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Abdominal Pregnancy with a Fibrovascular Peduncle Connected to Fallopian Tube

Fibrovasküler Pedinkülle Tubaya Bağlantılı Abdominal Gebelik

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ABSTRACT

Abdominal pregnancy is an uncommon form of ectopic gestation with a higher incidence of maternal morbidity and mortality. Ultrasonography and βhCG levels are useful for early detection of ectopic pregnancy. Meticulous surgical exploration is crucial for the definitive diagnosis in abdominal pregnancy. Abdominal pregnancy with an extraordinary presentation is summarized in the current case report. Seven weeks pregnant patient complained of pain and was diagnosed as ectopic pregnancy according to the results of βhCG and ultrasonography. Laparoscopic findings were consistent with normal uterus, bilateral adnexae and intraabdominal bleeding. The ectopic gestational product with adherent blood clot was observed free in the abdomen, connected to the left tuba with only a thin peduncle. The peduncle was electrocauterized, the gestational product was removed from the abdomen by the endobag. Abdominal pregnancy may be free in the abdomen, connected to the fallopian tube with a peduncle. Simple excision of the peduncle will enable the surgical treatment.

Key Words: Abdominal pregnancy, ectopic pregnancy

ÖZET

Ektopik gebeliğin nadir çeşitlerinden olan abdominal gebelikte yüksek maternal morbidite ve mortalite oranları izlenmektedir. Ultrasonografi ve βhCG seviyeleri ektopik gebeliğin erken tanısında yararlıdır. Abdominal gebeliğin kesin tanısında, detaylı cerrahi eksplorasyon çok önemlidir. Olgu sunumunda nadir prezentasyon gösteren bir abdominal gebelik vakası özetlenmektedir. Yedi haftalık gebelik ve ağrı şikayetiyle başvuran hasta, βhCG ve ultrason sonuçlarına göre ektopik gebelik tanısı almıştı. Laparoskopi bulgularında, batında kanama ve normal görünümde uterus, over ve tubalar izlendi. Ektopik gebelik ve koagulum sol tubaya ince bir pedinkülle bağlanmış olarak batında serbest olarak izlendi. Pedinkül bipolar forseps ile koterize edilerek, ektopik gebelik materyali endobag ile batın dışına alındı. Abdominal gebelik batında serbest olup, tubaya pedinkülle bağlantılı seyredebilir. Bu vakaları cerrahi olarak sadece pedinkülün kesildiği kolay bir işlemle tedavi etmek mümkün olabilir.

Anahtar Kelimeler: Abdominal gebelik, ektopik gebelik

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Abdominal pregnancy, a rare form of ectopic pregnancy, is observed as implantation of gestation in the peritoneal cavity external to the uterine cavity and fallopian tubes.[1] Ultrasonography and magnetic resonance imagings with follow-up of βhCG (beta-human chorionic gonadotrophin) levels are useful for early detection of ectopic pregnancy, however surgery enables the definitive diagnosis for abdominal pregnancy.[2] Considering the increased maternal morbidiy and mortality rate, diagnostic surgical intervention should be considered as the first-line intervention for abdominal ectopic pregnancy.

Abdominal pregnancy is classified as primary or secondary. Implantation occurs initially in the abdomen without any uteroplacental fistula and normal adnexae are observed in primary abdominal pregnancy.[3] Secondary abdominal pregnancy results from tubal rupture, and subsequent implantation in the abdominal cavity following initial pregnancy in the tube, ovary, or uterus.[4]

Most of the case reports present secondary abdominal pregnancy whereas the primary type is very rarely observed.[5] The exact mechanism and the etiology of primary abdominal pregnancy is not definite. The current case report presents the diagnosis and management of an extraordinary form of abdominal pregnancy during laparoscopy.

