Heterotopic Pregnancy: A Case Report

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Introduction:
Heterotopic pregnancy is defined as the coexistence of intrauterine and ectopic pregnancies (1). Heterotopic pregnancy prevalence has been increased by ovulation induction and assisted reproduction methods. Its prevalence is 1:7000 pregnancies after ovulation induction and is 1:900 of pregnancies after in vitro fertilization (2).

By diagnostic method promotions, such as transvaginal ultrasonography, early and correct diagnosis of heterotopic pregnancy has become possible (2). The first case of heterotopic pregnancy, natural and without ovulation induction drugs usage, was reported at an autopsy in, 1708.

Then Reece reported 589 other cases of heterotopic pregnancies (3).

In 1971, Rayan reported the first case of heterotopic pregnancy after ovulation induction by clomiphene citrate (4). The first case of heterotopic pregnancy after assisted reproduction was reported by Sondheimer, a twin gestation that was diagnosed by ultrasonography and the free fluid in the abdomen was guessed to be due to bleeding from fragile corpus luteum (5).

Laparoscopy was done for the patient, and a tubal pregnancy was diagnosed as well. In our case report, a case of heterotopic pregnancy with abnormal symptoms is reported.

Case Report:
The patient was a 26-year old woman that was referred to the maternity ward of Ghaem Hospital on Feb. 20, 2004, due to severe vaginal bleeding and uterine contractions at the 8th week of gestational age. Her intrauterine pregnancy had been previously confirmed by ultrasonography. She was gravida 3, para 1 and had one abortion [at 10th week] 6 months before when evacuational curettage had been done due to incomplete abortion.

Her past medical and surgical history was normal. The evacuational curettage was done for her due to inevitable abortion. The result of pathology (Number 568946) was the product of conception, and the patient was discharged a day after curettage. She was referred again 3 days after that due to uterine cramps and fever (38.5°C).

Upon physical examination she had tenderness with cervical motion and the posterior cul de sac was bulged. Serum hCG level was 4500 IU/CC, and ultrasonography detected a mixed echo behind the uterus that was due to internal bleeding.

Laparotomy was done for the patient due to extrauterine pregnancy, an aborted tubal pregnancy was found in left tube; and salpingostomy was done for her. Pathologic study of curetting results and left tube biopsy confirmed the pregnancy. The result of tubal pathology (Number 82-2392) was tubal pregnancy.

Discussion:
There is no certain etiology for heterotopic pregnancy.

For heterotopic pregnancy occurrence, at least two ova must be fertilized and separate implantation must be done like dizygous twins (3).

In pregnancy by the in vitro fertilization method (IVF) at least one of the fertilized ova should pass through the uterine cavity reaching the outside, and this can occur during or after IVF (2).

The two main etiologies of heterotopic pregnancy prevalence increase in patients treated by ART by: More prevalence of tubal trauma and pelvic pathologies, and more embryo exposure. A Daniel A has suggested that tubal factor has an important role in extrauterine pregnancies in patients who used the IVF method (2,6). Clinical manifestations of heterotopic pregnancy has differed in recent years, due to the patient's early follow-up and transvaginal ultrasonography method.

15.8% of heterotopic pregnancy cases have differed in recent years due to the patient's early follow-up and transvaginal ultrasonography method. In 15.8% of patients with heterotopic pregnancies, ultrasonography was normal in early stages. Although ultrasonography is a valuable method for early intrauterine pregnancy diagnosis, in cases in which intrauterine and extrauterine pregnancies coexistence, the diagnosis becomes difficult because the gestational sac lies between bowel loops and cannot be detected easily.

Some authors suggest that after...
heterotopic pregnancy diagnosis, treatment should be done as soon as possible to prevent pregnancy complications (6,7,8). By advanced ultrasonographic methods usage for early diagnosis of intrauterine pregnancies, more than 40% of patients with heterotopic pregnancy are unstable cardiovascular patients and those with acute abdomen can be treated by laparotomy or laparoscopy (9). Care should be taken to avoid intrauterine pregnancy trauma. Early diagnosis and treatment of heterotopic pregnancies can revive most intrauterine pregnancies. In stable patients with heterotopic pregnancies, other therapeutic methods should be considered as well. Timor and Tristish are the first individuals who used transvaginal ultrasonographically guided salpingo-ocentesis with potassium chloride for treatment of tubal pregnancy (10). However, investigations about this method are still limited; and its safety is not distinguished because sometimes extraterine pregnancy toxic agents can enter the uterine blood circulation and damage intrauterine pregnancy, too. Nowadays almost two-thirds (66.2%) of intrauterine pregnancies are born alive and survived. This amount is more than the 35% that was reported by Smith, 1970(11); and this is probably due to diagnostic and therapeutic methods improvement in recent years. No fetal malformation in intrauterine pregnancies was found due to hypoxemia because of intraperitoneal bleeding due to extra uterine pregnancy; and the abortion rate was not increased.
Abstract:

Objective: This is a report of a heterotopic pregnancy coexisting with intrauterine and ectopic pregnancies[1]. For occurrence of heterotopic pregnancy, at least two ova must be fertilized; and separate implantation must be done like dizygous twins (2). Clinical manifestations of heterotopic pregnancy has differed in recent years, due to the patient's early follow-up and transvaginal ultrasonography method. In this study we report a case of heterotopic pregnancy.

Key Words: Heterotopic Pregnancy, Inevitable Abortion, Tubal Pregnancy.

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