

## Spontaneous heterotopic triplet pregnancy with bilateral tubal ectopic: A rare case report and review of literature

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### Abstract

**Background:** Heterotopic Pregnancy is a rare incidence in natural uninduced pregnancy, presenting about 1/30000 live deliveries. With onset of artificial reproductive techniques and ovulation induction, the overall incidence of heterotopic pregnancy has ascended to approximately 1 in 3900 pregnancies. Other risk factors include a history of pelvic inflammatory disease, tubal damage, pelvic surgeries, mullerian duct abnormality and prior tubal surgery.

**Case report:** We report a rare case of spontaneous Heterotopic triplet pregnancy in which an ectopic pregnancy in each tube with a single intrauterine gestation. Patient also gave birth to triplet female child by LSCS 6 year back.

**Conclusion:** Heterotopic pregnancy can be a life threatening condition and can be easily missed. Heterotopic pregnancy should be suspected in patients with an adnexal mass, even in absence of risk factors. A high index of suspicion in women is needed for early and timely diagnosis and management with laparotomy or laparoscopy can result in a favorable and successful obstetrical outcome.

**Keywords:** heterotopic pregnancy, uninduced, artificial reproductive techniques, laparotomy

### 1. Introduction

Heterotopic pregnancy is the simultaneous coexistence of an intrauterine and an extrauterine gestation<sup>[1]</sup>. Spontaneous Heterotopic pregnancy is a rare event accounting for about 1/30000 pregnancies<sup>[2]</sup>.

With the onset of artificial reproductive techniques and ovulation induction, the overall incidence of Heterotopic pregnancy has risen to approximately 1 in 3900 pregnancies<sup>[3]</sup>.

Mostly diagnosis of intrauterine pregnancy is made retrospectively during the emergent laparotomy for ruptured ectopic pregnancy<sup>[4]</sup>. Transvaginal ultrasound is the key for diagnosis of Heterotopic pregnancy<sup>[5]</sup>.

Surgical intervention plays an essential part in management of Heterotopic pregnancy. The target is to remove the ectopic pregnancy without jeopardizing the intrauterine pregnancy<sup>[6]</sup>.

In this case report we present a rare case of spontaneous Heterotopic triplet pregnancy with bilateral ectopic.

### 2. Case presentation

A 28 year old female G2P1L3 presented to emergency department of obstetrics and gynaecology P.B.M. hospital Bikaner Rajasthan on 8/3/19 in state of hypovolemic shock. Physical examination revealed normoponderal (BMI 22.3kg/m<sup>2</sup>), afebrile (temp. 37.5°C), and pale patient. Her hemodynamic assessment was consistent with hypovolemic shock (heart rate 162/min. BP 80/50, respiratory rate 26/min.).

On abdominal examination distension, guarding and rigidity was present. On per vaginal examination no evidence of vaginal bleeding, cervix was closed. Cervical motion

tenderness and bilateral adnexal tenderness present.

Preliminary diagnosis of ruptured ectopic pregnancy was made and patient was taken for emergency laparotomy. Patient was informed about risk and benefits for mother and she gave informed consent.

On laparotomy Frank haemoperitoneum of 1000-1500ml, an approximately 4×3cm size ruptured ectopic pregnancy at ampulla of right fallopian tube and left sided unruptured tubal ectopic pregnancy was present. Uterus was bulky suggesting intrauterine pregnancy. Right sided salpingectomy was done and conservative tubal surgery done for left sided ectopic pregnancy regarding her fertility issues. Intraoperative and postoperative period uneventful. Ultrasonography was done on 4<sup>th</sup> postoperative day regarding intrauterine pregnancy which showed single pregnancy of 6 week. Patient was discharged on post operative day 7 and is under regular follow up.

### 3. Discussion

Heterotopic pregnancy defined as the presence of multiple gestation with one in the uterine cavity and the other outside the uterus. With the onset of artificial reproductive techniques and ovulation induction incidence of Heterotopic pregnancy are increased now, but in natural conception it is quite rare event. Incidence of Heterotopic pregnancy in natural conception is 1 in 30000 pregnancies<sup>[7]</sup>.

Most cases of ectopic pregnancies are diagnosed in our setting at the ruptured stage with haemoperitoneum which warrant immediate laparotomy. In these conditions, Heterotopic when it exists is usually diagnosed retrospectively or during surgery for the ruptured ectopic pregnancy<sup>[7]</sup>.

Diagnosis of Heterotopic pregnancy was suspected during the emergency and life saving laparotomy for treatment of ruptured ectopic pregnancy. The outcome of intrauterine pregnancy depends on the trauma caused to the uterus or not, in such conditions. When the treatment of extrauterine pregnancy is done by laparoscopy, minimum trauma is caused to the uterus and result of intrauterine pregnancy can be up to 70% of viable term babies<sup>[6]</sup>.

Due to urgency of the situation ultrasonography was not done before surgical intervention. The diagnosis is being confirmed by paracentesis.

#### 4. Conclusion

Clinician should always keep Heterotopic pregnancy in the differential diagnosis in a reproductive women with abdominal pain and signs & symptoms of ectopic pregnancy. They must be alert to the fact that confirming an intrauterine pregnancy clinically or by ultrasonography doesn't exclude the coexistence of an ectopic pregnancy.

A high index of suspicion in high risk women is needed for early and timely diagnosis and management with laparotomy or laparoscopy can result in a favourable successful obstetrical outcome.

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