CASE REPORT

Ovarian Pregnancy

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Abstract

Ovarian pregnancy is a rare form of ectopic pregnancy. We present here a case of an ovarian pregnancy, who presented to us as an acute abdomen.

Key Words

Ovarian pregnancy, Corpus luteum, Oophorectomy, Ectopic pregnancy.

Introduction

Ovarian pregnancy was first reported by Saint Maurice de Perigot in 1682. Primary ovarian pregnancy is a rare form of ectopic pregnancy. Its incidence ranges from 1:7000 to 1:60,000 (1) and represents less than 3% of ectopic pregnancies. The present communication describes a case of ovarian pregnancy presenting as an acute abdomen.

Case Report

A 37 year old P2+0 presented to surgical emergency on 24 August'.98 with complaints of pain lower abdomen and vomiting and diagnosis of appendicular perforation was made. On gynaecological review, she had two full term normal vaginal deliveries and was using Copper T as a method of contraception for last 9 years. She had similar attack of pain 10 days earlier when she attended a private practitioner and CuT was removed. She also received a course of antibiotics with minimal relief. Her last menstrual period was on 22nd July 1998, which lasted for 3 days and was less than normal. However, period prior to this was completely normal. On admission, urine for pregnancy test was done which was positive. Vaginal examination showed uterus of normal size, soft with tenderness in both fornices and cervical excitation. Transvaginal scan showed empty uterus with free fluid in the pouch of Douglas. Culdocentesis revealed blood in the pouch of Douglas.

Keeping in view the possibility of ruptured ectopic pregnancy emergency laparotomy was performed. At laparotorny the findings were as under :–

- 800 ml of blood in the peritoneal cavity
- Both fallopian tubes were healthy and normal in their entire length including fimbrial end.

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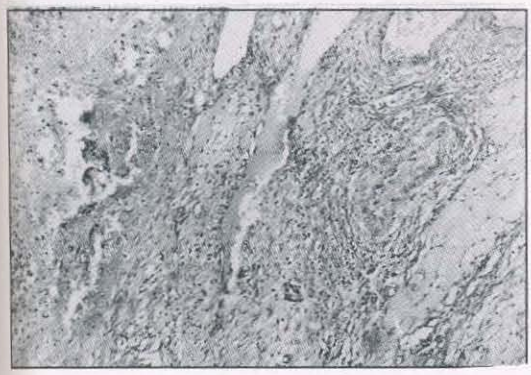
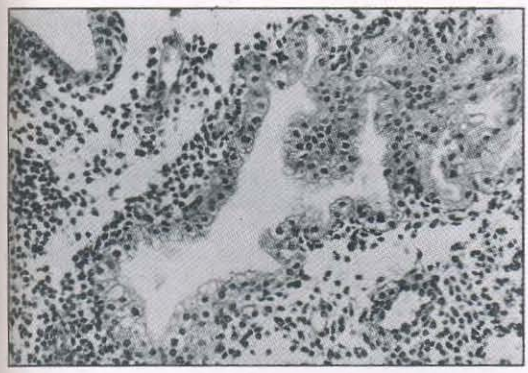
- Right ovary was normal sized and unremarkable.
- Left ovary was enlarged to 6x7 cms having rough external surface and covered with blood clots.
- Appendix was normal.

At this time impression was ruptured corpus luteum ith intrauterine pregnancy since her pregnancy test was sitive. Since there was an active bleeding from the ary, left sided oophorectomy was done. As the patient d completed her family, bilateral tubal ligation with latation and curettage was done. Histopathological amination showed ovarian pregnancy with Arias-Stella action in the endometrium (Fig. 1 and 2). Patient ceived two units of blood transfusion during surgery d was discharged home on fifth post-operative day.



g. 1. Congested ovarian tissue is seen on the left while right side of the field shows haemorrhage. In the middle of the field at interphase of ovarian cortex with haemorrhage, clusters of trophoblastic cells are seen. (H&E × 100).



g. 2. Endometrial curettings showed Arias-stelia reaction characterised by hypersecretory pattern having stratified nuclei and vacuolated cytoplasm while one area shows hyperchromatic nuclei bulging into the glandular lumen. (H&E × 200).

Discussion

Although the ovary can accommodate expanding pregnancy more readily than tube, rupture at any stage is the usual consequence. Usually, the rupture occurs around 42 days of ammenorrhoea, though there are recorded cases where the pregnancy continued to term.

Ovarian pregnancy usually presents with abdominal pain, vaginal bleeding and adnexal mass, symptoms suggestive of tubal pregnancy. The relationship between intrauterine contraceptive device use and ovarian pregnancy is still controversial. In a series of 20 cases by Raziel *et. al.* (3), eighteen women had intrauterine contraceptive device in situ when ovarian pregnancy was diagnosed. Our patient also conceived with CuT in situ which was removed ten days prior to her admission to hospital.

The increased use of tranvaginal ultrasound has resulted in more frequent diagnosis of unruptured ovarian pregnancy (4) though it was not possible in our patient pre-operatively. At laparotomy, the possibility of ruptured corpus luteum with intrauterine pregnancy was considered since it is more common than ovarian pregnancy.

Early diagnosis is important so that conservative management can be useful which could be surgical or medical. Methotrexate has been used successfully for medical treatment of ovarian pregnancy (5,6). Conservative surgery in the form of ovarian wedge resection or ovarian cystectomy can be performed safely if lesion is small. However, in larger lesions with active bleeding, oophorectomy should be done. Our patient underwent right-sided oophorectomy as there was active bleeding. Tubal ligation and dilatation and curettage was done as patient had completed her family.

Spiegel berg in 1878 formulated criteria for the diagnosis of ovarian pregnancy which are :–

- The tube on the affected side must be intact
- The fetal sac must occupy the position of the ovary
- The ovary must be connected to the uterus by ovarian ligament
- Definite ovarian tissue must be found in the sac wall.

All the above mentioned criteria were met in our patient.

Summary

Ovarian pregnancy is a rare form of ectopic pregnancy. One must keep the possibility preoperatively and intra-operatively as majority of times the diagnosis is in reterospect.

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