Section: Obstetrics and Gynaecology

Case Report

PREGNANCY IN UNICORNUATE UTERUS WITH RUDIMENTARY HORN: A RARE CASE OF SUCCESSFUL CESAREAN DELIVERY

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ABSTRACT

Unicornuate uterus is a rare congenital anomaly of the uterus resulting from abnormal development of Mullerian ducts. Pregnancy in such unicornuate uterus is considered high risk because of potential adverse fetal outcomes. This case highlights an incidental finding of unicornuate uterus with a full-term pregnancy in a 21-year-old women when she was taken up for cesarean delivery after non-progression of labor. Live healthy baby delivered in such anomaly highlights the importance of timely delivery in pregnancy with unicornuate uterus.

INTRODUCTION

Congenital uterine anomalies are one of the important causes of infertility or recurrent miscarriages.[1,2] Uterine anomalies may affect nearly 1 in 600 women. The incidence of unicornuate uterus is approximately 5% of all anomalies of uterus.[3] Unicornuate uterus poses risk to reproductive performance with reduced live birth rate, increased prematurity and ectopic pregnancies.[1] Presence of rudimentary horn also poses risk of uterine ruptures if pregnancy occurs in this horn.[2] Despite the anomaly and adverse outcome risk, clinical pregnancy and live birth can be achieved in substantial number of women.[4]
Here, we describe a case of successful pregnancy and live birth in a woman with unicornuate uterus.

CASE PRESENTATION

A 21-year-old female, married for 2 years, initially presented to local health center with primigravida pregnancy, oligohydramnios and pregnancy induced hypertension (blood pressure [BP]: 160/100 mmHg) and foetal distress. This was a spontaneous conception. When presented to us, she had leaking per vaginum over past 7-8 hours with labor pains. She had no history of diabetes, eclampsia, or any infertility treatments received in past one year. She had three prior ultrasound examination with latest results indicating gestation age of 36+4 weeks. At the labour room, she had BP of 160/100 mmHg and thus was treated with intravenous labetalol (20 mg) stat dose and loading dose of magnesium sulphate (14 mg) as per Pritchard's regimen. Vitals monitored over next 3 hours. Though BP reduced to 140/100 mmHg, there was no labor progression with no improvement of effacement. When opened for cesarean section, there was gravid unicornuate uterus on right and a rudimentary horn on left side [Figure 1]. Single, live male baby delivered that cried immediately after birth. The birth weight was 2.046 kg. After clearing the placenta, clots and achieving haemostasis, rudimentary horn was found to be communicating with a blind cavity upon digital exploration. There were no signs or evidence of products of conception, fetal tissue or placenta or its membranes. Uterine closure was done with continuous interlocking sutures. Post-delivery, BP was stable on oral labetalol (20 mg) and nicardipine retard (20 mg). Antihypertensives were tapered over next 14 days. Newborn did not require any neonatal intensive care. After uneventful postoperative period, patient was discharged after five days. She was counselled about the possible complications related

to her uterine anomaly. Patient did not turn up for her scheduled follow-up at three months.

Figure 1: Unicornuate pregnant uterus

DISCUSSION

The congenital anomalies of uterus arise because of faulty development in the mullerian ducts. The severity and stage of development at which the abnormalities define the various anomalies. Unicornuate uterus may have an atrophic uterine remnant or may have a uterine horn that may be communicating or non-communicating. Unicornuate uterus poses a diagnostic challenge in 2-diemsnional ultrasound. In modern diagnostic era, 3-dimensional transvaginal ultrasound can accurately diagnose such anomalies. Saline infusion sonogram may be helpful to assess the communication of rudimentary horn. Magnetic resonance imaging is helpful in cases where there is dilemma in diagnosis of such anomalies. Undetected cases may be seen at laparoscopy or hysteroscopy.[5] Pregnancy in unicornuate uterus is challenging as such pregnancies are high risk for miscarriages, ectopics, preterm labor/delivery, and substantially lower live birth rate. In addition to these, there is higher risk of endometriosis.[1] Diagnosis of unicornuate uterus during pregnancy may be challenging. In our case, patient had undergone ultrasound examination three times during antenatal period. However, the anomaly of uterus was not observed partly because of the developing fetus in the larger and main part of the uterus. Pregnancy in rudimentary horn has also been reported.[6] In such cases, early ultrasound scan may show the uterus as bicornuate uterus with a fetus being present in rudimentary horn. Our patient had a spontaneous conception. However, presence of such anomalies of uterus may not sustain pregnancy. Even in patients who undergo in-vitro fertilization and embryo transfers, there is still a risk of pregnancy loss, preterm birth, low birth weight, and lower rates of liver birth rate compared to normal uterus patients.[7] Nonetheless, as in our case, successful outcomes of pregnancy and delivery have been achieved in unicornuate uterine anomaly.[3,8-10] Communicating rudimentary horn was one of the important findings in our case. Majority of the reported cases have shown that the horn is non-communicating. Nonetheless, communicating rudimentary horn has been reported previously.[11] Another important factor is timely delivery as such pregnancies are a high risk. In our case, there was non-progression of labor that prompted us to do an emergency cesarean delivery. Waiting too long in such high-risk pregnancy may result in adverse outcomes.

CONCLUSION

Though uterine anomaly such as unicornuate uterus can have poor impact on maternal and fetal outcomes, a successful pregnancy with live birth can be achieved which is highlighted by our case. Prompt decision making to proceed for cesarean delivery in absence of progression of labor is a critical point in achieving uneventful outcomes for both mother and the newborn.

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