



## A Rare Case: Ovarian Ectopic Pregnancy

Authors

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### Introduction

An ectopic pregnancy is one in which the fertilized ovum is implanted and develops outside the normal endometrial cavity. When such ectopic implantation occurs in an ovary, it is known as an ovarian pregnancy (OP), meaning an ovarian ectopic pregnancy. The fertilized ovum is thus retained inside the ovary. With an increase in the use of assisted reproductive techniques, the cases of OP are also increasing. Ovarian pregnancy is uncommon form of ectopic pregnancy with an incidence of 1/7000-1/40,000 live births and 0.5-3% of all ectopic gestations.

**The Spielberg criteria (1878)-** (for confirmation of early ovarian pregnancy)

- Fallopian tube as the affected site must be intact.
- The foetal sac must occupy the position of the ovary.
- The ovary must be connected to the uterus by ovarian ligament.
- Ovarian tissue must be located in the sac wall.

In advance pregnancies last criterion i.e. detection of ovarian tissue in the wall of sac may not be satisfied as parenchyma is compressed laminated and distended by developing foetus.

### Aim

To present a case of successful laparotomy for ovarian ectopic pregnancy.

### Setting

Department of Obstetrics and Gynaecology, Katihar Medical College, Katihar, Bihar.

### Case Summary

A 19 year old female, Primigravida with one and half month's amenorrhoea presented in obstetrics Casualty with chief complaint of pain abdomen since 3 days. Pain was all over abdomen with no aggravating and relieving factor. Pain was continuous and radiated to left shoulder. There was also history of nausea and syncopal attack. There was also history of spotting P/V since 2 days. Her previous menstrual cycle was normal, there was no significant past, personal or surgical history.

### On Examination-

B/P- 90/60 mm hg

P/R - 118 bpm

Temp- 101 F

Pallor -++

No icterus, cyanosis, clubbing, lymphadenopathy

**Per Abdomen-**

Distension ++

Tenderness ++

Immediately preliminary investigation and USG was done.

**Investigation-**

Hb- 7.8 mg/dl

Platelet- 1.3/ cmm

ABoRh- B positive

RBS - 96 mg/dl

Urea - 28

Creatinine- 0.7

Serum Bilirubin-

Total- 0.9

Direct- 0.5

Indirect- 0.4

S.G.O.T – 28

S.G.P.T – 32

TLC – 11000

**USG** – A heterogeneous mass lesion with dense fluid collection in right adnexa

S/O – rupture ectopic pregnancy

S/O – hemoperitonium

**Operative Procedure**

After all preliminary investigations patient was taken for emergency laparotomy in view of suspected right ovarian ectopic pregnancy. Under general anaesthesia, with aseptic precaution patient laid in supine position. Abdomen was painted and draped. A low transverse incision was given 2.5 cm above the pubic symphysis. Abdomen was opened in layers. Peritoneum was opened. Blood was suctioned out and ruptured right ovarian pregnancy was identified and explored. Right sided salphingoophrectomy was done. Peritoneal cavity was washed with normal saline. Hemostasis was achieved and abdomen was closed in layers. Specimen was sent for histopathological examination.

**Post Operative Period**

She was given injectable antibiotics. Post-operative period was uneventful and patient was

discharged on eighth post-operative day and to be followed on OPD basis. Histopathology report showed chronic villi.

**Discussion**

There is overall increase in the incidence of ectopic gestation due to increasing prevalence of sexually transmitted disease and PID, induced abortions, assistant reproductive techniques and increased availability of diagnostic facilities.

Ovarian ectopic pregnancy can occur when the fertilization takes place within the fallopian tube and the conceptus is regurgitated and implanted in the ovarian stroma.

Sign & Symptoms of ovarian ectopic pregnancy:

- ❖ Mild to moderate lower abdominal pain.
- ❖ Vaginal bleeding
- ❖ Nausea
- ❖ Vomiting
- ❖ Constipation
- ❖ Hypovolumic shock (if ruptured)

### Examination Finding

Clinical examination and lab finding include lower abdominal tenderness with or without rigidity or guarding. Vaginal bleeding, adnexal  $\beta$  tenderness, positive pregnancy test and elevated  $\beta$ -hCG level.

### Diagnostic evaluation

In haemodynamically stable patient further diagnostic evaluation should include TVS. TVS findings along with serial quantitative  $\beta$ -HCG level gives better interpretation. Usually on TVS an intrauterine gestational sac can be visualized when quantitative  $\beta$ -hCG level  $>2000$ - $3000$  IU/L. Sonographic findings for presence of ovarian ectopic-

- ❖ An empty endometrial cavity.
- ❖ A gestational sac that is inseparable from the adjacent ovarian parenchyma.
- ❖ A yolk or fetal pole with or without cardiac motion depending upon gestational age.
- ❖ Ring of fire sign.

Medical management consists of use of methotrexate or PGF<sub>2</sub> in cases of primary incomplete resection or trophoblastic persistence, but laparoscopic ovarian wedge resection or cystectomy is the mainstay of treatment for ovarian pregnancy. Early detection and a high index of suspicion is the key to timely manage and for successful outcome in ovarian pregnancy. Sometimes, when ultrasound is equivocal, follow-up TVS scans and serial  $\beta$ -human chorionic gonadotropin level at or after 48 h are required to confirm the clinical suspicion.

### Conclusion

Incidence of ovarian pregnancy is on the rise. Although ultrasonography can detect ovarian gestations in unruptured cases but cannot easily differentiate ovarian from other tubal gestation in ruptured state. Medical management is usually not feasible, as most of the patients present in ruptured state. Conservative surgical approach is the management of choice.

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