

## Heterotopic Pregnancy Following Embryo Transfer: A Case Report

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**Abstract:** Aetiology of heterotopic pregnancy is the series of multifactorial causes. Here we report as heterotrophic pregnancy following embryo transfer. A 28 year old nulliparous who had 3 embryo transfer 6 weeks prior, came to the hospital with complaints of pain in abdomen, nausea, vomiting with syncopal attack. On ultrasonography 2 gestational sac was seen 1 intrauterine and 2nd in the adenexa. Emergency laparotomy was performed and left salpingoopherectomy was done. Patient withstood the procedure well. Post procedure patient was uneventful and delivered a full term baby with normal birth weight. It is a rare phenomenon. Early diagnosis is required to avoid any fatality. Patient must be counseled regarding the dreadful consequences of embryo transfer.

**Keywords:** heterotopic pregnancy, nausea, vomiting, salpingoopherectomy, Laparotomy.

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### INTRODUCTION

A heterotrophic pregnancy is a rare complication of pregnancy in which both extra uterine (ectopic pregnancy) and intra uterine pregnancy occur simultaneously. If there is embryo transfer more than 4 embryo, the risk has been quoted as 1 in 45 [1]. In natural conceptions, the incidence of heterotrophic pregnancy has been estimated to be 1 in 30,000 pregnancy. In general population heterotrophic pregnancy is 1 in 7000 [2]. Hereby we report a heterotrophic pregnancy in 28 year old nulliparous women who had IVF with 3 embryo transfer.

### CASE REPORT

A 28 year old woman came to the OPD in department of obstetrics and gynecology with complaints of pain in abdomen, nausea vomiting and syncopal attack. She had 3 embryo transfer for IVF 6 weeks before presently she was afebrile, pallor, abdominal tenderness was present. USG was done which shows 2 Sacs of size 1.19x1.08x0.66 cm (fetus A) and 0.67x0.30x0.76 cm (Fetus B) in uterus and adenexa as suggested by ring of fire appearance on color Doppler respectively. Finding suggestive of heterotrophic pregnancy no cardiac activity was seen in both the fetuses' gestational age of approx. 5 wks. Left sided salpingoopherectomy done haemoperitoneum approx. 250 cc was found. Post-operative 1unit of packed red blood cell was given. Patient was uneventful and was discharged after 5 days. Pregnancy periods were uneventful. She delivered a full term baby female baby of 2.45 kg by lower segment cesarean section.



**Fig-1:** USG Image showing heterotrophic Pregnancy

### DISCUSSION

Various authors documented correlation between the number of embryos transferred and the chance of heterotopic pregnancy [3]. Heterotopic pregnancy can be presented in many ways, most of which occur in the first trimester, as in our patient [4]. A heterotopic gestation can also present as hematometra and lower quadrant pain in early pregnancy. Our patient also present with lower abdominal pain.

There are many challenges in heterotopic pregnancy. It is difficult and requires a high index of suspicion since it is rare and the presence of intrauterine pregnancy often delays the diagnosis and it requires early intervention for uneventful pregnancy. Clinical symptoms are not generally helpful for diagnosis, which is often delayed by attributing symptoms such as pain and bleeding to complication of the coexisting intrauterine pregnancy [5]. Physical examination

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usually reveals abdominal tenderness, and occasionally an adnexal mass as in present case.

The most important diagnostic method for heterotopic pregnancy is the high-resolution transvaginal sonography. However we have identified the case only by Trans abdominal sonography.

In conclusion the possibility of heterotopic pregnancy should be entertained whenever a pregnant woman presents with abdominal pain and signs of peritoneal irritation.

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