CASE REPORT

UNRUPTURED ECTOPIC IN RUDEMENTRY HORN OF BICORNUATE UTERUS OF RARE CASE REPORT

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INTRODUCTION: Out of all ectopic pregnancies, 98.5% are singleton tubal pregnancies and rest are at other sites, which create diagnostic problems and has been associated with great morbidity and mortality than tubal pregnancies. Pregnancy in rudimentary horn of a bicornuate uterus is a very rare condition and Johansen reported the incidence of this pregnancy at approx. one in one lakh pregnancies.¹ The case is being presented because of rarity. The rudimentary horn may consist of a functional cavity, which is usually non-communicating or it may be small solid muscle with no cavity or endometrium. The pregnancy in a non-communicating horn is possible only through trans peritoneal migration of the sperm or fertilized ovum with an estimated incidence of one in every 1,00,000 to 1,40,000 pregnancies.² It is associated with high rate of spontaneous abortion, pre-term labour, intraperitoneal hemorrhage and uterine rupture.³ The definitive diagnosis of rudimentary horn pregnancy prior to rupture is unusual and is possible only by laparotomy.

CASE STUDY: A 20 years old gravida 2, abortion 1, with two months period of amenorrhea with unruptured ectopic pregnancy was referred from private hospital, tuni. She was apparently asymptomatic and outside scan was done in routine antenatal checkup and report shows right side unruptured tubal ectopic pregnancy. She had one abortion at 16 wks of gestation spontaneously verified at private hospital, tuni. She is married for 1 year. Her past medical and gynecological histories were unremarkable with regular menses and without dysmenorrhea. Her vital parameters were normal.

Her abdomen examination finding are: soft, no tenderness, no palpable mass or guarding present. On per vaginal examination: Uterus is bulky. Cervix - os closed, cervical movement tenderness present, fullness in right fornix. Routine investigations were done, with in normal limits, asked for repeat ultrasonography. The report was: uterus bulky, Endometrial thickness -6mm, Evidence of well-defined gestational sac in right adnex with 3.5 to 5mm CRL.

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Provisional Diagnosis: Unruptured right tubal ectopic pregnancy. In view of high risk of ruptured ectopic pregnancy, laparotomy was performed. At laparotomy, it was bicornuate uterus with pregnancy in rudimentary horn. Uterus was slightly enlarged with left tube and ovary normal. The right rudimentary horn was enlarged to 8wks, with increased vascularity and soft in consistency compared to left side uterus. The inferior surface rudimentary horn was compressed and like a fibrous band

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attached to the uterus. Right rudimentary horn along with intact gestational sac was removed. The cut section of specimen showed the fetus and placenta inside the rudimentary horn with no communication. Histopathology confirmed gestational sac in the myometrium of the rudimentary horn of the uterus, myometrium shows hypertrophy and hyperplasia. Post-operative period was uneventful and was discharged 7 days later.

DISCUSSION: The clinical diagnosis of ectopic pregnancy is not at all straight forward. The classic clinical triad of pain, abnormal bleeding, and palpable adnexal mass is not commonly present and when present, may erroneously lead to diagnosis of ectopic pregnancy. Ectopic pregnancy commonly presents with abdominal pain, which may occur before or after rupture. Diagnosis of rudimentary horn pregnancy is made at laparotomy.² In this rare form of ectopic pregnancy implantation occur in the cavity of rudimentary horn of uterus. The horn does not always communicate with rest of the uterine cavity, in which case it must be assumed that sperms ascend through the other horn of the uterus and get fertilized with an ovum in the peritoneal cavity.

This, then enters the tube of rudimentary horn. An important feature of this pregnancy is that, even though the sac is surrounded by poorly developed myometrium and, it retains the pregnancy for a longer time than in tube or ovary. Criteria for sonographic diagnosis of rudimentary horn pregnancy includes pseudo pattern of an asymmetrical bicornuate uterus, absent visual continuity in between the cervical canal and the lumen of the pregnant horn, and the presence of myometrial tissue surrounding the gestational sac. Rupture does not take place until 12 to 20 weeks, but when it does, there is always severe bleeding which makes the condition extremely dangerous. By the end of second trimester, 89% of these pregnancies had ruptured as reported by O'Leary.³ This pregnancy is associated with a mortality rate as high as 5%.⁴ Removal of the gravid rudimentary horn and leaving behind normal horn of the uterus along the tube and ovary is the accepted treatment.

CONCLUSION: There is a need of complete clinical evaluation, increased awareness of this rare condition and high index of suspicion for early prerupture diagnosis. Sensitivity of ultrasound is 26%, which decreases with advancing age of pregnancy. Three dimensional USG may be used for diagnosis of uterine anomalies. If ultrasound diagnosis remains inconclusive, MRI has major contribution to the diagnostic evaluation, as it is a noninvasive tool to detect uterine anomalies in gravid/non-gravid uterus.⁵ It is recommended by many surgeons that immediate surgery be performed whenever diagnosis of pregnancy in rudimentary horn is made even if unruptured to prevent rupture.

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