Heterotopic Pregnancy in a Natural Conception: Case Report

Spontan Konsepsiyonlu Bir Olguda Heterotopik Gebelik

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ABSTRACT Heterotopic pregnancy is simultaneous presence of intrauterine and extrauterine pregnancies. The estimated incidence of spontaneous heterotopic pregnancy is accepted to be 1/30 000. Its incidence has increased to 1% with widespread use of assisted reproductive techniques. The main risk factors that predisposing to heterotopic pregnancy are similar to those leading to ectopic pregnancy. Most of the cases are diagnosed after clinical signs and symptoms developed and misdiagnosed of this situation may lead to a higher incidence of morbidity and mortality. Four common symptoms of this disease are abdominal pain, adnexial mass, peritoneal irritation and an enlarged uterus. This disease should be considered in patients who has an intrauterine pregnancy with acute abdominal pain. We present a case of spontaneous heterotopic pregnancy in a 30-year-old woman with no known risk factors.

Key Words: Pregnancy, tubal; pregnancy

ÖZET Heterotopik gebelik intrauterin ve ekstrauterin gebeliğin birlikte görülmesidir. Spontan heterotopik gebelik insidansı 1/30 000 kabul edilmektedir. Yardımcı üreme tekniklerinin yaygın kullanımı ile bu hastalığın insidansı %1'e yükselmiştir. Heterotopik gebeliğe yol açan risk faktörleri, ektopik gebeliğe yol açan risk faktörleri ile benzerlik göstermektedir. Bu hastalığın tanısının ancak klinik bulgu ve semptomlar yerleştikten sonra konulabilmesi yüksek morbidite ve mortalite oranlarına yol açar. Abdominal ağrı, adneksial kitle, peritoneal irritasyon bulguları ve büyümüş uterus varlığı heterotopik gebeliğin 4 temel belirtisidir. Bu durum, intrauterin gebeliği olmasına rağmen akut batın bulguları olan olgularda mutlaka ayırıcı tanıda akılda tutulmalıdır. Bu yazıda, bilinen herhangi bir risk faktörü olmayan 30 yaşında bir heterotopik gebelik olgusu sunulmuştur.

Anahtar Kelimeler: Gebelik, tubal; gebelik

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Heterotopic pregnancy is a rare and life-threatening condition in which an intrauterine and extrauterine pregnancies coexist. The incidence of heterotopic pregnancy is reported to be 1/30000 in spontaneous pregnancy.[1] Its incidence has increased to 1% with widespread use of assisted reproductive techniques.[2,3]

Most of the cases are diagnosed after clinical signs and symptoms developed and misdiagnosed of this situation may lead to a higher incidence of morbidity and mortality.

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We report a case of spontaneous heterotopic pregnancy with tubal rupture in a 30-year-old woman who had no known risk factors for this disease.

CASE REPORT

A 30-year-old gravida 5, parity 3 woman who was in her 8th week of pregnancy, was admitted to the emergency department of our hospital with a complaint of vomiting and severe lower abdominal pain for 4 hours. She had no history of infertility, use of fertility agents or pelvic inflammatory disease. This was a spontaneous conception. On examination in the emergency department, she was pale and cold with pulse of 110 beats/minute and blood pressure of 100/60 mmHg. Abdominal examination revealed lower abdominal tenderness with rebound and guarding. On pelvic examination there was cervical motion tenderness with a closed os and bilateral adnexial tenderness. Her hemoglobin level was 9.4 mg/dl.

Abdominal and pelvic ultrasound examination revealed a viable intrauterine pregnancy of 8 weeks' gestation, a cystic mass (31 mm in diameter) on the right adnexial site and large amount of free fluid in perihepatic, perisplenic regions and in the cul de sac.

An emergency laparotomy was performed with the diagnosis of acute abdomen via midline incision that revealed a ruptured extrauterine pregnancy in the ampullary part of the left tuba, hemoperitoneum of 1200 ml with abundant clots. Left salpingectomy was performed, the abdomen was washed with 1.5 liters of normal saline. An abdominal ultrasound examination done postoperatively and revealed a viable intrauterine fetus.

The histopathological examination of tissue confirmed a left tubal ectopic pregnancy with the presence of necrotic chorionic villi.

She was discharged on the second day after operation. She was followed regularly in our antenatal clinic till term. She delivered a healthy male baby at 39 weeks gestation by caesarean section due to fetal distress, (weight: 3455 grams, head circumference: 36 cm). The written consent form was obtained from the patient.

DISCUSSION

The simultaneous coexistence of an intrauterine and extrauterine gestations is called heterotopic pregnancy. The history of ectopic pregnancy, pelvic inflammatory disease, tubal surgery, endometriosis and use of assisted reproductive techniques are the main risk factors that predisposing to heterotopic pregnancy. These risk factors are similar to those leading to ectopic pregnancy.[1,4] This rare and potentially fatal condition occurs more frequently following ovulation induction and assisted reproductive techniques.[2] In our case there was no known risk factors.

The preoperative diagnosis of heterotopic pregnancy is very difficult due to nonspesific symptoms. Reece et al. defined four common symptoms as abdominal pain, adnexial mass, peritoneal irritation and an enlarged uterus.[5] The most common complaint is severe lower abdominal pain. Its reported that 83% of heterotopic pregnancy cases complain of abdominal pain. Vaginal bleeding is a rare symptom in heterotopic pregnancies due to the intact endometrium of intrauterine pregnancy.[4,6] Because of the normal beta hCG production from the intrauterin pregnancy, serial beta hCG levels are not helpful in the diagnosis of heterotopic pregnancy.

An abdominopelvic ultrasound examination which is performed by experienced clinician can identify the extrauterine pregnancy and pelvic free fluid. The sensitivity of transvaginal ultrasound in diagnosing heterotopic pregnancy is only 56% at 5-6 weeks.[7] It is reported that routine ultrasonography detects only about 50% of tubal heterotopic pregnancies and the remainder are diagnosed during laparoscopy or laparotomy when patients became symptomatic.[5]

Other surgical conditions of acute abdomen should be considered in the differential diagnosis of heterotopic pregnancy.[8]

The treatment of heterotopic pregnancy is surgery. It can be done by laparoscopy or laparotomy.

Because of the nonspesific sypmtoms and laboratory findings of this disease, most of the cases admit to emergency departments with symptoms of acute abdomen. These patients are usually diagnosed after the symptoms developed. Although heterotopic pregnancy is a rare disease, it should be considered in patients who has an intrauterine pregnancy with severe lower abdominal pain, peritoneal irritation or pelvic mass.

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