

Case Report: A Case of Recurrent Ruptured Ovarian Pregnancy

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ABSTRACT:

Ovarian ectopic pregnancy is a highly unusual condition, representing just 0.5–3% of ectopic pregnancies, and its recurrence is very rare. We discuss a 35-year-old multigravida (G3P1L1A1) who has a previous right oophorectomy due to a ruptured ovarian ectopic pregnancy four years ago. She conceived spontaneously and arrived at 5 weeks' gestation with acute lower abdominal pain and hemodynamic instability. Upon admission, she exhibited tachycardia (110/min), hypotension (90/60 mmHg), and along with widespread abdominal tenderness and forniceal tenderness during pelvic examination. Laboratory testing showed a hemoglobin level of 7.1 g/dL. An emergency laparotomy showed 700 mL of hemoperitoneum containing 300 g of clots and a ruptured left ovarian ectopic pregnancy, while the left fallopian tube appeared normal proceeded with left salpingo-oophorectomy, histopathology revealed the same

Keywords: ovarian ectopic , oophorectomy, laparotomy , ovarian implantation .

INTRODUCTION:

Ectopic pregnancy, characterized by the implantation of a fertilized egg outside the endometrial cavity, takes place in around 1–2% of all pregnancies, with the fallopian tube being the most frequent location. Ovarian ectopic pregnancy (OEP) is a highly uncommon type, accounting for 0.5–3% of all ectopic pregnancies and about 1 in 7,000–40,000 live births. Diagnosing OEP can be difficult, as its clinical presentation resembles that of tubal ectopic pregnancy or a ruptured corpus luteum, with many cases appearing only post-rupture, resulting in hemoperitoneum and considerable maternal morbidity.

The exact causes of ovarian implantation remain unclear, although aspects like the use of intrauterine devices (IUDs), pelvic inflammatory disease, assisted reproductive methods, and previous pelvic surgeries have been suggested as potential contributors. Established in 1878, the Spiegelberg criteria continue to serve as the definitive method for confirming OEP intraoperatively and histologically, necessitating evidence of an intact ipsilateral fallopian tube, attachment of the ovarian ligament, and ovarian tissue present within the gestational sac wall.

Although recurrence of ectopic pregnancy is well known, recurrent ovarian ectopic pregnancies are extremely uncommon, with only a limited number of cases documented globally. We present a distinct instance of a recurrent ruptured ovarian ectopic pregnancy in a woman who had a previous contralateral oophorectomy for the identical issue. This report underscores diagnostic difficulties, surgical management factors, and the importance of awareness in future pregnancies for women with a history of ectopic pregnancy

CASE PRESENTATION:

A 35 years old, multigravida ,G3P1L1A1, 5 Weeks(by dates), previous lower segment caesarean section , Last child birth 7 years ago , previous history of ruptured right ovarian ectopic pregnancy – right oophorectomy done four years ago .Patient now had Spontaneous conception . Patient confirmed pregnancy one week ago, now presented with complaints of lower abdominal pain on and off for 2 days .Patient presented to the emergency with above mentioned complaints and was hemodynamically unstable with vitals include, BP – 90/60 MMHG , PR – 110/MIN RR- 24/MIN, SPO2 – 94 percent . On P/A –diffuse tenderness+ ,P/V – Uterus normal size forniceal tenderness noted . ABG – Hb : 7.1g/dl . In view of hemodynamic instability and suspecting a ruptured ectopic pregnancy , Patient was taken up for emergency laparotomy under general anaesthesia .Intraoperative findings - 700 ml hemoperitoneum noted, 300 g of clots noted . Uterus bulky , right ovary not seen (consistence with previous surgery) , left tube normal ,left ruptured ovarian pregnancy noted with active bleeding , proceeded with left salpingo-oophorectomy.Intraoperatively one unit packed cell transfusion given . Histopathology , the sections revealed ovarian tissue enclosing chorionic villi surrounded by syncytiotrophoblasts and cytotrophoblasts along with areas of haemorrhage and vascular congestion.