CASE REPORT

A 34 year old woman, gravida 1, para 1, presented 7 weeks after her last menstrual period complaining of pain in the lower abdomen. She had no history of surgical procedure except vaginal delivery. Six days before her presentation her blood βhCG level was 3046 IU/L. Physical examination revealed tenderness in the lower abdomen. Transvaginal ultrasound scanning demonstrated an empty uterus with an endometrium 14 mm thick. A hyperechoic mass (50x50x40 mm) containing gestational sac and yolk sac was observed in the left adnaxae with hemoperitoneum.

Laparoscopy was performed for the diagnosis of ectopic pregnancy. Following aspiration of nearly 500 ml of blood from the abdomen, the uterus and bilateral adnexae were observed normal by panoramic view. The ectopic gestational product and adherent blood clot were observed free in the abdomen connected to the left tuba with only a thin peduncle (Figure 1a). The peduncle was electrocauterized and cut by bipolar forceps. The ectopic gestational product was removed from the umbilical port by endobag. The pelvis was irrigated with saline and dilatation and curettage was performed at the end of the procedure. Histologic assessment of the tissue confirmed the ectopic abdominal pregnancy connected to the left tuba with a fibrovascular peduncle and decidualized endometrial stroma (Figure 1b).

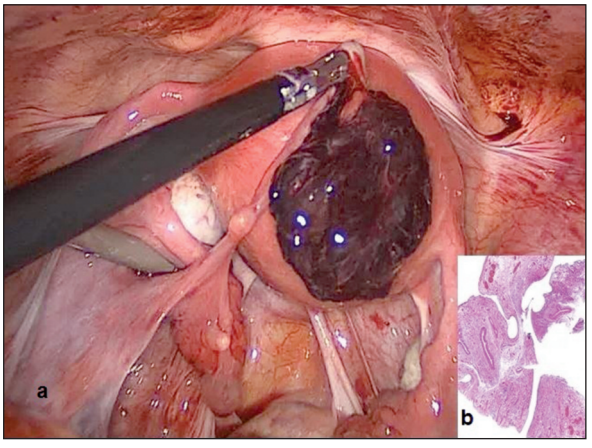

FIGURE 1a: Laparoscopic view demonstrating bilaterally normal tubes and ovaries. The ectopic gestational product is observed free in the abdomen connected to the left tuba with a thin peduncle.
FIGURE 1b: Photomicrograph of slide demonstrating the fibrovascular peduncle between the fallopian tube and the ectopic gestational product.

DISCUSSION

Abdominal pregnancy is observed by migration of a fertilized oocyte into the peritoneal cavity as attached to the mesentery or abdominal viscera. It occurs in around 1.3% of ectopic pregnancies.[1] Majority of abdominal pregnancies are secondary, resulting from reimplantation of a ruptured or aborted tubal pregnancy. On the other hand primary abdominal pregnancy is extremely rare and according to Studdiford`s criteria normal bilateral Fallopian tubes and ovaries are observed without any recent or remote injury.[3] Pregnancy should be

related to peritoneal surface without a uteroplacental fistula.[3]

Patient in the current case had history of vaginal delivery, without surgical risk factors for ectopic pregnancy. Multiparity, history of pelvic inflammatory disease, uterine surgery, in vitro fertilization, endometriosis, adenomyosis, intrauterine device and low socioeconomic status are the possible risk factors for abdominal pregnancy.[6]

The uterus and bilateral adnexae were observed normal without any tubal damage or bleeding in our case presentation. However, the ectopic gestational product was free in the abdomen connected to the left tuba with a thin peduncle providing its vascular supply. Electrocauterization of the peduncle by bipolar forceps enabled the surgical treatment.

In conclusion, abdominal pregnancy may be initially diagnosed as ruptured tubal pregnancy. It may seldom be free in the abdomen without any implantation on the peritoneal cavity and connected to the fallopian tube with a peduncle. Simple excision of the peduncle and removal of the ectopic gestational product will be sufficient for the treatment in these cases. Surgical exploration of intact tubes and ovaries will guide the conservative surgical management and preservation of fertility.

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