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Ruptured heterotopic pregnancy: A case report

Rüptüre heterotopik gebelik: Olgu sunumu

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Abstract

Ectopic pregnancy is defined as a condition in which the gestational sac is located outside the uterine cavity. And also Heterotopic pregnancy is the addition of at least one extra-uterine pregnancy to normal pregnancy. This is more common in patients with assisted reproductive techniques and ovulation induction. Today, with the increasing use of assisted reproductive techniques, the importance of primary care services has become increasingly important and must be kept in mind. We report a case of intrauterine normal pregnancy was accompanied by ruptured tubal pregnancy.

Keywords: Pregnancy, Heterotopic Pregnancy

Öz

Ektopik gebelik gestasyonel kesenin uterin kavitenin dışına yerleştiği durum olarak tanımlanır. Heterotopik gebelik ise normal gebeliğe ilaveten en az bir ektrauterin gebeliğin olmasıdır. Bu durum, yardımcı üreme teknikleri ve ovülasyon indüksiyonunun kullanıldığı hastalarda daha sık görülür. Günümüzde yardımcı üreme tekniklerinin giderek daha fazla kullanılmaya başlanmasıyla, tanı aşamasında ki zorluklar nedeniyle birinci basamak sağlık hizmetlerinde de önemi artan ve akılda tutulması gereken bir durum haline gelmiştir. Olgumuzda intrauterin normal gebeliğe rüptüre tubal gebelik eşlik etmekteydi.

Anahtar Kelimeler: Gebelik, Heterotopik Gebelik

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Introduction

Heterotopic pregnancy is the addition of at least one extra-uterine pregnancy to normal pregnancy [1]. And it is more common in patients with assisted reproductive techniques and ovulation induction [2].

As a result of the increasingly widespread use of assisted reproductive techniques; it may cause serious complications in patients with increased incidence of heterotopic pregnancy. The importance of clinical and ultrasonographic evaluation of pelvic and adnexa structures is great; especially in the follow-up of pregnancies where assisted reproductive techniques are used. It should be ensured that physicians who follow the pregnancy are always careful about this [3].

One of the most important responsibilities of the family physicians is follow up the pregnancy process. In terms of continuity in patient follow-up and preventive medicine; The awareness of the patients who are at risk is the primary duties of the family physicians [4].

In this study; A case of heterotopic pregnancy after ovulation induction will be presented. The aim of our presentation, to take attention to the increasing incidence of heterotopic pregnancy, remind of the difficulties and complications of diagnosis and to emphasize the importance for family medicine in addition.

Case Presentation

A thirty-four year old woman who told she had been pregnant for eight weeks admitted to our hospital with complaints of vaginal bleeding and abdominal pain. In the gynecological history of the patient, it was learned that the patient had been married for eight years, she had vaginismus treatment in the first year of the marriage, and the condom was preferred as a contraceptive method until one year before. It was learned that hysteroscopy and vaginal polypectomy were performed because she could not conceive 6 months after she and her husband decided to have a child. Then patient received to ovulation induction, clomiphene citrate and chorionic gonadotropin alpha therapy. She said that two embryo transfers were made in vitro fertilization (IVF) 7 weeks ago because she did not conceive again.

The day before the patient applied to our hospital, she had mild abdominal pain and she was diagnosed with overdose hyper stimulation syndrome at another hospital. She said that she applied to our hospital due to the increasing pain.

The overall condition was moderate and anxious in appearance of the patient. Blood pressure was 110/70 mmHg, pulse was 97/min and fever was 36.7°C. In the gynecological examination of the patient who was identified as involuntary defender in his abdomen, vulva vagina was in a natural view. Extra-uterine had minimal vaginal bleeding, the chollum movements were painful and the size of the uterus could not be evaluated due to severe pain. Transabdominal ultrasonography examination revealed two fetuses followed by fetal heart rate (FHR) compatible with 7 weeks and 4 days according to the head-butt distance (CRL) measured in uterus and right tuba. In transvaginal ultrasonography (TVUS), 2 fetuses' CRL measurements followed by FHR compatible with 8 weeks in the

uterine cavity and 7 weeks+2 days in the right salpinx. Both ovaries were in multi-cystic appearance in harmony with hyper stimulation. Widespread fluid was detected in peri-splenic and peri-hepatic areas and douglas. In laboratory tests; hemoglobin was 9.9 g/dl, hematocrit was 28.9%, leukocyte was 14200/mm³ and platelet count was 220000/mm³.

