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CASE REPORT

A Rare Phenomenon Spontaneous Heterotropic Pregnancy: Case Report

Nadir Bir Olgu Spontan Heterotropik Gebelik: Olgu Sunumu

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ABSTRACT

Introduction: Heterotopic pregnancy is a rare condition accompanied by intrauterine and ectopic pregnancy.
Case: Intrauterine pregnancy and a suspicious ectopic focus were observed in a thirty-seven-year-old patient with no risk factors who presented with menstrual delay. The ectopic pregnancy was successfully removed by surgery to preserve the uterine pregnancy.
Discussion: This case report discusses the importance of early diagnosis and management of heterotopic pregnancy to avoid both fetal and maternal morbidity and mortality.
Conclusion: It is important to evaluate the adnexia along with the uterus in determining pregnancy in patients presenting with menstrual delay. Additionally, laparoscopy is a reliable option in the treatment of heterotropic pregnancy.

Keywords: Ectopic pregnancy, Heterotropic pregnancy, Laparoscopy, Transvaginal ultrasonography

ÖZ

Giriş: Heterotopik gebelik, intrauterin ve ektopik gebeliğin eşlik ettiği nadir bir durumdur.
Olgu: Otuz yedi yaşında, herhangi bir risk faktörü bulunmayan ve adet gecikmesi şikayetiyle başvuran hastada intrauterin gebelik ve şüpheli ektopik odak izlendi. Ektopik gebelik, intrauterin gebelik korunarak cerrahi olarak başarıyla çıkarıldı.
Tartışma: Bu vaka raporunda hem fetal hem de maternal morbidite ve mortaliteyi önlemek için heterotopik gebeliğin erken tanı ve tedavisinin önemi tartışılmaktadır.
Sonuç: Adet gecikmesi ile başvuran hastalarda gebeliğin belirlenmesinde uterus ile birlikte adneksinin de değerlendirilmesi önemlidir. Ayrıca laparoskopi heterotropik gebelik tedavisinde güvenilir bir seçenektir.

Anahtar Kelimeler: Ektopik gebelik, Heterotropik gebelik, Laparoskopi, Transvajinal ultrasonografi

Introduction

Heterotopic pregnancy (HP) was first described by Duverney in 1708. Heterotopic pregnancy is a condition in which intrauterine and ectopic pregnancy develop simultaneously. It is associated with hypovolemic shock and carries a risk of serious morbidity and mortality for the mother and fetus. Therefore, early diagnosis and treatment are very important [1]. With the widespread use of assisted reproductive techniques (ART), the frequency of heterotropic pregnancy has increased and is seen at a rate of 1 in 3900 pregnancies. While the rare incidence of heterotropic pregnancy after spontaneous conception is 1/30000 [2].

Heterotropic pregnancy risk factors includes family history of multiple pregnancy, endometriosis, tubal pathology, history of pelvic inflammatory disease, transfer of 2 or more embryos in ART [3].

Treatment consists of medically or surgically terminating the ectopic pregnancy and ensuring the continuity of the intrauterine pregnancy [4]. In this case report, a patient without any risk factors with prediagnosis of heterotropic pregnancy, who underwent diagnostic laparoscopy is discussed.

Case

A thirty-seven years old patient with gravida 3, parity 2, whose previous pregnancies ended with cesarean delivery applied due to menstrual delay. According to the last menstrual period, her gestational age was 5 weeks and 6 days. The patient's arterial blood pressure ,pulse and tempretaure was recorded as 120/70mmHg, 80/minute, and 36.8°C respectively. In the examinations, B-hcg was found to be 5996 mIU/m. During the transvaginal ultrasonography (TVUSG), a 14x11x12 mm

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sized gestational sac (GS) and a 3 mm yolk sac (YS) were observed in the uterine cavity (Figure 1- red arrow). A suspicious ectopic mass measuring 16x10x12 mm was seen in the right adnexa (Figure 1 - yellow arrow).

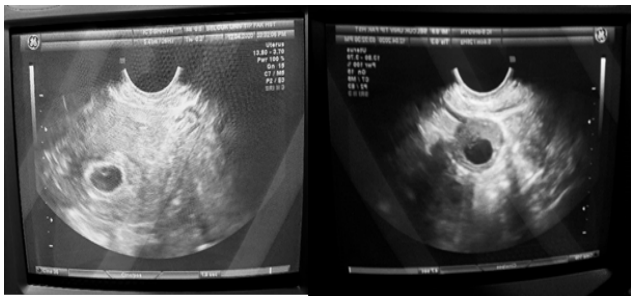

Figure 1.

During the physical examination, rebound tenderness and defanse was not present. Pelvic magnetic resonance imaging (MRI) was performed (Figure 2).

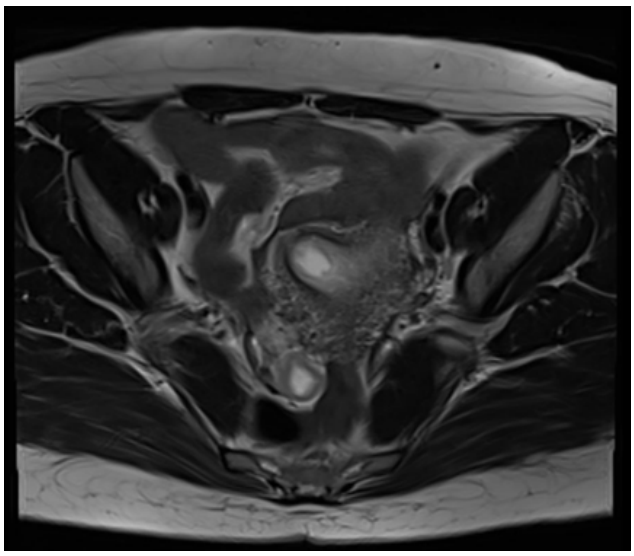

Figure 2. Red arrow – intrauterin pregnancy, Yellow arrow – extrauterin pregnancy

