Pregnancy carried to term in a unicornuate uterus without rudimentary horn: a case report

Abstract

Uterine malformations, although rare, can have significant implications for the course of pregnancy and childbirth. The unicornuate uterus, a congenital anomaly resulting from incomplete development of the Müllerian ducts, is associated with a variety of obstetric risks, including acute fetal distress and the need for emergency caesarean section. We report here the case of a primiparous patient, pregnant with an unattended full-term pregnancy, presenting to the obstetric emergency department in labor, in whom acute fetal distress was detected on cardiotocography, leading to an emergency cesarean section.

Keywords: Unicornuate uterus; Műllerian anomaly; complete unilateral agenesis; caesarean section

Introduction

A unicornuate uterus accounts for 2.4 to 13% of all Müllerian anomalies. A unicornuate may be associated with gynecological and obstetric complications such as infertility, endometriosis, hematometra, urinary tract anomalies, abortions, and preterm deliveries. It has a poor reproductive outcome and pregnancy management is still unclear.(3)

Case report

Mrs. A., 36, G4P1, who had suffered 4 spontaneous precocious miscarriages, presented to the obstetric emergency department at 39 weeks' amenorrhea with regular uterine contractions. On admission, vital signs were stable, and obstetrical examination revealed a 40% effaced cervix dilated to 2 cm, mobile cephalic presentation, and an intact water sac. fetal heart auscultation was performed using a pinard stethoscope, with a low heart rate of 100 bpm.

Cardiotocography showed repetitive DIP 2 decelerations, suggesting acute fetal distress. As there was no response to intra-uterine resuscitation measures (oxygen therapy, repositioning of the patient), an emergency caesarean section was performed to save the fetus.

During laparotomy, a uterine anomaly was discovered: the uterus was asymmetrically shaped, suggestive of a right unicornuate uterus with no rudimentary horn on the left.(figure 1) The lower segment was thin and distended. A newborn weighing 3200 grams, with an Apgar score of 7 at 1 minute and 10 at 5 minutes, was extracted by a low transverse segmental hysterotomy, closed with separate absorbable sutures.

The patient made a good post-operative recovery, with resumption of transit on the second day and discharge on the fifth day. The newborn was entrusted to the mother and did not require hospitalization.

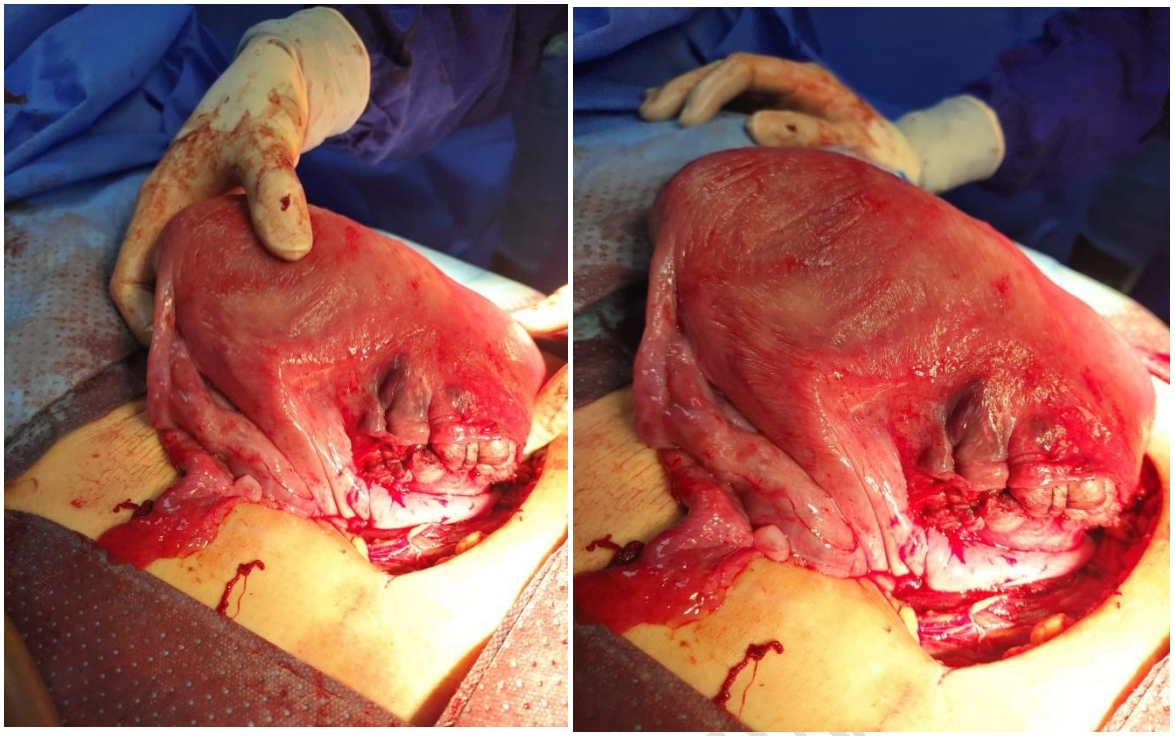

Figure1 : intraoperative image after hysterorrhaphy showing a unicornuate uterus

Discussion

Congenital uterine anomalies result from an abnormal formation, fusion or reabsorption of Müllerian ducts during fetal life. These anomalies are present in 1 to 10% of the unselected population, 2 to 8% of infertile women and 5 to 30% of women with a history of miscarriages (5)

Unicornuate uteri account for 10% of uterine malformations (4) Their incidence, although difficult to specify, is estimated at one per 1,000 women.

The unicornuate uterus corresponds to class II in the American Fertility Society's classification of Müllerian anomalies (6). Our case corresponds to a type IId anomaly (complete unilateral agenesis) clinically associated with decreased fertility, increased risk of early miscarriage, increased risk of late miscarriage and preterm delivery and are associated with an increased risk of obstetric complications such as abnormal presentation, intrauterine growth retardation, uterine rupture and acute fetal distress. In the present case, acute fetal distress could be attributed to suboptimal uteroplacental perfusion due to uterine malformation (7).

Forty percent of women with unicornuate uterus have renal abnormalities, which was not diagnosed in this case. (10)

Jain A et al. described A case of a 26-year-old primipara who presented with a 40-week pregnancy associated with breech presentation. She was managed for elective caesarean section, and intraoperatively they found that she had a unicornuate uterus without rudimentary horn.(9) This case is similar to our own, since the unicornuate uterus was only discovered intraoperatively, but the cause of Caesarean section differs, since in our case the reason was acute fetal distress.

Nanda et al has described a successful twin pregnancy in unicornuate uterus with one fetus in non-communicating rudimentary horn. Numerous other cases of ruptured non-communicating rudimentary horn pregnancies have also been described (8)

Other cases have been reported in the literature. For example, one study described a twin pregnancy on a pseudo-unicorn uterus, discovered at 8 weeks' amenorrhea, with a favorable outcome after hemihysterectomy of the rudimentary horn(1). In another case, rupture of a rudimentary non-communicating gravid uterine horn on a pseudo-unicorn uterus was reported at 23 weeks' amenorrhea, highlighting the risk of uterine rupture associated with this malformation(2).

Conclusion

This case highlights the importance of careful evaluation of patients with uterine malformations. Rigorous prenatal monitoring and preparation for a possible caesarean section are essential to optimize maternal and fetal outcomes .Optimal management approach in pregnancies with unicornuate uterus is not indicated and further observational and prospective studies are required to further investigate managements needed in pregnancy with unicornuate uterus.

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