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Case Report

Spontaneous heterotopic pregnancy: a case report

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ABSTRACT

Heterotopic pregnancy is defined as multiple gestation in which intrauterine and extrauterine gestational sacs co-exist. The extra uterine gestational sac is most commonly tubal ectopic pregnancy. We presented case of a 26 years old multigravida who presented to emergency with complaints of pain abdomen and giddiness for 2-3 days. She was at period of gestation (POG) 7 weeks and on clinical examination patient was anxious with mild pallor, mildly tachycardiac and blood pressure (BP) was 90/60 mm of Hg. After thorough clinical examination and sonography diagnosis of heterotopic pregnancy with ruptured tubal ectopic was made. She was taken up for Emergency laparotomy after investigations and consent. Left salpingectomy was done and she was discharged with a single intrauterine live pregnancy on 6th post op day. For early detection of cases of heterotopic pregnancy careful evaluation of adnexa is mandatory in early gestation scan.

Keywords: Heterotopic pregnancy, Tubal ectopic, Laparotomy, Hemoperitoneum

INTRODUCTION

Heterotopic pregnancy is defined as multiple gestation in which one gestational sac is intrauterine while the other is extra uterine - most commonly tubal ectopic pregnancy. It was first reported as an autopsy finding in 1708.¹ The incidence has been estimated to be about 1 in 30,000 spontaneous pregnancies. With the use of assisted reproductive technologies, the incidence is as high as 0.75% to 1.5% of pregnancies.² Heterotopic pregnancy is a life threatening condition especially that it is undiagnosed later after tubal rupture has already occurred.³ The ampulla is the most common site representing 70% of the ectopic pregnancies, followed by fimbria (12%), isthmus (11%), interstitial (2-3%), ovary (1%), scar ectopic (1%), cervical and abdominal ectopic (1%).¹ An interstitial ectopic pregnancy is one of the most life-threatening types of ectopic pregnancy with a mortality rate that can reach 6-7 times higher than that of the ectopic

pregnancies in general.⁴ Surgery with laparoscopic salpingectomy with minimal or no uterine manipulation remains the main modality for managing the ectopic with evacuation of hemoperitoneum subsequently. Two thirds of intrauterine pregnancies carry on till term with or without progesterone support.

CASE REPORT

A 26 years old multigravida at period of gestation (POG) 7 weeks presented to emergency with complaints of pain abdomen and giddiness for 2-3 days. On clinical examination patient was anxious with mild pallor, mildly tachycardiac and blood pressure (BP)-90/60 mm of Hg. On abdominal examination there was diffuse lower abdominal tenderness. Vaginal examination showed no vaginal bleeding, cervical motion tenderness was present, uterus was bulky and there was tenderness and fullness in fornices and pouch of Douglas (POD). Trans vaginal

ultrasonography (USG) showed a mass arising from left fallopian tube with haemorrhagic fluid collection in pelvis along with a single live intrauterine pregnancy (Figures 1). A diagnosis of heterotopic pregnancy with ruptured tubal ectopic was made. She was taken up for emergency laparotomy and proceed under GA after written and informed consent regarding risk to her and the viable pregnancy was taken. On opening abdomen there was about one litre of haemorrhagic fluid (containing blood clot and fresh blood) (Figure 2) and a mass arising from ampulla of the left fallopian tube with active bleeding was noted. Uterus was bulky and soft and right tube was normal. Left salpingectomy was done. The specimen was sent for histopathology. Complete haemostasis was achieved. Intraoperatively one unit blood was given and another unit given postoperatively.

Post-operative period was uneventful with a haemoglobin (Hb) of 9.6 g/dl. The histopathology report was consistent with ectopic. She was discharged with a single intrauterine live pregnancy on 6th post op day. She was counselled about risks of abortion and preterm labour associated with the procedure performed. She continued to be on regular follow up with sustained progesterone support, in the antenatal care outpatient department (ANC OPD) and she delivered vaginally at 38 weeks a healthy female child.

Figure 1 shows sonographic appearance of heterotopic pregnancy (tubal and intrauterine pregnancy).



Figure 1: Sonographic appearance of heterotopic pregnancy (tubal and intrauterine pregnancy).



Figure 2: Intraoperative image showing tubal and intrauterine pregnancy.

DISCUSSION

The use of ovulation-inducing agents has increased the incidence of multiple gestations and heterotopic pregnancies. Berger and Taymor reported an incidence of combined pregnancy in as many as 1 in 100 stimulated patients. With clomiphene citrate the incidence is 1 in 900 whereas with gonadotrophins it is 1%.⁵ The most common predisposing anatomic finding associated with heterotopic pregnancies is pre-existing tubal disease.⁶

Heterotopic pregnancy (HP), might be a fatal obstetric condition to both mother and intrauterine pregnancy. Because of the very low incidence of HP, the literature is lacking evidence-based recommendations and the majority of the current practice is based on case reports and expertise opinion. The majority of HP cases diagnosed late and hence significant morbidity and occasional mortality have been reported as a result of a delay in diagnosis.⁷ The aim of management of heterotopic pregnancy should be to offer the least invasive method for a favourable outcome of the intrauterine pregnancy.⁸

While systemic medical management is absolutely contraindicated in the presence of a viable intrauterine pregnancy, surgical management remains the recommended cornerstone of treatment. A laparoscopic approach is preferred in view of better visualization and faster post-operative recovery. In cases in which hemodynamic instability or an interstitial-intrauterine pregnancy is present, a laparotomy is indicated. Expectant management plays no role in the care of a patient with a heterotopic pregnancy.

CONCLUSION

Nowadays incidence of heterotopic pregnancy is increasing. Catastrophic outcomes of heterotopic pregnancy like tubal rupture and haemorrhage leads to maternal morbidity and mortality. To decrease morbidity of women careful and early evaluation of the adnexa is mandatory not only in women undergoing assisted reproduction but also with spontaneous pregnancy to diagnose heterotopic pregnancy at the earliest.

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