

## Case Report; A Case of Successful Pregnancy in a Complete Bicornuate Uterus

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### Abstract:

The accurate population prevalence of these is difficult to assess because the best diagnostic technique is invasive that said the prevalence is found the imaging range is( 0.4-10) percent About 3 % of women are born with a defect in the size, shape, or structure of their uterus. A bicornuate uterus is one of the most common types of uterine irregularities. While true prevalence of Mullerian duct anomalies was not well established, ultrasound examinations revealed that approximately one per 250 women reported uterine abnormalities Complete bicornuate uterus is a type of Mullerian duct deformity, resulting from abnormal duct fusion. Similar to other Mullerian anomalies, bicornuate uterus is associated with specific complications during possible pregnancies. While various studies have reported successful deliveries in a bicornuate uterus, it might be accompanied with various complications, ranging from preterm labor such as uterine rupture. One of the current approaches to diagnosis this abnormality is ultrasound monitoring. In the present report, we presented 27-years-old multiparous women with a history of two abortions with unknown causes. The patient was not diagnosed with a complete bicornuate uterus in her two unsuccessful pregnancy. However, she was suspected with a complete bicornuate uterus based on the findings of sonography in the first stage of labor in her third pregnancy. She opted for cesarean section for breech presentation A successful cesarean section was performed on the subject in the 39th week of gestation and breech presentation. According to the results, successful delivery could be achieved in patients with bicornuate uterus. Considering factors such as recurrent miscarriage, suspicious findings, and unreliable results of ultrasound, other diagnostic evaluations, including magnetic resonance imaging (MRI) which is not easily available everywhere in our country so sonography and hysterosalpingography are recommended. for all the women with history of unknown miscarriage to diagnosed reproductive system abnormalities.

**Keywords:** Abnormalities, Deformity, Cesarean, Sonography.

### Introduction:

If a woman has a bicornuate uterus, it means that her uterus is heart- shaped. The uterus is the organ in a woman's body that holds a baby. The shape of woman uterus is important if a woman

become pregnant because it affects how a baby lies in your womb. Uterus irregularities are relatively unusual. About 3 percent of women are born with a defect in the size, shape, or structure of their uterus. A bicornuate uterus is one of the most common types of uterine irregularities. Read on to learn more about ways that doctors detect a bicornuate uterus and how this condition can impact your pregnancy. Women with a bicornuate uterus are born with it, but they might not know they have it unless they undergo an ultrasound or other imaging test. That's because it often doesn't cause any. On the other hand, some women with a bicornuate uterus report the following symptoms

- irregular vaginal bleeding
- repeated miscarriages
- painful periods
- abdominal discomfort & pain during intercourse

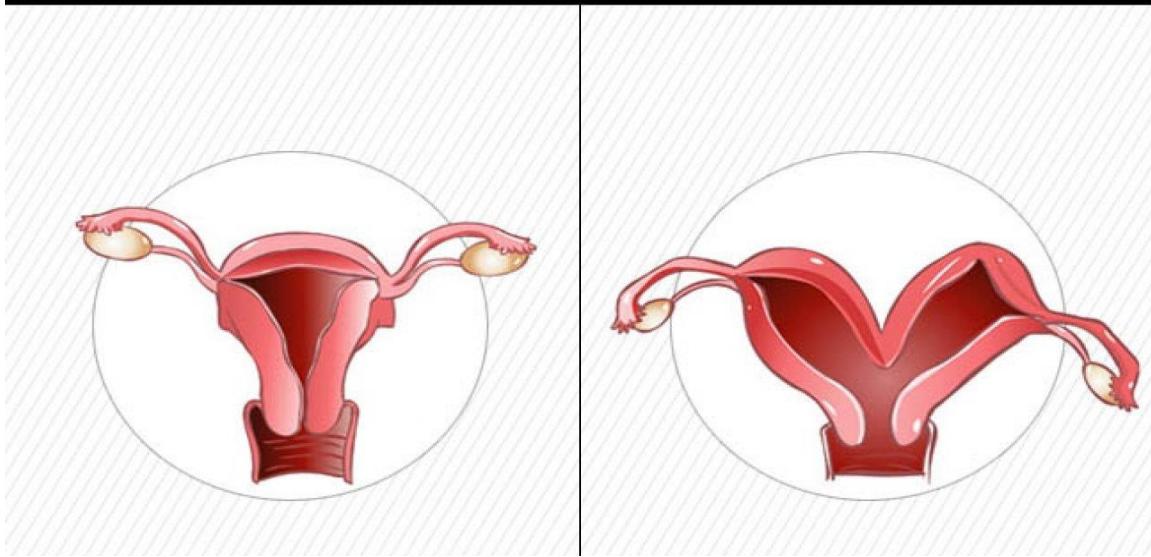
#### BICORNUATE UTERUS AND PREGNANCY

A heart-shaped uterus probably won't affect your fertility. In fact, studies have shown that having a bicornuate uterus doesn't lessen a woman's chances of becoming pregnant. But, some older research trusted source suggests that this abnormality is more common in women who are infertile.

