

Primary Ovarian Ectopic Pregnancy

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Abstract

Background: Incidence of ovarian ectopic pregnancy is about 0.001% to 0.013% of normal pregnancies. Pregnancy with Copper T device in-situ comes with increased chances of ectopic pregnancy. **Case Report:** A 23-year lady with intrauterine copper-T device (Cu T 380A) in-situ, presented with complaint of pain in lower abdomen. There was no history of overdue of menstruation. Her urine pregnancy was positive, per vaginum examination showed tenderness and fullness in right fornix, β HCG=4300, ultrasound showed free fluid in pouch of Douglas. Laparotomy showed hemoperitoneum and ruptured right ovarian ectopic pregnancy. Wedge resection and reconstruction of ovary was done. Histopathological examination confirmed ovarian ectopic pregnancy. **Conclusion:** Recognizing ovarian ectopic pregnancy is of critical importance, and should be considered in the differential diagnosis of acute abdomen in women of reproductive age.

Keywords: Abdomen, Ectopic Pregnancy, Intrauterine Devices, Laparotomy, Ovary, Pregnancy.

Introduction

Primary ovarian ectopic pregnancy is very rare condition, its incidence is about 0.001% to 0.013% [1,2]. Use of copper T device is suggested risk factor for ovarian ectopic pregnancy. Diagnosis is made using the Spiegelberg criteria [3] which includes: (i) gestational sac located in the region of the ovary, (ii) ectopic pregnancy is attached to the uterus by the ovarian ligament, (iii) ovarian tissue in the wall of the gestational sac is proved histologically, (iv) tube on the involved side is intact.

Prior to surgery, diagnosis of ovarian ectopic is seldom made, even transvaginal sonography is not very much useful for diagnosing this condition. We are reporting this case of ovarian ectopic pregnancy associated with IUCD (intra uterine copper T device) use, justifying that IUCD is one of the risk factor of ovarian ectopic pregnancy.

Case Report

A 23 year old patient presented with complaint of pain in lower abdomen. There was no history of overdue of menstruation. She had regular menstrual cycle of 4 days in 28 days cycle. She had last menstrual period 24 days prior to presentation with an average flow. Patient had two live children, last child birth was 2 years back. She got IUCD (Cu T 380A) inserted 6 months back. On examination, her vitals were stable, pulse rate 92/minute, blood pressure was 100/60 mmHg. On per abdomen examination, tenderness, guarding and rigidity was absent. Per speculum examination revealed healthy cervix and vagina, no bleeding and copper T thread was seen. On per vaginum examination no cervical motion tenderness, normal sized anteverted uterus with backward cervix, mildly tender full right fornix was present. Urine pregnancy test was positive, and β -HCG was 4300 IU/L (normal: <5 IU/L). Ultrasonography showed normal uterus,

bilateral bulky ovaries, no obvious adnexal mass, and free fluid in pouch of Douglas and in pelvis.

Decision for laparotomy was taken as pain has increased and tachycardia occurred. Hemoperitoneum of 600 ml was evident. The site of ectopic pregnancy was identified over right ovary, 2x2 cms, with bleeding from its surface. Uterus, bilateral fallopian tubes and left ovary were normal [Fig.1,2]. Wedge resection of ovary was done, removing the ectopic mass and reconstruction of ovary was done [Fig.3]. Post-operative period was uneventful. Histopathological examination of ectopic mass shows an ovarian ectopic pregnancy.

Discussion

Ovarian pregnancies are about 1-3% of all ectopic pregnancies. Suggested risk factors are younger age, endometriosis, pelvic inflammatory disease, intra-uterine devices, ovulatory medications, and assisted reproductive techniques [3]. In present case report, IUCD was found to be risk factor for ovarian ectopic pregnancy. IUCD prevents uterine implantation, tubal implantation by 99.5% and 95% respectively, without any effect on ovarian ectopic pregnancy [3-6]. Pre-surgical diagnosis of ovarian ectopic pregnancy is difficult, even ultrasonography or trans-vaginal sonography can misdiagnose it for haemorrhagic corpus luteum or ovarian cyst.

Ovarian ectopic pregnancy can be treated conservatively with single dose methotrexate. But preferred mode of treatment is surgical by either laparotomy or laparoscopy [7]. In the past, ovarian pregnancy had been treated by ipsilateral oophorectomy, but trend has been shifted toward conservative surgery such as cystectomy or wedge resection performed by either laparotomy or laparoscopy. Currently, laparoscopic surgery is the treatment of choice [8]. Future fertility is not affected after ovarian pregnancy [7]. In our patient, laparotomy was performed because of hemoperitoneum and with deteriorating vitals of patient.

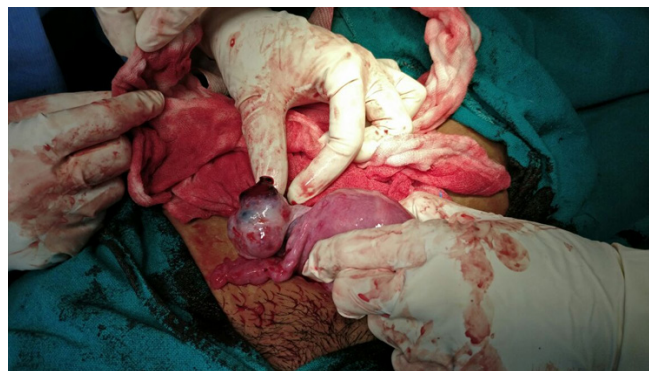


Fig.1: Site of ectopic pregnancy was identified over right ovary.



Fig.2: Zoomed view of figure 1 - right ovarian ectopic pregnancy.



Fig.3: a: reconstructed right ovary after wedge resection. b: left ovary.

Conclusion

Ovarian ectopic pregnancy is rare, but it should be considered in the differential diagnosis of acute abdomen in women of reproductive age.

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