



Ovarian Ectopic Pregnancy Managed : A case report

KEYWORDS

Ovarian ectopic pregnancy, Transvaginal ultrasound scan, Laparoscopic management

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ABSTRACT We report a rare case of left ovarian ectopic pregnancy. A twenty-eight year old woman presented with amenorrhea for 07 weeks and lower abdominal pain. Her β -HCG was 2190 IU. Imaging revealed a mass at the left adnexa about 4x3.5 cm. The mass was removed through emergency operative laparoscopy. Pathology revealed ovarian pregnancy. Serial monitoring of β -HCG level to confirm the complete removal of placental tissue was done. She had uneventful recovery.

Introduction

Ectopic pregnancy is a cause of significant maternal mortality [1]. While the exact incidence remains unknown, reported figures range from 0.25 to 1.5 of all pregnancies [2]. The incidence is probably higher as a significant number of such pregnancies remain undetected. While more than 98% of ectopic pregnancies are in the Fallopian tube, a small number are in extra tubal sites; the abdomen, the cervix and the ovary. Ovarian pregnancy is rare representing 0.2% of all ectopic pregnancies [2]. However, ovarian pregnancy could be a life-threatening condition if it ruptures, leading to hemoperitoneum and hypovolemic shock. The diagnosis depends on the physicians' suspicion, experience and is made with high-resolution transvaginal ultrasonography and laparoscopic treatment. Preservation of ovarian tissue during surgery is important to preserve fertility. We report a case of a ruptured ovarian pregnancy, which was managed laparoscopically.

The Case

A twenty-nine-year old gravida two, para one with seven weeks amenorrhea attended the emergency department of our Hospital with a history of lower abdominal pain for two days which was increasing in severity. She had no other symptoms and had not bled vaginally. She had a term baby normally delivered 08 years ago. She had been investigated in the past for secondary infertility and no cause was found. The current pregnancy was a spontaneous conception.

On examination, her general condition was satisfactory. The abdomen was extremely tender in the suprapubic region and had marked rebound tenderness. Pelvic examination revealed left forniceal tenderness. Transvaginal ultrasound examination demonstrated an empty uterine cavity with an endometrial thickness of 1.2 cm. Transvaginal ultrasound scan revealed a left adnexal hyperechogenic mass measuring 3.8 cm x 3.6cm. There was free fluid in the pouch of Douglas and the appearance of blood clot was adherent to the uterus. The ovaries were not clearly visualized. Hemoglobin level was 8.8 g/dl; the white blood cell count was 9.1×10^9 and normal platelets count. The β -HCG was 2190 IU. Our provisional diagnosis was an ectopic pregnancy and the patient was taken for an emergency laparoscopy. At laparoscopy, there was about 400 ml of free blood in the peritoneal cavity. The uterus was bulky with blood clots adherent to the fundus but was otherwise unremarkable. Both Fallopian tubes looked normal with no evidence of an ectopic pregnancy. The right ovary looked normal. On the left ovary there was a ruptured Corpus luteal cyst surrounded by what looked like

blood clots and decidual tissue. There was active bleeding from the base of the cyst which had ruptured, see figures 1, 2 and 3. The blood clot and cystic tissue were aspirated; the site of bleeding was identified and diathermised. Hemostasis was satisfactory and peritoneal lavage was performed. All the clots and tissue were sent for histopathological examination. The diagnosis at the time of surgery was an ovarian ectopic pregnancy. The patient had an uneventful recovery. A postoperative transvaginal scan showed no abnormality. Twenty-four hours following surgery, the β -HCG had dropped down to 1170 IU and a week later it was 221 IU. Macroscopic examination showed a piece of soft brownish tissue measuring 4x2x1 cm, the cut surface is brownish. Most of tissue was studied at multiple levels showed hemorrhagic decidua and Chorionic villi confirming ectopic ovarian pregnancy. On microscopic examination, plenty of chorionic villi lying dispersed in a background of hemorrhagic ovarian stroma were identified (Fig -II). No gestational trophoblastic disease is seen.

Discussion

Ovarian ectopic pregnancy was first reported by St. Maurice in 1682[3] Early diagnosis of an ovarian pregnancy is perhaps the most difficult compared to all the other types of extra uterine gestations. It has two subtypes; intra follicular and extra follicular. In present case report intra follicular ovarian ectopic was recognized [4]. With a few exceptions, the initial diagnosis is made on the operating table and the final diagnosis only on histopathology on the basis of the four Spiegelberg criteria [2]. (a) The gestational sac is located in the region of the ovary, (b) The ectopic pregnancy is attached to the uterus by the ovarian ligament, (c) Ovarian tissue in the wall of the gestational sac is proved histologically, (d) The tube on the involved side is intact. Our case fulfilled all the 04 criterias. Ultrasound, especially TVS has proved to be an invaluable tool in the diagnosis, as in our case, where hyperechoic appearance of the trophoblast surrounded by thickened hypoechoic ovarian tissue is the only indication of an ovarian ectopic gestation[5].

