morbidity as compared to singleton. There has been a shift in the mode of delivery of multiple fetuses, and now there is much liberal use of cesarean section than in the past. Twin pregnancy in each horns of a uterus didelphys or **bicornis bicollis** is a very rare phenomenon, and our patient presented during labor with no ambiguity in diagnoses. Her previous delivery being preterm can be explained with such a uterine malformation. But, women who have such pregnancies belong to a high risk category and need intensive antenatal care so as to decrease both maternal and fetal morbidity.

It is observed that uterine malformations may have consequences on fertility of the women but apart from that the fetal outcomes are dramatic, with preterm labor and prematurity being dreaded complications. However, uterus **bicornis bicollis** has better outcomes than separate or bicornuate uterus with regard to fetal survival. It is because a functional hemi-uterus can carry a fetus better than a semi-functional but single uterus. In our case report, one baby was delivered vaginally and the other delivered by cesarean section in the 34th week. The detection of uterine anomalies in early pregnancy is of great importance.

Sonography has been reported to be useful in identifying abnormal uterine development in most of the cases. Transvaginal sonography offers a reliable diagnostic method in predicting uterine anomalies in the very early stages of pregnancy or before conception. In the above-mentioned case report, it was possible to detect a uterus didelphys or **bicornis bicollis** with a viable twin pregnancy in both the horns only during intra operative period as patient presented very late in the third trimester.

Conclusion

It is important to detect uterine anomalies at the earliest so as to decrease any maternal or fetal morbidity. Transvaginal ultrasonography **in addition to clinical findings** is an accurate method to detect such anomalies if done in the first trimester or before conception.

Conflicts of interest: The authors declare no conflict of interest.

Consent Disclaimer:

As per international standard or university standard, patient's consent has been collected and preserved by the authors.

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