Case Report

**Ovarian Ectopic Pregnancy: A Report of Three Cases**

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**ABSTRACT**

We report a case series of 3 ectopic ovarian pregnancies. All 3 cases presented with 6 to 8 weeks amenorrhea with acute pain abdomen admitted as emergency. All 3 patients were hemodynamically stable at the time of admission and urinary pregnancy test was positive. One patient diagnosed with transvaginal sonography. Other two patients’ paracentesis showed altered blood. Emergency laparotomy was done in all 3 cases. Hemoperitoneum was present in all 3 cases with ovarian pregnancy. Wedge resection done in 2 cases and ovariotomy done in other case. Post operative period was uneventful and diagnosis was confirmed with histopathology report.

**Key words:** ovarian pregnancy, ectopic pregnancy, wedge resection, ovariotomy, chorionic villi.

**INTRODUCTION**

Ovarian pregnancy accounts for less than 3% of all ectopic pregnancies. Inspite of advances in the diagnostics, ovarian pregnancy is rarely diagnosed before surgery. The clinical signs and symptoms are the same as for more common tubal ectopic pregnancies and frequently is confused with a hemorrhagic corpus luteum at the time of surgery. (¹) These three case reports are presented as ruptured ectopic with the deferential presentation of ovarian ectopic pregnancy but the definitive diagnosis made only after histopathological examination.

**CASE REPORTS**

**Case No.1**

A 25 year old G3P1011 was admitted following 6 weeks of amenorrhea with complaints of abdominal pain for one day and one episode of dizziness. On examination she was hemodynamically stable. Per abdominal examination showed mild tenderness over the left iliac fossa. On per vaginal examination, uterus was bulky with left fornix tenderness. Urine Pregnancy Test was positive. Transvaginal ultrasound showed empty uterine cavity with complex left adnexal mass. On laparotomy there was a hemoperitoneum of 200ml. The uterine size was normal, bilateral tubes were normal, right ovary was normal, there was bleeding from the anterolateral surface of the left ovary. Wedge resection of involved ovarian tissue was done, which on histopathology showed chorionic villi in
ovarian tissue. Post operative period was uneventful.

**Case No.2**
A 27 year old G2P1001 Previous cesarean with one and half months amenorrhea presented with acute pain abdomen for 8 hours with spotting per vagina. On examination: Pallor was present, BP was 90/60 mm of Hg, Pulse was 110/min. Per abdominal examination showed mild distension of the abdomen with tenderness in suprapubic region. Per vaginal examination showed blood stain of examining. Fornices were full and tender. Urine for Pregnancy Test was positive. On paracentesis altered colour blood was aspirated. Patient was prepared for emergency laparotomy. Intraoperatively 1200 ml of haemoperitoneum was present. Bleeding from posterior surface of right ovary was seen. Wedge resection was performed. Histopathology confirmed ovarian pregnancy by the presence of chorionic villi. Postoperative period was uneventful.

**Case No.3**
A 21 year old G2P1001 previous cesarean attended emergency with complaint of abdominal pain following one and half month of amenorrhea. On examination she was hemodynamically stable. Per abdominal examination showed mild tenderness over the right iliac fossa. Cervical motion tenderness was present. Urine for Pregnancy Test was positive. On paracentesis hemoperitoneum was confirmed. Explorative laparotomy showed bleeding from the surface of the right ovary. Right ovariotomy was done. On histopathology examination ovarian pregnancy was confirmed by the presence of chorionic villi in ovarian tissue. Post operative period was uneventful.

**DISCUSSION**
Ovarian pregnancy is rare form of ectopic gestation. As with the tubal pregnancy the presence of tubal pathology and pelvic inflammatory disease could be predisposing factors. It can occur without any classical antecedent risk factors, however there seems to be strong association with intrauterine contraception devices. Other risk factors are assisted reproductive technology and endometriosis. Although early use of quantitative serum Beta Human Chorionographic Gonadotropin and pelvic ultrasonography (USG) have increased diagnostic capability for ectopic implantation, ovarian pregnancy still presents a diagnostic challenge. Ovarian pregnancy usually appeared on or within ovary as a cyst with a white echogenic outside ring. A yolk sac or embryo is less commonly seen. The appearance of the content lagged in comparison with the gestational age. Patient present early in gestation as the ovary cannot accommodate the gestation as tunica albugenia is weakened by the invading cytotrophoblast. Due to the increased vascularity of the ovarian tissue it is common for the massive hemorrhage and circulatory collapse. It is suspected when any hemorrhagic mass is seen adjacent to the ovary with normal...
fallopian tube. It is mostly confused with tubal ectopic pregnancy and ruptured corpus luteum cyst. Differentiation occurs on exploration and confirmation is always on histopathology. (2,3)

Von Spiegelberg 1878 put forward 4 criteria for the diagnosis of ovarian pregnancy: (1) an intact ipsilateral tube, separate from the ovary; (2) a gestational sac occupying the position of the ovary; (3) a gestational sac connected to the uterus by the ovarian ligament; and (4) ovarian tissue in the wall of the gestational sac. (4)

Management is surgical. Laparoscopic conservative surgery with repair of ovarian tissue is the standard treatment. Medical treatment has a limited role as diagnosis of ovarian ectopic is difficult before surgery. USG guided local injection of Methotrexate and Prostaglandin F2α (PGF2α) have been reported in limited number of case reports only. Medical treatment is mainly indicated as secondary option for primary incomplete resection or trophoblastic persistence. Unlike tubal ectopic which has significant risk of recurrence, to date there has been no reports of repeat ovarian ectopic pregnancy. (5)

We reported three cases of ovarian ectopic and in two cases vitals were stable, while one needed emergency laparotomy. Ovarian pregnancy was suspected during exploration with definitive diagnosis made only by histopathology examination. All the cases required surgery either wedge resection or ovariotomy. In all three cases there was no history of Cu T insertion or pelvic inflammatory disease (PID).

**CONCLUSION**

Ovarian ectopic often mimics tubal pregnancy, ruptured hemorrhagic luteal cyst and ovarian cyst torsion, advanced diagnostic technique aren’t able to differentiate and definitive diagnosis is made only after histopathological examination of excised specimen.

**REFERENCES**