A bicornuate uterus raises your risk of having a miscarriage later in your pregnancy and delivering your baby early. Some researchers suggest that these problems happen because of irregular uterine contractions or reduced uterine capacity. Statistics vary when it comes to determining how many women experience these problems. For instance, one report states that the prevalence of repeated miscarriage in women with uterine defects ranges between 1.8 percent and 37.6 percent.

Additionally, babies born to mothers with a bicornuate uterus have a greater chance of developing birth defects compared to those born to women without the condition. In fact, this risk was four times higher in one study. If you have a bicornuate uterus, your pregnancy will be treated as high-risk. Your doctor will monitor your pregnancy carefully. They may perform frequent ultrasounds to check the position of your baby. Your baby may settle in a breech position, which means their bottom or feet are facing down before birth. You may require extra

testing and will be more likely to give birth via Cesarean delivery.



## Discussion

Uterine anomalies usually result from abnormal development of Mullerian ducts (1).

While true prevalence of Mullerian duct anomalies was not well established, ultrasound examinations revealed that approximately one per 250 women reported uterine abnormalities (2). Each of these anomalies is accompanied with a unique complication during pregnancy (3). According to the literature, bicornuate uterus has been identified as a form of abnormal duct fusion. The incidence of bicornuate uterus is reported to be 10.3% in women, while the incidence rate of pregnancy in rudimentary uterus is one per 40000 pregnancy cases (4, 5). Preterm rupture of membranes in small for gestational age infants and caesarian section (due to mal presentations) are mostly observed in women with Mullerian anomalies (6). However, even women with complete bicornuate uteri can experience successful pregnancies. Therefore, a case of successful pregnancy in a patient with bicornuate

Case report A 25-year-old multipara woman (gravid a: two, abortion: one) with a previous history of complete abortions in the 10th and 12th week of gestation (about three years ago) was referred to outpatient gynecology& obstetrical clinic for routine pregnancy follow-up in her 8th week of pregnancy. No uterine abnormality was reported by abdominal ultrasound in the first pregnancy of the subject, and the patient had no abortion workups. However, possible bicornuate uterus with a living fetus 8th week of gestation was observed in the second pregnancy of the patient. The next abdominal ultrasound in the 16th week of pregnancy reported the cervical length at 33 mm and a septated uterus, while the patient was symptom free. In the 33th week of gestation, the cervical length was reduced to 27 mm. Moreover, the patient received weekly progesterone due to occasional painful contractions. In the next abdominal ultrasound exam in the 36th week of pregnancy, the fetus was alive and in a breech position.

Therefore, after the last ultrasound in week 39 of gestation, the patient was scheduled for selective cesarean section due to the breech position of the fetus:

The patient delivered a healthy boy, weighing 3400 gr with one-minute Apgar score of nine and five-minute Apgar score of 10. It is worth noting that the patient was diagnosed with a complete bicornuate uterus with a single common cervix and no anomaly was observed in other organs. The placenta and fetus were both located in the right horn of uterus. After the removal of placenta, bleeding was estimated at 1000 cc, and the incision sites were sutured.

The patient was stable after the cesarean section and discharged in overall healthy conditions after 48 h. (9)

Other rare complications, such as failure of contraceptive methods, might also be responsible for this condition. In this regard, Naghibi et al. reported a case of pregnancy in a horn of bicornuate uterus. A history of both vaginal and caesarean delivery without any positive history of miscarriage was reported in the mentioned study. In terms of contraceptive methods, the subject was using intrauterine device (IUD) at the time, which failed since the device and fetus were in different horns of uterus. After the cesarean section, the device was removed and a female neonate at gestational age of 32 weeks (2200 gr) was delivered (10). Early ultrasound is a contributing method for evaluation of the effects of abnormal uterus on pregnancy (11). Sensitivity of ultrasound in visualizing the rudimentary horn of uterus is 23%, which allows the diagnosis of only 14% of patients before the manifestation of clinical symptoms (12). In the current case report, ultrasound could not identify the first pregnancy. This could be due to the small size of uterine horn or difficulty to provide proper imaging of this condition. However, the patient was accurately diagnosed with rudimentary horn of uterus in her second pregnancy. A case of pregnancy in one horn of bicornuate uterus was reported in a study by Adeyemi et al. Similar to the present report, the results of ultrasound revealed a bicornuate uterus in the patient. In addition, a history of intrauterine fetal mortality at term was affirmed, which was followed by a cesarean section for delivering a stillborn fetus. After another miscarriage, the patient of the mentioned study successfully gave birth to a healthy boy (weight: 2.8 kg, gestational age: 38 weeks) through a caesarean section (13). Another effective procedure for evaluation of fallopian tubes and uterus is the invasive hysterosalpingography process, in which patients are exposed to radiation. Given the inability of this procedure to visualize the external uterine.

