Ruptured Tubal Triplet Heterotopic Pregnancy After in Vitro Fertilisation: A Case Report✍

Mehmet A. OSMANAĞAOĞLU, Murat AKSOY, F. Ceylan İLHAN, Recep ERİN

Trabzon, Turkey

To analyse the incidence, diagnostic and therapeutic management of heterotopic pregnancy following in vitro fertilisation (IVF). We present a case who had a ruptured left tubal heterotopic triplet pregnancy at nine weeks of gestation following in vitro fertilisation. A 47-year-old pregnant woman who conceived following IVF-ET transfer was referred to our emergency unit with a suspicion of stomach perforation at 9 weeks' gestation. on physical examination she had severe abdominal pain and distension. Her blood pressure 130/70 mmHg and pulse rate 96 beats/min. Pelvic examination showed tenderness on movement of the cervix and a slightly enlarged uterus. Her hemoglobin was 9.4 mg/dl. Transabdominal ultrasound examination showed an intrauterin viable twin pregnancy. A third gestationel sac at the left cornual area of which diameter was 23 mm was also seen. Massive amount of fluid was detected in perihepatic, perispleenic, and the cul-de-sac area and also between bowels. Based on these findings a ruptured heterotopic pregnancy was suspected and emergency laparotomy was performed. At laparotomy, there was 800 ml of hemoperitoneum. There was a 2-3 cm ruptured isthmic ectopic pregnancy in the left tube. A left total salpingectomy was performed. Postoperative recovery was uneventful and the patient was discharged on postoperative day 3 in good condition. She was following up in the antenatal unit and the twin pregnancy is progressing normally. Heterotopic pregnancies are rare but life-threatening conditions, therefore it should be kept it in mind when a pregnant woman who underwent IVF-ET, presents low abdominal pain.

Key Words: Heterotopic pregnancy, In vitro fertilisation

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Introduction

Heterotopic pregnancy is defined as a combined intrauterine and extrauterine pregnancy. Heterotopic pregnancy is rare with incidence of 1/8000 to 30000.[1] The increased incidence of pelvic inflammatory disease, increased used for ovarian stimulation and assisted reproductive techniques (ART) have lead to the increased incidence of multiple gestations as well as heterotopic pregnancy during the past years.[2] The incidence of heterotopic pregnancy after IVF is estimated as high as 1 %.[3] Most of the extrauterine gestations are located in the fallopian tube.

Medicine School of Karadeniz Technical University Department of Obstetrics and Gynecology, Trabzon

Address of Correspondence: *Mehmet A. OSMANAĞAOĞLU*
Karadeniz Technical University Faculty of Medicine Department Obstetrics and Gynecology, Trabzon
drmaosmanaga@gmail.com

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Case Report

A 47-year-old pregnant woman who conceived following IVF-ET blastocyst transfer was referred to our emergency unit with a suspicion of stomach perforation at 9 weeks' gestation. At the time of admission to our hospital, on physical examination she had severe abdominal pain and distension. Her temperature was 37°C, blood pressure 130/70 mmHg and pulse rate 96 beats/min. Pelvic examination showed tenderness on movement of the cervix and a slightly enlarged uterus. Her hemoglobin was 9.4 mg/dl. Transabdominal ultrasound examination showed an intrauterine viable twin pregnancy with the mean sac diameters of 46 mm and 41 mm. A third gestationel sac at the left cornual area of which diameter was 23 mm was also seen. Severe amount of fluid was detected in, perihepatic, perispleenic, and the cul-de-sac area and also between bowels. Based on these findings a ruptured heterotopic pregnancy was suspected and emergency laparotomy was performed. At laparotomy, there was 800 ml of hemoperitoneum. The uterus size corresponded to 10 weeks gestation, the left ovary and right adnexa were normal. There was a 3-4 cm ruptured isthmic ectopic pregnancy in the left tube. A left total salpingectomy was performed. Postoperative recovery was uneventful and the patient was discharged on postoperative day 3 in good

condition. She was following up in the antenatal unit and the twin pregnancy are progressing normally.

