Section: Obstetrics & Gynaecology

Case Report

A CASE REPORT OF RUPTURED OVARIAN PREGNANCY ARISING IN A UNICORNUATE UTERUS: A RARE OCCURANCE

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Received : 02/08/2023
Received in revised form : 21/09/2023
Accepted : 06/10/2023

Keywords:
Ovarian pregnancy, unicornuate uterus

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DOI: 10.47009/jamp.2023.5.5.351

Source of Support: Nil,
Conflict of Interest: None declared

Int J Acad Med Pharm
2023; 5 (5); 1788-1790

Abstract

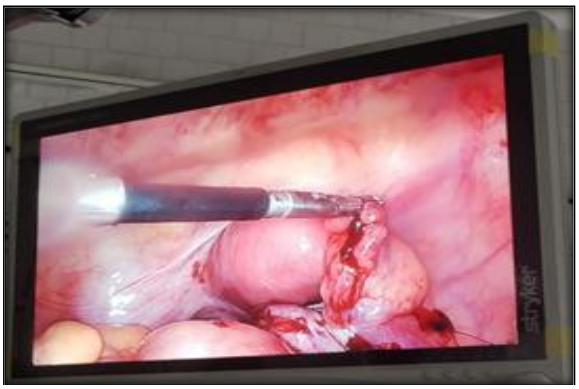
Introduction The incidence of unicornuate uterus is 0.2-0.3% of the whole population. It is closely associated with obstetrical complications such as early miscarriage, ectopic pregnancy and malpresentations. Ovarian pregnancy is a rare form of ectopic pregnancy seen in 0.3-3% of all ectopic pregnancies. The association of ovarian pregnancy with unicoruate uterus is even more uncommon. It is difficult to differentiate ovarian pregnancy from other types of ectopic pregnancies and ruptured corpus luteum. We present a case of primigravida who presented with features of ectopic pregnancy. Diagnosis of unicornuate uterus was made intraoperatively while that of ovarian pregnancy was made postoperatively on histopathology. Laparoscopic management is the treatment of choice. **Conclusion** Every pregnant patient should be eyed with suspicion of uterine anomaly. Suspicion of ovarian ectopic should be made in any patient presenting with features of ectopic pregnancy. Being aware is the key to diagnose the condition preoperatively and avoid the catastrophe.

INTRODUCTION

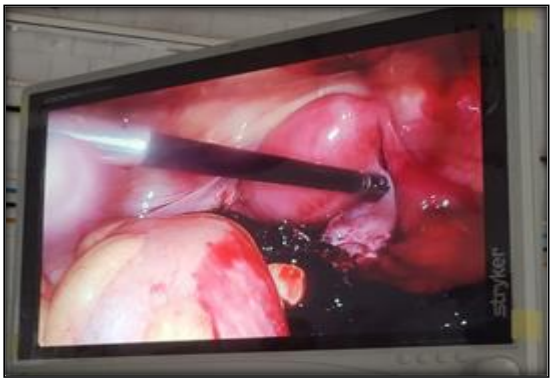
The incidence of unicornuate uterus is 1:4020 in general population.[1] The prevalence of a unicornuate uterus amongst all mullerian defects is relatively low accounting for 4% to 10% of women.[2-4] Unicornuate uterus is associated with adverse pregnancy outcome such as miscarriages, ectopic pregnancy, preterm delivery and intrauterine growth retardation.[5,6] Amongst all the reproductive outcomes in unicornuate uterus, ectopic pregnancy is seen in 2.7% cases.[6] Ovarian pregnancy is a rare form of ectopic pregnancy, incidence ranging from 1 in 2000 to 1 in 60000 deliveries and accounts for 0.3-3% of all ectopic pregnancies.[7,8] Rupture in first trimester is the usual rule in ovarian pregnancy. It can be misdiagnosed as ruptured corpus luteal cyst in 75% of cases.[9,10] The correct diagnosis on the basis of symptomatology is difficult and is solely on the basis of histopathology. There is limited literature showing association of ovarian pregnancy with unicornuate uterus. The following case shows the presence of rare form of ectopic pregnancy i.e. ipsilateral ruptured ovarian pregnancy in a patient with unicornuate uterus.

