



# International Journal of Medical Research & Health Sciences

www.ijmrhs.com

Volume 3 Issue 4

Codon: IJMRHS

Copyright ©2014

ISSN: 2319-5886

Received: 17<sup>th</sup> May 2014Revised: 28<sup>th</sup> June 2014Accepted: 17<sup>th</sup> Jul 2014

## Case report

### OVARIAN ECTOPIC PREGNANCY- A CASE REPORT

Hiremath PB<sup>1</sup>, \*Nidhi Bansal<sup>2</sup>, SPArunkumar<sup>3</sup>, Lavanya M<sup>4</sup>, Sandhya Panjeta Gulia<sup>5</sup>, Premaleela KGM<sup>6</sup>, Reshma Hiremath<sup>7</sup>

<sup>1</sup>Associate Professor, <sup>2</sup>Assistant Professor, <sup>6</sup>Professor, Dept of Obstetrics & Gynecology, SVMCH & RC, Ariyur, Puducherry

<sup>3</sup>Prof & Head, <sup>4</sup>Assistant Professor, <sup>5</sup>Associate Professor, Dept. of Pathology, SVMCH & RC, Ariyur, Puducherry

<sup>7</sup>IMO, Mapusa, Goa

\*Corresponding author email: drnidhibansal@gmail.com

### ABSTRACT

Ectopic pregnancy (implantation anywhere outside the normal uterine cavity) is the most common pregnancy complication leading to mortality. In the era of artificial reproductive techniques and liberated life style, ectopic pregnancy is not rare. However, ovarian pregnancy is an uncommonly encountered variety of ectopic pregnancy, and a definitive preoperative diagnosis is very challenging. Intraoperative findings and histopathology usually provide the final diagnosis. High serum beta human chorionic gonadotrophin levels, lack of an intrauterine gestational sac, tubo ovarian mass on ultrasonography (USG), patient's risk factors, in addition to the Spiegelberg's criteria gives a high probability of ovarian pregnancy. Management with surgical approach is required in all cases. We have made an attempt to present a case of ovarian pregnancy, consistent with Spiegelberg's criteria. Our case demonstrates the difficulty in preoperative and intra operative diagnosis of ovarian ectopic, the final confirmation has been made by histopathology.

**Keywords:** Ectopic pregnancy, Ovary, Risk factor, Haemoperitoneum, Pelvic inflammatory disease.

### INTRODUCTION

The incidence of ectopic pregnancy has been on the rise over the past two decades. It has increased from 1 in 150 pregnancies to about 1 in 40 pregnancies in the present times. Ectopic gestation may be extrauterine (tubal, ovarian, abdominal) or uterine (interstitial, rudimentary horn of the bicornuate uterus, cervical, caesarean scar)<sup>1</sup>. Ovarian pregnancy is a rare variant of ectopic pregnancy, with a reported incidence of 1/7000 - 1/40,000 pregnancies<sup>2, 3</sup>. It remains a challenge for the diagnosis, even today, in spite of the availability of sophisticated diagnostic technologies. There are very few reports of an accurate preoperative diagnosis, utilizing ultrasonography. Most commonly, patients undergo surgery for suspected ruptured tubal ectopic pregnancy, hemorrhagic corpus luteum or hemorrhagic ovarian cyst. Fortunately, the final diagnosis is provided by

histopathological examination, otherwise, it would have remained enigmatic, creating a confusion for the clinicians. It is not easy, even for the pathologist to confirm the final diagnosis, but, with great difficulty, using the Spiegelberg's criteria, a team of efficient pathologists, can provide an accurate diagnosis.

### CASE REPORT

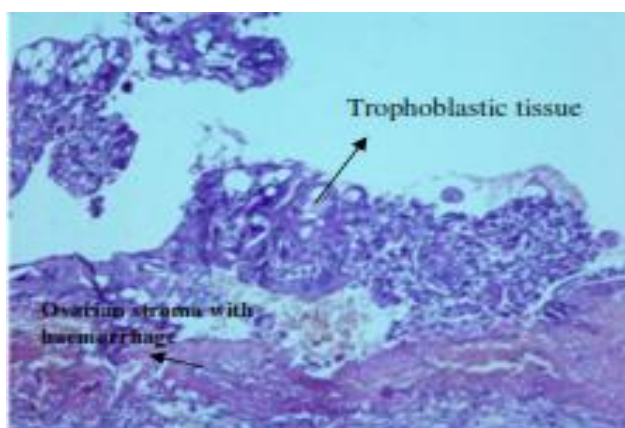
A 25 year old female, P3L3, not sterilized, was admitted in the emergency ward of Sri Venkateshwaraa Medical college and research centre, Ariyur, Pondicherry, with history of acute onset of abdominal pain, not associated with any vomiting, loose stools or giddiness. On enquiry, patient gave a history of one and a half month of amenorrhea. On examination, patient had a pulse rate

of 90/min, blood pressure of 90/60mmhg and severe pallor was present. On abdominal examination, generalized tenderness was noted all over the abdomen. Urine pregnancy test was positive. On clinical assessment, a diagnosis of ruptured ectopic pregnancy was made. Blood samples collected for the routine investigations. Hb: 7.3G%, PCV: 24%, Blood group: O positive. Ultrasound examination of abdomen and pelvis showed evidence of gross free fluid in the peritoneal cavity with no evidence of intrauterine or extrauterine gestational sac. Patient was taken for emergency laparotomy and proceed.

Intraoperatively, approximately 1500ml of haemoperitoneum was noted with a normal uterus and grossly normal tubes. A small bleeding point was seen at the tip of the right ovary with normal left ovary. In view of normal tubes and suspicious lesion on the right ovary, the decision was made for right salphingo-ovariotomy. As the patient was willing for sterilization, left partial salphingectomy and dilatation and curettage was done. Intraoperatively surgeon was summoned and surgical cause for haemoperitoneum was ruled out.