Our case has a few points of interest. Firstly, when a patient is suspected of having a ruptured tubal pregnancy and is taken up for laparoscopy. Patients with an ovarian pregnancy have a good prognosis for future fertility and therefore conservative surgical management, as in our case, is advocated. Laparoscopy is required for diagnosis. Literature shows that the risk of ovarian pregnancy is found to be higher in those who use intrauterine contraceptive devices [7], ICSI-ET [8], vagi-

nal douching [9]. No case of a repeat ovarian pregnancy has been reported in the literature [10].

Conclusion

Ovarian pregnancy is a serious complication of pregnancy accounting for 0.25 to 1.5 of all pregnancies. Early diagnosis though necessary to ensure a successful outcome may be difficult unless this condition kept in mind. Our findings suggest that laparoscopic management by ovarian electro-cauterization, resection of the ectopic pregnancy and retaining as much ovarian tissue as possible is an appropriate method with good efficacy and low complication rate for infertility.

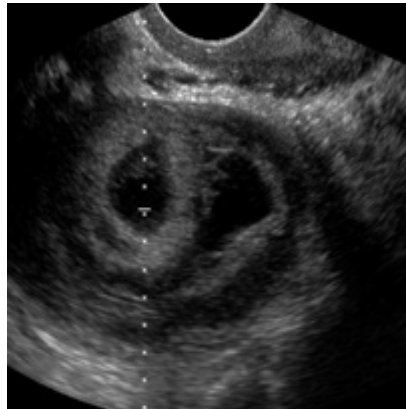


Figure-1 : Transvaginal ultrasonography of ovarian pregnancy

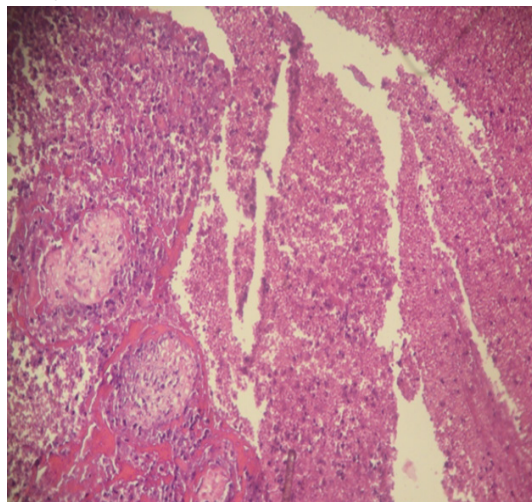


Figure 2: Histological diagnosis of ovarian ectopic pregnancy

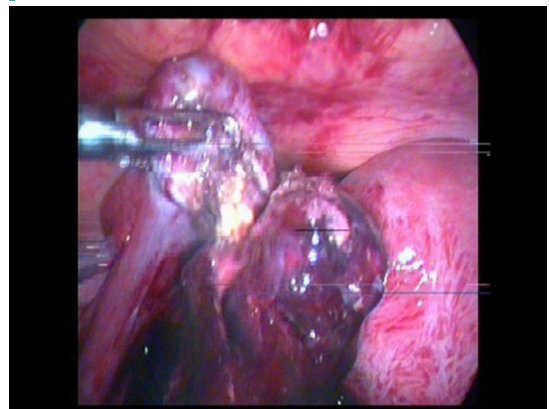
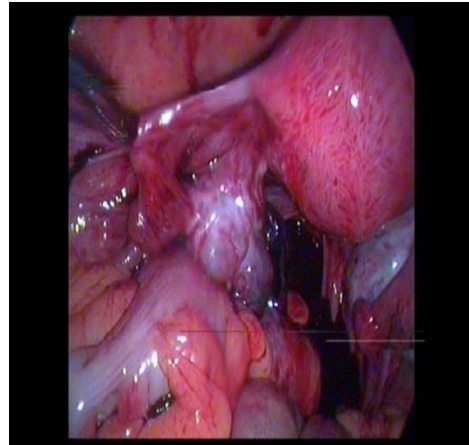


Figure-3 : Laparoscopic picture of left ovarian ectopic pregnancy

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