Primary Omental Pregnancy: Case Report

Primer Omental Gebelik

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ABSTRACT Primary omental pregnancy is an extremely rare type of ectopic pregnancy. It can be primary or secondary to a tubal pregnancy that aborts out of the fimbria and reimplants in the peritoneal cavity. We present a case in which a 27-year-old woman admitted to emergency department with severe abdominal pain. There was no gestational sac in the endometrium, however, marked free fluid and normal ovaries were demonstrated in transvaginal ultrasound. She was diagnosed as ruptured ectopic pregnancy and laparotomy was carried out. In exploration, bilateral tubes and ovaries were intact. An omental pregnancy was detected and partial omentectomy was performed. Histopathologic evidence of neovascularization confirmed the diagnosis of "primary omental pregnancy". The primary omental pregnancy should be considered in the cases with diffuse hemorrhage and normal appearance of bilateral tubes and ovaries in exploration.

Key Words: Pregnancy, ectopic; pregnancy, abdominal

ÖZET Primer omental gebelik çok nadir görünen bir ektopik gebelik tipidir. Primer olabileceği gibi, fimbrial uçtan abort ederek peritoneal kavitede tekrar implante olan tubal gebeliğe sekonder de gelişebilir. Burada acil polikliniğe karın ağrısı ile gelen 27 yaşındaki kadın hasta sunulmuştur. Transvajinal ultrasonografide belirgin serbest sıvı, normal overler gözlenmiş, endometrial kavitede ise gebelik kesesi izlenmemiştir. Rüptüre ektopik gebelik öntanısıyla laparotomi yapılmıştır. Eksplorasyonda, bilateral overler ve tubalar normaldi. Omental gebelik gözlenip, parsiyel omentektomi yapılmıştır. Neovaskülarizasyonun histolojik kanıtı ile primer omental gebelik tanısı doğrulanmıştır. Eksplorasyonda over ve tubaların normal gözlendiği yaygın batın içi kanaması olan hastalarda primer omental gebelik dikkate alınmalıdır.

Anahtar Kelimeler: Gebelik, ektopik; gebelik, abdominal

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Abdominal pregnancy occurs in 1% of all ectopic pregnancies.[1,2] Omental pregnancy is the least common form among them. Clinical features and management of abdominal pregnancies requires mostly suspicion and attention since it is associated with eight times increased maternal mortality than tubal ectopic pregnancies.[3] There have been only a few cases of omental pregnancies which were mostly secondary form of abdominal pregnancy existed in the literature. Diagnosis of primary omental pregnancy must be supported by histological examination for differential diagnosis from its secondary form.[4]

We present a case of primary omental pregnancy which is diagnosed during laparotomy to emphasize that omentum should be carefully examined if both tubes and ovaries are normal by exploration in ectopic pregnancy cases.

CASE REPORT

The patient, a 27-year-old woman, gravida 1 parity 0 abortus 1 patient admitted to Maltepe University Hospital Emergency Department with a complaint of epigastric, left lower quadrant abdominal pain and vaginal bleeding for 4 days saying her normal on time menstrual period. Her history revealed normal menstrual cycle without any contraception method. Abdominal physical examination was remarkable for the presence of diffuse abdominal tenderness and rebound. Transvaginal ultrasound scanning demonstrated marked free fluid with normal ovaries and a 7 mm thickness of endometrium. Patients' haemoglobin level was 9.6 g/dL. Serum β-hCG was 1284 mIU/mL.

An emergency laparotomy through pfannenstiel incision was carried out with a diagnosis of ruptured ectopic pregnancy. Exploration revealed defibrinated blood, and coagulum with bilateral normal ovaries and fallopian tubes. Liver, spleen and intestine were all normal in appearance. On the omentum, 4 x 5 cm blood cloth was observed with 2 x 3 cm nodular lesions palpated. Partial omentectomy followed by diagnostic dilation and curettage were performed.

Histopathologic examination was reported as plasental villus formation, neovascularization and trophoblastic invasion of omental tissue and a decidual endometrial reaction confirming primary omental pregnancy (Figure 1). Patient was discharged 3 days after operation. Postoperative β-hCG levels markedly decreased. It was 166.9 mIU/mL on 3rd day and 5.4 mIU/mL on 15th day.

DISCUSSION

Omental pregnancy is a vey rare form of abdominal pregnancies that is 1.4% in all ectopic pregnancies.[5] There are Studdiford's criteria for the diagnosis of primary omental pregnancies: (i) normal bilateral Fallopian tubes and ovaries with no recent or remote injury; (ii) lack of uteroperitoneal fistula; (iii) presence of a pregnancy related exclusively to the peritoneal surface and early enough to eliminate the possibility of implantation following a primary nidation in the tube.[6] In a review of the literature, Freidrich and Rankin modified Studdiford's criteria; these are: A) the presence of a pregnancy of less than 12 weeks histological gestational age whose trophoblastic attachments are related solely to a peritoneal surface, B) grossly normal tubes and ovaries, and C) the absence of uteroperitoneal fistula.[7]

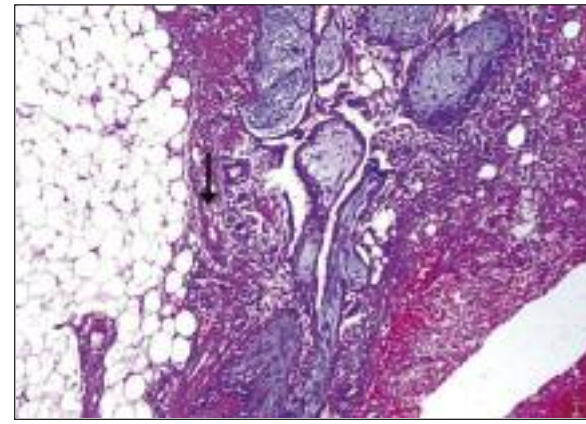

FIGURE 1: The arrow shows neovascularization and chorionic villi within the omental tissue (Hematoxylin&Eosin X100).

To date, 18 omental pregnancies, most of them are secondary, were reported. Only progesteron containing pills and intrauterine devices are the known risk factors, although our patient had no history of any contraceptive method use.[8]

Symptoms of omental pregnancy may differ from tubal ectopic pregnancy. There may be no vaginal bleeding and menstrual delay.[5] Omental pregnancy tends to bleed earlier than tubal pregnancy and so may present with occult abdominal bleeding and acute lower quadrant pain.[9] In our case, the most obvious symptom was severe lower quadrant pain.

Mortality due to omental pregnancy is often related with hemorrhagic shock.[5,10] In the most of the reported cases, laparotomy was performed, however, successful laparoscopic approach was also reported in some cases.[10-12] If the invasion of preg-

nancy is wide and deep into omentum, laparotomy might be mandatory.[13] Our case underwent laparotomy due to rapidly worsened vital signs.

Omental pregnancies are divided into primary and secondary forms. Histhopathologic neovascularization or trophoblastic growth in supporting tissues must be found for diagnosis of primary omental pregnancy otherwise it is secondary form.[4]

In the histopathologic report of our case, placental villus formation, congestion and neovascularization were observed in the omental tissue. These histhopathologic findings of the case verified that our case is a primary omental pregnant.

As a conclusion, primary omental pregnancy should be considered in the cases with diffuse hemorrhage and normal appearances of bilateral tubes and ovaries in exploration.

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