Post operatively, the patient received 2 units of blood and the declining trend of serum beta HCG was noted. The patient recovered and was discharged.

Histopathology report showed secretory endometrium and tubes showed normal histology with no evidence of chorionic tissue. Right ovary showed ovarian stroma with immature villous tissue, consisting of cytotrophoblast and syncytiotrophoblast surrounded by blood clots. [Fig.1] The final impression of Ovarian ectopic pregnancy was given.



**Fig 1: High magnificati (n(40x) view of ovarian ectopic**

## DISCUSSION

Ovarian ectopic pregnancy is rare and can be associated with high morbidity and mortality rates in reproductive aged women. Ovarian Ectopic pregnancy (OEP) is still a diagnostic dilemma. It is difficult to make a diagnosis even during the surgery. About a century ago, Spiegelberg<sup>4</sup> had defined four criteria for the diagnosis of primary OEP that; (a) the tube on the affected side must be normal, (b) the gestational sac must occupy the habitual place of the ovary, (c) it must be connected to the uterus by the utero-ovarian ligament, (d) unequivocal ovarian tissue must be histologically demonstrated in the wall of the sac. The most common clinical presentations in patients with OEP are a period of amenorrhea, pain abdomen and bleeding per vaginum<sup>5</sup>. Ovarian ectopic pregnancy is associated with risk factors like artificial reproductive technologies (ART), intrauterine contraceptive devices (IUCD), Endometriosis and pelvic inflammatory disease (PID).<sup>6</sup>

Sensitivity of Transvaginal sonography (TVS) is more than 90% in the diagnosis of ectopic pregnancy. It is now the imaging modality of choice. Diagnosis is based on the visualization of an ectopic mass rather than the inability to visualize an intrauterine pregnancy. Specific sonographic criteria have been outlined for the diagnosis of tubal and non-tubal pregnancies<sup>7</sup>. In a study of 25 cases of ovarian pregnancies, the most significant finding was the inability to distinguish an ovarian pregnancy from a hemorrhagic ovary or ruptured corpus luteum<sup>8</sup>. They are twice as likely to be diagnosed at surgery or following the pathological diagnosis<sup>9</sup>. Age of the patient and fertility status guides the clinician in deciding the treatment options. In the present era, the most common treatment approach is the laparoscopy. However, in our case, laparoscopy was not attempted due to the lack of skilled laparoscopic team at the time of admission. Intraoperatively, removal of the entire ovary, including the ectopic pregnancy or wedge resection of the ovary is usually attempted<sup>10</sup>. Etoposide or methotrexate have been reported as a medical treatment option in the postoperative period if beta HCG level (normal level less than 25IU in nonpregnant woman) remains high, indicating persistent trophoblastic disease<sup>11</sup>. There is a chance of recurrence of ectopic pregnancy in 15% cases, whatever be the modality of treatment, however,

there is a high chance of normal pregnancy too. The commonest cause for ectopic gestation is the PID and therefore early diagnosis and appropriate treatment would decrease the incidence of ectopic pregnancy<sup>1</sup>.

## CONCLUSION

Presently ectopic pregnancy is not an uncommon clinical entity, more so in the era of artificial reproductive technologies. However, ovarian ectopic is rarely diagnosed in the preoperative period, in spite of advanced investigative modalities. The final diagnosis is usually by histopathology.

**Conflict of interest: None**

**Source of funding: Nil**

## REFERENCES

1. Padubidri VG, DaftarySN. Ectopic Gestation. Shaw's textbook of Gynaecology, 15<sup>th</sup> Ed. Elsevier. New Delhi; 2011: 266-81
2. Itoh H, Ishihara A, Koita H. Ovarian pregnancy: report of four cases and review of literature. *Pathol Int.* 2003; 53(11):806-09
3. Salas Valien JS, Reyero Alvarez MP. Ectopic ovarian pregnancy. *An Med Interna.* 1995;12(4): 192-24
4. Kraemer B, Kraemer E, Guengoer E, Juhasz-Boess I. Ovarian ectopic pregnancy: diagnosis, treatment, correlation to Carnegie stage 16 and review based on a clinical case. *Fertil Steril* 2009; 92:392.e13–15.
5. Grimes HG, Nosal RA, Gallagher JC. Ovarian pregnancy: a series of 24 cases. *Obstet Gynecol.* 1983;61:174–80
6. Comstock C, Huston K, Lee W. The ultrasonographic appearance of ovarian ectopic pregnancies. *Obstet Gynecol.* 2005;105:42-5.
7. Kirk E, Bourne T. Diagnosis of ectopic pregnancy with ultrasound, *Best Practice & Research Clinical Obstetrics and Gynaecology.* 2009; 2(4):125-29
8. Patel Y, Wanyonyi SZ, Rana FS. Laparoscopic management of an ovarian ectopic pregnancy case report. *East African Medical Journal.* 2008; 85:201–04
9. J. Hallat. Primary ovarian pregnancy. A report of twenty-five cases. *American Journal of Obstetrics & Gynecology.* 1982;143:50–60 .
10. Hüseyin Cengiz, Cihan Kaya, Murat Ekin, Hakan Güraslan, Hediye Da deviren, Levent Yasar. Ovarian Ectopic Pregnancy: Association with Intrauterine Contraceptive Device. *Cukurova Medical Journal.* 2013; 38 (3): 520-24
11. Stein MW, Ricci ZJ, Novak L, Robert SJH, Koenigsberg M. Sonographic comparison of the tubal ring of ectopic pregnancy with the corpus luteum. *J Ultrasound Med.* 2004;23:57–62