Discussion

Heterotopic pregnancy after IVF is a rare condition. The prevelance of heterotopic pregnancy is rising, because of the increasing use of infertility treatment such as ovarian hipersitimulation medications and multiple embriyo transfers. It needs to be diagnosed earlier so as to prevent the fatal complications.

The direct intertion of embryos into the uterotubal orifice or migration of the embryos placed at the uterine fundus have been suggested as possible explanations of the mechanism of heterotopic pregnanacies. No more than three embryos should be transferred during the IVF-ET procedure.[4]

The diagnosis is usually suspected when the symptoms of abdominal pain, tenderness, rebound occur, however most of the patients may be asymtomatic. In our case the patient presented at nine weeks of gestation with abdominal pain. At her first evaluation in emergency unit, because of the severe abdominal fluid sonografically, stomach perforation was suspected until the third extrauterine gestational sac had been seen with a detailed transvaginal sonography. The differential diagnosis of a heterotopic pregnancy was not entertained because of the presence of an intrauterine pregnancy and poor visualization of the adnexa on ultrasound. The introduction of transvaginal sonography to daily practice has increased the correct diagnosed rates from 2.6% up to 14.8%.[5,6] The management of heterotopic pregnancy stil remains controversial. Several authors have mentioned the value of a laparoscope and the success of laparatomy is also mentioned in several studies.[7]

The gold standard treatment for ectopic pregnancy is surgery, either salpingostomy or salpingectomy. Careful attention should be paid to minimal handling of the uterus so as not to disrupt the intrauterine gestation.

In conclusion, heterotopic pregnancies are rare but life-threatening conditions, therefore it should be kept it in mind when a pregnant woman who underwent IVF-ET and presents low abdominal pain.

İn Vitro Fertilizasyon Sonrası Rüptüre Üçüz Tubal Heterotopik Gebelik: Bir Olgu Sunumu

İn vitro fertilizasyonu (IVF) takiben gelişen bir heterotopik gebeliğin insidans, tanı ve tedavi yaklaşımının incelenmesi amaçlanmıştır. İn vitro fertilizasyon sonrası 9. Gebelik haftasında rüptüre olmuş sol tubal heterotopik gebelik olgusunu sunuyoruz. IVF embriyo transferi sonrası 9. Gebelik haftasında mide perforasyonu şüphesiyle 47 yaşında gebe bir kadın acile başvurmuştur. Fizik muayenesinde abdominal ağrı ve distansiyonu vardı. Vital bulgularından TA: 130 /70 mmHg ve nabız 96 /dak idi. Pelvik muayenesinde serviks hareketleri ağrılı olup uterus hafifçe büyümüştü. Hemoglobin değeri 9,4 mg/dl idi. Transabdominal ultrasonografide intrauterin canlı ikiz gebelik ile birlikte sol kornual bölgede 23 mm boyutlarında üçüncü bir gebelik kesesi saptandı. Perihepatik, perisplenik, douglas ve barsak ansları arasında yaygın miktarda sıvı tespit edildi. Bu bulgularla rüptüre heterotopik gebelik şüphesiyle acil laparatomiye alındı. Laparotomide 800 ml hemoperiteum vardı. Sol tubal istmik bölgede 2-3 cm ebatında ektopik odak saptandı. Sol salpinjektomi yapıldı. Postopertaif dönem sorunsuz geçmiş olup 3. Günde iyi durumda taburcu edildi. Antenal ünitede normal gelişim gösteren ikiz gebelik olarak takip edildi. Heterotopik gebelikler nadir görülmekle birlikte hayatı tehdit eden bir durumdur. Bu nedenle IVF-ET sonrası alt abdominal ağrısı olan gebelerde mutlaka akılda tutulması gereken bir durumdur.

Anahtar Kelimeler: Heterotopik Gebelik, İn vitro fertilizasyon

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