Heterotopic Ectopic Pregnancy

Premlata Mital, *Veena* Acharya, *Nupur* Hooja, *Kalyan* Sahai
Department of Obstetrics and Gynecology S. M. S. Medical College, Jaipur.

Key words : heterotopic pregnancy, ectopic pregnancy

Introduction

Heterotopic ectopic pregnancy is an uncommon group of ectopic pregnancy where at least one of a multiple pregnancy lies outside the uterus and at least one in the uterine cavity. Spontaneous occurrence of heterotopic pregnancy is rare. It is a life threatening condition and early diagnosis is often difficult. Serial HCG assays and sonography are made unreliable by the presence of intrauterine pregnancy. The diagnosis is often made after the tubal pregnancy has ruptured.

Case Report

A 33 year old women, G3P2-2FTND with two female children, alive and healthy, reported in the emergency with complaints of severe pain in the abdomen and bleeding per vaginum since few hours. Her menstruation was overdue by 11 days. Her urine pregnancy test was positive. On vaginal examination - cervical movements were not tender, cervix was pointing forwards and uterus was parous in size and soft. There was no tenderness in the fornices. Sonography (USG) showed a gestational sac of 5 weeks. She was managed conservatively. However, she continued to have severe pain in abdomen associated with vomiting and bleeding per vaginum off and on. Repeat USG one week later showed intrauterine sac of 6 weeks with fetal echoes. She had acute abdominal pain after one week for which she was admitted on 9th October, 2001. Vaginal examination revealed the uterus to be soft and 8 weeks size with an ill defined tender mass in the posterior fornix. She was subjected to repeat USG which showed intrauterine viable pregnancy of 7 weeks. A doppler flow study was done which showed an intrauterine pregnancy of 7 weeks along with an echogenic mass in the pouch of Douglas, suggestive of ruptured ectopic pregnancy.

Laparotomy was performed on 13th October, 2001 and she was offered concurrent termination of intrauterine pregnancy which she refused. At laparotomy hemoperitoneum was present. There was a right sided ruptured tubal pregnancy. The uterus was enlarged to 8 weeks size. Right salpingo-oophrectomy was done. The tissue was sent for histopathological examination, which confirmed the diagnosis of right tubal pregnancy. Two units of blood were transfused intra-operatively.

She was put on injection HCG and folic acid till completion of first trimester and followed up with regular antenatal visits and serial USG which showed the fetus to be growing normally. Her antenatal period was uneventful till the 7th month. She then developed pre-eclampsia and methyldopa was started with which her blood pressure remained under control. She went into labor at 37 weeks on 4th May, 2002 and was admitted. She delivered vaginally a normal male child of 3 kg with an apgar score of 8 on 5th May, 2002. She did not turn up at the postpartum clinic and was not seen again.

Discussion

Heterotopic pregnancy, a rare condition first described by Duverney in 1708, is the simultaneous occurrence of an intrauterine and extrauterine pregnancy. The generally accepted incidence is 1 in 30,000 pregnancies[1]. Current incidence is about 1/4000 pregnancies, higher in patients with history of pelvic inflammatory disease[2]. The incidence is also increased with the use of ovarian stimulation. With IVF, it is about 1/35-1/100 clinical pregnancies.

Lower abdominal or pelvic pain in uncomplicated intrauterine pregnancy is a common symptom. The combination of abdominal pain, adnexal mass, peritoneal irritation, and an enlarged uterus are the major clinical features associated with combined pregnancy.

The diagnosis of this rare condition may be difficult and careful ultrasound examination is mandatory. Beta human chorionic gonadotropin levels are unreliable and misleading for diagnosis[3]. Transvaginal ultrasonography is more reliable in the diagnosis of combined intra- and extrauterine pregnancy[4]. A high index of suspicion is very important. Continued enlargement of the uterus and a positive pregnancy test after treatment of an ectopic pregnancy confirm the diagnosis.

Paper received on 1/09/02 ; accepted on 24/10/03

Correspondence :
Dr. Nupur Hooja
A-29, Lal Bahadur Nagar, Malviya Nagar
Opp. Hotel Clarks Amer, Jaipur - 302017.
Tel. 550851 e-mail : hoojas@datainfosys.net

The prognosis for the intrauterine pregnancy is usually good and laparotomy for concurrent ectopic pregnancy does not appear to disrupt the intrauterine gestation when the gestational sac on ultrasonography is consistent with dates. Surgical intervention to avoid the potential detrimental effects of hemorrhagic shock must be a priority. The uterus should be only minimally and carefully handled in order to avoid disturbing the pregnancy.

Madhany[1] reported two cases of heterotopic pregnancies from Kenya in which, both women had laparotomy and salpingo-oophorectomy because of ruptured tubal pregnancy. The intrauterine pregnancies were left intact, progressed well, and continued to term resulting in delivery of normal babies.

Ifenne[5] reported one case of heterotopic pregnancy in which, the woman had laparotomy and right sided salpingo-oophorectomy because of ruptured tubal pregnancy. The intrauterine pregnancy was left intact, progressed well and continued to term resulting in delivery of a normal female child weighing 2.5 kg.

Laparoscopy might be safely performed to aid differential diagnosis in a uncertain condition during pregnancy and laparoscopic surgery might be an appropriate method to manage some carefully selected patients with heterotopic ectopic pregnancy[6]. Despite the number of cases being small, lack of complications in these reports is encouraging feasibility of laparoscopic management of heterotopic pregnancy[7]. Early diagnosis of an ectopic pregnancy allows successful laparoscopic treatment, without sequelae to the intrauterine gestation.

References

1. Madhany NHL. Combined intra- and extra-uterine (tubal) pregnancies in two patients. *East Afr Med J 1977; 54: 505-6.*
2. Rizk B, Tan SL, Morces S et al. Heterotopic pregnancies after IUF and ET. *Am J Obstet Gynecol 1991; 164: 161-4.*
3. Walker DD, Clarke TC, Kennedy EC. Heterotopic ectopic and intrauterine pregnancy after embryo replacement. *Br J Obstet Gynecol 1993;100:1048-9.*
4. Kurzel RB. Ultrasonographic detection of combined pregnancy. *Am J Obstet Gynecol 1979; 134:100-1.*
5. Ifenne D I. Ectopic Pregnancy Coexisting with Intrauterine Pregnancy. *Nig J Surg Res 2000; 2:158-60.*
6. Wang PH, Chao HT, Tseng JY et al. Laparoscopic surgery for heterotopic pregnancies: a case report and a brief review. *Eur J Obstet Gynecol Reprod Biol 1998;80:267-71.*
7. Pschera H, Gatterer A. Laparoscopic management of heterotopic pregnancy a review. *Obstet Gynecol Res 2000; 26:157-61.*