Case Description

A 21-year-old woman presented in emergency of department of Obstetrics and Gynaecology, Government Medical College, Udhampur, J&K with symptoms consistent with ruptured ectopic pregnancy. Transvaginal ultrasonography revealed right adnexal mass with free fluid in the POD.



ISSN (O): 2687-5365; ISSN (P): 2753-6556



Right ovary was not separately visualized on ultrasonography. No renal anomalies were detected. Emergency laparoscopy was done. Uterus was unicornuate. There was 1.5 litres of blood in the peritoneal cavity. Left tube and ovary were absent. There was slight bleeding from right fimbrial end that was controlled by cauterization. There was frank bleeding from corpus luteal cyst in the ovary, that was excised and hemostasis was secured by cauterization of ovarian bed. Tissue obtained was sent for histopathology. Right tube and ovary were preserved. Histopathological diagnosis of corpus luteum showed presence of chorionic villi, which clinched the diagnosis of ovarian pregnancy.

DISCUSSION

All women presenting with ectopic pregnancy should be eyed with suspicion of uterine anomaly. The prevelance of mullerian duct anomalies varies significantly from 0.4-10%9. Unicornuate uterus results from complete or near complete arrested development of one of the mullerian ducts. Prevelance of unicornuate uterus is 0.2-0.3% of the population. Its presence does not reduce the ability to conceive but increases the risk of adverse outcomes such as miscarriages, preterm delivery, IUGR and ectopic pregnancy[6]. Incidence of ectopic pregnancy in unicornuate uterus is 2.7%.

Ovarian ectopic pregnancy accounts for 0.3-3% of all the ectopic pregnancies. The cause of ovarian pregnancy is poorly understood, but is thought to occur by either failure of follicular extrusion or by secondary implantation.[12,13] A rising rate of ovarian pregnancy has been seen over years with increasing clinical suspicion and improving diagnostic tools such as the use of transvaginal ultrasound. Although a strong association between use of IUCD and rate of ovarian pregnancies has been seen,[14] but primary ovarian pregnancies may occur without any antecedent risk factors.[15] The diagnosis of ovarian pregnancy is difficult even on laparoscopy. It can be misdiagnosed as ruptured corpus luteal cyst in 28% cases. Hallat,[12] confirms in his study that there is difficulty in distinguishing between corpus luteal cyst and ovarian pregnancy by naked eye. The application of Spigelberg's criteria for an ovarian pregnancy (1.The fallopian tube, including the fimbria ovarica, is intact and clearly separate from the ovary. 2. The gestation sac occupies the normal position of the ovary. 3. The gestation sac should be connected to the uterus by the ovarian ligament. 4. There must be ovarian tissue attached to the trophoblastic tissue in the specimen) can be too strict to confirm the diagnosis. Diagnosis is mostly confirmed by histopathologic report. As a result the non involvement of fallopian tube and presence of chorionic villi within the ovarian tissue has been suggested as the modified criteria for the diagnosis of ovarian pregnancy.[16]

Several surgical procedures have been documented for treatment as cystectomy, enucleation, ovarian wedge resection with suturing of ovarian bed. In advanced cases ovariectomy and oophrectomy may be necessary.

CONCLUSION

Ovarian pregnancy is a rare condition and its diagnosis is difficult both preoperatively and intraoperatively. All patients presenting with ectopic pregnancy should be eyed with suspicion of ovarian pregnancy. Treatment is mainly surgical. With advances in ultrasonography it can be diagnosed preoperatively and treated surgically.

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ISSN (O): 2687-5365; ISSN (P): 2753-6556

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ISSN (O): 2687-5365; ISSN (P): 2753-6556