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ABSTRACT

Ovarian pregnancy is a rare type of extra uterine pregnancy accounting for 1-3% of all extra uterine pregnancies. We report a rare case of ruptured ovarian pregnancy. A 35 year old, multiparous woman, presented to the emergency department with chief complaints of acute abdomen and loss of consciousness. She had a history of two months of amenorrhea and had intrauterine contraceptive device since last delivery. Urine pregnancy test was positive. Ultrasound scan suggested ruptured ectopic pregnancy. Emergency laparotomy was done which revealed a gestational sac in one ovary. Histopathology examination confirmed the diagnosis of ruptured ovarian pregnancy. Although ovarian pregnancy is rare, in any case of a ruptured ectopic where both the tubes are found to be normal on laparotomy, an ovarian pregnancy must be ruled out. Early detection and prompt diagnosis can prevent complications.

Keywords: ruptured ovarian pregnancy, ectopic, IUCD.

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INTRODUCTION

Primary ovarian pregnancy is a rare variant of ectopic pregnancy. It accounts for 0.5-3% of all ectopic pregnancies [1]. Its incidence is increasing in recent years due to use of intrauterine devices and assisted reproductive techniques [2]. The preoperative diagnosis of this type of pregnancy is challenging. Most of the time it is presents as acute abdomen as ovarian pregnancy ruptures before first trimester. Accurate diagnosis is made at the time of surgery and confirmed by histopathological examination.

We report one such case of ruptured ovarian pregnancy in a 35 year old multiparous woman.

Case Report

A 35 year old lady presented to the emergency department with acute lower abdominal pain and loss of consciousness. She is a multiparous woman with a previous cesarean section for fetal distress and other was a spontaneous abortion. She had the history of using IUCD (copper) for 6 years. Her last menstrual period (LMP) was 2 months ago and her menstruation cycle was regular. Urine pregnancy test done 2 days back at home showed a positive result. Ultrasound scan was done and it showed ascitis with the impression of an ectopic pregnancy. So emergency laparotomy was done. Gestational sac of 3x2cm was seen in the right ovary. Left ovary was cystic. Right and left tubes, and uterus appeared normal. Blood clots were removed from pouch of Douglas. Histopathological examination confirmed ovarian ectopic pregnancy. Fig (1-3).

Figure 1

Figure 2
Microscopic examination shows ovarian stroma enclosing corpus luteum and chorionic villi admixed with trophoblastic island in a background of necrotic blood clot.

**DISCUSSION**

Ovarian ectopic pregnancy is a rare variant of implantation outside the uterine cavity. Hertig estimated that ovarian pregnancy accounts for one in 25 000 to 40 000 pregnancies [3]. But recent studies suggest that there is overall increase in ovarian ectopic pregnancy due to the use of IUCD and assisted reproductive techniques. IUCD prevents intrauterine implantation but not extra uterine pregnancies. It is postulated that IUCD may potentiate ovarian nidation and causes increased tubal motility due to the effect of prostaglandin synthesised [4].

In our case, ultrasound failed to distinguish between tubal or ovarian pregnancy as it is a case of ruptured ectopic pregnancy. Intraoperatively it filled Spiegelberg’s criteria (1878) 1) an intact ipsilateral tube, clearly separate from the ovary; (2) a gestation occupying the normal position of the ovary; (3) a gestational sac connected to the uterus by the utero-ovarian ligament; (4) ovarian tissue in the wall of the gestational tissue. Definite diagnosis is made by histopathological examination as it is difficult to differentiate from a hemorrhagic corpus luteum intraoperatively [5].

Early diagnosis by high resolution transvaginal ultrasound and medical management by methotrexate may be done in unruptured cases. [6] Conservative surgical approach remains the treatment of choice in ruptured pregnancies as the patient is hemodynamically unstable.

**CONCLUSION**

Incidence of ovarian pregnancy is increasing and the most common cause being use of IUCD.

In any case of a ruptured ectopic where both the tubes are found to be normal on laparotomy, an ovarian pregnancy must be ruled out.

Early diagnosis by high resolution transvaginal ultrasound and laparoscopy can decrease the risk of complications like rupture and maternal mortality.

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REFERENCES