### **Conclusion:**

According to the findings of the current research, uterine abnormalities are accompanied with uneventful outcomes such as preterm labor, fetal mal presentation, and even perinatal mortality. However, these anomalies may not be suspected before the occurrence of abortion or its complications. In the present report, while the first abortion might have not been caused by uterine abnormalities, the breech position in the second pregnancy possibly resulted from bicornuate uterus. Although women with complete bicornuate uteri might experience successful

pregnancy, they are still at the risk of certain complications. Nevertheless, it seems necessary to raise the patients' awareness towards the possible outcomes of this condition by physicians.

**Reference:**

1. Grimbizis GF, Camus M., Clinical implications of uterine malformations and hysteroscopic treatment results. *Human Reproduction Update*. 2001; 7(2):161-174.
2. Byrne J, Nussbaum-Blask A, , et al. Prevalence of Mullerian duct anomalies detected at ultrasound. *American Journal of Medical Genetics*. 2000; 94(1):9-12
3. Lin PC. Reproductive outcomes in women with uterine anomalies. *Journal of Women's Health*. 2004; 13(1):33-39.
4. Has R, Ermis H, Yildirim A. A malformed fetus in a rudimentary uterine horn pregnancy. *Ultrasound in Obstetrics and Gynecology*. 2000; 16(2):200-202.
5. Zhang Y, Zhao YY, Qiao J. Obstetric outcome of women with uterine anomalies in China. *Chinese Medical Journal*. 2010; 123(4):418-422.
6. Hiersch L, Yeoshoua E, Miremberg H, Krissi H, Aviram A, Yoge Y, et al. The association between Mullerian anomalies and short-term pregnancy outcome. *The Journal of Maternal-Fetal & Neonatal Medicine*. 2016; 29(16):2573-2578.
7. Bal R, Bal K, Mallik MP. Mullerian anomalies, reproductive outcomes, rudimentary horn. Different mullerian duct anomalies-Diagnosed Incidentally or During Emergency Interventions. 2015; 4(31):5334-5341.
8. Chan YY, Jayaprakasan K, Tan A, Thornton JG, Coomarasamy A, Raine-Fenning NJ. Reproductive outcomes in women with congenital uterine anomalies: a systematic review. *Ultrasound in Obstetrics & Gynecology*. 2011; 38(4):371-382.
9. Jayaprakash S, Muralidhar L, Sampathkumar G, Sexsena R. Rupture of bicornuate uterus. *BMJ Case Reports*. 2011; 2011(10):1-4.
10. Dabiri A, Naghibi T. Pregnancy with IUD in a Bicornuate Uterus. *The Scientific Journal of Zanjan University of Medical Science*. 2012; 20(79):
11. Hefny AF, Kunhivalappil FT, Nambiar R, Bashir MO. A rare case of first-trimester ruptured bicornuate uterus in a primigravida. *International Journal of Surgery Case Reports*. 2015; 14:98-100.
12. Jayasinghe Y, Rane A,. The presentation and early diagnosis of the rudimentary uterine horn. *Obstetrics and Gynecology*. 2005; 105(6):1456-1467.

13-.Alanh Decherny, Laure Nathan, Ashley s. Roman. (2013). Current. Diagnosis and treatment of Obstetrics and Gynecology. 11Edition .Mac Graw Hall .USA .

14-F gray Cunningham, Norman, F. gnat, Kenneth, Leveono, Laryc Gil's rap 111. Johnchauth, Kathained, Wenstorm.( 2001) . Williams Obstetric s. 25 edition. U.S.A. America. section.3 p 43

15- Sadhana gupta.(2011). A Comprehensive text book of obstetrical and gynecology. first edition .New Delhi .St Louis Panama city . Chapter