

## CASE REPORT

### PRIMARY OVARIAN PREGNANCY – A CASE REPORT

Kavyashree G<sup>1</sup>, Manohar<sup>2</sup>, Shivakumar S<sup>3</sup>, Deepthi H. R<sup>4</sup>

#### HOW TO CITE THIS ARTICLE:

Kavyashree G, Manohar, Shivakumar S, Deepthi H. R. "Primary Ovarian Pregnancy – A Case Report". Journal of Evolution of Medical and Dental Sciences 2014; Vol. 3, Issue 08, February 24; Page: 1987-1990, DOI: 10.14260/jemds/2014/2091

**ABSTRACT:** Primary ovarian pregnancy is one of the rarest varieties of ectopic pregnancies. Pelvic pain, amenorrhea & vaginal bleeding are the foremost classical symptoms found in these cases. Here we report a case of ruptured primary ovarian pregnancy suspected intra operatively & later confirmed by histopathological report.

**KEYWORDS:** Ovary, ectopic pregnancy, Intra uterine device, speigelberg criteria.

**INTRODUCTION:** Primary ovarian pregnancy is rarer accounting for 0.15 to 3% of all ectopic gestations<sup>1</sup>. The diagnosis of an ovarian ectopic pregnancy is seldom made before surgery. Ultrasound, especially transvaginal scanning (TVS) has proved to be an invaluable tool in the diagnosis of this condition<sup>2</sup>. Ovarian pregnancies could be misdiagnosed as they are mostly & easily confused with a ruptured corpus luteum<sup>3</sup>.

**CASE REPORT:** Smt.xx, 24yrs presented with complaints of pain abdomen since 15 days to the surgery OPD. She got a scan done, later she was referred to our OPD for? tubo-ovarian mass. Detailed history was taken. The pain was more in the lower abdomen, intermittent, dull aching type. She also gave history of vomiting, 1 episode & headache following pain abdomen since 2 days. She was para 1, living 1 with abortion 2. Her last delivery was 4 years back. She gives history of cu-T 380A insertion for 2 years and removal 1 year back. Her last menstrual period was 15 days back (only spotting per vagina). Patient general condition was good. Pulse 80/min. BP 110/60 mmHg, Pallor+, Cardiovascular/respiratory systems-normal. Per abdomen examination- soft, tenderness in the right iliac fossa+, no mass palpable. Per speculum examination revealed cervix and vagina healthy. On per vaginal examination cervical movement tenderness and right adnexal tenderness was present. Mass about 4\*5 cms was felt in the right fornix.

Clinical diagnosis: ? ectopic pregnancy.

Urine pregnancy test was done and it was positive.

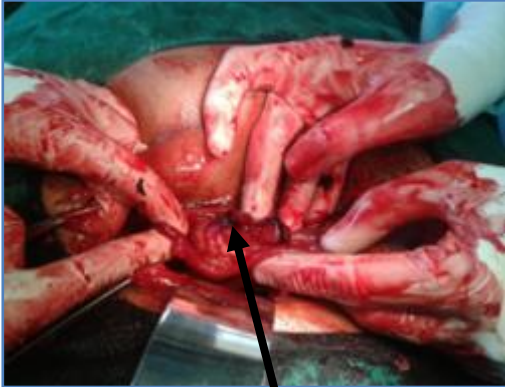


## CASE REPORT

USG abdomen revealed

- Large heterogenic mass lesion in the right adnexa -?? Tubo ovarian mass
- Mild ascites
- Seedling Fibroid

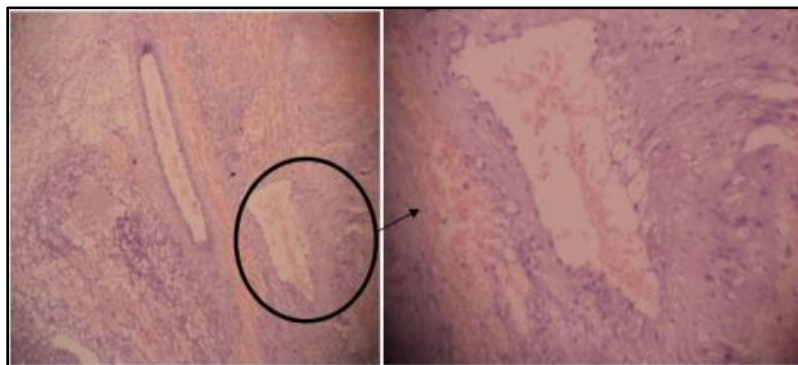
After arranging 2 pints of blood, Emergency laparotomy was done.