3 days later the case was evaluated in terms of positive embryo heart rate and CRL (Crown-rump length). Transvaginal ultrasonography (TVUS) revealed CRL 6 weeks and 0 days intrauterine embryo. In this case, heterotropic pregnancy was primarily considered when intrauterine pregnancy and right adnexal mass were evaluated together. Laparoscopic surgery was planned for the case. Detailed information was given about maternal and obstetric complications that may occur due to surgery. Informed consent was obtained. Intraoperative observation, the left ovary and bilateral fallopian tubes were normal. There was a bilobulated appearance in the right ovary (Figure 3).

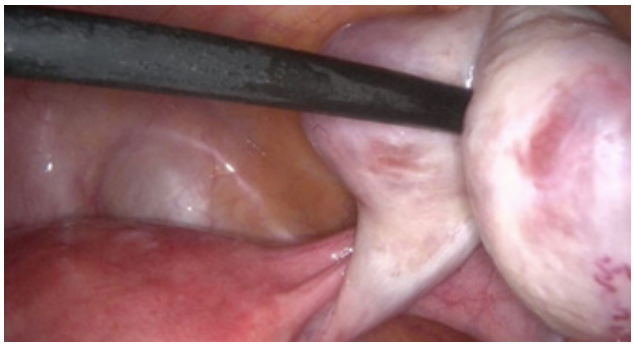

Figure 3.

It was observed to be the medial part of the bilobed area in the right ovary associated with the uterus together with the lig. ovary proprium (ovarian pregnancy?). The distal part was compatible with the corpus luteum. Since MRI and ultrasonography images were compatible with heterotopic pregnancy, the medial part of the bilobed lesion observed on the right side was drained for diagnostic purposes (Figure 4).

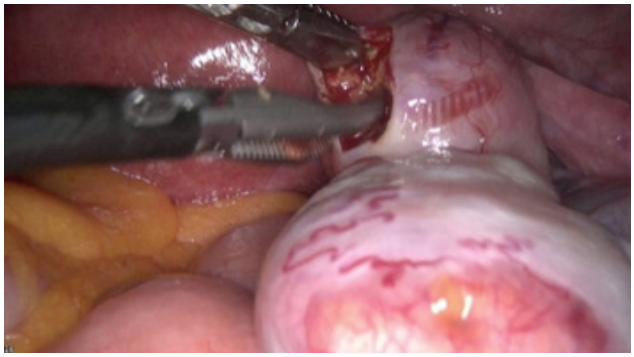

Figure 4.

The procedure was terminated following bleeding control. No complications developed. The patient was started on microgenised progesterone 200 mcg. USG control was performed on the first postoperative day. The suspicious ectopic focus was not observed on USG. Intra-uterine, FKA+, CRL compatible with 6 weeks and 0 days was observed. The patient was discharged on the 2nd postoperative day. At the follow-up 1 week later FKA+, CRL compatible with 7 weeks and 0 days with positive heart rate embryo was observed.

Discussion

While the frequency of heterotropic pregnancy is rarely 1/30000 in spontaneous conception, the incidence of heterotropic pregnancy is gradually increasing with the development of assisted reproductive techniques and ovulation induction in recent years [2, 5]. 95% of ectopic pregnancies, including heterotopic pregnancies, occur in the fallopian tube [6]. But it can

also be found on the cervix, in scarring from previous caesarean section surgery, and in the interstitial segment of the fallopian tube, ovaries, peritoneum, or intra-abdominal spaces [7]. In our case, the heterotropic pregnancy was seen in the right ovary. Risk factors for spontaneous heterotropic pregnancy include smoking, history of ectopic pregnancy, pelvic inflammatory disease, tubal surgery and endometriosis, similar to the risk factors for ectopic pregnancy [8]. In this case, spontaneous conception accompanied by a suspicious adnexal lesion occurred with the absence of any risk factors indicates that the tuba and ovaries should be evaluated every patient with an intracavitary pregnancy. Early diagnosis is difficult due to the absence of symptoms specific to heterotropic pregnancy. As the beta hCG value increases and intrauterine pregnancy is observed on ultrasonography, adnexal evaluation is often skipped and diagnosis is delayed [9]. In this case, the presence of an adnexal mass made heterotropic pregnancy suspected. In a review of the literature published from January 1994 to December 2004, Barrenetxea reported approximately 74% of 13 cases of spontaneous heterotropic pregnancy between the 5th and 8th weeks of gestation [10]. Our case was considered to be a heterotropic pregnancy at the 5th week of gestation.

The aim of heterotropic pregnancy treatment is to terminate the ectopic pregnancy while preserving the intrauterine pregnancy [11]. Medical treatment options include ultrasound-guided potassium chloride or hyperosmic solution injection and methotrexate. When compared in terms of abortion rate, heterotropic pregnancies given medical treatment have a higher abortion rate than heterotropic pregnancies treated surgically [12]. According to the study conducted by Eom et al. on the surgical and obstetric results of the laparoscopic approach in 17 cases with heterotropic pregnancies, it was reported that the use of laparoscopic surgery in treatment is safe [11]. In this case, laparoscopic surgery was performed.

Conclusion

In this case report, the importance of early diagnosis and treatment of heterotropic pregnancy is discussed. Since heterotropic pregnancy is a life-threatening condition that is difficult to diagnose, it is important to evaluate the tubes and ovaries in all patients presenting with menstrual delay.

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