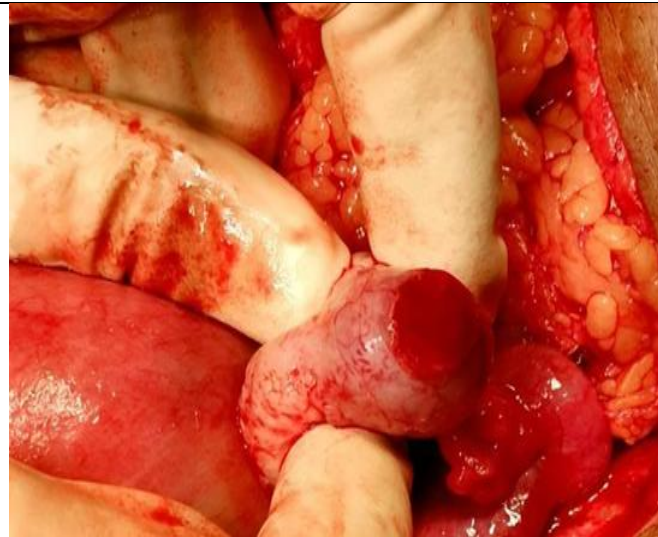


Figure 1 : intraoperative image showing ovarian ectopic

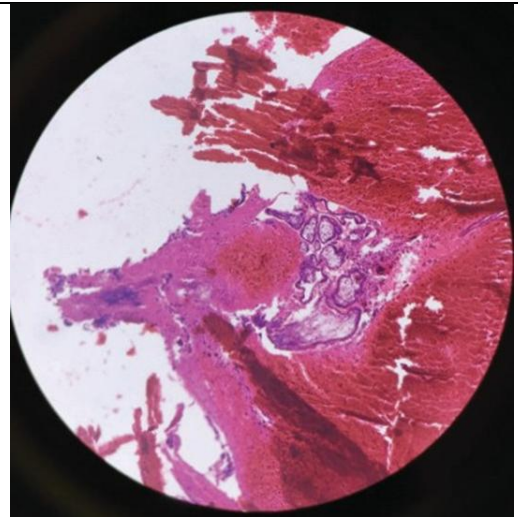


Figure 2 : histopathology showing ovarian stroma

DISCUSSION:

Ovarian ectopic pregnancy's precise pathogenesis is still not fully understood. Follicle rupture failure, intrafollicular fertilization, retrograde migration of a fertilized ovum, or implantation within an ovulatory defect in the ovarian cortex are some of the hypothesized processes. Compared to tubal ectopic pregnancy, the risk factors are less well established; however, they have been linked to endometriosis, pelvic inflammatory illness, intrauterine device (IUD) use, previous pelvic surgery, and assisted reproductive technologies (ART). Although conclusive evidence is lacking, the recurrence in this instance suggests that intrinsic ovarian or tubal factors may predispose to abnormal implantation. With the clinical presentation being acute abdominal pain and hemoperitoneum—is nonspecific and frequently resembles tubal ectopic pregnancy or burst corpus luteum, diagnosis is still difficult. Although transvaginal ultrasonography is essential for early assessment, its diagnostic precision for ovarian pregnancy is restricted. The gold standard for intraoperative confirmation is still the Spiegelberg criteria, which include an intact ipsilateral fallopian tube, a gestational sac inside the ovary, attachment to the uterus via the ovarian ligament, and histological confirmation of ovarian tissue in the sac wall. This case emphasizes how crucial it is to have early suspicion, especially in women who have had an history of ectopic pregnancy. The degree of the hemoperitoneum, hemodynamic stability, and fertility issues all influence the individualized management. The mainstay of treatment is still surgery, with oophorectomy or laparoscopic wedge resection being needed in situations of rupture. Although methotrexate-assisted medical therapy works well for some early, unruptured ectopic pregnancies, it is rarely practical in ovarian instances because of increased rupture risk and diagnostic delays.

CONCLUSION:

Recurrent ectopic pregnancy in the ovaries is an uncommon and potentially dangerous situation. Timely identification continues to be difficult because of its vague symptoms and diagnostic constraints, frequently leading to rupture and considerable complications. Surgical intervention, especially through fertility-preserving methods, is essential in these situations. This case highlights the necessity of having a heightened level of suspicion in women who have experienced an ectopic pregnancy before and stresses the importance of conducting early first-trimester ultrasound in future pregnancies. Ongoing documentation of comparable cases is crucial for enhancing the understanding of recurrence risk factors, directing personalized management, and providing evidence-based guidance for future reproductive care.

REFERENCES:

1. Mathur SK, Parmar P, Gupta P, Kumar M, Gilotra M, Bhatia Y. Ruptured primary ovarian ectopic pregnancy: case report and review of the literature. *J Gynecol Surg.* 2015;31(6):354.
2. Goyal LD, Tondon R, Goel P, Sehgal A. Ovarian ectopic pregnancy: a 10 years' experience and review of literature. *Int J Reprod Biomed.* 2014;12(12):825–30.
3. [Anonymous]. Ovarian ectopic pregnancy: a 10 years' experience and review of literature. [Study at Government Medical College Chandigarh]; 2000–2010.

4. Wang QX, et al. Clinical analysis of women with ovarian pregnancy: a retrospective case-control study. BMC Pregnancy Childbirth. 2022.
5. Singh N, Sarmalkar M, Mehendale M, Nayak A. Ruptured primary ovarian ectopic pregnancy: a case series. Int J Reprod Contracept Obstet Gynecol.
6. Tehrani HG, Hamoush Z, Ghasemi M, Hashemi L. Ovarian ectopic pregnancy: a rare case. Iran J Reprod Med. 2014;12(4):281-284.
7. Chandel A, Gupta C. Successful management of ruptured ovarian ectopic pregnancy: a case report. Int J Reprod Contracept Obstet Gynecol.
8. Spiegelberg O. Zur Casuistic der Ovarialschwangerschaft. Arch Gynaekol. 1878;13:73.