Per-operative findings-

- Hemoperitoneum was present.
- Both fallopian tubes & left ovary were found to be normal. Uterus was normal size.
- Fresh bleeding from the breached surface of the right ovary. Intra operative diagnosis of ? Right ruptured ovarian pregnancy was made for which right salphingo oophorectomy was done. About 200gms of clots were removed from POD & peritoneal wash was given.

### HISTOPATHOLOGICAL REPORT



H & E, 4X

H & E, 40X

**GROSS:** External surface of ovary is irregular, nodular and grey brown. Cut section of ovary shows a small cyst measuring 0.5 cms across. Also seen in cut section are corpus luteum and grayish brown areas. **MICROSCOPY:** Sections show ovarian tissue with a focus showing chorionic villi, with proliferation of syncytiotrophoblast surrounded by areas of hemorrhage. Corpus hemorrhagicum and follicular cyst are also seen. **IMPRESSION:** Features suggestive of ectopic pregnancy-right ovary.

## CASE REPORT

---

**DISCUSSION:** Primary ovarian pregnancy is a rare entity, first case being reported by St.Maurice in 1682. The reported incidence is 0.15 to 3% of all ectopic gestations. It can be classified as primary & secondary. Primary when ovum is fertilized while still within the follicle, secondary when fertilization takes place in the tube & the conceptus is later regurgitated to be implanted in the ovarian stroma. They can be intrafollicular or extra follicular. Intrafollicular is invariably primary & extrafollicular may be primary or secondary, where ovarian tissue is usually absent in the gestational sac<sup>4</sup>. With a few exceptions, the initial diagnosis is made on the operating table & the final diagnosis only on histopathology on the basis of the four Spiegelberg criteria<sup>5</sup>

- The gestational sac is located in the region of the ovary
- The ectopic pregnancy is attached to the uterus by the ovarian ligament
- Ovarian tissue in the wall of the gestational sac is proved histologically
- The tube on the involved side is intact

The only risk factor associated with the development of ovarian pregnancy is the current use of intrauterine device. Raziel et al reported that 90% of ovarian pregnancies occurred intrauterine device users. Ovarian pregnancy mostly occurs in younger age<sup>6</sup>.

In our case report, suspicion of ruptured primary ovarian pregnancy was made as evident by the intra operative findings as both tubes were normal. This was later confirmed by histopathological examination of the specimen. There was history of IUCD (Cu-T 380A) insertion for 2 yrs. which is a risk factor for primary ovarian pregnancy as given in the literature.

**CONCLUSION:** Primary ovarian pregnancy has to be kept in mind when both tubes are normal at the time of surgery for ruptured tubal pregnancy. Thus high clinical suspicion, early diagnosis & prompt treatment can reduce the morbidity & mortality of the patient.

### REFERENCES:

1. Shweta Tomar Yadav et al. Primary ovarian pregnancy a rare clinical entity: a case report. *Int J Reprod Contracept Obstet Gynecol.* 2013 Sep; 2(3):444-446.
2. Gon S et al. Two cases of primary ectopic pregnancy. *Online J Health Allied Scs.*2011; 10(1); 26.
3. Ismail Mete iTiL et al. Primary Ovarian Pregnancy; A case report and review of literature; *Ege Tip Dergisi*2004; 43(2); 113-115.
4. Check JH, Chase JS. Ovarian pregnancy with contralateral corpus luteum. *Am J Obstet Gynecol* 1986; 54:155-6.
5. Sienera P, Digregorio A, Ariso R. Ovarian pregnancy operative laparoscopy; report of eight cases. *Human Reprod* 1997;12;608-610.
6. Raziel A. Golan A, Pansky M, Ronel R, Bukovsya J, Caspi E. Ovarian pregnancy: a report of 20 cases in one institution. *Am J ObstetGynecol.*1990;163:1182.

## CASE REPORT

---

### **AUTHORS:**

1. Kavyashree G.
2. Manohar R.
3. Shivakumar S.
4. Deepthi H. R.

### **PARTICULARS OF CONTRIBUTORS:**

1. Associate Professor, Department of Obstetrics and Gynaecology, Mandya Institute of Medical Sciences, Mandya.
2. Assistant Professor, Department of Obstetrics and Gynaecology, Mandya Institute of Medical Sciences, Mandya.
3. Professor, and Head of the Department, Department of Pathology, Mandya Institute of Medical Sciences, Mandya.

4. Associate Professor, Department of Obstetrics and Gynaecology, Mandya Institute of Medical Sciences, Mandya.

### **NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:**

Dr. Manohar R,  
Assistant Professor,  
Department of Obstetrics and Gynaecology,  
Mandya Institute of Medical Sciences,  
Mandya.  
E-mail: manoharrangaswamy@gmail.com

Date of Submission: 05/02/2014.  
Date of Peer Review: 06/02/2014.  
Date of Acceptance: 12/02/2014.  
Date of Publishing: 21/02/2014.