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Case Report

Pregnancy in unicornuate uterus without rudimentary horn: a case report

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ABSTRACT

A unicornuate uterus is associated with numerous obstetric and gynaecological complications such as infertility, endometriosis, miscarriage, malpresentations, and intrauterine growth restriction. Around 2.3-13% of Mullerian duct anomalies present as unicornuate uterus. Management of unicornuate uterus is still uncertain and it leads to poorer pregnancy outcome. We present here a case of 26-year-old primigravida who presented to us with 40-weeks pregnancy associated with breech presentation. She was taken for elective caesarean section and intra-operatively she was found to have unicornuate uterus without rudimentary horn. Unicornuate uterus is associated with poor pregnancy outcome but a successful pregnancy is possible. Usual presentation of patients with unicornuate uterus is near their menarche and they have higher than usual gynaecological complications. Pregnancies in unicornuate uterus are prone to intra uterine growth restriction hence serial ultrasound should be done for regular fetal growth monitoring.

Keywords: Unicornuate uterus, Mullerian duct anomaly, Pregnancy

INTRODUCTION

Fusion of Mullerian ducts lead to formation of uterus in fetal life. Abnormal or incomplete fusion of these ducts lead to congenital uterine structural anomalies. These anomalies are usually asymptomatic and a normal pregnancy can occur with these malformations. These anomalies occur in 1 to 10% of unselected population, 5 to 30% in females with history of miscarriages and 2 to 8% in infertile women.¹ Unicornuate uterus represents 2.3-13.2% of all uterine anomalies.² Exact prevalence of uterine anomalies among population is difficult to assess as the diagnostic techniques are invasive and they are rarely used in asymptomatic population. Ovarian developments are usually unaffected in these cases although in rare cases ovary on the affected side may be displaced a little higher in the abdomen.³

Presence of uterine anomalies leads to various complications like pre-term labour, pre-mature rupture of membrane, breech presentation, miscarriages and infertility among many others.⁴⁻⁶ Relationship between unicornuate uterus and infertility needs to be further understood. A meta-analysis showed that 23.7% women with unicornuate uterus had problem of subfertility.⁷

The pregnancy outcome in females with unicornuate uterus is poorer compared to general population and live birth rate is as low as 29.2% while premature birth rate is as high as 44% and an ectopic pregnancy rate in females with unicornuate uterus is 4%. Pregnancy wastage rate is also higher among females with unicornuate uterus and account for 24.3% in first trimester, 9.7% in second trimester and 10.5% in subsequent days.³

CASE REPORT

A 26-year-old female presented to outpatient department at 40 weeks of gestational age for her routine obstetric evaluation. She was not a registered case at our institute and her recent ultrasound report showed breech presentation. She was planned for elective caesarian section in view of breech presentation.

On initial evaluation she was afebrile, fairly built and her vital signs were within normal limits. Clinical evaluation of her abdomen showed abnormal uterine contour. Her non-stress test was within normal limits and routine laboratory investigations also did not reveal any pathology.

She was taken up for elective caesarian section. She was given spinal anesthesia and remained hemodynamically stable throughout the procedure. Intra-operatively she was found to have unicornuate uterus with no rudimentary horn and fallopian tube of the contralateral side was directly attached to the ovary. This was an incidental finding. The baby cried immediately after birth and his birth weight was 2.70 kg. Uterus was closed in double layer and she did not have any post-partum hemorrhage. Post-operative period was also uneventful and she was discharged on the 4th post-operative day.

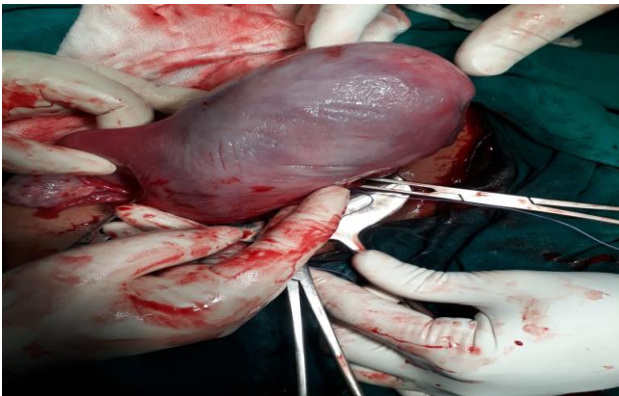


Figure 1: Intraoperative picture showing Mullerian duct anomaly.

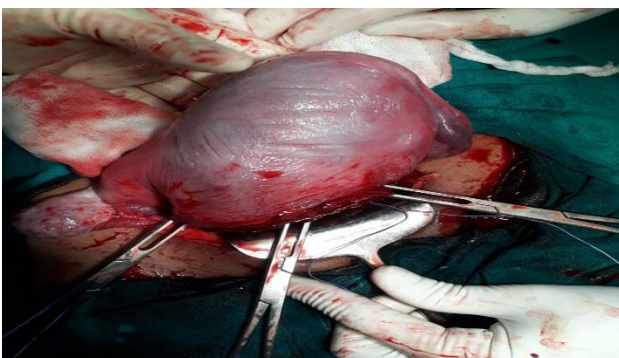


Figure 2: Another view of intraoperative field showing Mullerian duct anomaly.

DISCUSSION

Patients with unicornuate uterus usually present near menarche and have higher than usual gynecological complications. Most common presenting symptom include dysmenorrhea and chronic pelvic pain. Hence, evaluation of patients with these symptoms is recommended with 2 dimensional (2D) and 3D ultrasound imaging.⁸ However, an inexperienced radiologist can easily miss the diagnosis.

Nanda et al has described a successful twin pregnancy in unicornuate uterus with one fetus in non-communicating rudimentary horn.⁹ Numerous other cases of ruptured non-communicating rudimentary horn pregnancies have also been described.^{10,11}

Rupture and ectopic pregnancy are common occurrences in pregnancy of unicornuate uterus with rudimentary horn, although there no clear guidelines whether rudimentary horn should be resected early in pregnancy or before conception. Even post resection of rudimentary horn patients with unicornuate uterus tend to have higher than average rate of obstetric complications such as first and second trimester abortion, intra-uterine growth retardation, pre-term delivery and fetal demist.

All uterine anomalies tend to increase the rate of malpresentations and it is important to consider that fetal weight estimation can be less accurate in breech presentation.¹² American congress of obstetricians and gynaecologists (ACOG) suggests use of serial fetal weight estimation using ultrasound in pregnancies with high risk of intrauterine growth restriction (IUGR) as is the case with unicornuate uterus.

CONCLUSION

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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Ethical approval: Not required

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