The patient underwent operation with the diagnosis of heterotopic rupture tubal pregnancy. Common coagulation was observed in the abdominal laparoscope. Following the aspiration of coagulation, 3x4 cm ruptured ectopic pregnancy material was detected. Patient had a right-hand salpingectomy. The left tuba and the ovaries were naturally observed. Her blood pressure was 90/60, pulse was 98 in postoperative follow-up. Blood transfusion was supported due to the monitoring of the patient's hemoglobin values as 5.4 g/dl. When the hemoglobin value was reached 9 g/dl and the vitals were stable, the uterine pregnancy was evaluated normally, the patient was discharged.

Discussion

While the natural incidence of heterotopic pregnancy was 1/30000, it increased to 1/7000 after assisted reproductive techniques. In ovulation induction patients, it increased to 0.5-1% [5-7]. The diagnosis of heterotopic pregnancies is made between 70% and 5-8 weeks [8]. In this case, it is diagnosed in this time period. Early diagnosis of heterotopic pregnancy is difficult due to ambiguous symptoms. The findings of enlarged uterus, abdominal pain, adnexal mass and peritoneal irritation are the four general manifestations in the literature [9]. In early diagnosis, transvaginal ultrasound is a valuable diagnostic method. However, the sensitivity of 5-6 weeks in pregnancies is only 56% [10]. While routine pregnancy detection and follow-up β -hCG measurement is useful in the diagnosis of ectopic pregnancy, in heterotopic pregnancy; because of concurrent intrauterine pregnancy it is not useful. Ultrasonographic examination of intrauterine fetal heart rate confirms pregnancy and additionally it is very important to evaluate the adnexal structures sensitively.

A day prior to the examination of the patient who was admitted to another hospital in this case, the complaints were attributed to a hyper stimulation and tubal pregnancy could not be detected. This may be due to the difficult evaluation of the adnexal structures of hyper stimulated ovaries. In addition, the fact that ovarian hyper stimulation is sufficient to explain the current clinic may lead to the lack of detailed examination.

Heterotopic pregnancy is a condition that can be encountered when patients are treated for infertility. Due to the increasing use of assisted reproductive techniques in our country it is necessary to be aware of this issue and to keep in mind the differential diagnosis.

References

1. Thakur R, El-Menabawey M. Combined intra-uterine and extra-uterine pregnancy associated with mild hyperstimulation syndrome after clomiphene ovulation induction. *Hum Reprod.* 1996 Jul;11(7):1583-4.
2. Dimitry, ES, Subak-Sharpe R. Nine cases of heterotopic pregnancy in 4 years of in-vitro fertilization. *Fertil Steril.* 1990;53(1):107-10.
3. Hassani KIM, Bouazzaoui AE, Khatouf M, Mazaz K. Heterotopic pregnancy: A diagnosis we should suspect more often. *J Emerg Trauma Shock [Internet].* 2010 Jul [cited 2017 Sep 20];3(3):304.

4. Rakel RE. The Family Physician. In: Textbook of Family Medicine. Elsevier; 2012. p. 3–16.
5. Ludwig M, Kaisi M, Bauer O, Diedrich K. Heterotopic pregnancy in a spontaneous cycle: do not forget about it! Eur J Obs Gynecol Reprod Biol. 1999;87(1):91–3.
6. Mukul LV, Teal SB. Current Management of Ectopic Pregnancy. Obstet Gynecol Clin North Am. 2007;34(3):403–19.
7. Cunningham FG. Williams obstetrics. 24th ed. 2014. 377-395 p.
8. Tal J, Haddad S, Gordon N, Timor-Tritsch I. Heterotopic pregnancy after ovulation induction and assisted reproductive technologies: A literature review from 1971 to 1993. Fertil Steril. 1996 Jul 1;66(1):1–12.
9. Reece EA, Petrie RH, Sirmans MF, Finster M, Todd WD. Combined intrauterine and extrauterine gestations: a review. Am J Obstet Gynecol. 1983 Jun 1;146(3):323–30.
10. Dündar Ö, Levent T, Ercüment M, Murat M, Yergök YZ. Monokoryonik monoamniotik ikiz gebelikle birlikte görülen heterotopik gebelik olgusu. Perinatoloji Dergisi 2006;14(2):96-100