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Case Report

A rare case report: heterotopic pregnancy with ovarian ectopic pregnancy

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ABSTRACT

Heterotopic Pregnancy(HP) is defined as the occurrence of intrauterine and extrauterine pregnancy simultaneously. Incidence varies from 1 in 8000 to 30,000 natural conceptions. HP is common with artificial reproductive techniques and is very rare in natural conception. A high index of suspicion is helpful in diagnosis and appropriate management. We report a case of HP in a 28-year-old woman presented with 2 and half months amenorrhoea, pain abdomen and bleeding per vagina with TAS showing intra uterine single missed abortion and ovarian ectopic pregnancy.

Keywords: Eclampsia, Preeclampsia, Pregnancy, Posterior reversible encephalopathy syndrome (PRES), Reversible posterior leukoencephalopathy syndrome

INTRODUCTION

HP is occurrence of intra and extra uterine pregnancy simultaneously. The incidence varies from 1 in 8000 to 30,000 pregnancies conceived naturally.¹ Fallopian tube is the commonest site of ectopic pregnancy in HP.² The occurrence of an ovarian HP comprises only 2.3% of all Heterotopic pregnancies.³ Ovarian EPs by themselves are uncommon, accounting for only 1-3% of all ectopic pregnancies.⁴ Risk factors for HP are PID, tubo ovarian abscess, previous abdominal surgeries, IVF, Endometriosis, tubal reconstructive surgeries, and uterine malformations similar to ectopic pregnancy.^{5,6} In the last decades there has been an increase of ectopic pregnancy and a subsequent increase of HP. Individuals usually presents with pain abdomen, bleeding per vagina, abdominal mass, in some cases haemorrhagic shock or asymptomatic.^{1,7} Due to difficult preoperative diagnosis, it can be dangerous for mother and the simultaneous intrauterine pregnancy. The differential diagnosis to be considered are acute appendicitis, Ovarian cyst rupture,

Ovarian torsion.⁷ A high index of suspicion is required in diagnosing HP.

CASE REPORT

A 28-year-old gravida 2 abortion 1 lady came to emergency department of Bowring and Lady Curzon Hospital attached to Bangalore Medical college and research institute with complaints of 2 and half months amenorrhoea, pain abdomen and bleeding per vagina since 1 day conceived naturally with a history of 1 spontaneous abortion at 3 months gestational age.

There was no history of infertility treatment or PID, abdominal surgery. On examination she was having stable vitals i.e., PR-76 bpm, BP-112/76 mmHg, and without pallor. Per abdomen examination revealed no mass and it was soft, on Bimanual examination uterus was 10-12 weeks gravid size, anteverted, soft, and fornices were free and non-tender, no cervical motion tenderness, slight belledig per vagina noted.

Her Hb-13g/dl, β -HCG-4350 mIU/ml. Transabdominal sonography showed an intrauterine pregnancy of 8 weeks without cardiac activity suggestive of missed abortion and slight subchorionic haematoma. Left ovary showed a gestational sac corresponds to 7 weeks with fetal pole suggestive of ectopic pregnancy as shown in Figure 1.



Figure 1: Transabdominal Ultrasonography showing an Intrauterine Pregnancy of 8 weeks without cardiac activity and subchorionic haematoma and left Ovarian Ectopic with gestational sac of 7 weeks.

Manual vacuum aspiration was done after inducing with PGE1-400mcg per vagina. and single dose Inj. Methotrexate 50 mg IM given, and β -HCG done on day 4 was 291 m IU/ml which showed a decreasing trend. She was discharged on day 4.

DISCUSSION

HP is diagnosed when there is occurrence of two or more intrauterine pregnancy and ectopic pregnancy.⁸ The existence of intrauterine and extrauterine pregnancy simultaneous, also known as heterotopic pregnancy, can occur in various forms: intrauterine pregnancy and tubal, abdominal, cornual, cervical or ovarian pregnancy. HP is difficult to diagnose clinically; and hence there is significant danger to mother and live intrauterine pregnancy. A review study showed that most of extrauterine pregnancies were located in the fallopian tube (72.5%).⁹ An ovarian HP is a rare diagnosis with few reported cases. A review literature found only 5 cases of ovarian HP which were spontaneous, while most of them were following clomiphene or ART use.⁹ USG examination will be helpful in diagnosing HP. HP may be considered, as a consequence of modern reproductive medicine though occurs spontaneously in natural conception which is very rare. The incidence of HP increases with increase in IVF and ovulation induction and previous tubal surgery.^{1,10} Most common ectopic site of pregnancy is fallopian tube.² However cervix and

ovarian heterotopic pregnancies have also been reported.¹¹ Bicornuate uterus with gestation in both cavities may mimic HP. A high resolution TVS with doppler helpful in diagnosis of HP.¹²

An ovarian heterotopic pregnancy is a rare diagnosis with very few reported cases.¹³ The risk of ovarian pregnancy after assisted reproductive techniques is approximately 0.3% and is likely to increase with widespread use of these procedures.¹⁴ The traditional method of treating an ovarian pregnancy is laparoscopic wedge resection or ipsilateral oophorectomy.¹⁵

Present case fulfills Spiegelberg criteria for ovarian pregnancy, namely: fallopian tube including fimbria must be intact and separate from the ovary, the pregnancy must occupy normal position of the ovary, the ovary must be attached to the uterus through the utero-ovarian ligament, and there must be ovarian tissue in the wall of the gestational sac.^{1,2,3,4,16}

The illustrated case didn't have any risk factor for HP and presented with slight bleeding per vagina and pain abdomen.

In our case we gave methotrexate injection for treating ovarian pregnancy after doing Manual Vacuum Aspiration for missed abortion. Complications associated with this procedure include local infection or rupture of the ectopic pregnancy.

CONCLUSION

HP though rare can still present from natural conception. A high index of suspicion and timely diagnosis can result in successful outcome. This case report highlights the significance of clinical awareness regarding the feasibility of heterotopic pregnancies. High levels of serum β -hCG with a singleton intrauterine pregnancy or a clinical presentation of an acute abdomen should raise one's level of suspicion.

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