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RESEARCH ARTICLE

PREGNANCY CARRIED TO TERM IN A UNICORNUATE UTERUS WITHOUT RUDIMENTARY HORN: A CASE REPORT

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Abstract

Uterine anomalies, though uncommon, can greatly influence pregnancy outcomes and the process of childbirth. The unicornuate uterus, a congenital malformation stemming from the incomplete development of the Müllerian ducts, is linked to various obstetric complications, such as acute fetal distress and the necessity for urgent cesarean delivery. This case highlights a primigravid patient with an unmonitored full-term pregnancy, who presented to the obstetric emergency department in active labor. Cardiotocography revealed signs of acute fetal distress, prompting an emergency cesarean section.

Introduction:-

A unicornuate uterus represents between 2.4% and 13% of all Müllerian malformations. This condition can be linked to various gynecological and obstetric issues, including infertility, endometriosis, hematometra, urinary tract anomalies, miscarriages, and preterm births. It is often associated with a low reproductive prognosis, and managing pregnancies in such cases remains uncertain. (3)

Case Report :

Mrs. A., 36, G4P1, who had suffered 4 spontaneous precocious miscarriages, presented to the obstetric emergency departmentat 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 lowheart rate of 100bpm.

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

During laparotomy, a uterine anomaly was identified: the uterus had an asymmetrical shape, indicating a right unicornuate uterus without a rudimentary horn on the left (Figure 1). The lower segment appeared thin and distended. A newborn weighing 3200 grams, with an Apgar score of 7 at 1 minute and 10 at 5 minutes, was delivered through a low transverse segmental hysterotomy, which was then closed using 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.

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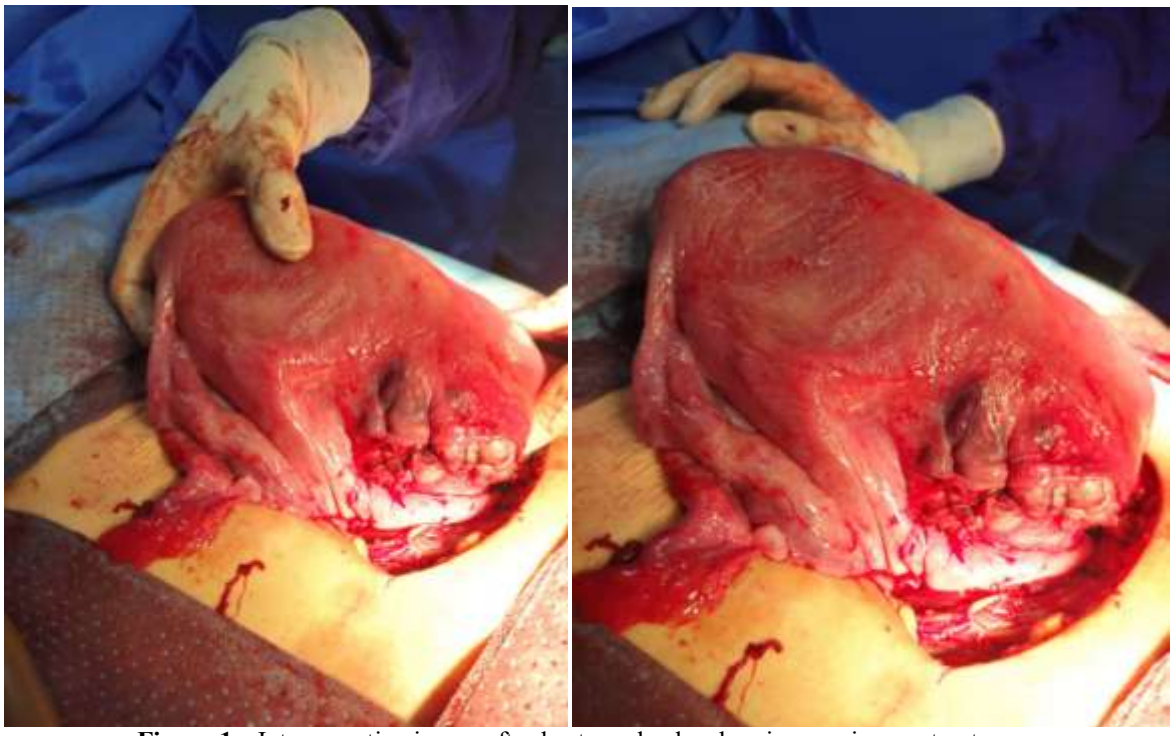

Figure 1:- Intraoperative image after hysterorrhaphy showing a unicornuate uterus.

Discussion:-

Congenital uterine anomalies arise from irregular development, fusion, or resorption of the Müllerian ducts during fetal development. These anomalies are observed in 1 to 10% of the general population, 2 to 8% of women with infertility, and 5 to 30% of women with a history of recurrent miscarriages (5). Unicornuate uteri represent 10% of uterine malformations (4), with an estimated incidence of approximately 1 in 1,000 women.

The unicornuate uterus is classified as Type II in the American Fertility Society's classification of Müllerian anomalies (6). Our case is classified as Type IId (complete unilateral agenesis), which is commonly linked with reduced fertility, an increased risk of early and late miscarriages, preterm births, and various obstetric complications, such as abnormal fetal presentation, intrauterine growth restriction, uterine rupture, and acute fetal distress. In this case, the acute fetal distress can be attributed to suboptimal uteroplacental perfusion resulting from the uterine malformation (7).
Approximately 40% of women with a unicornuate uterus have associated renal abnormalities, although this was not observed in our case (10).

Jain et al. reported a case of a 26-year-old primipara with a 40-week pregnancy complicated by breech presentation. During elective cesarean delivery, a unicornuate uterus without a rudimentary horn was discovered (9). This case is similar to ours in that the unicornuate uterus was only identified intraoperatively, but the reason for the cesarean section differed, as in our case, acute fetal distress was the cause.

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

Additional cases have been documented, such as one study that described a twin pregnancy in a pseudo-unicornuate uterus, identified at 8 weeks' gestation, with a positive outcome following hemihysterectomy of the rudimentary horn (1). In another case, the rupture of a non-communicating gravid uterine horn in a pseudo-unicornuate uterus occurred at 23 weeks' gestation, emphasizing the risk of uterine rupture associated with this anomaly (2).

Conclusion:-

This case underscores the importance of thorough evaluation for patients with uterine malformations. Close prenatal monitoring and preparation for a potential cesarean section are crucial for optimizing both maternal and fetal outcomes. The optimal management approach for pregnancies involving a unicornuate uterusis not yet clearly defined, and further observational and prospective studies are needed to investigate the necessary management strategies for such pregnancies.

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