

A Rare Case of Primary Ovarian Ectopic Pregnancy

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Abstract

Primary ovarian ectopic means implantation of gestational sac in the ovary. It is a rare form of non-tubal ectopic pregnancy and accounts for 3% of all ectopic pregnancy. Most cases ovarian pregnancy terminate with rupture in first trimester of pregnancy, which has a potential for life threatening massive hemorrhage. Etiology is not fully understood but association has been reported with usage of intra uterine device. Diagnosis of ovarian ectopic pregnancy preoperatively is challenging and most cases are diagnosed intraoperatively. Here we report a case of primary ovarian ectopic pregnancy.

Keywords: Ovarian Pregnancy, Ectopic, Intra Uterine Devices

Introduction

Primary ovarian ectopic means implantation of gestational sac in the ovary. It is a rare form of non-tubal ectopic pregnancy and accounts for 3% of all ectopic pregnancy. Most cases ovarian pregnancy terminate in first trimester of pregnancy as ovary can only accommodate pregnancy for a short period usually with rupture and intra-abdominal hemorrhage due to burst or eroded capsule. Diagnosis is made based on the Spielberg criteria.

SPIEGELBERG CRITERIA:

1. Fallopian tube should be intact on affected side.
2. Fetal sac must occupy the position of the ovary
3. Ovary must be connected to uterus by ovarian ligament
4. Ovarian tissue must be located in the sac wall.

Case Presentation

The patient was 30-year-old multiparous woman with one previous normal vaginal delivery followed by cesarean section for obstetric complication. Patient presented to the hospital with severe abdominal pain in hypogastric area with was radiating to her left shoulder. The patient had regular menstrual cycle with last menstrual period 6 weeks ago.

Patient had a history of IUCD instertion 2 years back after the last child birth. She had taken a home urine pregnancy test because of her delayed menses which was positive but didn't follow up with any

ultrasonography. Transvaginal sonography was done which showed a normal sized uterus with no gestational sac but an echogenic mass was noted medial to right ovary of 8*10 mm size and right tubal ectopic was suspected. The beta-HCG titers showed a slow rise which plateaued. Management with multiple doses of methotrexate was decided as the patient was hemodynamically stable.

The beta HCG titer didn't decrease during the treatment and the patient suffered from severe abdominal pain and her vital signs were unstable with BP 80/systolic, p 130/min. Decision of emergency laparotomy was taken.

Intra op findings: 600-700 cc blood was noted in the abdominal cavity and a ruptured ovarian ectopic was diagnosed. Wedge resection of ovary was performed and sample was sent for histopathological examination. Histopathological examination confirmed that it was an ovarian ectopic pregnancy.

Discussion

Ovarian pregnancy is a rare variant of ectopic pregnancy. It occurs by fertilization of an ovum retained in the peritoneal cavity leading to implantation on the ovarian surface. Accurate preoperative diagnosis is very difficult and diagnosis is usually made by pathological assessment and Spiegelberg criteria. Pre-diagnosis is usually supported by increased levels of beta HCG. The current data inform that most cases occur in the first trimester which usually present with rupture and massive intraabdominal hemorrhage resulting in hypovolemia which can be life threatening. It is believed that IUCDs trigger mild inflammation that disturbs the ciliary activity of the Endometrium and leads to ovum transport delay and ectopic implantation.

As the definitive diagnosis can be made only surgically and confirmed histopathologically even in patients with early onset, surgical interventions have both a diagnostic and therapeutic value. As oophorectomy is a radical procedure, decision should be made keeping in mind the patient's age, her desire for future conception, size of the mass. Because of this medical and conservative treatments have been introduced in case of unruptured ovarian ectopic pregnancy to prevent ovarian tissue loss so future fertility can be preserved.

Conclusion

Most of the patients present with circulatory collapse due to rupture ectopic in spite of modern diagnostic modalities. High index of suspicion is required for early and efficient diagnosis, prompt treatment. Determination of fetal implantation site during antenatal ultrasonography is important for early diagnosis. Ovarian ectopic pregnancy is commonly managed surgically but plan of management should be decided based on the desire for future fertility.

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